NUCLEAR REGULATORY COMMISSION ISSUANCES

OPINIONS AND DECISIONS OF THE NUCLEAR REGULATORY COMMISSION WITH SELECTED ORDERS

January 1, 2014 – June 30, 2014

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PREFACE

This is the seventy-ninth volume of issuances (1–529) of the Nuclear Regulatory Commission and its Atomic Safety and Licensing Boards, Administrative Law Judges, and Office Directors. It covers the period from January 1, 2014, to June 30, 2014.

Atomic Safety and Licensing Boards are authorized by Section 191 of the Atomic Energy Act of 1954. These Boards, comprised of three members, conduct adjudicatory hearings on applications to construct and operate nuclear power plants and related facilities and issue initial decisions which, subject to internal review and appellate procedures, become the final Commission action with respect to those applications. Boards are drawn from the Atomic Safety and Licensing Board Panel, comprised of lawyers, nuclear physicists and engineers, environmentalists, chemists, and economists. The Atomic Energy Commission (AEC) first established Licensing Boards in 1962 and the Panel in 1967.

Between 1969 and 1990, the AEC authorized Atomic Safety and Licensing Appeal Boards to exercise the authority and perform the review functions which would otherwise have been exercised and performed by the Commission in facility licensing proceedings. In 1972, that Commission created an Appeal Panel, from which were drawn the Appeal Boards assigned to each licensing proceeding. The functions performed by both Appeal Boards and Licensing Boards were transferred from the AEC to the Nuclear Regulatory Commission by the Energy Reorganization Act of 1974. Appeal Boards represented the final level in the administrative adjudicatory process to which parties could appeal. Parties, however, were permitted to seek discretionary Commission review of certain board rulings. The Commission also could decide to review, on its own motion, various decisions or actions of Appeal Boards.

On June 29, 1990, however, the Commission voted to abolish the Atomic Safety and Licensing Appeal Panel, and the Panel ceased to exist as of June 30, 1991. Since then, the Commission itself reviews Licensing Board and other adjudicatory decisions, as a matter of discretion. *See* 56 FR 29403 (1991).

The Commission also may appoint Administrative Law Judges pursuant to the Administrative Procedure Act, who preside over proceedings as directed by the Commission.

The hardbound edition of the Nuclear Regulatory Commission Issuances is a final compilation of the monthly issuances. It includes all of the legal precedents for the agency within a six-month period. Any opinions, decisions, denials, memoranda and orders of the Commission inadvertently omitted from the monthly softbounds and any corrections submitted by the NRC legal staff to the printed softbound issuances are contained in the hardbound edition. Cross references in the text and indexes are to the NRCI page numbers which are the same as the page numbers in this publication.

Issuances are referred to as follows: Commission (CLI), Atomic Safety and Licensing Boards (LBP), Administrative Law Judges (ALJ), Directors' Decisions (DD), and Decisions on Petitions for Rulemaking (DPRM).

The summaries and headnotes preceding the opinions reported herein are not to be deemed a part of those opinions or to have any independent legal significance.

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In the Matter of **Docket No. 63-001**

U.S. DEPARTMENT OF ENERGY
(High-Level Waste Repository) **January 24, 2014**

NUCLEAR REGULATORY COMMISSION: AUTHORITY TO SUPERVISE PROCEEDINGS

The Commission has inherent authority to supervise both the Staff's work and adjudicatory proceedings relating to license applications. *See Shieldalloy Metallurgical Corp.* (Decommissioning of the Newfield, New Jersey Site), CLI-13-6, 78 NRC 155 (2013); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 476 (2008); and *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23, 56 NRC 230, 237 (2002).

NUCLEAR REGULATORY COMMISSION: AUTHORITY TO SUPERVISE PROCEEDINGS

The Commission has the authority to reconsider or clarify its decisions, if necessary. *See Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Unit 2), CLI-80-41, 12 NRC 650, 652 (1980) (citing *Trujillo v. General Electric Co.,* 621 F.2d 1084, 1086 (10th Cir. 1980)).

MEMORANDUM AND ORDER

In response to the writ of mandamus issued by the U.S. Court of Appeals for the District of Columbia Circuit, we recently issued a decision and companion Staff Requirements Memorandum setting forth the course of action we selected to continue the licensing process for the Department of Energy's Yucca Mountain high-level radioactive waste repository.[1] The State of Nevada requests that we clarify certain aspects of the decision and the SRM; Nye County, Nevada, the States of South Carolina and Washington, Aiken County, South Carolina, and the National Association of Regulatory Utility Commissioners (together, the "Five Parties") seek reconsideration of certain aspects of our decision.[2] As discussed below, we deny both requests.

I. DISCUSSION

We undertook CLI-13-8 and the companion SRM pursuant to our inherent authority to supervise the Staff's work and adjudicatory proceedings relating to license applications.[3] Our authority to reconsider or clarify such a decision, if needed, is likewise inherent in our authority to render the decision in the first instance.[4]

As we stated in CLI-13-8, the course of action that we approved to resume the Yucca Mountain licensing process constitutes the next logical steps in that

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[1] *See generally* CLI-13-8, 78 NRC 219 (2013); Staff Requirements — SECY-13-0113 — Memorandum and Order Concerning Resumption of Yucca Mountain Licensing Process (Nov. 18, 2013) (ADAMS Accession No. ML13322A007) (SRM); *In re Aiken County,* 725 F.3d 255 (D.C. Cir. 2013).

[2] State of Nevada Petition for Clarification of November 18, 2013 Restart Order and Related Staff Requirements Memorandum (Nov. 27, 2013) (Nevada Petition); Request for Leave to File Motion for Reconsideration of Memorandum and Order (Nov. 27, 2013), and Motion for Reconsideration of Memorandum and Order (Nov. 27, 2013) (Five Parties Motion). We received three answers to the requests. Five Parties' Answer to Nevada's Petition for Clarification of Restart Order and Staff Requirements Memorandum (Dec. 9, 2013); State of Nevada Consolidated Answers to (1) Five Parties' Request for Leave to File Motion for Reconsideration and (2) Five Parties' Motion for Reconsideration of Commission's November 18, 2013 Restart Order (Dec. 9, 2013); NRC Staff Answer to Petition for Clarification and Response to Motion for Reconsideration (Dec. 9, 2013) (Staff Answer).

[3] CLI-13-8, 78 NRC at 224 (citing *Shieldalloy Metallurgical Corp.* (Decommissioning of the Newfield, New Jersey Site), CLI-13-6, 78 NRC 155 (2013); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 476 (2008); and *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23, 56 NRC 230, 237 (2002)).

[4] *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Unit 2), CLI-80-41, 12 NRC 650, 652 (1980) (citing *Trujillo v. General Electric Co.,* 621 F.2d 1084, 1086 (10th Cir. 1980)).

process. These actions, principally completion of the safety evaluation report (SER) and completion of a supplemental environmental impact statement, are intended to advance the process "in a manner that is constructive and consistent with the court's decision and the resources available."[5] We have considered Nevada's and the Five Parties' requests.[6] As discussed below, we do not find that our decisions require revision or clarification.

A. Nevada's Petition for Clarification

Nevada seeks clarification that, should the adjudication be restarted and discovery resume, we will adjust the milestone for the proceeding calling for completion of discovery 60 days after the SER is issued.[7] In CLI-13-8, we declined to consider various requests related to the adjudication in view of our decision to continue to hold the adjudication in abeyance. As we stated there, should the adjudication recommence at a future time, "participants will have the opportunity to resubmit requests associated with the conduct of the proceeding at that time."[8] Additional potential deviations from the schedule in 10 C.F.R. Part 2, Appendix D associated with the adjudication — including the one raised by Nevada here — would be appropriately addressed at that time. No participant will be unfairly prejudiced.

Nevada also seeks clarification of the SRM. In particular, Nevada requests that we clarify our direction that the NRC Staff, in carrying out the directions in CLI-13-8, "adopt work previously completed as a first principle."[9] Nevada states its concern that the phrase "work previously completed" can be interpreted to imply a judgment that all work relevant to the safety evaluation performed to date may be adopted without further "investigation or inquiry," or might include the Staff's Technical Evaluation Reports.[10] We decline to revisit the SRM. As the Staff correctly observes, neither Nevada nor any other external entity is entitled

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[5] CLI-13-8, 78 NRC at 226.

[6] The Staff objects to the Five Parties' request on procedural grounds, citing provisions relevant to adjudications in 10 C.F.R. Part 2, Subpart C. Staff Answer at 5-7. Our rules provide that a motion for reconsideration "must demonstrate a compelling circumstance, such as the existence of a clear and material error in a decision, which could not have been reasonably anticipated, which renders the decision invalid." 10 C.F.R. § 2.345. *Accord* 10 C.F.R. §§ 2.323(e), 2.341(d) (referencing the standard in section 2.323(e)). Assuming that this standard applies to the Five Parties' motion, we observe that the Five Parties neither demonstrate a clear and material error in our decision nor raise any issue that could not reasonably have been anticipated. Further, as discussed *infra,* the Five Parties have not shown that any of the requested relief is required. The Five Parties have not, therefore, demonstrated any error that renders our decision invalid.

[7] Nevada Petition at 2-3.

[8] CLI-13-8, 78 NRC at 233-34.

[9] Nevada Petition at 3.

[10] *Id.* at 3-4.

to seek revisions to a Commission direction to the NRC Staff contained in an SRM.[11] In any event, however, no clarification of this direction is needed. The Staff represents — and we expect — that it will undertake completion of its review activities, including development of its findings on the Safety Evaluation Report, consistent with "existing agency requirements and guidance."[12] Further, as always, we expect the Staff to complete a robust review addressing all applicable regulatory requirements, with its analysis and conclusions documented in the SER, and for those working on the project to exercise their independent professional judgment in the performance of their duties.

B. Five Parties' Motion for Reconsideration

The Five Parties seek greater detail on the licensing activities than we set forth in CLI-13-8, as well as additional information that they believe will help them to assess the merits of the course of action we have selected. They request, for example, "an order outlining a schedule of deadlines for issuance of the remaining [safety evaluation report volumes]"; "a detailed listing of what work remains on each individual [safety evaluation report volume], and an explanation for estimating that an additional twelve months is required"; and an "explanation for why prompt issuance of the SERs, followed by staged discovery and adjudication of Phase I post-closure issues, is not achievable with available funds."[13]

As we stated in CLI-13-8, the court in *Aiken County* "afforded us broad discretion in choosing a pragmatic course of action to resume the licensing process." The course of action we selected complies with the fundamental direction of the D.C. Circuit — to resume the licensing process. As fully explained in CLI-13-8, by taking an incremental approach, we have attempted to ensure, to the maximum extent possible, that the next logical steps in the process are completed.[14] Although the petitioners in the *Aiken County* decision sought a broad mandamus order, nothing in the court's decision required us to undertake a particular course of action, to conduct an accounting containing the level of detail sought by the Five Parties, or to subject the Staff's estimates of the time required to perform

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[11] Staff Answer at 4 & nn.9, 11 (citing Internal Commission Procedures (July 5, 2011) at II-9, III-11, *available at* http://www.nrc.gov/about-nrc/policy-making/internal.html (last visited Dec. 18, 2013)). The cited provisions describe the contents of an SRM and the process for reviewing draft SRMs, respectively.

[12] *See* Staff Answer at 3-5 (citing "Yucca Mountain Review Plan," NUREG-1804 (Rev. 2 July 2003) (ADAMS Accession No. ML032030389) and NRC Management Directive 3.57, "Correspondence Management" (Oct. 18, 2005) (ADAMS Accession No. ML053070034) (describing concurrence processes)). Further, the Staff represents that it is preparing review guidance that will address our direction on its conduct of this review. *Id.* at 4-5.

[13] Five Parties Motion at 3, 4, 5.

[14] CLI-13-8, 78 NRC at 226-29.

its work to the scrutiny of third parties. We decline to order the Staff to do more than has been directed by the D.C. Circuit. Although we expect that the activities outlined in CLI-13-8 will expend "nearly all of the funds currently available to the NRC"[15] — leaving few, if any, funds for other licensing activities, including the resumption of the adjudication — we have committed to reevaluate this conclusion "in the event that circumstances materially change."[16] And as we have stated, we are closely monitoring the cost and progress of the Staff's activities, and we will give direction for reprioritization of time and funds should estimates prove inaccurate. That is to say, in the event the NRC appears likely to exhaust funds prior to completing the activities we have directed, we will provide direction to the Staff to maximize completion of these activities.[17]

In short, in CLI-13-8 we outlined a course of action, necessarily predictive in nature, to complete the next logical steps in this licensing process. Our chosen path forward is consistent with the court's direction in *Aiken County* and the limited available funds, and further relief is not warranted.

* * * *

One other matter merits mention. In CLI-13-8, we observed that the agency had remaining $2.5 million "in obligated, unexpended funds that would become available if contract audit activities are completed and these funds are eligible for subsequent [de-obligation]."[18] In December 2013, $2.2 million in obligated, unexpended Nuclear Waste Fund appropriations were deobligated and are now available for agency use.[19] Now that additional funds are available we are providing further direction to the Staff, consistent with CLI-13-8 and the companion SRM, on the use of those funds to make the Licensing Support Network document collection publicly available in the Agencywide Documents Access and Management System.[20] In light of the uncertainties inherent in cost projections, we reiterate that we continue to closely monitor all ongoing activities and Nuclear

[15] *Id.* at 236.

[16] *Id.* (footnote omitted).

[17] SRM at 2 (unnumbered) (instructing the Staff to provide monthly progress reports that will include "accomplishments, updated schedules for remaining activities, the cost of remaining activities, and stakeholder communications and interactions"). In addition, we are providing to Congress monthly reports on NRC activities and expenditure of unobligated carryover funds appropriated from the Nuclear Waste Fund. These reports are publicly available. *See* CLI-13-8, 78 NRC at 236 n.86.

[18] CLI-13-8, 78 NRC at 228 n.35.

[19] The remaining balance of approximately $300,000 is reserved to cover any emergent costs identified during the ongoing contract closeout process.

[20] CLI-13-8, 78 NRC at 230 n.47; SRM at 2 (unnumbered). We provide this direction separately. *See* Staff Requirements — SECY-13-0138/SECY-13-0138A — U.S. Department of Energy (High-Level Waste Repository): State of Nevada Petition for Clarification of November 18, 2013 Restart Order and Related Staff Requirements Memorandum (Nov. 27, 2013); "Five Parties" Motion for Reconsideration of Memorandum and Order (Nov. 27, 2013) (Jan. 24, 2014) (ADAMS Accession No. ML14024A265).

Waste Fund expenditures to ensure effective implementation of our direction and prudent use of funds.[21]

II. CONCLUSION

For the reasons set forth above, we *deny* Nevada's and the Five Parties' requests.

IT IS SO ORDERED.[22]

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 24th day of January 2014.

[21] CLI-13-8, 78 NRC at 236 & n.87; SRM at 2 (unnumbered).

[22] Commissioner Apostolakis has recused himself from this adjudication and, therefore, did not participate in this matter. *See* Notice of Recusal (July 15, 2010).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Eric J. Leeds, Director

In the Matter of	**Docket Nos. 50-335** **50-389** **50-250** **50-251** **(License Nos. DPR-67,** **NPF-16,** **DPR-31,** **DPR-41)**
FLORIDA POWER & LIGHT COMPANY **(St. Lucie Nuclear Power Plant, Units 1 and 2)** **(Turkey Point Nuclear Generating Plant, Units 3 and 4)**	**January 14, 2014**

On April 23, 2012, Mr. Thomas King (the Petitioner) e-mailed (Agency-wide Documents Access and Management System (ADAMS) Accession No. ML13295A021) the U.S. Nuclear Regulatory Commission (NRC, or the Commission). The Petitioner requested that the NRC take enforcement action against the St. Lucie Plant, Units 1 and 2, and the Turkey Point Nuclear Generating Plant, Units 3 and 4 (St. Lucie and Turkey Point plants). Florida Power & Light Company is the Licensee for these plants. The NRC Staff treated the request for enforcement action as a petition according to Title 10 of the *Code of Federal Regulations* (10 C.F.R.), section 2.206, "Requests for Action Under This Subpart."

The Petitioner requested that the NRC take immediate enforcement action in the form of shutting down or prohibiting the restart of the St. Lucie and Turkey Point plants until a criminal investigation of the AMES Group, LLC

(AMES, a contractor that performed work for the Licensee at the St. Lucie and Turkey Point plants) is complete and everything has been verified safe. As the basis for the request, the Petitioner stated the Licensee was in violation of its policies and procedures on contractor trustworthiness and that work on safety-related equipment may have been done by unqualified contractor employees. The Petitioner specifically requested that the NRC prevent the St. Lucie and Turkey Point plants from starting up until the Licensee's contractor is cleared, all documents and work performed on safety-related equipment at both plants is independently verified, and all critical work and motor-operated valve testing is redone.

In this Director's Decision, the Director of the Office of Nuclear Reactor Regulation denied the Petitioner's request. The NRC did not substantiate the Petitioner's concern that AMES had sought to misrepresent the capabilities of its technicians to NRC-licensed facilities. As discussed in the letter to the Licensee dated May 23, 2013 (ADAMS Accession No. ML13205A243), based on the evidence obtained, the NRC did not substantiate that the contractor willfully submitted falsified training and qualification documents for any AMES employee for consideration by the Licensee. Therefore, the NRC found no basis for expanding its current level of regulatory oversight or otherwise taking enforcement action against the Licensee based on the Petitioner's concerns.

FINAL DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

On April 23, 2012, Mr. Thomas King (the Petitioner) e-mailed (Agency-wide Documents Access and Management System (ADAMS) Accession No. ML13295A021) the U.S. Nuclear Regulatory Commission (NRC, or the Commission). The Petitioner requested that the NRC take enforcement action against the St. Lucie Plant, Units 1 and 2, and the Turkey Point Nuclear Generating Plant, Units 3 and 4 (St. Lucie and Turkey Point plants). Florida Power & Light Company is the Licensee for these plants. The NRC Staff treated the request for enforcement action as a petition according to Title 10 of the *Code of Federal Regulations* (10 C.F.R.), section 2.206, "Requests for Action Under This Subpart."

A. Actions Requested

The Petitioner requested that the NRC take immediate enforcement action in the form of shutting down or prohibiting the restart of the St. Lucie and Turkey

Point plants until a criminal investigation of the AMES Group, LLC (AMES, a contractor that performed work for the Licensee at the St. Lucie and Turkey Point plants) is complete and everything has been verified safe. As the basis for the request, the Petitioner stated that the Licensee was in violation of its policies and procedures on contractor trustworthiness and that work on safety-related equipment may have been done by unqualified contractor employees. The Petitioner specifically requested that the NRC prevent the St. Lucie and Turkey Point plants from starting up until the Licensee's contractor is cleared, all documents and work performed on safety-related equipment at both plants is independently verified, and all critical work and motor-operated valve testing is redone.

On May 22, 2012, the NRC's Office of Nuclear Reactor Regulation Petition Review Board (PRB) evaluated the Petitioner's request for immediate action. By e-mail dated June 13, 2012 (ADAMS Accession No. ML13301A455), the NRC informed the Petitioner that the agency denied the request for immediate action because the NRC did not have sufficient information to support taking immediate actions to support a shutdown or to prohibit the restart of the St. Lucie and Turkey Point plants. The NRC had not identified immediate safety concerns at the St. Lucie or Turkey Point plants, and the NRC did not find that the continued operation of the plants would adversely affect the health and safety of the public. On July 9, 2012, the Petitioner was provided an opportunity to address the PRB to provide additional information concerning his request during a public and recorded telephone conference. The Petitioner reiterated the basis for his concerns. The transcripts for the telephone conference are located at ADAMS Accession No. ML13296A710.

By letter dated August 29, 2012 (ADAMS Accession No. ML12233A627), the NRC accepted the petition for review and informed the Petitioner that the NRC Region II office was evaluating the remaining issues in the Petitioner's e-mail under a separate process. The acknowledgment letter also stated that once the NRC Region II office completed its evaluation, the NRC's Office of Enforcement and Office of Nuclear Reactor Regulation would review the conclusion. If the NRC identified impacts to safety-related equipment at the St. Lucie or Turkey Point plants, it would take appropriate action.

II. DISCUSSION

The NRC Region II office completed its evaluation and informed the Petitioner of the results of its evaluation. The NRC did not substantiate the Petitioner's concern that AMES had sought to misrepresent the capabilities of its technicians to NRC-licensed facilities. As discussed in the letter to the Licensee dated May 23, 2013 (ADAMS Accession No. ML13205A243), based on the evidence obtained,

the NRC did not substantiate that the contractor willfully submitted falsified training and qualification documents for any AMES employee for consideration by the Licensee. Therefore, the NRC found no basis for expanding its current level of regulatory oversight or otherwise taking enforcement action against the Licensee based on the Petitioner's concerns.

III. CONCLUSION

In conclusion, the NRC found no basis for taking enforcement action against the Licensee based on the Petitioner's concerns. The NRC did not find that the continued operation of the plants would adversely affect the health and safety of the public. Therefore, the NRC is denying the Petitioner's requested enforcement actions against the St. Lucie and Turkey Point plants. No further action is required.

As provided in 10 C.F.R. 2.206(c), the NRC will file a copy of this director's decision with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the decision will constitute the final action of the Commission 25 days after the date of the decision unless the Commission, on its own motion, institutes a review of the decision within that time.

FOR THE NUCLEAR
REGULATORY COMMISSION

Eric J. Leeds, Director
Office of Nuclear Reactor
Regulation

Dated at Rockville, Maryland,
this 14th day of January 2014.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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In the Matter of **Docket No. 40-8943-MLA-2**

CROW BUTTE RESOURCES, INC.
(Marsland Expansion Area) **February 14, 2014**

ADJUDICATORY PROCEEDINGS: PARTY SANCTIONS

A party who neglects to fully participate in a proceeding is subject to sanctions including dismissal of its contention. *See* 10 C.F.R. § 2.320. *See also Washington Public Power Supply System* (WPPSS Nuclear Project No. 1), LBP-00-18, 52 NRC 9, 13-14 (2000); *Boston Edison Co.* (Pilgrim Nuclear Generating Station, Unit 2), LBP-76-7, 3 NRC 156, 157 (1976); *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-224, 8 AEC 244, 250 (1974).

STANDING: ORGANIZATIONAL

An Indian Tribe has an organizational interest in protecting cultural artifacts connected with it.

CONTENTIONS: NATIONAL HISTORIC PRESERVATION ACT

A petitioner may claim deficiencies in the application's cultural resources discussion even though it is generally not expected that the applicant's cultural resources discussion will be comprehensive. A petitioner should not wait for the Staff to perform its responsibilities under the NHPA before it raises a claim that

information is lacking. The fact that the Staff will develop additional information relevant to cultural resources, as part of its NHPA review, does not preclude a challenge to the application's cultural resources discussion.

CONTENTIONS: ADMISSIBILITY

The Commission gives the Board's rulings on contention admissibility substantial deference, even where the support for the contention appears weak, or where the claim's materiality presents a "close question." *See NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 326-27, 329 (2012).

CONTENTIONS: MATERIALITY

Confinement of the aquifers is an issue material to the environmental impacts of an application for a license to operate an ISL uranium recovery facility.

MEMORANDUM AND ORDER

The NRC Staff and the license applicant, Crow Butte Resources, Inc., have appealed the Atomic Safety and Licensing Board's ruling granting a hearing with respect to Crow Butte's application to expand its *in situ* uranium recovery operation in Dawes County, Nebraska.[1] As discussed below, we affirm the Board's rulings on standing and contention admissibility.

I. BACKGROUND

Crow Butte currently operates an *in situ* uranium recovery facility in Crawford, Nebraska. This proceeding involves a request to amend its materials license to authorize operation of a satellite facility about 11 miles southeast of Crow Butte's central processing facility.[2]

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[1] LBP-13-6, 77 NRC 253 (2013).

[2] *See* Application for Amendment of USNRC Source Materials License SUA-1534 Marsland Expansion Area Crawford, Nebraska, Volume I, Environmental Report (ADAMS Accession Nos. ML12160A513, ML12160A515, ML12160A517, ML12160A519) (Environmental Report); Application for Amendment of USNRC Source Materials License SUA-1534, Marsland Expansion Area Crawford, Nebraska, Volume I, Technical Report (ADAMS Accession Nos. ML12160A527, ML12160A529, ML12160A530, ML12160A531) (Technical Report). In addition to this license

(Continued)

In LBP-13-6, the decision being appealed in this case, the Board found that the Tribe had demonstrated standing and admitted two of its proposed contentions in part. It rejected four other proposed contentions in their entirety.[3] In the same order, the Board also found that several other individuals and groups seeking intervention had not established standing.[4]

Both Crow Butte and the Staff contend that the Tribe's intervention petition should have been denied in its entirety. Crow Butte disputes the Tribe's standing in this proceeding, but the Staff does not contest standing on appeal.[5] Both Crow Butte and the Staff argue that neither contention is admissible.[6]

II. DISCUSSION

Our rules of practice provide for an automatic right to appeal a Board decision on the question whether a petition to intervene should have been wholly denied.[7] We give a Board's ruling on standing "substantial deference."[8] Similarly, we

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application, Crow Butte also has pending an application to renew the license for its central facility and another application to expand its operations into the "North Trend Expansion Area," a site adjacent to and north of Crow Butte's main site. *See generally Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), Docket No. 40-8943; *Crow Butte Resources, Inc.* (North Trend Expansion), Docket No. 40-8943-MLA.

[3] The Board rejected four contentions: Contention 3, "Inadequate Analysis of Groundwater Quality Impacts"; Contention 4, "Requiring the Tribe to Formulate Contentions Before an EIS Is Released Violates NEPA"; Contention 5, "Failure to Consider Connected Actions"; and Contention 6, "Failure to Consider Direct Tornado Strikes." Because the Board granted the hearing request, its decision to reject these contentions may not be appealed until the end of the case. 10 C.F.R. § 2.311(d)(1). *See, e.g., Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-04-31, 60 NRC 461 (2004).

[4] Two organizations, Western Nebraska Resources Council and Aligning for Responsible Mining, and three individuals, Antonia Loretta Afraid of Bear Cook, Bruce McIntosh, and Debra White Plume, filed a consolidated intervention petition. The Board considered the standing of each group and individual separately and found that none had made the requisite showing. *See* LBP-13-6, 77 NRC at 269-82. The Board did not consider the admissibility of these contentions. *Id.* at 282. These petitioners have not appealed.

[5] *See* Crow Butte Resources Notice of Appeal of LBP-13-06 (June 4, 2013); Brief in Support of Crow Butte Resources' Appeal from LBP-13-06 (June 4, 2013) (Crow Butte Appeal); NRC Staff's Notice of Appeal of LBP-13-6, Licensing Board's Order of May 10, 2013, and Accompanying Brief (June 4, 2013) (Staff Appeal).

[6] Crow Butte Appeal at 9-19, Staff Appeal at 5-18.

[7] *See* 10 C.F.R. § 2.311(d)(1).

[8] *Strata Energy, Inc.* (Ross In Situ Uranium Recovery Project), CLI-12-12, 75 NRC 603, 608 (2012); *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 914 (2009); *Crow Butte Resources, Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 543 (2009) (*Crow Butte North Trend*).

defer to a Board's contention admissibility rulings unless the appeal points to an "error of law or abuse of discretion."[9]

As an initial matter, we observe that the Tribe did not answer either appeal and, as noted below, did not fully participate before the Board with respect to the questions at issue. Although we find in the Tribe's favor today, the Tribe's failure to pursue a contention in the future could result in (among other things) dismissal of the contention.[10]

A. Standing

The Oglala Sioux Tribe is not a new participant to our proceedings. As relevant here, the Tribe has been admitted as a party to the ongoing proceeding associated with Crow Butte's license renewal application.[11] In that proceeding, the Board based the Tribe's standing on the presence onsite of cultural resources that "may be harmed as a result of mining activities."[12] As the license renewal Board found, "Federal law not only recognizes that Native American tribes have a protected interest in cultural resources found on their aboriginal land, but as well has imposed on federal agencies a consultation requirement under the [National Historic Preservation Act] to ensure the protection of tribal interests in cultural resources."[13] The Tribe also is participating as an interested governmental entity in the ongoing license amendment proceeding for the North Trend Expansion Area.[14]

The Board based its standing ruling on the Tribe's asserted interest in pro-

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[9] *Crow Butte North Trend,* CLI-09-12, 69 NRC at 543. *See also Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 336 (2009); *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), CLI-09-16, 70 NRC 33, 35 (2009).

[10] *See, e.g.,* 10 C.F.R. § 2.320 ("If a party fails to file an answer or pleading within the time prescribed in this part or as specified in the notice of hearing or pleading, to appear at a hearing or prehearing conference, to comply with any prehearing order entered by the presiding officer, or to comply with any discovery order entered by the presiding officer, the Commission or the presiding officer may make any orders in regard to the failure that are just . . . ."); *Washington Public Power Supply System* (WPPSS Nuclear Project No. 1), LBP-00-18, 52 NRC 9, 13-14 (2000); *Boston Edison Co.* (Pilgrim Nuclear Generating Station, Unit 2), LBP-76-7, 3 NRC 156, 157 (1976); *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-224, 8 AEC 244, 250 (1974).

[11] *Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), LBP-08-24, 68 NRC 691 (2008), *aff'd in part, rev'd in part,* CLI-09-9, 69 NRC 331, 336-41 (2009) (affirmed as to standing).

[12] *Id.* at 714.

[13] *Id.* at 715.

[14] *See Crow Butte Resources, Inc.* (North Trend Expansion Project), LBP-08-6, 67 NRC 241, 267 (2008), *aff'd in part, rev'd in part on other grounds, Crow Butte North Trend,* CLI-09-12, 69 NRC 535 (2009).

tecting cultural resources on the site of the proposed facility.[15] The proposed Marsland Expansion Area, as with the other Crow Butte facilities currently under consideration for NRC licenses, is to be located within the aboriginal territory of the Sioux people.[16] Native American artifacts found on the site therefore are likely to be Sioux in origin. The Tribe argued before the Board that operations on the Marsland site potentially could harm these cultural resources, particularly if Crow Butte does not "properly judge the significance of certain artifacts" that may be present.[17]

The facts relating to standing changed between the time Crow Butte filed its application and the time the Board ruled on the Tribe's intervention petition. Crow Butte's application identified no Native American cultural resources on the site.[18] The Tribe's intervention petition also did not identify any specific resources on the site.[19] But the Tribe supported its petition with a declaration by the Tribe's Tribal Historic Preservation Officer (THPO), Wilmer Mesteth, who stated that artifacts or other cultural resources likely would be discovered if one were to look at extant and extinct water resources.[20] Mr. Mesteth also asserted that any Native American cultural resources found in the Marsland Expansion Area would belong to the Tribe:

> The lands encompassed by the expansion are within the Territory of the Great Sioux Nation, which includes the band of the Oglala Lakota (Oglala Sioux Tribe) aboriginal lands. As a result the cultural resources, artifacts, sites, etc., belong to the Tribe. . . . Any harm done to these artifacts, perhaps because the Applicant did

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[15] The Tribe claimed three bases for standing. In addition to the cultural resources claim, it claimed an interest in protecting both the environment on the reservation (particularly groundwater and the White River), and the health of its members. *See* Petition to Intervene and Request for Hearing of the Oglala Sioux Tribe (Jan. 29, 2013) at 9-10 (OST Petition). The White River runs through Dawes County and northeast through the Pine Ridge Reservation. But the Board found that, based on Crow Butte's assertion, the Marsland site is within the watershed of a different river, the Niobrara. LBP-13-6, 77 NRC at 271-72 n.6. The Board therefore expressed "concerns" whether the Tribe had provided sufficient information to support the environmental claim. *Id.* at 271. The Tribe also claimed a procedural injury to its right to be consulted under the NHPA, as both a basis for standing and part of Contention 1. OST Petition at 8-9. The Board rejected the procedural injury claim as part of the proposed contention. LBP-13-6, 77 NRC at 286.

[16] The Marsland Expansion Area license application notes: "In the mid-1800s, this region was occupied predominantly by bands of Lakota Sioux and Cheyenne." Environmental Report, § 3.8.1, at 3-76.

[17] *See* Declaration of Wilmer Mesteth ¶¶ 5, 11-12, 16 (Jan. 29, 2013) (Mesteth Declaration), appended to OST Petition. *See also* OST Petition at 8-9.

[18] *See* Environmental Report § 3.8.1, at 3-77 ("No indigenous people site or artifacts were found in the project area.") (information also found in Technical Report § 2.4.1, at 2-72).

[19] *See generally* OST Petition.

[20] Mesteth Declaration ¶ 8.

> not properly judge the significance of certain artifacts or cultural resources will be an injury to the Tribe. . . .[21]

In responding to the Tribe's intervention petition, both the Staff and Crow Butte argued that the lack of any known Native American cultural resources on the site undermined the Tribe's standing.[22]

The Staff advised the Board in its answer to the Tribe's intervention petition, however, that two Native American tribes — the Santee Sioux Nation and the Crow Tribe of Montana — had performed a cultural resources survey of the sites relevant to Crow Butte's pending applications.[23] The survey was conducted after the Staff invited representatives of several tribes, including the Oglala Sioux Tribe, to examine all of the Crow Butte sites, including Marsland.[24] The two tribes conducted the surveys between mid-November and early December 2012, but the Staff had not received the results as of the time it filed its answer to the Tribe's intervention petition before the Board.[25]

In March, the Board asked the Staff to provide the results of the survey.[26] The Staff provided a complete, nonredacted version of the survey report to all consulting tribes (including the Oglala Sioux Tribe) and then made available to the public a redacted version of the report.[27] The report of the survey findings (designated here as the SSN Report) indicated several sites of Native American

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[21] *Id.* ¶ 5.

[22] *See* Applicant's Response to Petition to Intervene Filed by the Oglala Sioux Tribe at 6-7 (Feb. 25, 2013) (Crow Butte Response); NRC Staff Response to the Oglala Sioux Tribe's Request for Hearing and Petition to Intervene at 11 (Feb. 25, 2013) (NRC Staff Response). The Staff stated at that time that a future discovery of cultural resources of interest to the Tribe could potentially support standing for the Tribe. *Id.*

[23] *See* NRC Staff Response at 4-5 (citing Camper, Larry W., NRC, Letter to President John Yellow Bird Steele, Oglala Sioux Tribe (Sept. 5, 2012) (ADAMS Accession No. ML12248A299)). The surveys conducted covered four Crow Butte sites, including its central facility, the proposed North Trend Expansion Area, the proposed Marsland Expansion Area, and the proposed Three Crow Expansion Area. The Santee Sioux Nation and the Crow Tribe of Montana are not participants in this adjudication.

[24] *Id.*

[25] *Id.* at 5.

[26] *See* Memorandum and Order (Requesting Additional Information) (Mar. 15, 2013) (unpublished).

[27] *See* NRC Staff Response to Board Order Requesting Additional Information (Mar. 20, 2013) (explaining that the complete report would be available to the interested Native American tribes, with a version to be made publicly available later). Shortly thereafter, the Staff notified the Board, Crow Butte, and the petitioners once the public version of the report was available in ADAMS. Simon, Marcia, Counsel for NRC Staff, Letter to the Administrative Judges (Apr. 3, 2013).

origin within the boundaries of the area proposed for the Marsland license amendment that could be affected by activities proposed by Crow Butte.[28]

Because the Board had not yet ruled on standing and contentions at this point, it invited the Staff, Crow Butte, and the petitioners to file briefs addressing the impact of the new information on both standing and contention admissibility.[29] The Staff and Crow Butte filed responsive briefs; the Tribe did not.[30]

The Staff acknowledged that the Marsland Expansion Area lay within the Tribe's aboriginal land and that the sites identified in the SSN Report were of interest to the Tribe.[31] The Staff stated that the question of standing would turn on whether the Tribe had demonstrated an injury to that interest.[32]

In its response to the SSN Report, Crow Butte acknowledged that the Tribe "may have a concrete interest in the newly-discovered sites" but argued that it had not shown a procedural injury under the consultation requirements of the National Historic Preservation Act (NHPA).[33] According to Crow Butte, the Tribe's concern was simply that the Staff would, in the future, violate its duty to consult with the Tribe under the NHPA. Crow Butte argued that the Tribe could not base standing "simply on a right to demand government compliance with the law" and that any claim of procedural injury for Staff noncompliance was premature.[34] The Board rejected Crow Butte's argument as an overly narrow reading of the Tribe's standing claim.[35] Instead, the Board found that the Tribe demonstrated standing based on its claimed interest in protecting Native American cultural resources on the Marsland Expansion Area, as indicated by the SSN Report and by the Tribe's historical occupation of the area.[36]

Crow Butte now argues that the Tribe has not shown that it meets the require-

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[28] Santee Sioux Nation, Crow Butte Project, Dawes County (SSN Report) (ADAMS Accession No. ML13093A123) (undated) (redacted).

[29] Memorandum and Order (Establishing Schedule for Additional Pleadings to Address Information in Recent Tribal Cultural Resources Survey Report) (Mar. 22, 2013) (unpublished).

[30] *See generally* Applicant's Supplemental Response on Standing (Apr. 10, 2013) (Crow Butte Supplemental Brief); NRC Staff's Supplemental Pleading Regarding Santee Sioux Nation Report (Apr. 10, 2013) (NRC Staff Supplemental Brief).

[31] NRC Staff Supplemental Brief at 3-4.

[32] *Id.* at 4.

[33] Crow Butte Supplemental Brief at 7. The NHPA requires the Staff to consult with interested parties (including Indian Tribes) to identify historic properties, evaluate the potential effects of the project on those properties, and consider mitigation measures. *See* 16 U.S.C. § 470f; 36 C.F.R. § 800.1(a). *See also* 36 C.F.R. § 800.2(c)(2)(ii).

[34] Crow Butte Supplemental Brief at 8.

[35] LBP-13-6, 77 NRC at 273-74.

[36] *Id.* The SSN Report included a request to allow "one or two" tribal monitors on the Marsland site during any drilling and construction near the identified cultural sites "because they are difficult to identify on the surface." SSN Report at 5.

ments for "organizational standing." In general, an organization may meet this standard by one of two means: either by showing a threat to its organizational interests or as a representative of one or more of its individual members. As an initial matter, we agree that the Tribe did not show representational standing.[37] Indeed, the Board did not predicate the Tribe's standing on its representation of individual tribal members. Rather, the Board based standing on the Tribe's interest as a tribe in protecting its heritage — that is, its interest as an organization.[38]

Crow Butte next argues that the Tribe has no organizational interest in the cultural artifacts that may be onsite. In particular, Crow Butte claims that the Tribe has not shown that the Native American cultural resources identified on the site are directly connected with the Tribe. According to Crow Butte, the Tribe's interest in protecting the cultural resources on the site is "no different than the interest *any other person* or organization might have in protecting cultural and historical resources."[39]

Related to this argument, Crow Butte claims that the Board erred in relying on the information in the SSN Report to find a connection between the Tribe and the cultural items at Marsland.[40] It points out that the Tribe neither discussed nor incorporated that document into its pleadings.[41] Crow Butte argues that the Board erred in considering the SSN Report for standing purposes because the Tribe did not amend its petition or update its standing affidavits to indicate a particularized interest in the resources identified in the SSN Report.[42] By this reasoning, the Board should have disregarded the Report because the Tribe did not file a supplemental brief. But it appears to us that the Board viewed the report as additional confirmation of the Tribe's already-demonstrated interest in the proceeding, which it based on the Tribe's historical connection to the site.

The Board found that, "even without the new cultural resources survey information, we would have concluded that [the Tribe] had established its standing to intervene in this proceeding."[43] The Board took the view that as long as relevant cultural resources had been identified within the Tribe's aboriginal lands, as they encompass the Marsland Expansion Area, it did not matter, for standing purposes,

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[37] *See* Crow Butte Appeal at 8. Crow Butte's argument that the Tribe did not show that it "uses or visits Marsland" relates to representational standing, and we need not consider it further. Similarly, Crow Butte's assertion that the Tribe did not "suggest that its members have any direct connection with the project area" (by which we assume Crow Butte means no *current* direct connection) relates to representational standing.

[38] LBP-13-6, 77 NRC at 272.

[39] Crow Butte Appeal at 8-9 (emphasis added).

[40] *Id.* at 9.

[41] *Id.*

[42] *Id.*

[43] LBP-13-6, 77 NRC at 275 n.11.

which participant first identified them or brought the additional information before it.[44] The Board considered the Report from the standpoint that the Tribe had *already* claimed an interest in any Native American artifacts found on the site. While the Board may be said to have "inferred" that the Native American cultural resources found on the site were connected to the Oglala Sioux Tribe, this connection was one the Tribe had already asserted in its original petition and in the Mesteth Declaration. We understand the Board to have construed the SSN Report as additional factual support — rather than the only support — for the Tribe's assertion that it had an interest in cultural resources that were present on the project site. For the purposes of determining standing, therefore, we find no error of law or abuse of discretion in the Board's decision.[45]

Crow Butte's argument that the Tribe has no "organizational standing" cannot be squared with our previous *Crow Butte License Renewal* ruling concerning the rights of a federally recognized Indian tribe with respect to cultural resources found within its aboriginal lands. Crow Butte suggests that the cultural resources may have no connection with the Tribe, despite having been found within its aboriginal territory. But we recognized in the *Crow Butte License Renewal* proceeding that the Tribe has a cognizable interest in Native American cultural resources that are present within its aboriginal territory.[46] In addition, Crow Butte acknowledged before the Board that the Tribe "may have a concrete interest in the newly-discovered sites."[47] Finally, the Tribe claimed that cultural resources could be potentially harmed by operations at Marsland, particularly if the applicant fails to "properly judge the significance of these artifacts," an assertion that the Board found plausible.[48] The Board found that the Tribe's interest, coupled with a plausible potential injury to that interest, was a sufficient basis for standing.

For these reasons, and consistent with our ruling in the *Crow Butte License Renewal* matter, we defer to the Board's determination that the Tribe has sufficiently demonstrated the requisite potential injury based on its interest in protecting extant cultural resources located on its aboriginal lands. We decline to disturb the Board's finding of standing.

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[44] *Id.* at 275 n.10.

[45] The boards follow a longstanding principle that, in the standing analysis, "we construe the petition in favor of the petitioner." *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995). *Accord Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 NRC 431, 439 (2008); *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-08-21, 68 NRC 554, 559 (2008).

[46] *See Crow Butte License Renewal,* CLI-09-9, 69 NRC at 337-39.

[47] Crow Butte Supplemental Brief at 7.

[48] *See* Mesteth Declaration ¶ 5. *See also* LBP-13-6, 77 NRC at 274.

B. Contention Admissibility

The Staff joins Crow Butte in arguing that neither Contention 1 nor Contention 2 was properly admitted. As discussed below, we affirm the Board's decision to admit these two contentions.

1. Contention 1: Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources

In its Contention 1, as originally submitted, the Tribe argued that the application had failed to describe the environment with respect to cultural resources located in the Marsland Expansion Area.[49]

In support of its contention, the Tribe offered the declaration of Mr. Mesteth. Mr. Mesteth stated that known cultural resources on land to the north of the site (including artifact scatters, "faunal kill and processing sites," and camps) indicate extensive use of the general area by indigenous people.[50] The Tribe argued, essentially, that although the Tribe did not know of any Native American artifacts or sites within the proposed project area (because it had not had the opportunity to look), such material was bound to be there.

Based upon Mr. Mesteth's declaration, the Board admitted that portion of Contention 1 challenging the description of cultural and historical resources at the site, as follows:

> The application fails to meet the requirements of 10 C.F.R. §§ 51.60 and 51.45, the National Environmental Policy Act [NEPA], the National Historic Preservation Act, and the relevant portions of NRC guidance included at NUREG-1569 section 2.4, in that it lacks an adequate description of either the affected environment or the impacts of the project on archaeological, historical, and traditional cultural resources.[51]

As discussed above, Crow Butte's application stated that two surveys were performed on the site; these surveys found no Native American cultural sites or artifacts on the site.[52] As stated in the SSN Report, however, a later survey

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[49] The contention also claimed that the Staff had not complied with the NHPA's requirement to consult with affected Indian tribes. The Board rejected the portion of the contention regarding compliance with the tribal consultation requirements under NHPA § 106, finding that the concern had been raised prematurely. LBP-13-6, 77 NRC at 287 (citing *Crow Butte North Trend,* CLI-09-12, 69 NRC at 564-66, and *Crow Butte License Renewal,* CLI-09-9, 69 NRC at 348-51). A contention claiming the Staff's consultation was inadequate does not ripen until issuance of the Staff's draft environmental review document. *Crow Butte License Renewal,* CLI-09-9, 69 NRC at 351.

[50] *See* Mesteth Declaration ¶ 11.

[51] LBP-13-6, 77 NRC at 306.

[52] Environmental Report § 3.8.1, at 3-77; Technical Report § 2.4.1, at 2-72.

identified nine Native American sites and two items of interest within the proposed Marsland Expansion Area.[53] The Board found a litigable contention (as narrowed) because the project area contains potential cultural objects and sites that were not accounted for in the application.[54]

The Staff argues that the Board erred in admitting Contention 1 because it "improperly expanded the scope" of what is expected of an applicant under the NRC's regulations implementing the NHPA.[55] In particular, the Staff contends that under 10 C.F.R. § 51.45(c), the applicant is only required to provide information "to aid the Commission in the development of its independent analysis."[56] The Staff cites its own obligations under the NHPA to develop additional information in consultation with Indian tribes. Therefore, "the Applicant's [Environmental Report] will necessarily fail to contain all information relative to cultural resources onsite."[57] The Staff essentially argues that Crow Butte's Environmental Report was not fatally insufficient because the Staff does not expect Crow Butte's cultural resources discussion to be comprehensive.[58]

But the issue here is not whether Crow Butte should have done more to discover cultural resources on the site but whether the Tribe proffered a sufficient challenge to the application as presented. The Staff's reasoning must be reconciled with the provisions in 10 C.F.R. § 2.309(f)(1) and (f)(2), requiring a petitioner to base its environmental contentions on information available at the time its intervention petition is to be filed, including the applicant's environmental report. Our regulations do not contemplate a petitioner waiting for the Staff to perform its responsibilities under the NHPA before the petitioner raises environmental contentions. Although our regulations do allow for contentions based upon the Staff's environmental review documents, a request to admit a new or amended contention requires a petitioner to show that the information upon which it is based was "not previously available" and "materially different from information previously available."[59] The fact that the Staff will develop additional information relevant to cultural resources, as part of its NHPA review, does not preclude

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[53] Crow Butte Appeal at 11 n.38.

[54] LBP-13-6, 77 NRC at 288.

[55] Staff Appeal at 6-7 ("Not only does the NHPA provide another avenue for the Staff to obtain information, but the NHPA *requires* the Staff to obtain information from sources other than the Applicant. Government-to-government consultation with tribes is mandatory when historic properties with religious or cultural significance to them may be affected by an undertaking.") (Emphasis in original, footnote omitted).

[56] *Id.*

[57] *Id.* at 7.

[58] *Id.* at 8-9.

[59] 10 C.F.R. § 2.309(f)(2), (c)(1)(i), (ii).

a challenge to the completeness of the cultural resources information in the application.

In support of its original contention, as supported by the Mesteth Declaration, the Tribe argued that because the Marsland site contains both current and "extinct water resources," which were "favored camping sites of indigenous peoples, both historically and prehistorically," there is a strong likelihood "that cultural artifacts and evidence of burial grounds exist in these areas" despite the contrary results reported in Crow Butte's cultural resource survey.[60] Further, the Tribe argued that "those sites need to be identified" and the impact of proposed licensed activities evaluated. The Board determined, "Given the nature of Native American aboriginal culture, in the circumstances this statement, in and of itself, appears sufficient to support this contention."[61] In view of Mr. Mesteth's status as the Tribe's THPO, and the fact that the Marsland Expansion Area is within the Tribe's aboriginal area, we are satisfied that the Tribe has established a genuine dispute with the Marsland application on a material issue of fact.

Crow Butte repeats the argument, here joined by the Staff, that the Board improperly considered the SSN Report in making its contention admissibility determination.[62] The crux of this argument is that the Tribe did not comment on the report's significance or relevance to its contention, even when given the express opportunity to do so; as such, the Board's use of the Report to buttress its finding of contention admissibility was improper.[63] Given that the Board found the contention admissible based on the original statements of Mr. Mesteth, even without the support of the SSN Report, we need not reach the question whether the Board properly relied upon the SSN Report in ruling on the admissibility of Contention 1.[64]

We defer to the Board's decision admitting the contention.

2. Contention 2: Failure to Include Adequate Hydrogeological Information to Demonstrate Ability to Contain Fluid Migration

We also defer to the Board with respect to its ruling admitting Contention 2. The contention, as described in the Tribe's intervention petition and in the

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[60] Mesteth Declaration ¶ 8.

[61] LBP-13-6, 77 NRC at 288.

[62] Staff Appeal at 10-13; Crow Butte Appeal at 11-12.

[63] The Staff adds that because the petitioner has the burden to explain the significance of a document, the Board should not have considered it in finding the contention admissible. Staff Appeal at 10.

[64] *See* LBP-13-6, 77 NRC at 288. We are not persuaded otherwise by Commissioner Svinicki's dissenting opinion in which she supports a remand to the Board.

supporting affidavit of Dr. Hannan LaGarry,[65] meets the minimum requirements for contention admissibility.

Contention 2, as admitted, states:

> The application fails to provide sufficient information regarding the geological setting of the area to meet the requirements of 10 C.F.R. § 40.31(f); 10 C.F.R. § 51.45; 10 C.F.R. § 51.60; 10 C.F.R. Part 40, Appendix A, Criteria 4(e) and 5G(2); the National Environmental Policy Act; and NUREG-1569 section 2.6. The application similarly fails to provide sufficient information to establish potential effects of the project on the adjacent surface and ground-water resources, as required by 10 C.F.R. § 51.45, NUREG-1569 section 2.7, and the National Environmental Policy Act.[66]

The Board found that Contention 2 challenged the "adequacy of the hydrogeologic information provided in [Crow Butte's] application, claiming the data provided do not demonstrate that [Crow Butte] can contain fluid migration."[67] Specifically, the Board found that the contention comprised four claimed "deficits" in the application: (1) the discussion of the project's proposed effects on surface and groundwater; (2) the application's description of effective porosity, hydraulic conductivity, and hydraulic gradient; (3) the lack of a "conceptual model of site hydrology adequately supported by data," and (4) "unsubstantiated assumptions" concerning confinement of the aquifers.[68] Crow Butte and the Staff, on appeal, argue that these general claims were not supported by citations to the specific portions of the application that the Tribe maintains do not "provide sufficient information" and do not identify particular omissions in the application.[69]

As originally submitted, the contention stated that the application "fails to provide sufficient information regarding the geological setting" to meet the requirements of NEPA, our regulations, and NUREG-1569, the Standard Review Plan for *in situ* leach uranium extraction applications.[70] It continued with a brief discussion of the information relating to hydrology and geology that should be

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[65] OST Petition, Attachment 9, Expert Opinion on the Environmental Safety of In-Situ Leach Mining of Uranium Near Marsland, Nebraska, Dr. Hannan LaGarry (LaGarry Declaration).

[66] LBP-13-6, 77 NRC at 306.

[67] *Id.* at 289.

[68] *Id.*

[69] *See, e.g.,* Crow Butte Appeal at 14, 16-19 (describing the application's discussions of each topic claimed to be "insufficient"); Staff Appeal at 19-20.

[70] OST Petition at 17-18 (citing NUREG-1569, "Standard Review Plan for In Situ Leach Uranium Extraction License Applications" (June 2003) (ADAMS Accession No. ML031550272); 10 C.F.R. §§ 51.45, 51.60). The Standard Review Plan, NUREG-1569, does not in itself impose requirements on an applicant but provides guidance to the Staff in reviewing an application. *See Curators of the University of Missouri,* CLI-95-1, 41 NRC 71, 98 (1995).

included in an *in situ* uranium recovery application.[71] The Tribe claimed that the application must include a "description of the affected environment . . . sufficient to establish potential effects . . . on adjacent surface and ground water resources"; a "conceptual model of site hydrology"; a description of "hydrogeology, including the horizontal and vertical hydraulic conductivity"; and a description of the "effective porosity, hydraulic conductivity, and hydraulic gradient."[72] The Tribe also asserted that "the application fail[ed] to present sufficient information in a scientifically defensible manner to adequately characterize the site and off-site hydrology to ensure confinement of the extraction fluids."[73]

In support of this contention, as noted above, the Tribe provided the declaration of Dr. LaGarry, an expert in the geology of the region, to support its claims. Dr. LaGarry's declaration begins with an overview of the stratigraphy of water-bearing rocks of northwestern Nebraska, with specific comments about the occurrence of each formation in the Marsland area.[74] He suggests that some of the information upon which Crow Butte relies is outdated and incorrect: "The recent mapping of the geology of northwestern Nebraska has shown that the simplified, 'layer cake' concept applied by pre-1990s workers is incorrect, and overestimates the thickness and areal extent of many units by 40-60%."[75]

Dr. LaGarry next identifies three potential pathways through which contaminants could reach the aquifers lying above the mined formation and migrate to the White and Niobrara Rivers: (1) surface leaks and spills, (2) excursions from the injection and extraction wells, and (3) lack of containment caused by faults.[76] With respect to the lack of containment, he states that there are "potential faults in the Marsland area," which "may allow the transmission of mining fluids to travel upward into the aquifer."[77] Dr. LaGarry's declaration includes a large-scale map of western Nebraska showing a single known fault in the Marsland area, but Dr. LaGarry states that, based on his work over the past 25 years, "there are likely hundreds more" such faults.[78] He concluded that, because of these potential

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[71] OST Petition at 17-18. *See* 10 C.F.R Part 40, App. A. Because the requirements listed in Appendix A were specifically written for conventional uranium recovery facilities, not all requirements found there are applicable to *in situ* leach recovery facilities. NUREG-1569, Appendix B provides a table of applicable criteria and the corresponding sections in the review plan where such criteria are addressed.

[72] OST Petition at 17-18.

[73] *Id.*

[74] LaGarry Declaration at 2-4 (unnumbered).

[75] LaGarry Declaration at 4 (unnumbered). *See, e.g.,* Environmental Report § 3.3.1.1, at 3-4 to 3-16.

[76] *See* LaGarry Declaration at 4-5 (unnumbered). Two of these pathways (that is, surface leaks and leaks from the injection and extraction wells) do not relate to any subject raised by the petitioners in Contention 2.

[77] *Id.*

[78] *Id.*

pathways, it was his opinion that *in situ* leach uranium recovery should not be allowed in the Marsland area.[79]

Crow Butte and the Staff argued before the Board that Contention 2 did not demonstrate a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(vi). That provision requires a contention to:

> provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute.

Both the Staff and Crow Butte pointed out that the application included discussions of each topic listed in Contention 2. Their responses cited the specific sections of the application where each matter was addressed.[80] Crow Butte and the Staff argued that the petition did not address the information in the application or identify any information that was purportedly missing or inaccurate.[81] Before the Board, the Tribe claimed that these arguments go to the merits of the contention. The Tribe claimed that the Staff and Crow Butte were essentially asking the Board to consider, at the contention admissibility stage, whether the cited portions of the application were sufficient or not.[82] The Tribe also argued that the regulation does not require the Tribe to discuss "each and every portion of the application that bears any relation to the issue being contested," but requires a "brief explanation" of the argument and a "concise statement" of the relevant facts.[83]

In rejecting the Staff's and Crow Butte's arguments, the Board held that the requirement that a contention refer to "specific portions of the application" has the dual purpose of ensuring that the boards can determine whether the contention is within the scope of the proceeding, and that the applicant knows which portions of the application it must defend.[84] The Board found that the Tribe's "petition makes abundantly clear which section of [Crow Butte's] application it is challenging, namely those sections pertaining to [Crow Butte's] discussion of the hydrogeologic conditions at and around the [Marsland] site and [Crow

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[79] *Id.* at 5 (unnumbered).

[80] NRC Staff Response at 26-27, 29; Crow Butte Response at 12-13.

[81] *See* NRC Staff Response at 29 ("The Tribe does not explain what it means by 'scientifically defensible' and gives no examples to support that claim"); Crow Butte Response at 14 ("Dr. LaGarry does not address any of the evidence provided by [the application] in support of confinement or even point to any portion of the application that is alleged to be deficient").

[82] *See* Reply to NRC Staff and Applicant Responses to the Petition to Intervene and Request for Hearing of the Oglala Sioux Tribe (Mar. 4, 2013) at 14-15, 16.

[83] *Id.* at 21 (citing 10 C.F.R. § 2.309(f)(1)).

[84] LBP-13-6, 77 NRC at 292-93.

Butte's] discussion of fluid containment at the site."[85] The Board concluded that the contention was "specific enough to allow [Crow Butte] to understand what portions of its application are being challenged."[86] The Board found that the Tribe was "essentially pointing to all sections of the application relating to hydrogeology as the source of its concern about alleged inadequacies that [the Tribe] perceives as all-encompassing deficiencies in the application."[87] The Board went on to add that it was "apparent . . . that [the Tribe] is challenging [Environmental Report] section 3.4.3.2, 'Aquifer Testing and Hydraulic Parameter Identification Information,' and [Environmental Report] section 3.4.3.3, 'Hydrologic Conceptual Model for the Marsland Expansion Area.'"[88]

As we stated at the outset, we afford the Board's rulings on contention admissibility substantial deference. Such deference is appropriate even where we may consider that the support for the contention is weak, or where the claim's materiality presents a "close question."[89] The issue involved in the proposed contention — confinement of the aquifers — is material to the environmental impacts of this licensing action.[90] The Board concluded that the contention was specific enough, and we defer to the Board on that issue. We therefore decline to disturb the Board's decision to admit Contention 2.

III. CONCLUSION

Based on the foregoing, we *affirm* LBP-13-6 with respect to its determinations regarding the Oglala Sioux Tribe's standing and the admission of Contentions 1 and 2.

[85] *Id.* at 293.

[86] *Id.* at 292.

[87] *Id.*

[88] *Id.* at 293. In Environmental Report § 3.4.3.2, Crow Butte discusses the purpose, conduct, and results of a 2011 pumping test, which it claims (among other things) establishes the hydraulic conductivity of the site and demonstrates adequate confinement of the aquifers. In Environmental Report § 3.4.3.3, it discusses the hydraulic conceptual model for the proposed expansion area and its bases (including core sampling) for that model.

[89] *See, e.g., NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 326-27, 329 (2012). Although we agree with Commissioner Svinicki that this presents a close question, we instead conclude that deference to the Board's findings is appropriate.

[90] *See Crow Butte North Trend,* CLI-09-12, 69 NRC at 559.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 12th day of February 2014.

Commissioner Svinicki, Dissenting in Part

I respectfully dissent with regard to the admissibility of the Tribe's Contentions 1 and 2. I recognize that both contentions raise close questions under our contention admissibility standards and agree with much of the majority's reasoning. But, for the following reasons, I cannot concur in the majority's result.

A. The Board Did Not Fully Consider Whether the Mesteth Declaration Alone Provided Sufficient Support for Contention 1

With respect to Contention 1, I agree with the majority's reluctance to rely on the SSN Report to support the contention.[91] As the majority's opinion notes, the initial hearing request did not cite the SSN Report, which was not available at that time.[92] Rather, the Staff provided the SSN Report in response to the Board's March 15, 2013, request.[93] The Tribe never amended its contention to include the SSN Report[94] and declined to comment on the report's significance when asked to do so by the Board.[95] Therefore, reliance on the SSN Report to establish the admissibility of Contention 1 would depart from our frequently stated rule that the petitioner, rather than the licensing board, bears the burden of establishing the admissibility of proffered contentions.[96] In keeping with this rule, we have previously overturned board decisions that revised inadmissible contentions to render them admissible[97] or inferred additional bases for contentions beyond those supplied by the petitioner.[98] In my view, basing Contention 1 on the contents of the SSN Report would constitute a similar error. The majority's opinion wisely avoids this result.

However, I do not agree with the majority's determination to uphold the admission of Contention 1 on the grounds that the Board found the Mesteth Declaration

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[91] *See* p. 22, *supra.*

[92] *Id.* at pp. 15-17, 20.

[93] *Id.* at pp. 16-17 (citing Memorandum and Order (Requesting Additional Information) (Mar. 15, 2013) (unpublished)).

[94] *See* 10 C.F.R. § 2.309(c) (allowing parties to file amended contentions upon discovering new information that lends further support to existing claims).

[95] *See* p. 17, *supra* (noting that the Tribe did not file a brief "addressing the impact of the new information on both standing and contention admissibility").

[96] *E.g., Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-12-15, 75 NRC 704, 714 (2012).

[97] *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-09-8, 69 NRC 317, 323-27 (2009).

[98] *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991).

alone provided sufficient support.[99] The Board's order indicates that the Mesteth Declaration might support the contention; "Given the nature of Native American aboriginal culture, in these circumstances this statement [(the Mesteth Declaration)], in and of itself, *appears* sufficient to support this contention."[100] But, the Board ultimately stated that the SSN Report obviated the need to determine whether the Mesteth Declaration provided sufficient support for Contention 1 — "to whatever degree it might not be sufficient, the subsequent SSN/CN survey has shown the concern to be well founded."[101] Thus, in admitting Contention 1, the Board concluded that "the recent archaeological survey discovery of potential Native American cultural resource sites on the [Marsland Expansion Area] is sufficient to establish the admissibility" of Contention 1.[102] Moreover, the lack of response to the Staff's objections to the Mesteth Declaration at the contention admissibility stage underscores the incompleteness of the Board's consideration of the Mesteth Declaration's adequacy.[103] As a result, I believe the agency has yet to consider fully whether the Mesteth Declaration provides adequate support for Contention 1. Because we generally prefer that licensing boards make initial factual determinations,[104] I would remand Contention 1 to the Board to consider fully whether the Mesteth Declaration alone provides an adequate factual basis for Contention 1.

B. Contention 2 Does Not Show a Genuine Dispute on a Material Issue

With respect to Contention 2, I again concur with much of the majority's reasoning. I agree with the majority's finding that aquifer confinement is a material issue for this proceeding.[105] In addition, I agree with the majority's finding that Dr. LaGarry suggests that some specific references in the Environmental Report may be outdated, particularly those that he asserts rely on an outdated "layer cake" concept or potentially understate the number of faults in Western Nebraska.[106] However, in my view, the connection between these findings is too attenuated

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[99] *See* p. 22, *supra.*

[100] LBP-13-6, 77 NRC at 288 (emphasis added).

[101] *Id.*

[102] *Id.*

[103] *Compare id. with* NRC Staff Response at 21-23 (claiming that the Mesteth Declaration lacks sufficient specificity, did not adequately challenge the applicant's methodology, and relies on a quotation from the Environmental Report that does not pertain to the Marsland site).

[104] *Washington Public Power Supply System* (WPPSS Nuclear Project Nos. 3 and 5), CLI-77-11, 5 NRC 719, 722-23 (1977).

[105] *See* p. 26, *supra.*

[106] *Id.* at pp. 24-25.

to show the genuine dispute on a material issue our regulations require of an admissible contention.

Specifically, our regulations require the proponent of a contention to "provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact."[107] Our requirement that the petitioner show a genuine dispute on a material issue ensures that an "inquiry in depth is appropriate."[108] We have observed that a "dispute at issue is 'material' if its resolution would 'make a difference in the outcome of the licensing proceeding.'"[109]

While the Tribe has shown that aquifer confinement is an important issue, the disputes raised by the Tribe do not contravene Crow Butte's analysis regarding confinement. Therefore, Contention 2 does not establish a genuine dispute on a material issue. At most, the Tribe claimed that some assumptions regarding confinement of mining fluids from the aquifer may not be sound because "there are likely hundreds more" faults in western Nebraska than some scholars have claimed and the "layer cake" model may be outdated.[110] But, Crow Butte does not rely on these assumptions to establish confinement — rather it relies on an aquifer pumping test, among other things.[111] Nothing in the LaGarry Declaration, LBP-13-6, or the majority opinion clearly connects the disputes identified by the Tribe with the analyses Crow Butte relies on to establish confinement. Therefore, even if these disputes were resolved in favor of the Tribe, that resolution would have no evident impact on the results of the environmental analysis. Rather, the disputes raised by Contention 2 appear to be the type of "flyspecking" we have previously found inappropriate for environmental contentions, such as Contention 2.[112] Consequently, Contention 2 does not raise a genuine dispute with the application on a material issue, as required by our regulations. In light of this, I also respectfully dissent from the majority's conclusion on the admissibility of Contention 2.

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[107] 10 C.F.R. § 2.309(f)(1)(vi).

[108] Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,168, 33,171 (1989) (quotations omitted).

[109] *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999) (quoting Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,168, 33,172 (1989)).

[110] *See* LaGarry Declaration at 4-5 (unnumbered).

[111] *E.g.,* Environmental Report § 3.4.3.2, at 3-40 to 3-42.

[112] *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 71 (2001).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Allison M. Macfarlane, Chairman
Kristine L. Svinicki
George Apostolakis
William D. Magwood, IV
William C. Ostendorff

In the Matter of **Docket Nos. 50-327-LR**
50-328-LR

TENNESSEE VALLEY AUTHORITY
(Sequoyah Nuclear Plant, Units 1
and 2) **February 12, 2014**

REPLY BRIEFS

Section 2.311 does not provide for the filing of replies.

RULES OF PRACTICE

We permit filings not otherwise authorized by our rules only where necessity or fairness dictates.

ELECTRONIC FILING

Electronic filing is required unless we grant an exemption permitting an alternative filing method for good cause shown, or unless the filing falls within the scope of the exception identified in 10 C.F.R. § 2.302(g)(1).

APPEALS, INTERLOCUTORY

Section 2.311(c) and (d)(1) of our rules of practice permits an appeal as of right

from a board's ruling on an intervention petition in two limited circumstances: (1) upon the denial of a petition to intervene and/or request for hearing, on the question as to whether it should have been granted; or (2) upon the granting of a petition to intervene and/or request for hearing, on the question as to whether it should have been wholly denied. This limited interlocutory appeal right attaches only when the Board has fully ruled on the initial intervention petition — that is, when it has admitted or rejected all proposed contentions.

APPEALS, INTERLOCUTORY

A board must rule on all pending contentions before an appeal may be lodged pursuant to section 2.311(c) or (d)(1).

MEMORANDUM AND ORDER

The Tennessee Valley Authority (TVA) and the Blue Ridge Environmental Defense League (BREDL) have appealed the Atomic Safety and Licensing Board's order, LBP-13-8.[1] The Board found that BREDL established standing.[2] In addition, the Board found seven of BREDL's proposed contentions inadmissible, but held in abeyance a contention raising waste confidence matters. As a result, the Board neither granted nor denied the hearing request.[3] As discussed in more detail below, because the intervention petition has not been fully ruled upon by the Board, LBP-13-8 is not yet ripe for appeal. We dismiss the appeals as premature and provide further guidance with respect to the pending waste confidence contention.

I. BACKGROUND

This matter involves TVA's license renewal application for two units on the Sequoyah site, located in Soddy-Daisy, Tennessee. The renewed operating licenses, if issued, would authorize TVA to operate Sequoyah Units 1 and 2 for an additional 20 years beyond the period specified in the current licenses, which expire on September 17, 2020, and September 15, 2021, respectively.[4]

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[1] LBP-13-8, 78 NRC 1 (2013).

[2] *Id.* at 5.

[3] *Id.*

[4] Tennessee Valley Authority; Notice of Acceptance for Docketing of Application and Notice of Opportunity for Hearing Regarding Renewal of Sequoyah Nuclear Plant, Units 1 and 2 Facility *(Continued)*

Following publication of a notice of opportunity to request a hearing and petition for leave to intervene on TVA's license renewal application, BREDL filed an intervention petition and hearing request, submitting eight proposed contentions.[5] The Board concluded that BREDL demonstrated standing.[6] The Board rejected seven of BREDL's contentions and held that a portion of one, related to waste confidence, should be held in abeyance.[7]

Regarding waste confidence, last year the U.S. Court of Appeals for the District of Columbia Circuit found that the NRC failed to comply with the National Environmental Policy Act in issuing its 2010 update to the Waste Confidence Decision and accompanying Temporary Storage Rule.[8] The court vacated both the Decision and the Rule and remanded the case to the agency.[9] Shortly thereafter, in the *Calvert Cliffs* decision, we responded to a series of petitions to suspend final licensing decisions in twenty-two reactor licensing proceedings.[10] Because waste confidence undergirds certain agency licensing decisions, we held that the NRC should not issue licenses affected by the Waste Confidence Decision until the remanded issues are resolved.[11] At that time, we and the licensing boards also had received several new contentions and associated filings concerning waste confidence.[12] In view of the special circumstances presented by waste confidence,

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Operating License Nos. DPR-77, DPR-79 for an Additional 20-Year Period, 78 Fed. Reg. 14,362, 14,362-63 (Mar. 5, 2013).

[5] *See id.*; Petition for Leave to Intervene and Request for Hearing by the Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team, and Mothers Against Tennessee River Radiation (May 6, 2013) (BREDL Intervention Petition).

[6] LBP-13-8, 78 NRC at 5. The Board also found that two subsets of BREDL, Bellefonte Efficiency and Sustainability Team and Mothers Against Tennessee River Radiation, had not made sufficient showings to demonstrate standing. *Id.* BREDL did not challenge these two standing determinations. *See* Petition for Interlocutory Review by the Blue Ridge Environmental Defense League and Chapter Bellefonte Efficiency and Sustainability Team, and Mothers Against Tennessee River Radiation (July 30, 2013) at 1 n.1 (BREDL Petition).

[7] LBP-13-8, 78 NRC at 5. Contention B asserts that "NRC cannot grant the Sequoyah license renewal without conducting a thorough analysis of the risks of the long-term storage of irradiated nuclear fuel generated by Sequoyah Units 1 and 2." *Id.* at 15 (quoting BREDL Intervention Petition at 12). The Board rejected the safety portion of Contention B: "To the extent that Contention B asserts that *New York v. NRC* undermines or invalidates the safety portion of the [License Renewal Application] for Sequoyah, we reject it." *Id.* at 16.

[8] *New York v. NRC,* 681 F.3d 471, 473 (D.C. Cir. 2012).

[9] *Id.*

[10] *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 63-65 (2012).

[11] *Id.* at 66-67.

[12] *Id.* at 67 & n.10.

we directed that those contentions — and any related contentions filed in the near term — be held in abeyance pending our further order.[13]

In the instant case, the Board reasoned that the environmental portion of BREDL's waste confidence contention "is substantially similar to the petitions" that we responded to in the *Calvert Cliffs* decision.[14] Accordingly, the Board held the contention in abeyance and, as a result, neither granted nor denied BREDL's request for a hearing.[15]

II. DISCUSSION

Both TVA and BREDL now appeal the Board order pursuant to 10 C.F.R. § 2.311.[16] TVA argues that the Board should have dismissed the waste confidence contention in its entirety, and therefore, BREDL's petition to intervene and request for hearing should have been wholly denied.[17] BREDL requests that we review LBP-13-8 and grant its request for a hearing and petition to intervene.[18] The Staff opposes both petitions for review; TVA opposes BREDL's petition for review.[19]

As an initial procedural matter, TVA seeks to reply to the Staff's answer, while the Staff opposes TVA's request.[20] As TVA acknowledges, section 2.311 does not provide for the filing of replies.[21] The Staff contends that TVA should have anticipated its arguments that (1) LBP-13-8 is not appealable under 10 C.F.R. § 2.311 and (2) because TVA did not raise the issue before the Board, TVA is

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[13] *Id.* at 68-69.

[14] LBP-13-8, 78 NRC at 16 (citing *Calvert Cliffs,* CLI-12-16, 76 NRC 63).

[15] *Id.* at 5, 16.

[16] Tennessee Valley Authority's Notice of Appeal of LBP-13-08 (July 30, 2013); BREDL Petition.

[17] Tennessee Valley Authority's Brief in Support of Appeal of LBP-13-08 (July 30, 2013) at 1 (TVA Brief).

[18] BREDL Petition at 1.

[19] NRC Staff Brief in Opposition to Tennessee Valley Authority Petition for Review of LBP-13-08 (Aug. 26, 2013) (Staff Answer to TVA Appeal); NRC Staff Brief in Opposition to Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team, and Mothers Against Tennessee River Radiation Petition for Interlocutory Review of LBP-13-08 (Aug. 26, 2013); Tennessee Valley Authority's Brief in Opposition to BREDL's Appeal of LBP-13-08 (Aug. 26, 2013).

[20] Tennessee Valley Authority's Motion for Leave to Reply to NRC Staff Brief in Opposition to Tennessee Valley Authority Petition for Review of LBP-13-08 (Sept. 5, 2013) (TVA Motion to Reply); Tennessee Valley Authority's Reply Brief on Appeal of LBP-13-08 (Sept. 5, 2013); NRC Staff's Answer to TVA's Motion for Leave to Reply (Sept. 16, 2013) (Staff Answer to TVA Motion to Reply).

[21] TVA Motion to Reply at 1; *All Operating Boiling Water Reactor Licensees with Mark I and Mark II Containments: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents,* CLI-13-2, 77 NRC 39, 44 n.20 (2013); *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-12-6, 75 NRC 352, 360 n.36 (2012).

foreclosed on appeal from arguing that *Calvert Cliffs* does not apply here because that decision only applies to contentions then pending or filed soon after its issuance 1 year ago.[22] For its part, TVA argues that it should be allowed to file a reply due to compelling circumstances, including the unusual posture of this case and the unforeseeability of the Staff's arguments.[23]

"We permit filings not otherwise authorized by our rules only where 'necessity or fairness dictates.'"[24] We are not persuaded that TVA could not reasonably have anticipated the arguments contained in the Staff's brief opposing TVA's appeal. TVA filed its appeal under section 2.311. As an experienced litigant in our proceedings, TVA should reasonably have anticipated that the Staff might challenge its interpretation of section 2.311 in the first instance, particularly given recent Commission case law (discussed *infra*) clarifying the appealability of Board decisions that only partially disposition a hearing request. More critically, however, the record reflects that TVA was aware of the potential applicability of *Calvert Cliffs* to this matter.[25] Because this very issue was raised earlier in this proceeding, TVA cannot claim surprise at the Staff's argument that it is precluded from raising the inapplicability of *Calvert Cliffs* for the first time on appeal.[26] TVA has not shown that it could not have addressed these issues in its appeal, nor has it presented genuinely new information in its reply; therefore, neither necessity nor fairness dictates that its reply should be permitted.[27] Moreover, we find that the arguments raised in TVA's reply are not necessary for our decision in this case. We therefore deny TVA's Motion to Reply.[28]

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[22] Staff Answer to TVA Appeal at 14-15.

[23] TVA Motion to Reply at 1-2.

[24] *Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 and 3), CLI-11-14, 74 NRC 801, 807 (2011) (citing *U.S. Department of Energy* (High-Level Waste Repository), CLI-08-12, 67 NRC 386, 393 (2008); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 677 (2008)).

[25] *See* Transcript (Scheduling Teleconference) (Aug. 8, 2013) at 46-47 (Judge Karlin's exchange with TVA counsel on the potential applicability of *Calvert Cliffs*).

[26] *See* Staff Answer to TVA Motion to Reply at 7 (citing Tr. at 46-47).

[27] *See Pilgrim,* CLI-12-6, 75 NRC at 374 n.138. For the same reasons, even if TVA's reply were considered under our motions rule that it cites, 10 C.F.R. § 2.323(c), it would not satisfy the "compelling circumstances" standard.

[28] BREDL replied to TVA's answer. Reply of the Blue Ridge Environmental Defense League (Sept. 5, 2013). TVA does not oppose BREDL's reply, but that reply likewise is not contemplated by our rules. BREDL does not address why its reply is proper, but even had BREDL done so, it would not have satisfied our standard. BREDL's reply does not raise new information or arguments that it could not have made when it filed its petition for review, and, as the reply relates to the merits of its appeal, which we do not reach today, it does not provide information necessary for our decision. As such, we likewise reject BREDL's reply.

(Continued)

With respect to the appeals of the Board order, section 2.311 of our rules of practice permits an appeal as of right from a board's ruling on an intervention petition in two limited circumstances: (1) upon the denial of a petition to intervene and/or request for hearing, on the question as to whether it should have been granted; or (2) upon the granting of a petition to intervene and/or request for hearing, on the question as to whether it should have been wholly denied.[29] This limited interlocutory appeal right attaches only when the Board has fully ruled on the initial intervention petition — that is, when it has admitted or rejected all proposed contentions. In *South Texas* and *Catawba,* we addressed circumstances similar to those here — where a Board has ruled only partially on an initial intervention petition.[30] These cases demonstrate that a Board must rule on all pending contentions before an appeal may be lodged pursuant to section 2.311(c) or (d)(1).[31] Consistent with these cases, because the Board explicitly neither granted nor denied BREDL's hearing request and neither admitted nor denied BREDL's waste confidence contention, neither TVA's nor BREDL's appeal is yet ripe.[32] We therefore dismiss those appeals without prejudice. Once the Board

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We also note that BREDL did not submit its reply via the agency's E-filing system, as required by 10 C.F.R. § 2.302, nor did it seek an exemption from that rule. We remind adjudicatory participants that electronic filing is required unless we grant an exemption permitting an alternative filing method for good cause shown, or unless the filing falls within the scope of the exception identified in 10 C.F.R. § 2.302(g)(1).

[29] *See* 10 C.F.R. § 2.311(c), (d)(1). An appeal of an order selecting a hearing procedure also is governed by section 2.311, "on the question as to whether the selection of the particular hearing procedures was in clear contravention of the criteria set forth in § 2.310." 10 C.F.R. § 2.311(e). That provision is not at issue here.

[30] *South Texas Project Nuclear Operating Co.* (South Texas Project, Units 3 and 4), CLI-09-18, 70 NRC 859 (2009); *Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-11, 59 NRC 203 (2004)). In these cases, the Boards found that the petitioners had standing and had submitted at least one admissible contention but did not rule on all of the outstanding contentions. *South Texas Project,* CLI-09-18, 70 NRC at 860; *Catawba,* CLI-04-11, 59 NRC at 205-07.

[31] *South Texas Project,* CLI-09-18, 70 NRC at 862; *Catawba,* CLI-04-11, 59 NRC at 208 ("[F]or a hearing petitioner to take an appeal pursuant to section 2.714a(b) [now section 2.311(c)], the petitioner must claim that, after considering all pending contentions, the Board has erroneously denied a hearing. And for a license applicant . . . to take an appeal under the counterpart regulation, section 2.714a(c) [now section 2.311(d)(1)], the applicant must contend that, after considering all pending contentions, the Board has erroneously granted a hearing to the petitioner."); *see* Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2218 (Jan. 14, 2004) (Table 2 — Cross-References Between Old Provisions of Subpart G and New Subpart C); *see also Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-07-2, 65 NRC 10, 11 (2007) (citing *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-04-31, 60 NRC 461, 468 (2004); *Catawba,* CLI-04-11, 59 NRC at 208).

[32] *See* LBP-13-8, 78 NRC at 5.

has finally dispositioned BREDL's intervention petition, TVA and BREDL may resubmit their appeals, as appropriate, consistent with the applicable rules.[33]

We do, however, take this opportunity to provide additional guidance on the question of the pending waste confidence contention — after all, it was our direction in *Calvert Cliffs* that led the Board to rule only partially on BREDL's intervention petition. We issued *Calvert Cliffs* shortly after the court vacated our 2010 Waste Confidence Decision and Temporary Storage Rule.[34] TVA correctly observes that, at that time, we had not set a course of action in response to the remand. Consistent with our direction in *Calvert Cliffs* to hold contentions related to waste confidence in abeyance, the Board correctly held the environmental portion of Contention B in abeyance.

Since the issuance of that decision, we have directed the Staff to proceed with development of a generic environmental impact statement and complete a final rule and environmental impact statement by Fall 2014.[35] We will provide further direction regarding pending waste confidence contentions concurrent with issuance of the final rule. Thereafter, following the issuance of the Board's final dispositive decision in this matter, and consistent with our procedural rules, TVA and BREDL will have the opportunity to appeal the Board's decisions.[36] In the meantime, the direction we provided in *Calvert Cliffs* remains in place.

III. CONCLUSION

For the reasons set forth above, we *dismiss* both TVA's appeal and BREDL's petition for interlocutory review, without prejudice to their ability to appeal the

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[33] We observe that, in its decision, the Board did note that its order was "subject to appeal in accordance with the provisions of 10 C.F.R. § 2.311." *Id.* at 35. The Board's reference serves as a useful convenience to the participants, in that it advises them of the potentially applicable appeal provision. But the Board's reference does not guarantee an immediate automatic appeal; the rule's requirements still must be satisfied.

[34] *See Calvert Cliffs,* CLI-12-16, 76 NRC at 66.

[35] *See* Staff Requirements — COMSECY-12-0016 — Approach for Addressing Policy Issues Resulting from Court Decision to Vacate Waste Confidence Decision and Rule (Sept. 6, 2012) (ADAMS Accession No. ML12250A032). We have since approved publication of a proposed rule and a draft Generic Environmental Impact Statement. *See* Staff Requirements — SECY-13-0061 — Proposed Rule: Waste Confidence — Continued Storage of Spent Nuclear Fuel (RIN 3150-AJ20) (Aug. 5, 2013) (ADAMS Accession No. ML13217A358); Waste Confidence — Continued Storage of Spent Nuclear Fuel, 78 Fed. Reg. 56,776 (Sept. 13, 2013); Draft Waste Confidence Generic Environmental Impact Statement, 78 Fed. Reg. 56,621 (Sept. 13, 2013).

[36] *See South Texas Project Nuclear Operating Co.* (South Texas Project, Units 3 and 4), CLI-10-16, 71 NRC 486, 491 (2010) (citing 10 C.F.R. § 2.341(a), (b); *Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 365 & n.180 (2009)).

Board's rulings following the issuance of the Board's final dispositive decision in this matter.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 12th day of February 2014.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

THE ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Michael C. Farrar, Chairman
Dr. Paul B. Abramson
Nicholas G. Trikouros

In the Matter of **Docket No. 70-3098-MLA**
(ASLBP No. 07-856-02-MLA-BD01)
(Possession and Use License)

SHAW AREVA MOX SERVICES, LLC
(Mixed Oxide Fuel Fabrication Facility)

February 27, 2014
(as redacted per Order of May 21, 2014)

In this proceeding regarding the application of Shaw AREVA MOX Services, LLC ("Applicant") for a license to possess and use strategic special nuclear material ("SSNM") at a Mixed Oxide Fuel Fabrication Facility being constructed at the U.S. Department of Energy's Savannah River Site, the Licensing Board concludes that Applicant has provided reasonable assurance that the challenged portions of its material control and accounting ("MC&A") system satisfy the applicable regulatory requirements. For Contention 9, Applicant has demonstrated, as required by 10 C.F.R. § 74.55(b)(1), the ability to verify the presence and integrity of SSNM items with a 99% power of detecting item losses of 5 formula kilograms within specified time periods. For Contention 10, Applicant has demonstrated, as required by 10 C.F.R. § 74.57(b), the ability to resolve MC&A alarms within approved time periods. For Contention 11, Applicant has demonstrated, as required by 10 C.F.R. § 74.57(e), the ability to rapidly assess alleged thefts.

REGULATIONS: INTERPRETATION (10 C.F.R. §§ 74.51, 74.55, 74.57)

The NRC may issue a license to possess and use five or more formula kilograms of SSNM, under 10 C.F.R. Part 70, only if an applicant can establish, implement, and maintain an approved MC&A system that will achieve general performance objectives. To achieve these SSNM loss-related performance objectives, the MC&A system must provide the capabilities described in sections 74.55 and 74.57, among other capabilities.

REGULATIONS: INTERPRETATION (10 C.F.R. Part 74)

The NRC's MC&A regulations in 10 C.F.R. Part 74 require the tracking of SSNM items during storage and processing in order to safeguard these materials from diversion.

REGULATIONS: INTERPRETATION (10 C.F.R. Part 74)

The NRC's MC&A regulations in 10 C.F.R. Part 74 are intended to "provide flexibility for licensees to select the most cost-effective ways of achieving performance objectives." Though flexible, an applicant's proposed controls must still be "adequate" to show compliance with the regulations.

MATERIALS LICENSE UNDER PART 70: REASONABLE ASSURANCE

For an applicant's MC&A system to be found adequate, a licensing board must make a case-by-case determination, guided by the Atomic Energy Act's mandate that no license to possess special nuclear material may be issued if issuance "would be inimical to the common defense and security or would constitute an unreasonable risk to the health and safety of the public." This board finds that use of the reasonable assurance standard to determine MC&A adequacy, as suggested by the NUREG-1718 guidance, is consistent with our statutory mandate.

REGULATIONS: STANDARD FOR PERFORMANCE-ORIENTED REGULATIONS

Even though performance-oriented regulations provide applicants with flexibility to determine how best to achieve stated performance objectives, the method chosen must still demonstrate reasonable assurance of compliance with the underlying regulatory standard. It is incumbent on the NRC Staff to scrutinize an applicant's chosen approach and determine whether or not it provides reasonable

assurance that the regulation will be met. Mere compliance with regulatory guidance is not sufficient.

LICENSING DECISION: BURDEN OF PROOF

An applicant for an NRC license bears the ultimate burden of proof. With respect to each contention, an intervenor has the initial "burden of going forward" and must provide sufficient evidence to support the claims made. If an intervenor makes that showing, the applicant has the burden of demonstrating by a preponderance of the evidence that it has met the relevant NRC regulations and that the licensing board should reject each contention on the merits.

REGULATORY GUIDES: STATUS

NRC regulatory guidance documents are intended merely to assist the Staff (and applicant) in understanding the underlying objective of the regulatory requirements. Guidance documents describe particular means of satisfying regulatory requirements in ways acceptable to the NRC Staff, but they do not bind applicants who remain free to choose different means.

REGULATORY GUIDES: STATUS

NRC regulatory guidance documents are not binding upon a licensing board, so mere applicant compliance with guidance does not ensure sufficient compliance with the regulations or the grant of a license. Guidance documents are not binding law and should not be treated as such by applicants, the NRC Staff, or a licensing board.

REGULATIONS: INTERPRETATION (10 C.F.R. § 74.55(b))

Section 74.55(b) of 10 C.F.R. applies only to those licensees that are authorized to possess 5 or more formula kilograms of SSNM. Licensees must satisfy section 74.55(b)'s detection requirements for tamper-safed or sealed SSNM items in order to achieve the performance objectives set out in section 74.51(a). The regulation calls for the use of statistical sampling to achieve verification of item presence and integrity, stating that statistical sampling must result in "at least 99 percent power of detecting losses that total five formula kilograms or more." An applicant may satisfy the regulation if it can provide reasonable assurance that its proposed verification methods will meet this 99% power of detection within the stated time periods.

REGULATIONS: INTERPRETATION (10 C.F.R. § 74.55(b))

The sufficiency of an applicant's system for verification of SSNM item presence and integrity under 10 C.F.R. § 74.55(b) hinges upon the accuracy of the data used and its ability to meet the specific quantitative performance criteria set out in the regulation. Whether collected through automation or not, the data must be sufficiently accurate to enable a licensing board to find compliance with the overarching requirements of the Atomic Energy Act that there be reasonable assurance of compliance with the regulation.

REGULATIONS: INTERPRETATION (10 C.F.R. § 74.57(b))

Section 74.57(b) of 10 C.F.R. requires an applicant applying to possess 5 or more formula kilograms of SSNM to maintain alarm resolution capabilities designed to achieve the performance objectives of section 74.51(a). An applicant may propose a time period for alarm resolution, which must be approved by the NRC Staff. The fact that a time period has been approved by the NRC Staff does not, however, ensure that an applicant's commitment satisfies the regulation. Ultimately, the time period approved by the NRC Staff must be adequate to provide reasonable assurance that the applicant will achieve the performance objectives.

REGULATIONS: INTERPRETATION (10 C.F.R. § 74.57(b))

Section 74.57(b) of 10 C.F.R. does not require that an applicant demonstrate the ability to resolve an MC&A alarm through the use of any one alarm resolution method, such as an inventory, within the approved time period.

REGULATIONS: INTERPRETATION (10 C.F.R. § 74.57(e))

Section 74.57(e) of 10 C.F.R. requires an applicant applying to possess 5 or more formula kilograms of SSNM to maintain rapid theft assessment capabilities designed to achieve the performance objectives of section 74.51(a). The regulation provides an applicant with the flexibility to determine the most cost-effective means of meeting the requirement. Ultimately, an applicant's proposed approach to rapid theft assessment must provide reasonable assurance that it will achieve the performance objectives.

REGULATIONS: INTERPRETATION (10 C.F.R. § 74.57(e))

Section 74.57(e) of 10 C.F.R. does not require an applicant to show the ability to rapidly assess the validity of alleged thefts in every conceivable theft scenario.

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INITIAL DECISION
(Ruling on Contentions 9, 10, and 11)

Memorandum and Order of the Board by Its Majority, Judges Trikouros and Abramson*

I. INTRODUCTION AND OVERVIEW

This proceeding arises out of a challenge to the application of Shaw AREVA MOX Services ("Applicant") for a Nuclear Regulatory Commission ("NRC") license to possess and use strategic special nuclear material ("SSNM").[1] Applicant plans to use this material at a Mixed Oxide Fuel Fabrication Facility ("MOX Facility") currently being constructed by Applicant at the U.S. Department of Energy's ("DOE") Savannah River Site.[2] We address, in this final portion of this proceeding, three contentions filed by Nuclear Watch South, Blue Ridge Environmental Defense League, and Nuclear Information and Resource Service ("Intervenors") challenging Applicant's material control and accounting ("MC&A") system, which is required by 10 C.F.R. Part 74.[3]

*Judge Farrar is filing a separate statement indicating that, except in certain limited respects about which he dissents, he is in essential agreement with the substance of his colleagues' determinations (even if not with the manner of their expression), but that he believes certain matters deserve the additional discussion that he provides. That separate statement appears after the Board's decision.

[1] 10 C.F.R. § 74.4 (defining SSNM to mean "uranium-235 (contained in uranium enriched to 20 percent or more in the U^{235} isotope), uranium-233, or plutonium").

[2] *See Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 410 (2001); *Shaw AREVA MOX Services* (Mixed Oxide Fuel Fabrication Facility), LBP-11-9, 73 NRC 391, 394 (2011).

[3] Petitioner's Motion for Admission of Contentions 9, 10, and 11 Regarding Shaw AREVA MOX Services' Revised Fundamental Nuclear Control Plan (July 26, 2010) [hereinafter Petition] (challenging Applicant's compliance with 10 C.F.R. §§ 74.55(b)(1), 74.57(b), and 74.57(e)).

DOE intends the MOX Facility to further U.S.-Russian efforts to reduce each country's nuclear weapon stockpiles.[4] Mixed oxide ("MOX") fuel, which can be used in nuclear power reactors, is manufactured out of the SSNM obtained from those weapons.[5] Plutonium is to be first extracted from the weapons, then converted to plutonium oxide, mixed with uranium oxide, and formed into MOX fuel.[6] NRC's MC&A regulations require the tracking of SSNM items during storage and processing in order to safeguard these materials from diversion.[7]

The MOX facility proposal has been challenged from the initial filing of its application by groups asserting that Applicant has taken an inadequate approach to MC&A in concept, design, and execution. At the Construction Authorization Request ("CAR") stage, the board handling that adjudication dismissed an MC&A contention as moot, pending submittal of Applicant's Fundamental Nuclear Material Control Plan ("FNMCP") that would require inclusion of a detailed MC&A program.[8]

The pending MC&A challenge arose in 2010, when Applicant filed its amended FNMCP.[9] Both NRC Staff and Applicant opposed Intervenors' challenge to the amended FNMCP on timeliness grounds, but neither claimed failure to raise an issue cognizable under the agency's contention admissibility rules.[10] The Board subsequently admitted Contentions 9, 10, and 11.[11]

Against that background, we conducted two evidentiary hearings, both under "Subpart L" of the agency's procedural regulations.[12] The issues addressed in this portion of the proceeding revolve around use of a fully computerized and automated MC&A system to satisfy regulations which establish requirements for performance but neither prescribe nor proscribe any particular method for achieving those requirements.[13] Intervenors assert that backup systems beyond

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[4] *See* Record of Decision for the Surplus Plutonium Disposition Final Environmental Impact Statement, 65 Fed. Reg. 1608, 1609 (Jan. 11, 2000).

[5] *Id.*

[6] 66 Fed. Reg. 13,794, 13,795 (Mar. 7, 2001).

[7] 52 Fed. Reg. 10,033, 10,036 (Mar. 30, 1987) (to be codified at 10 C.F.R. Parts 70 and 74).

[8] *See Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-04-9, 59 NRC 286, 293-95 (2004); LBP-11-9, 73 NRC at 396.

[9] LBP-11-9, 73 NRC at 394.

[10] *Id.* at 395.

[11] *See id.* at 414.

[12] The Board originally consisted of Judges Farrar, Trikouros, and McDade, but Judge Abramson was appointed to replace Judge McDade prior to the second evidentiary hearing. Notice of Atomic Safety and Licensing Board Reconstitution, 77 Fed. Reg. 70,193 (Nov. 16, 2012). Throughout this decision, unless otherwise indicated, we refer to the board as "the Board" regardless of its membership.

[13] *See* Tr. at 1242-43 (Pham).

what Applicant has included in its FNMCP, including direct physical involvement, are necessary to comply with the regulations.[14]

After the initial hearing, the Board found the record inadequately developed regarding certain aspects of Contentions 9 and 11. The parties were given the opportunity to provide additional information on these two contentions,[15] which was considered at a supplemental evidentiary hearing.

Before the second hearing, Applicant presented additional approaches and analysis to show that its automated MC&A systems were in full compliance with agency regulations.[16] In its filing, the Staff substantially agreed with Applicant's position.[17] Intervenors did not submit additional witness testimony to address that testimony of Applicant and the NRC Staff.

We now find that the challenged aspects of Applicant's MC&A program components (including those related to item monitoring, alarm resolution, and alleged theft assessment) fulfill the requirements of NRC's regulations. First, we conclude that, contrary to the allegation in Contention 9, Applicant has demonstrated that its program of automated equipment, computer systems (and their verification), and the use of secured and tamper-safed item storage area boundaries, satisfactorily demonstrates the ability to verify "the presence and integrity" of all SSNM items in storage as specified by 10 C.F.R. § 74.55(b)(1). Second, we conclude that, contrary to the allegation in Contention 10, Applicant's preliminary program satisfactorily demonstrates the ability to "resolve the nature and cause of any MC&A alarm within approved time periods" in each of the four storage areas at issue as required by 10 C.F.R. § 74.57(b). Finally, we conclude that, contrary to the allegation in Contention 11, Applicant's preliminary program satisfactorily demonstrates the ability "to rapidly assess the validity of alleged thefts" as required by 10 C.F.R. § 74.57(e). The details of our decision regarding each of these three contentions are provided in Section V of this decision.

We note that significant portions of the assurances respecting integrity and presence, as well as the detection of losses of SSNM, rely upon physical security

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[14] *See* Intervenors' Initial Statement of Position on Contentions 9, 10, and 11 (Oct. 19, 2011) at 4-6 [hereinafter Intervenor Initial Statement of Position].

[15] *See* Licensing Board Memorandum and Order (Requesting Further Information from the Applicant) (June 29, 2012) (unpublished) [hereinafter Order Requesting Further Information].

[16] *See* Shaw AREVA MOX Services, LLC Supplemental Statement of Position on Contentions 9 and 11 and Response to Surreply (Oct. 15, 2012) [hereinafter Applicant Supplemental Statement of Position]; Shaw AREVA MOX Services, LLC Clarification of Supplemental Statement of Position on Contentions 9 and 11 and Response to Surreply (Dec. 5, 2012) [hereinafter Applicant Clarification of Supplemental Statement of Position]. Applicant simultaneously argued that no additional information was required and that the Board had no authority to call for it. *Id.*

[17] *See* NRC Staff's Response to Applicant's Supplemental Statement of Position on Contentions 9 and 11 and Response to Surreply (Jan. 16, 2013) [hereinafter Staff Supplemental Statement of Position].

and cyber-security systems whose adequacy is not currently before us. We rely upon the Commission, NRC Staff, and DOE, under whose auspices this facility is being constructed and will be operated, to effectively assure the adequacy of these security systems.

This decision first summarizes the procedural background of this proceeding in Section II. Section III discusses the applicable legal standards. Section IV identifies the parties' witnesses and their qualification. Section V sets forth the parties' positions and the Board's determinations on Contentions 9, 10, and 11. Section VI summarizes the Board's conclusions, and Section VII contains our Order finding in favor of Applicant. A list of the many technical terms and acronyms used in this decision is provided in Appendix A.

II. PROCEDURAL BACKGROUND

Applicant pursued licensing of the MOX Facility in two steps. First, the CAR was submitted on February 28, 2001,[18] resulting in issuance of Construction Authorization on March 30, 2005.[19] On September 27, 2006, Applicant initiated the second stage of the process by filing its License Application for possession and use of SSNM, byproduct, and source material at the MOX Facility,[20] along with its initial FNMCP, Physical Protection Plan ("PPP"), and other supporting documents required by NRC regulations.[21] The availability of the License Application and supporting documents was publicly noticed on March 15, 2007.[22] Intervenors

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[18] *See* 66 Fed. Reg. 19,994 (Apr. 18, 2001).

[19] Mixed Oxide Fuel Fabrication Facility Construction Authorization (Mar. 30, 2005), *available at* ADAMS Accession No. ML050660392.

[20] *See* Mixed Oxide Fuel Fabrication Facility License Application (Sept. 27, 2008) *available at* ADAMS Accession No. ML062750195. Applicant submitted a revised license application with MC&A and PPP information on November 17, 2006. *See* Shaw AREVA MOX Services Mixed Oxide Fuel Fabrication Facility License Application at 13-1 (Nov. 17, 2006), *available at* ADAMS Accession No. ML070160311.

[21] Letter from David Stinson, President and COO of Duke Cogema Stone & Webster, to NRC, Submittal of License Application (Sept. 27, 2006), *available at* ADAMS Accession No. ML062750194. Relevant portions of the original FNMCP and PPP were provided as exhibits. *See* MOX Fuel Fabrication Facility MC&A FNMCP, Chapter 2 and Annex D § D.G.3.4.11 (Apr. 2010) (Exh. APP000019) [hereinafter FNMCP Chapter 2]; MOX Fuel Fabrication Facility MC&A FNMCP, Chapter 3 (Apr. 2010) (Exh. APP000020) [hereinafter FNMCP Chapter 3]; MOX Fuel Fabrication Facility MC&A FNMCP, Chapter 4.1 (Apr. 2010) (Exh. APP000032); MOX Fuel Fabrication Facility MC&A FNMCP, Chapter G.3.4.12 (Apr. 2010) (Exh. APP000034) [hereinafter FNMCP Chapter G.3.4.12]; MOX Services MOX Facility, Physical Protection Plan (May 2011) (Exh. APP000022).

[22] *See* Notice of License Application for Possession and Use of Byproduct, Source, and Special Nuclear Materials for the Mixed Oxide Fuel Fabrication Facility, Aiken, SC, and Opportunity to Request a Hearing, 72 Fed. Reg. 12,204 (Mar. 15, 2007).

filed a petition to intervene and request for hearing on May 14, 2007,[23] which the Board granted.[24]

On June 27, 2008, the Board admitted Intervenors' Contention 4, dealing with Applicant's management of radioactive waste produced at the MOX facility.[25] On December 17, 2009, Applicant filed an exemption request regarding certain aspects of its FNMCP.[26] On March 22, 2010, Intervenors submitted Contention 8, challenging Applicant's exemption request.[27] Applicant withdrew the exemption request on May 11, 2010, and provided the NRC Staff with a revised FNMCP.[28] On May 17, 2010, Applicant provided Intervenors with notice and copies of that withdrawal and the revised FNMCP.[29] On May 24, 2010, Intervenors withdrew Contention 8 as moot.[30] On July 26, 2010, Intervenors filed a motion to admit Contentions 9, 10, and 11 based on the revised FNMCP,[31] which the Board granted on April 1, 2011.[32] On February 9, 2012, the Board dismissed Contention 4,[33] following Intervenors' decision not to submit supporting evidence.[34] This left Contentions 9, 10, and 11 pending before the Board.

The Board held a site visit at the MOX Facility on February 22, 2012, which all parties attended.[35] Several weeks later, the Board conducted its evidentiary hearing on Contentions 9, 10, and 11 in the Hearing Room at the agency's headquarters in Rockville, Maryland.[36] Because of the potential involvement of security-related

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[23] *See* Petition for Intervention and Request for Hearing (May 14, 2007), *available at* ADAMS Accession No. ML071410426.

[24] LBP-07-14, 66 NRC 169, 175 (2007).

[25] *See* LBP-08-11, 67 NRC 460, 464, 468 (2008).

[26] *See* Letter from David Stinson, President and COO of Shaw AREVA MOX Services, to NRC, Request for Exemption from Aspects of Process and Item Monitoring (Dec. 17, 2009), *available at* ADAMS Accession No. ML093561015.

[27] *See* Petitioners' Motion for Admission of Contention 8 Regarding Shaw MOX AREVA Services' Request for Exemption from Material Control and Accounting Requirements (Mar. 22, 2010) at 2.

[28] Letter from David Stinson, President and COO of Shaw AREVA MOX Services, to NRC, Withdrawal of the Request for Exemption from Aspects of Process and Item Monitoring (May 11, 2010), *available at* ADAMS Accession No. ML101340402.

[29] Certificate of Service Transmitting Withdrawal of the Request for Exemption from Aspects of Process and Monitoring (May 17, 2010).

[30] *See* Intervenors' Response to Shaw AREVA MOX Services' Withdrawal of Exemption Application and Withdrawal of Contention 8 (May 24, 2010), *available at* ADAMS Accession No. ML101540423.

[31] Petition at 1.

[32] *See* LBP-11-9, 73 NRC at 395.

[33] *See* LBP-12-2, 75 NRC 159, 161 (2012).

[34] Intervenor Initial Statement of Position at 2 n.1.

[35] *See* Licensing Board Order (Establishing Dates for Site Visit and Evidentiary Hearing) (Dec. 21, 2011) at 2 (unpublished).

[36] *See id.*

information, the Board chose not to open the hearing to the public.[37] None of the parties requested an opportunity to conduct cross-examination.[38]

The Parties submitted proposed corrections to the hearing transcript on March 29 and 30, 2012.[39] On May 3, 2012, the Board issued an Order tentatively accepting the parties' proposed corrections, but reserved the right to reject some or all of the corrections at a later date, if necessary.[40]

On June 29, 2012, the Board issued an Order requesting that Applicant provide additional information on Contentions 9 and 11 relating to system data verification and reliability.[41] On October 15, 2012, Applicant responded to the Board's request for additional information, supported by written testimony and additional exhibits.[42]

On November 16, 2012, the Board was reconstituted to its present membership, substituting Judge Abramson for Judge McDade.[43]

On December 5, 2012, Applicant submitted a Clarification of Supplemental Statement of Position on Contentions 9 and 11 and Response to Surreply, along with Additional Direct Testimony Related to an NRC Staff Request for Additional Information, and other supporting exhibits,[44] reflecting their responses to the NRC Staff Requests for Additional Information ("RAIs") on the FNMCP revisions.

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[37] *See id.* at 2 n.6.

[38] Tr. at 1568-69 (Curran, Klukan, Jones).

[39] *See* Intervenors' Proposed Corrections to Hearing Transcript (Mar. 29, 2012); Shaw AREVA MOX Services, LLC's Proposed Corrections to the Hearing Transcript (Mar. 30, 2012); NRC Staff's Proposed Transcript Corrections (Mar. 30, 2012).

[40] *See* Licensing Board Order (Regarding Transcript Corrections) (May 3, 2012) at 2 (unpublished).

[41] *See* Order Requesting Further Information at 10, 14.

[42] *See* Applicant Supplemental Statement of Position; MOX Fuel Fabrication Facility MC&A FNMCP, Revisions to Chapter 2 (Oct. 15, 2012) (Exh. APP000039) [hereinafter FNMCP Revised 2]; MOX Fuel Fabrication Facility MC&A FNMCP, Revisions to Chapter 3.3 (Oct. 15, 2012) (Exh. APP000040) [hereinafter FNMCP Revised 3.3].

[43] 77 Fed. Reg. at 70,193.

[44] *See* Applicant Clarification of Supplemental Statement of Position; Shaw AREVA MOX Services, LLC's Revised Pre-Filed Direct Testimony in Response to Board's June 29, 2012 Memorandum and Order (Dec. 5, 2012) (Exh. APPR10037) [hereinafter Applicant Supplemental Direct Testimony]; Shaw AREVA MOX Services, LLC's Additional Direct Testimony Related to NRC Staff Requests for Additional Information (Dec. 5, 2012) (Exh. APP000041) [hereinafter Applicant Additional Supplemental Direct Testimony]; SSNM Item Identity and Location Data Verification Procedure (Dec. 5, 2012) (Exh. APPR10038) [hereinafter SSNM Procedure]; Revisions to Shaw AREVA MOX Services, LLC's Pre-Filed Direct Testimony in Response to Board's June 29, 2012 Memorandum and Order (Dec. 5, 2012) (Exh. APP000042); Responses to NRC Requests for Additional Information and Revised Fundamental Nuclear Material Control Plan Pages (Dec. 5, 2012) (Exh. APP000043).

On January 16, 2013, Staff filed its responsive statement of position, witness testimony, and exhibits, supporting Applicant's position.[45]

On April 19, 2013, Intervenors submitted their response.[46] On May 3, 2013, Applicant submitted its reply to Intervenors' filing.[47]

On May 21, 2013, the Board conducted a supplemental hearing, also closed to the public, in the Hearing Room in Rockville, Maryland.[48]

As discussed below, the contentions at issue in this proceeding challenge the sufficiency of Applicant's newly proposed automated MC&A system, and allege that Applicant has not provided the assurances necessary to show the MOX facility can achieve the performance objectives established by the regulations. Contention 9 challenges Applicant's compliance with 10 C.F.R. § 74.55(b)(1),[49] which states that "[t]he licensee shall verify on a statistical sampling basis, the presence and integrity of SSNM items" with "at least 99 percent power of detecting item losses that total five formula kilograms or more, plant-wide." Contention 10 challenges Applicant's compliance with 10 C.F.R. § 74.57(b),[50] which states that "[l]icensees shall resolve the nature and cause of any MC&A alarm within approved time periods." Contention 11 challenges Applicant's compliance with 10 C.F.R. § 74.57(e),[51] which states that "[t]he licensee shall provide an ability to rapidly assess the validity of alleged thefts."

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[45] *See* Staff Supplemental Statement of Position; NRC Staff's Prefiled Supplemental Testimony of Tom Pham Concerning Contentions 9 and 11 (Jan. 16, 2013) (Exh. NRC000012) [hereinafter Staff Supplemental Testimony]; NRC Staff Requests for Additional Information on the MOX Services' Fundamental Nuclear Material Control Plan revisions dated October 15, 2012 (Jan. 16, 2012) (Exh. NRC000013); Supplemental to Final Safety Evaluation Report for the License Application to Possess and Use Radioactive Material at the Mixed Oxide Fuel Fabrication Facility in Aiken, SC (Jan. 16, 2012) (Exh. NRC000014) [hereinafter FSER Supplement].

[46] *See* Intervenors' Response to Shaw AREVA MOX Services' Clarified Supplemental Statement of Position on Contentions 9 and 11, Reply to NRC Staff's Response to MOX Services, and Reply to MOX Services' Response to Surreply Regarding Contentions 10 and 11 (Apr. 19, 2013) [hereinafter Intervenor Consolidated Response].

[47] *See* Shaw AREVA MOX Services, LLC's Reply to Intervenors' April 19, 2013 Response to MOX Services and NRC Staff Submittals (May 3, 2013) [hereinafter Applicant Supplemental Reply Statement of Position].

[48] Tr. at 1648-49 (Farrar).

[49] *See* Licensing Board Order (Appendix — New Contentions 9, 10, and 11) (Apr. 1, 2011) at 1 (unpublished) [hereinafter Contention Text Order].

[50] *See id.*

[51] *See id.*

III. LEGAL STANDARDS

A. Regulatory Requirements

The NRC may issue a license to possess and use 5 or more formula kilograms[52] of SSNM only if an applicant can "establish, implement, and maintain a Commission-approved material control and accounting (MC&A) system that will achieve [general performance objectives]."[53] To achieve these SSNM loss-related performance objectives, "the MC&A system must provide the capabilities described in §§ [74.55 and 74.57]," among other sections.[54]

NRC's MC&A regulations are intended to "provide flexibility for licensees to select the most cost-effective ways of achieving performance objectives."[55] This flexible approach requires an applicant's proposed controls to be "adequate" to show compliance with the regulations.[56] An adequacy finding requires the Board to make a case-by-case determination, guided by the Atomic Energy Act's mandate that no license to possess special nuclear material may be issued if issuance "would be inimical to the common defense and security or would constitute an unreasonable risk to the health and safety of the public."[57] Here, the Board adopts the reasonable assurance standard to determine the adequacy of Applicant's MC&A system, finding the guidance contained in NUREG-1718 to be consistent with our statutory mandate.[58]

The reasonable assurance standard is used in other license application contexts, though NRC regulations do not specify objective criteria needed to satisfy the

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[52] 10 C.F.R. § 74.4 (defining formula kilogram to mean "SSNM in any combination in a quantity of 1000 grams computed by the formula, grams = (grams contained U-235) + 2.5(grams U-233 + grams plutonium)."

[53] 10 C.F.R. § 74.51(a).

[54] 10 C.F.R. § 74.51(b).

[55] 52 Fed. Reg. at 10,034.

[56] 10 C.F.R. § 70.23(a)(6); *see also* 10 C.F.R. § 70.22(b) (stating that "applicant's program for control and accounting of such special nuclear material [must] show how compliance with the requirements of § . . . 74.51 . . . will be accomplished").

[57] 42 U.S.C. § 2077(c)(2); *cf. Union of Concerned Scientists v. NRC,* 880 F.2d 552, 558 (D.C. Cir. 1989) (stating that "[t]he determination of what constitutes 'adequate protection' under the [AEA], absent specific guidance from Congress, is just such a situation where the Commission should be permitted to have discretion to make case-by-case judgments").

[58] *See* Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, Standard Review Plan for the Review of an Application for a Mixed Oxide (MOX) Fuel Fabrication Facility, NUREG-1718, at xxi-xxii (Aug. 2000) (Exh. APP000029) [hereinafter NUREG-1718] (stating that "[t]he staff's responsibility in the review of a new license application . . . for a MOX fuel fabrication facility is to determine that there is reasonable assurance that . . . the facility can be operated in a manner that will not be inimical to the common defense and security and will provide reasonable protection of the health and safety of workers, the public, and the environment including that the facility was constructed consistent with the application").

requirement. The Commission has stated, in the context of a license renewal application, that "'[r]easonable assurance' is . . . based on sound technical judgment of the particulars of a case and on compliance with our regulations."[59] To meet this reasonable assurance standard, an applicant "must make a showing that meets the 'preponderance of the evidence' threshold of compliance with the applicable regulations."[60] Therefore, to determine whether Applicant has complied with the regulations at issue, the Board will look to whether Applicant has provided reasonable assurance that the use of its automated MC&A system satisfies the relevant regulatory requirements.

Intervenors consistently have asserted that the regulations at issue in these three contentions must be interpreted to require a certain specific method (involving physical action as opposed to automation only) to achieve the performance requirements of those regulations. Staff has repeatedly referred to these regulations as "performance-based." But "performance-based" regulation is a term of art in the NRC regulatory system, being fully explained in NUREG/BR-0303, which was released in 2002 and defines a methodology for the development of regulations for risk-informed regulation.[61] Not only was NUREG/BR-0303 released well after release of the present versions of the regulations at issue here, but the regulations at issue here do not involve any risk-informed–related matters — the defined term of art is inapplicable here. Nonetheless, 10 C.F.R. § 74.55(b) and (e) indeed establish requirements for the performance of Applicant's system and neither prescribe nor proscribe any methodology for achievement of those performance requirements. In that sense, Staff's assertions are, if taken in their commonsense meaning, correct. As to choice of methodology, these regulations are technology-neutral. This is the most effective way to draft regulations for application to a science and technology-based area such as nuclear power and its related disciplines where one can reasonably expect continuing advances in both science and technology after implementation of the regulations. By so doing, these regulations remain applicable as technology in the arena develops. They are not intended to be, and are not, under our common law system, interpreted to require, as Intervenors would have it, any particular methodology to achieve the performance requirements they establish.

B. Burden of Proof

As suggested above, Applicant bears the ultimate burden of proof in this

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[59] *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 263 (2009).

[60] *Id.*

[61] *See* N.P. Kadambi, Office of Nuclear Regulatory Research, Guidance for Performance-Based Regulation, NUREG/BR-0303 (Dec. 2010).

proceeding.[62] With respect to each contention, however, Intervenors have the initial "burden of going forward" and must provide sufficient evidence to support the claims made.[63] If Intervenors make that showing, Applicant has the burden of demonstrating by a preponderance of the evidence that it has met the relevant NRC regulations and that the Board should therefore reject each contention on the merits.[64]

C. Guidance Documents

Although compliance with NRC regulations is legally mandated, NRC guidance documents, such as the Standard Review Plan in NUREG-1718, are intended merely to "assist the staff (and applicant[s]) in understanding the underlying objective of the regulatory requirements."[65] Guidance documents describe particular means of satisfying regulatory requirements in ways acceptable to the NRC Staff, but they do not bind applicants who remain free to choose different means.[66] Guidance documents also do not bind the Board, so applicant compliance with guidance does not ensure the grant of a license.[67] As such, if the Board concludes that the guidance documents are fully consistent with establishing the requisite "reasonable assurance" of compliance with applicable regulatory requirements, the Board may consider compliance with such guidance as support for a conclusion that Applicant satisfies the applicable regulatory requirements.

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[62] *See* 10 C.F.R. § 2.325; *see also Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1048 (1983) (stating that "[i]t is well established that the Applicant carries the burden of proof on safety issues") (citing *Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-283, 2 NRC 11, 17 (1975)).

[63] *See Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-123, 6 AEC 331, 345 (1973).

[64] *See Midland,* ALAB-123, 6 AEC at 345.

[65] NUREG-1718, at xxii; *see also* Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, Standard Format and Content Acceptance Criteria for the Material Control and Accounting (MC&A) Reform Amendment, NUREG-1280, at 1 (Rev. 1 Apr. 1995) [hereinafter NUREG-1280] (stating that NUREG-1280 "describes the standard format and content suggested by the NRC for use in preparing [FNMCPs]").

[66] *See International Uranium (USA) Corp.,* CLI-00-1, 51 NRC 9, 19 (2000); *see, e.g.,* NUREG-1280, at 1 (noting that "conformance with the standard process is not required by the NRC").

[67] *See Int'l Uranium (USA) Corp.,* 51 NRC at 19 (stating that "NRC NUREGs[,] Regulatory Guides, [and] NRC Guidance documents are routine agency policy pronouncements that do not carry the binding effect of regulations").

IV. THE PARTIES' WITNESSES

A. Applicant's Witnesses

Applicant presented four witnesses on Contentions 9, 10, and 11: Ms. Sue King, Mr. Gary Bell, Mr. Gary Clark, and Ms. Martha Williams.[68] All four witnesses provided written and oral testimony at both evidentiary hearings.[69]

B. NRC Staff's Witnesses

At the first hearing, Staff presented one witness, Mr. Tom Pham, on Contentions 9, 10, and 11.[70] At the supplemental hearing, Staff again presented Mr. Pham, along with Mr. Thomas Grice and Mr. David Tiktinsky,[71] who appeared at the suggestion of the Board.[72] Mr. Pham provided written and oral testimony at both evidentiary hearings.[73] Mr. Grice and Mr. Tiktinsky did not provide written testimony but were questioned by the Board at the supplemental hearing.[74]

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[68] *See* Shaw AREVA MOX Services, LLC's Initial Statement of Position on Contentions 4, 9, 10 and 11 (Sept. 29, 2011) at 20-21 [hereinafter Applicant Initial Statement of Position]; Curriculum Vitae of Sue M. King (Sept. 29, 2011) (Exh. APP000015); Curriculum Vitae of Gary A. Bell (Sept. 29, 2011) (Exh. APP000016); Curriculum Vitae of Gary Clark (Sept. 29, 2011) (Exh. APP000017); Curriculum Vitae of Martha C. Williams (Sept. 29, 2011) (Exh. APP000018).

[69] *See* Shaw AREVA MOX Services, LLC's Revised Prefiled Direct Testimony on Contentions 9-11 (Mar. 1, 2012) (Exh. APPR00014) [hereinafter Applicant Direct Testimony]; Shaw AREVA MOX Services, LLC'S Prefiled Reply Testimony on Contentions 9-11 (Jan. 24, 2012) (Exh. APP000031) [hereinafter Applicant Reply Testimony]; Applicant Supplemental Direct Testimony; Applicant Additional Supplemental Direct Testimony; Shaw AREVA MOX Services, LLC'S Pre-Filed Reply Testimony in Response to Board's June 29, 2012 Memorandum and Order (May 3, 2013) (Exh. APP000044) [hereinafter Applicant Supplemental Reply Testimony]; Tr. 1080-81 (King, Clark, Bell, Williams, Farrar), 1650 (King, Clark, Bell, Williams, Farrar).

[70] *See* NRC Staff's Initial Statement of Position on Contentions 4, 9, 10, and 11 (Oct. 19, 2011) at 10, 13, 15 [hereinafter Staff Initial Statement of Position]; Curriculum Vitae of Thomas N. Pham (Oct. 19, 2011) (Exh. NRC000007).

[71] Curriculum Vitae of Thomas A. Grice (May 15, 2013) (Exh. NRC000015); Curriculum Vitae of David H. Tiktinsky (May 15, 2013) (Exh. NRC000016).

[72] Tr. at 1621-22 (Farrar) (suggesting that Staff make additional witnesses available "to make sure that [Staff has] a witness who can explain effectively to [the Board] the reasoning behind staff decisions and if they comply with regulations, why they do and what the thought process was . . . that went into it").

[73] *See* NRC Staff's Prefiled Direct Testimony of Tom Pham Concerning Contentions 9-11 (Oct. 19, 2011) (Exh. NRC000006) [hereinafter Staff Direct Testimony]; NRC Staff's Prefiled Response Testimony of Tom Pham Concerning Contentions 9, 10, and 11 (Dec. 20, 2011) (Exh. NRC000008) [hereinafter Staff Reply Testimony]; Staff Supplemental Testimony; Tr. at 1081 (Pham, Farrar), 1651 (Pham).

[74] *See* Tr. at 1651-62 (Farrar).

C. Intervenors' Witness

Intervenors presented one witness, Dr. Edwin Lyman, on Contentions 9, 10, and 11.[75] Dr. Lyman provided written and oral testimony at the initial hearing.[76] Dr. Lyman did not provide written testimony for the supplemental hearing, but did respond to oral questioning.[77]

D. Witness Qualifications

No party challenged the qualifications of any witness or their ability to testify as to the issues before the Board.[78] The Board has considered each witness' testimony to the extent appropriate.

V. CONTENTIONS

A. Contention 9

1. Text of Contention 9

As admitted by the Board, Contention 9 asserts:

> [Applicant's] Revised FNMCP does not satisfy the MC&A requirements in 10 C.F.R. § 74.55(b)(1) because it does not demonstrate that [Applicant's] item monitoring program has the capability to verify, on a statistical sampling basis, the presence and integrity of SSNM items. In particular, [Applicant] fails to show that it is capable of detecting item losses that total 5 formula kilograms of plutonium or more plant-wide within the time frames specified by the regulation 30 calendar days for Category 1[A] items and 60 days for Category 1B items contained in a vault or in a permanently control access area isolated from the rest of the material access area (MAA).[79]

2. The Relevant Regulation

The regulation at issue in Contention 9 is 10 C.F.R. § 74.55(b)(1), which states:

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[75] *See* Intervenor Initial Statement of Position at 2; Curriculum Vitae of Edwin S. Lyman (Oct. 20, 2011) (Exh. INT000002).

[76] *See* Direct Testimony of Dr. Edwin S. Lyman in Support of Intervenors' Contentions 9, 10, and 11 (Oct. 19, 2011) (Exh. INT000001) [hereinafter Intervenor Direct Testimony]; Tr. at 1081 (Farrar).

[77] Intervenors' counsel stated that "in our view, the Applicant has not given us anything new that would show that it satisfies the regulations. We do not need to submit evidence." Tr. at 1671 (Curran).

[78] *See* Tr. at 1650-52, 1080-81 (Farrar).

[79] Contention Text Order at 1.

> The licensee shall verify on a statistical sampling basis, the presence and integrity of SSNM items. The statistical sampling plan must have at least 99 percent power of detecting losses that total five formula kilograms or more, plant-wide, within:
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> (1) Thirty calendar days for Category IA items and 60 calendar days for Category IB items contained in a vault or in a permanently controlled access area isolated from the rest of the material access area (MAA).

The regulation applies only to those licensees that are authorized to possess 5 or more formula kilograms of SSNM.[80] Licensees must satisfy section 74.55(b)'s detection requirements for tamper-safed[81] or sealed[82] SSNM items[83] in order to achieve the performance objectives set out in section 74.51(a).[84] The regulation calls for the use of statistical sampling to achieve verification of item presence and integrity but does not prescribe a particular method of sampling, stating only that statistical sampling must result in "at least 99 percent power of detecting losses that total five formula kilograms or more."[85] An applicant may satisfy the regulation if it can provide reasonable assurance that the methods described in its FNMCP will meet this 99% power of detection within the stated time periods.

The regulation does not specify the method or approach that has to be taken to

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[80] *See* 10 C.F.R. §§ 74.51(a) and 74.55(a). The regulation defines Category IA material to mean "SSNM directly usable in the manufacture of a nuclear explosive device;" and Category IB material to mean "all SSNM material other than Category IA." 10 C.F.R. § 74.4. This proceeding concerns, among other things, Category IB items that are "contained in a vault or permanently controlled access area isolated from the rest of the [MAA]." Contention Text Order at 1. The regulation defines "vault" to mean "a windowless enclosure . . . designed and constructed to delay penetration from forced entry," and "controlled access area" to include a "permanently established area which is clearly demarcated, access to which is controlled, and which affords isolation of the material or persons within it." 10 C.F.R. § 74.4.

[81] 10 C.F.R. § 74.4 (defining "tamper-safing" to mean "the use of devices on containers or vaults in a manner and at a time that ensures a clear indication of any violation of the integrity of previously made measurements of special nuclear material within the container or vault").

[82] *Id.* (defining "sealed source" to mean "any special nuclear material that is physically encased in a capsule, rod, element, etc. that prevents the leakage or escape of the special nuclear material and that prevents removal of the special nuclear material without penetrations of the casing").

[83] *Id.* (defining "item" to mean "any discrete quantity or container of special nuclear material or source material, not undergoing processing, having a unique identity and also having an assigned element and isotope quantity").

[84] The capability to verify presence is most clearly aimed at "[o]ngoing confirmation of the presence of SSNM in assigned locations," while the capability to verify integrity is most clearly aimed at the "prompt investigation of anomalies potentially indicative of SSNM losses." 10 C.F.R. § 74.51(a)(1), (4).

[85] 10 C.F.R. § 74.4 (defining "power of detection" to mean "the probability that the critical value of a statistical test will be exceeded when there is an actual loss of a specific SSNM quantity"). In other words, the 99% power of detection requirement means that there must be a 99% probability that a missing item will be included within the sample chosen for inspection and would thus be detected.

provide the required presence and integrity verifications; it only specifies the goal to be achieved. Where a regulation neither prescribes nor proscribes any particular methodology to achieve the required performance, it will not be interpreted to require or prohibit any such method.

3. Issues Raised by Contention 9

Applicant proposes to verify the presence of all SSNM items every day by comparing the data contained in the "Perpetual Inventory Report" generated by the Manufacturing and Management Information System ("MMIS") with item locations and identities determined by the data stored in remote computer equipment — Programmable Logic Controller ("PLC") Mapping.[86] Movement of SSNM items is automated through the Process and Utility Control System ("PUCS"). The MMIS part of the PUCS monitors and supervises the automated production activities and records the information. A series of PLCs control the movement and placement of SSNM items and record or map this information. A daily comparison of the information stored in each of these computer systems forms the basis for item presence verification.

With regard to item integrity verification, Applicant proposes to seal and design SSNM item storage locations to be tamper-safed or equivalent to tamper-safing such that confirmation that the physical boundary of these locations has not been breached ensures the "integrity" of these items in accordance with 10 C.F.R. § 74.55.[87]

Intervenors contend that NRC regulations require that presence and integrity must both involve a physical element and that the methodology of Applicant, which relies entirely upon automated systems and controlled security boundaries, fails to satisfy those regulatory requirements.[88] Thus, the issue raised by Intervenors in Contention 9 is whether Applicant's proposed use of the data in the MMIS and PLCs, in conjunction with the storage location controlled security boundaries, meets the requirements of 10 C.F.R. § 74.55(b)(1). Intervenors are saying that Applicant "needs to show that it has some system for verifying that the computer program is correct."[89] They are questioning whether, as claimed by Applicant, "there is absolute equivalence between the PLC data and the actual physical presence and integrity of SSNM items."[90] In this regard, they are asserting

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[86] *See* Applicant Direct Testimony at 35-42.

[87] *Id.* at 52-53.

[88] *See generally* Intervenor Initial Statement of Position at 5 (arguing that Applicant's "proposed alternative measures are completely inadequate . . . to demonstrate that it complies with NRC's MC&A requirements"). *See also infra* Parts V.A.4 and V.A.5.

[89] Tr. at 1106 (Curran).

[90] *Id.*

that the accuracy of the data in the computer systems has to be verified, but they are "not insisting on any particular kind of verification."[91]

Intervenors' witness asserts that the requirement of 10 C.F.R. § 74.55(b)(1) for material presence to be demonstrated by statistical sampling that meets a 99% power of detection must be read to include some quantitative requirement for accuracy.[92] Implicit in this assertion is the argument that accuracy is an integral part of the power of detection requirement.

Intervenors also point out that a procedure for data verification was scheduled to be developed "some time in the future."[93] They argue that in this particular application, delayed development of this procedure should not be permitted but should be developed prior to the issuance of the license.[94]

In this respect, the Board is mindful of the fact that all systems for presence and for integrity "verification" have imbedded in them an element of accuracy. For example, when human direct measurement (a "physical" element) is used, there is an obvious potential for inaccuracies to be introduced through human error, such as inaccurate recording (by hand-written record) of item identifiers and inaccurate observation of seal condition. These human-error-based inaccuracies are intended to be reduced by NRC regulatory guidance suggesting the use, for example, of "tamper-safe" seals, and implementation of machine-readable identifiers such as bar codes.[95] And, although human error in verification of presence and integrity is expected to be reduced through the use of automation, the automation itself has its own characteristics which could introduce inaccuracies. These characteristics were examined by the Board and are discussed below.

With regard to the statistical sampling requirement in the regulation, Intervenors take the position that "when you do statistical sampling for item monitoring purposes that you actually locate, that you take a random sample of items, and

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[91] Tr. at 1104 (Curran).

[92] Intervenor Direct Testimony at A.5(1) (reading section 74.55's requirements to be "fundamentally *quantitative* in nature, in that they require licensees to develop a sampling plan to [sic] that is capable of detecting the loss of items totaling or exceeding a specified quantity (5 formula kilograms of SSNM), with a specified statistical power of detection (99 percent), within a certain quantified time period").

[93] Tr. at 1107 (Curran).

[94] Tr. at 1107-09 (Curran).

[95] *See* Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, Standard Format and Content Acceptance Criteria for the Material Control and Accounting (MC&A) Reform Amendment, NUREG-1280, at 95 (Rev. 1 Apr. 1995) (Exh. APP000033) [hereinafter NUREG-1280 Chapter 4.9] (recommending that "MC&A data [be] directly collected, inputted, checked, manipulated, reported and audited by computer where it is practical and advantageous to reduce the consequences and frequency of human error in MC&A data as much as practical").

you actually physically inspect them for identity and integrity purposes"[96] and that the use of the MMIS/PLC computer systems does not meet this requirement.

In this portion of the proceeding, Intervenors have raised a generalized contention (Applicant's plan does not comply with the regulation) by making three more specific, but still generalized, contentions and raising a large number of specific challenges in their initial pleadings and testimony. Permeating most of these specific challenges is the fundamental argument challenging Applicant's use of automated methods to achieve its compliance with MC&A requirements of our regulations. In raising these challenges, the matters which Intervenors challenge do not relate to physics, nor do they relate to nuclear engineering or science. Instead, they relate principally to interpretation of our regulations. As we make clear, the particular regulations at issue do not specify the methodology for achieving the required performance specified by the regulations, and Intervenors' principal complaint is that they believe the "old" system for tracking and verifying location and identity of SSNM in a facility — by direct human observation and measurement (or by physical action not *controlled* by or implemented solely through automation) — is required and some element of that process must be included. To succeed in this challenge, Intervenors face the task of making a case for an interpretation of the regulations which requires analysis of the law.

That said, there are basic principles which fully enabled the Board to decide that there is no support for the assertion that any particular methodology is prescribed or prohibited. The portion of the hearing and this Order devoted to this particular aspect is lengthy — largely because we have attempted to address each of the myriad more specific challenges which we see as falling under the umbrella of this particular assertion.

In addition to this broad category of assertions, Intervenors asserted from the beginning that Applicant's automated methodologies are fatally flawed because (1) there was no verification procedure submitted with the application, and (2) computer systems are susceptible to error and security breaches. And, although continuing to assert a preference for direct and indirect physical action such as human measurement and detection, they indeed raised a crucial point. The Board recognized that no system of accumulation of data and checking for presence and integrity of the SSNM at issue could meet the regulation if the data were not accurate enough to meet the specific quantitative criteria for performance set out in the regulation. And, when the Board requested, in response to Intervenors' complaint that the accuracy determinations of the plan should not be an "action item" for future resolution, more information on how Applicant would address the issue, Applicant submitted a modification to its plan setting out the details. Intervenors had offered no information whatsoever regarding

[96] Tr. at 1231 (Lyman).

what sort of errors might be inherent in the human-touch type of system they advocate, nor did they comment on the aspects of NRC regulatory guidance which suggests that automation is preferable because it reduces human error, but the issue of accuracy became a material portion of this part of the hearing. At bottom, Applicant's additional procedures were not challenged by Dr. Lyman (Intervenors' sole witness), and as we explored the matter Applicant and Staff assisted us in development of a standard by which these new procedures could be measured to determine if there was compliance with our regulations' specific performance requirements, even though there was no element of the regulations which addressed accuracy. The resultant approach, which we believe is applicable to any methodology, automated or not, is that in the end the data must be sufficiently accurate to enable the Board to find compliance with the overarching requirements of the Atomic Energy Act that there be reasonable assurances of compliance with the regulation. Substantial discussion is devoted to this in our Order, and in the end we find that the preponderance of the evidence plainly supports the conclusion that such reasonable assurances are present.

The regulation at issue has two fundamental precepts: first it requires "sampling"; and second, it requires that the sampling produce a specific statistical result. As to the requirement for sampling, our regulations neither prescribe nor proscribe the use of any particular methodology — and therefore the automated systems proposed by Applicant are not proscribed; as a result, if Applicant's methods can provide the required statistical information and meet the required statistical measure, the regulations' requirements will be satisfied.

The challenge to the regulation requires us to consider whether Applicant's method may rely entirely upon automated systems or must contain a direct or indirect human element or some "physical" action which is not fully automated.[97] This, in turn, requires consideration of the requirements of the regulation and whether, where the regulation is silent as to methodology, it should be interpreted to prescribe or proscribe any particular methodology. It also involves analysis of whether the regulation at issue here and the overarching requirements of our enabling legislation impose accuracy requirements upon the data underlying the presence and integrity determinations, and, if so, what those requirements are.

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[97] *Compare* Applicant Direct Testimony at 47-48 (describing Applicant's proposal to meet the requirements of section 74.55(b)(1) with an automated, computerized system), *with* Intervenor Direct Testimony at A.5(5) (asserting that the regulations require either sampling through physical interaction or validation of computer data through the use of a physical inventory).

4. Verification of Presence of SSNM Items

a. Parties' Positions on Verification of Presence

(i) INTERVENORS' POSITION ON VERIFICATION OF PRESENCE

Intervenors challenge Applicant's proposal to verify the presence of all SSNM items every day by comparing the data contained in the Perpetual inventory Report generated by the MMIS with item locations and identities determined by the data stored in remote equipment (PLC mapping). Intervenors would reject the claim by Applicant and NRC Staff that this meets the verification of item presence requirements of 10 C.F.R. § 74.55(b)(1).[98]

Moreover, Dr. Lyman's opinion is that the "conventional understanding of item 'sampling,' . . . would normally involve the random selection, location, *removal and physical inspection* of an item's identification and integrity."[99] Intervenors assert that the context in which the term "verify" is used in 10 C.F.R. § 74.55(b) demonstrates that the verification requirement is essentially itself quantitative because it requires the licensee to "verify on a statistical sampling basis, the presence and integrity of SSNM items."[100] Intervenors contend that because the regulation also requires that the statistical sampling plan must have at least 99% power of detecting losses that total 5 formula kilograms or more, the concept of verification as used in section 74.55(b) includes two additional requirements: (1) the direct physical intervention to make a quantitative statistical measure (i.e., the random selection, location, removal, and the physical inspection of an item's identification and integrity);[101] and (2) a sample size determined by quantitative analysis.[102] Explaining further, Intervenors' witness asserts that verification must (1) have some unspecified "independent" component,[103] and (2) include some assurance regarding the licensee's records.[104] Intervenors further assert that computer systems may contain inaccuracies and that those systems are vulnerable to manipulation by adversaries. As a result, Intervenors assert that

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[98] Intervenor Direct Testimony at A.5(8-10).

[99] *Id.* at A.5(5) (emphasis added).

[100] 10 C.F.R. § 74.55(b).

[101] *See* Intervenor Direct Testimony at A.5(5). Intervenors also provided evidence that members of Applicant's own staff believed that to provide the required assurance that the MMIS and PLC data represent "an accurate reflection of the location of the items," it would be necessary to periodically physically *validate* the data provided by the system. This would entail comparing the data with the actual presence and integrity of items in the storage areas at the plant as verified through direct inspection. *Id.* at A.5(11-13).

[102] *Id.* at A.5(5-6).

[103] *Id.* at A.5(20).

[104] *Id.*

reliance on the data in the MMIS and PLCs cannot provide a level of verification equivalent to that obtained by physically retrieving and inspecting actual items.[105]

Intervenors' witness, Dr. Lyman, asserts that the interrogation of the remote PLC mapping data and the reliance on physical protection measures do not constitute item "sampling" in the quantitative manner required by 10 C.F.R. § 74.55(b)(1).[106] He further explained his belief that:

> [i]n order to provide the required assurance that the PLC mapping system is accurate to desired quantitative standard, it would be necessary to periodically physically *validate* the data provided by the system. This would entail comparing the data with the actual physical inventories of the storage areas at the plant. There is no indication in the testimony of MOX Services that it intends to do such validation.[107]

Dr. Lyman further asserts that Applicant's "assertion that it can meet a quantitative requirement for item monitoring with the use of operating data but no plan for interim sampling and validation of the computer data is not defensible."[108]

As to evidence, Intervenors provided exhibits indicating that the NRC Staff was in communication with Applicant regarding the use of the MMIS and that, assert Intervenors, Applicant was well aware of the need for specific verification of the MMIS reliability, functionality, and security if it were to be used for MC&A purposes.[109] Intervenors also provided another exhibit discussing Applicant's internal evaluation of the revised approach using the "rationale of inaccessibility, automation, and Perpetual Inventory Report."[110] This exhibit discussed the importance of MMIS data verification and provided methods that would be used to establish the functionality of the MMIS Perpetual Inventory Report. It also indicated that the "functionality of the perpetual inventory report is critical to the daily operation of the plant so that all stakeholders are assured that if the MMIS does not function properly in this regard, then operations will-

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[105] *See id.* at A.5(6). We note, however, that Intervenors offer no discussion whatsoever of the human errors which can be expected in such physical retrieval and inspection, nor do they offer any data or other information which might enable this Board or the other Parties to compare the reliability or accuracy of the two methodologies.

[106] *See id.* at A.5(5).

[107] *Id.* at A.5(6).

[108] *Id.* at A.5(10).

[109] *See* E-mail from Mark Whittingham, MC&A Safeguards Specialist, Shaw AREVA MOX Services, to Robert Harivel, Plant Information Systems Analyst, Shaw AREVA MOX Services (Apr. 29, 2010) (Exh. INT000005); E-mail from Adam Redwine, MC&A Security Specialist, Shaw AREVA MOX Services, to Dave Kehoe and Dealis Gwyn (Nov. 18, 2010) (Exh. INT000006).

[110] Internal Memorandum, Food for Thought Regarding Item Monitoring Rationale, at 1 (Exh. INT000007) [hereinafter Food for Thought].

must-cease."[111] Dr. Lyman's direct testimony regarding these exhibits indicates his view that Applicant "fully understood that its proposal to take full credit for MMIS for satisfying the item monitoring regulations was technically uncertain and at a minimum would require periodic physical verification of MMIS data."[112]

Dr. Lyman asserts that Applicant "equates the data in the PLCs with the exact configuration of all SSNM in the plant at any time."[113] He asserts that to be able to make this statement, Applicant "takes credit for 'robust physical protection features' to support its assertion that the PLCs 'know' where all SSNM items are at any given time. Thus the accuracy of the PLCs is also directly tied to the functionality of the physical protection system, which must also operate perfectly."[114]

In addition, Dr. Lyman asserts that Applicant is "taking the position that their other automation and physical protection features, which as we said in our testimony are qualitative, are compensatory measures that allow them to essentially get what we think is an exemption from the letter of the regulations."[115] Dr. Lyman also asserted at the hearing that Applicant's item monitoring approach for item presence is a "substitute" or "alternative" for compliance with 10 C.F.R. § 74.55(b)(1).[116]

Intervenors further assert that the regulations were developed without contemplation of automated systems[117] and that, despite the fact that the requirements neither prescribe nor proscribe any particular method for compliance, we must read into those regulations a requirement for physical verification. In addition, Intervenors assert that, because the entire process is automated and computers not only *control* the movement of materials but also *record* their movement, the

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[111] Food for Thought at 5.

[112] Intervenor Direct Testimony at A.5(11).

[113] *Id.* at A.5(14).

[114] *Id.*

[115] Tr. at 1232 (Lyman).

[116] Intervenor Direct Testimony at A.4 (portraying Applicant's program as "proposing novel, poorly documented, untested and vague alternative approaches to compliance").

Indeed, at the Supplemental Hearing, Intervenors made clear that, on this point, it is their view there must be physical detection of each item via some human action, not by automation or computer. This assertion does not challenge whether or not the statistical test can be met via sampling the number or percentage of items to be sampled in Applicants' FNMCP; rather it challenges the method of identifying each sampled item as insufficient to satisfy the regulatory requirement because it involves only automated systems.

[117] We discuss issues revolving around the intent of the original draftspersons regarding methodology *infra* note 225.

requirement for demonstrating satisfaction of the 99% power of detection must include a determination regarding the accuracy of the computer-recorded data.[118]

Intervenors assert that "physical verification of the actual presence and integrity of containers . . . is plainly contemplated by § 74.55(b)[(1)]."[119] Dr. Lyman expressed his view that it is necessary (at least) that Applicant uses its automated systems to *physically* remove and verify the presence of individual items in order to meet the regulatory requirements.[120] Dr. Lyman stated that "[t]here is no indication in the testimony of [Applicant] that it intends to do such validation."[121]

(ii) APPLICANT'S POSITION ON VERIFICATION OF PRESENCE

Applicant's witnesses dispute Intervenors' argument, which is fundamentally that physical involvement in the sampling is required,[122] asserting that the interrogation of the remote PLC mapping data constitutes item "sampling" and that its "robust physical protection features" ensure the integrity of the data generated by the remote equipment.[123] They contend that the use of data from computer systems that were originally designed to keep track of the facility's inventory for management purposes can be relied on for verification of the presence and integrity of SSNM items as mandated by NRC's MC&A requirements.[124] By relying on the data in the MMIS and the PLCs, rather than conducting actual physical retrieval and inspection of items to achieve the required statistical sampling, Applicant will satisfy the NRC's requirements for item monitoring.[125]

Applicant's witnesses explained how Applicant uses separate computers that control item movements locally (PLCs) and that maintain the book inventory of the MOX Facility (MMIS) to verify the presence — that is, the identity and

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[118] Intervenors contend that Applicant's approach is based on the implicit assumption that the PLC mapping data "know" where all items are at all times, and any attempt to manipulate the data would be promptly detected. Intervenor Direct Testimony at A.5(14). Put another way, Intervenors state that it is implied by Applicant's position that the PLC mapping data are 100% accurate as defined by Applicant in its reply testimony — "the PLC memory is an accurate reflection of the location of the items." Applicant Reply Testimony at 15; Tr. at 1230-31 (Lyman).

[119] Intervenor Consolidated Response at 6. *See also id.* at 3, 8, 10 (repeatedly asserting that Applicant's approach is a "substitute" (and presumably an inferior one) for "physical" item monitoring).

[120] *See* Intervenor Direct Testimony at A.5(6) (stating that "[i]n order to provide the required assurance that the PLC mapping system is accurate to desired [sic] quantitative standard, it would be necessary to periodically physically *validate* the data provided by the system. This would entail comparing the data with the actual physical inventories of the storage areas of the plant.").

[121] *Id.*

[122] Tr. at 1231-32 (Lyman).

[123] Applicant Direct Testimony at 50.

[124] *Id.* at 56-57.

[125] *Id.*

location — of items, as required by 10 C.F.R. § 74.55(b)(1).[126] The witnesses explained that movement of SSNM through the MOX Facility is performed entirely through use of an automated system that is remotely directed, controlled, and monitored by the MMIS and PLCs.[127]

Applicant's witnesses explained the PLCs control and execute local item movements, track the actual geographical location of items, and record their current location in computer memory.[128] Those actual item locations are stored in the PLCs' memory and displayed in real time to operators on control-room computer screens (referred to as "graphic user interfaces" or "GUIs").[129] The MMIS, on the other hand, controls the overall movement of material through the MOX Facility, and therefore indicates the *expected* locations of items based on the MOX Facility production process. Applicant's witnesses describe the MMIS records as representing the "book" inventory.[130] To perform timely item presence verification using these highly automated systems, Applicant proposes to compare a "Perpetual Inventory Report" generated by the MMIS with the "map" of actual item locations and identities maintained by the PLCs, thus taking advantage of the fact that the PLCs and the MMIS computer systems are separate and independent from each other.[131]

With reference to the 30- and 60-day item monitoring periods and the 99% power of detecting 5 formula kilogram losses referred to in 10 C.F.R. § 74.55(b)(1), Applicant's witnesses point out that Applicant will run this MMIS/PLC mapping comparison "every night" (i.e., daily) for *all* SSNM items in *all* SSNM item storage areas, rather than for a subset of items.[132] It can also run the comparison on demand at any time.[133] Moreover, during facility processing, each time the PLCs retrieve a specific item from a precise location and confirm that item's identity using its unique identifier, the PLCs are not only confirming the presence of that item, but also the accuracy of the PLCs' records.[134] Applicant's witnesses assert that these daily, on-demand, and continuous mapping functions provide the timely (indeed daily) verification of the presence of all SSNM items (rather than

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[126] *See id.* at 47-49.

[127] *See id.* at 35-36.

[128] *See id.* at 37, 48.

[129] *Id.* at 48.

[130] *See id.* at 48-49. We note also that the purpose or function of the MMIS at the MOX Facility has not changed. *See* Tr. at 1733-36 (King, Bell). Accordingly, Mr. Pham's review of the MMIS at the reference facility is relevant to an understanding of the NRC Staff's consideration of Applicant's item monitoring approach. *See* Tr. at 1832 (Pham).

[131] *See* Applicant Direct Testimony at 49.

[132] *Id.*

[133] *Id.*

[134] *See id.* at 37.

a subset of items) "well within the 30 and 60 day time limitations" set forth in the rule.[135]

Applicant's witnesses do not claim that Applicant is excused from compliance; rather their position is that its daily, on-demand, and continuous mapping functions performed by the PLC and MMIS systems provide the timely verification of presence of SSNM items required by the rule.[136] At the initial hearing, Applicant's counsel, Mr. Silverman, stated: "[o]ur position is very clear. We're not suggesting that we're doing anything that's equivalent to the regulation, or a substitute for the regulation. We absolutely firmly believe we meet the regulation."[137] Applicant's witness, Mr. Clark, echoed Mr. Silverman, saying "[o]ur position is that we actually meet the letter of the regulation, not the spirit. We believe that we are doing 100 percent verification of the presence and integrity of items in storage."[138]

Applicant's witness, Ms. Williams, addressing the use of automation, noted that when the regulations were implemented, the common practice was for human access to material, with people going in and out of vaults and keeping paper records of material and when they used it. She then explained that "this is an entirely different situation because everything is automated, and there's no human access."[139] Mr. Pham of the NRC Staff testified that he is in agreement with Ms. Williams regarding this view.[140]

(iii) NRC STAFF'S POSITION ON VERIFICATION OF PRESENCE

Mr. Pham, the NRC's lead MC&A reviewer, testified that Applicant's "FN-

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[135] *Id.* at 51.

[136] *See id.* at 50 (stating that "the daily and on demand mapping comparisons, in conjunction with the robust physical protection features, provide a sample size that contains 100% of SSNM items in storage locations, thus providing at least 99% power of detection of item losses of at least 5 formula kilograms"); *id.* at 51 (stating that Applicant "meets the 30 and 60 day regulatory requirements"); *id.* at 51-52 (stating that "PLC and MMIS mapping, automation, and physical protection features that limit human access to items enable MOX Services to determine the presence of all SSNM items in storage on a daily basis, and therefore satisfy the regulatory requirement"); Tr. at 1265 (Clark) (stating that "[w]e don't believe that we have to do the verifications in the way that Dr. Lyman has outlined them. . . . I have a pretty long career of doing this sort of thing, and you don't have to do that this way. . . . [Y]ou can verify the presence and integrity, which is what the regulation requires, by doing exactly what we're doing. We have protected the inventory physically from any kind of thing that might impinge on it and cause items to be misplaced or stolen, and we have designed a way to verify the integrity of that inventory as well. So we meet the letter of the regulation by the method that we use.").

[137] Tr. at 1244 (Silverman).

[138] Tr. at 1249-50 (Clark).

[139] Tr. at 1242 (Williams).

[140] Tr. at 1242 (Pham).

MCP provides a fully-implemented item monitoring program."[141] He summarized Staff's position to be that "the practices in the . . . FNMCP for item monitoring for Category IA and IB items in specific storage areas are adequate and acceptable for ensuring the protection of [SSNM] at the MOX Facility" using the MMIS and PLC mapping reconciliation and certain physical protection features.[142] He continued that, "[t]he verification of the presence of all items on a daily basis, as proposed by MOX Services, exceeds the regulatory requirement in 10 C.F.R. § 74.55(b)(1) to verify items every 30 or 60 days, as required for Category IA and IB items, respectively, using a statistical sampling method."[143] In section 13.2.3.2 of the SER, Staff determined that "the FNMCP identifies and describes an item monitoring program that establishes the capability to provide timely plant wide detection of the loss of items that total two kilograms of plutonium, with 99-percent power of detection."[144] Similarly, in his direct testimony, Staff's witness, Mr. Pham, stated that the FNMCP "provides a fully-implemented item monitoring program, including item loss detection, item identification, item categorization, tamper-safing, accessibility, accounting and control procedures, item measurements, item verification, and monitoring of samples."[145]

Mr. Pham also concurs with Applicant's assertion that the interrogation of the remote PLC mapping data is a "100 percent verification" approach (rather than random sampling) which meets the regulation's statistical sampling requirement.[146] Mr. Pham indicated in prefiled direct testimony that sections 2.8.3.1 and 2.8.3.2 of Applicant's FNMCP describe how Applicant meets the requirements for item monitoring for Category IA and 1B materials.[147] Mr. Pham testified that:

> [Applicant] uses the MMIS to generate a Perpetual Inventory Report for all items in these areas. The MMIS provides records on where items should be located and the PLCs provide the actual current location of each item. The Perpetual Inventory

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[141] Staff Direct Testimony at 4.

[142] *Id.*

[143] *Id.*

[144] Final Safety Evaluation Report for the License Application to Possess and Use Radioactive Material at the Mixed Oxide Fuel Fabrication Facility in Aiken, SC (Dec. 2010) at 13-5 (Exh. APP000021) [hereinafter FSER]. In Staff's Reply Testimony, Mr. Pham clarified that the term, "power of detection," is an expression that "refers only to the missing item or the item(s) missing material being chosen for verification as part of the statistical sample. It does not address the accuracy of the method used to detect if an item is missing or missing material." Staff Reply Testimony at 1.

[145] Staff Direct Testimony at 4.

[146] *See* Tr. at 1276 (Pham).

[147] Staff Direct Testimony at 10-11 (stating that the comparison of MMIS and PLC records "would meet the requirement to verify the presence of Category 1A . . . and 1B items"). *See also* FNMCP Chapter 2, at 138-39.

> Report is generated on a daily basis and . . . compared with operating location[s] recorded by the PLCs.[148]

According to Mr. Pham, "any discrepancies between where an item should be and where it is physically located [according to the PLCs] will be promptly investigated and resolved in accordance with the alarm resolution program described in Section 3.0 of the . . . FNMCP."[149] Mr. Pham concluded that this would meet the requirement to verify the presence of Category IA and 1B items.[150] Also with respect to verification of item presence, Mr. Pham testified regarding Applicant's comparison of where items should be (the MMIS's Perpetual Inventory Report) and where they actually are (the PLC map), and concluded that these daily mapping comparisons meet the requirements of the rule.[151]

Mr. Pham summarized Staff's overall position regarding Contention 9 by indicating "that the approach described by [Applicant] in its testimony would provide an adequate item monitoring program that would meet the requirement of 10 C.F.R. § 74.55(b)(1)."[152] This position was affirmed by Staff Counsel during the initial hearing on March 7, 2012.[153]

b. Board Determinations on Verification of Presence

We find no support for Intervenors' proposition that the plain language of the regulation, which does not speak to the *method* used for verifying presence or integrity, plainly contemplates physical verification. Moreover, neither the regulation itself nor its regulatory history sets out any explicit requirement that the verification process must satisfy any of the elements Intervenors propose.[154]

More fundamentally to Intervenors' basic claim, there is no requirement in NRC regulations that there be any "physical" verification of item presence. And the silence of a regulation as to a particular compliance technique does not indicate the prohibition of that technique. Here, the silence of NRC regulations as to whether automated methodologies may be used to meet the regulatory performance requirements cannot be read to impose some other methodology. The regulation does not explicitly prohibit the use of new technologies or methodologies, nor does it require licensees to use any particular method of item monitoring.

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[148] Staff Directory Testimony at 10-11.
[149] *Id.*
[150] *See id.*
[151] *Id.*
[152] *Id.* at 13.
[153] Tr. at 1094-95 (Klukan).
[154] *See supra* Part V.A.4.a(i); *see also* 52 Fed. Reg. at 10,033; 49 Fed. Reg. 4091 (Feb. 2, 1984).

As to the argument that this requirement was established before automated systems were available to make the required measurements and, therefore, that it did not contemplate the use of automation, we find, as Applicant and Staff witnesses testified,[155] the regulation is technology-neutral, establishing only performance requirements, and thus it can be reasonably applied to embrace technologies developed after its implementation.[156] In this regard, we find that automated systems may be used, contrary to Intervenors' assertion, to satisfy the statistical sampling requirements of the regulation.

The fact that another facility physically inspects an item's unique identifier and physically checks the item off a list maintained by facility records[157] does not mean that Applicant's plans to conduct the same verification using automation is noncompliant. Nowhere does the NRC require that such verifications be

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[155] *See* Tr. at 1811 (Pham) (stating that "this is a performance-based regulation. So we are receptive for the Applicant to come up with a method. And any method they can propose to us, we evaluate it, we review it, and we determine it is adequate or not adequate."); Tr. at 1738-39 (Bell) (characterizing the requirements at issue as "performance requirements"); see also Tr. at 1748-49 (Klukan) (stating that "[10 C.F.R. §] 74.55 is a performance-based regulation. They have to meet a certain task. . . . Now how they go about doing that is up to the Applicant and the staff applies its best technical expertise to determine whether there's reasonable assurance that the plan specified by the Applicant or proposed by the Applicant will meet that standard"); Tr. at 1945 (Jones) (stating that "[section] 74.55(b)(1) is a performance-based rule that requires a licensee to verify presence and integrity on a certain regular basis but does not prescribe the method for achieving compliance. Whatever method the licensee chooses, the NRC staff must determine whether there is reasonable assurance that the method is effective."); Tr. at 1829 (Grice) (stating that "the NRC has always tried to make its best effort to keep regulations technology-neutral, so that we are performance-based. And so the requirement is that you do the verification. The method of performing that verification is up to the licensee. It's up to Staff to determine whether their preferred method of verification is acceptable."). Moreover, Applicant's reliance on computerized systems for item monitoring is, in fact, not entirely new. As Applicant's witnesses testified at the supplemental hearing, using a computerized system to keep the book inventory is common practice for facilities regulated under Part 70. Tr. at 1793 (Bell) (stating that "ultimately the book value is a computer, as it is with any other facility under this regulation."); Tr. at 1889 (King) (stating that "the book inventory of most systems is maintained on a computer. That's not novel about our facility.").

[156] As we noted above, this approach to regulation in a technologically evolving area is eminently sensible — it provides regulations which have a long useful life, needing modification only when the performance requirements change. Our view is not inconsistent with the Proposed Rule wherein the Commission, discussing the state of the art for material control at the time portions of these regulations were written and noting that at that time "most facilities did not have, as part of their MC&A programs, automated tracking systems and computer-based accounting systems to help track SNM items," observed that "[t]oday, licensees have the ability to track items immediately upon creation instead of waiting for hand-written ledgers to be updated." Notice of Proposed Rulemaking Amendments to Material Control and Accounting Regulations, 78 Fed. Reg. 67,225, 67,228 (Nov. 8, 2013).

[157] *See* Tr. at 1391-96 (Pham, Williams) (XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX).

accomplished by human interaction with the material or human-controlled remote physical manipulation of items nor does the NRC require that such verifications be "independent."[158] Indeed, with respect to automation as opposed to human physical inspection, NRC regulatory guidance explicitly encourages the use of automation to reduce the opportunity for human error.[159] Given the evidence on the record, we also find no merit in Intervenors' argument that Applicant is attempting, either directly or indirectly, to be excused from regulatory compliance with 10 C.F.R. § 74.55(b)(1).

For the foregoing reasons, we find that Intervenors have failed to provide any information or support for their proposition that Applicant's automated systems do not comply with the regulatory requirements and their challenges to Applicant's item monitoring approach on these grounds fail.

Section 74.55(b)(1) of 10 C.F.R. requires statistical sampling with "at least 99 percent power of detecting item losses" of certain specified amounts, but without mandating the use of a specific sampling method. We find that Applicant's sampling method, which examines data representative of the entire set of SSNM items, and not a limited subset, samples 100% of SSNM items and thus we conclude it complies with the requirement to sample a sufficient number of items to result in at least 99% power of detecting the specified losses. Nonetheless, the ability of Applicant's method to satisfy the regulatory power of detecting requirement hinges upon the accuracy of the data providing the 100% sample size. We discuss below, in Subsection 6, evidence submitted respecting Intervenors' assertion that the accuracy of data used on, and generated by, these automated systems is material to a determination of compliance, and our conclusion that there are reasonable assurances of compliance in that regard.

5. Verification of Integrity of SSNM Items

The second issue raised by Contention 9 is whether Applicant satisfies the requirement to verify, on a statistical sampling basis, the "integrity" of SSNM items, again with at least a 99% power of detecting losses totaling 5 formula kilograms or more, within 30 days for Category IA and 60 days for Category IB items.[160] A determination regarding item integrity refers to the ability to determine that a container holding SSNM items has not been breached and that the amount of SSNM within has not been altered.

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[158] *See* Tr. at 1707-08 (Clark, Klukan).

[159] *See* NUREG-1280 Chapter 4.9, at 95 (recommending that "MC&A data [be] directly collected, inputted, checked, manipulated, reported and audited by computer where it is practical and advantageous to reduce the consequences and frequency of human error in MC&A data as much as practical").

[160] *See* 10 C.F.R. § 74.55(b)(1).

To satisfy the item integrity requirements of section 74.55(b)(1), Applicant proposes to use each of the MOX Facility's SSNM item storage areas as containment boundaries. Applicant will use tamper-indicating devices ("TIDs"), or protection equivalent to tamper-safing at each containment boundary.[161] For each item storage area containment boundary except one — the Assembly Storage Area ("TAS") — the integrity and the unique identifier of the TIDs will be visually inspected every day by Operations personnel.[162]

In the TAS, Applicant proposes to ensure the integrity of the SSNM fuel assemblies by controlling access to the TAS crane.[163] Applicant's witnesses testified that, "[s]ince the assemblies are large heavy components, controlling access to the crane ensures that no one can breach the integrity of the stored assemblies and provides protection equivalent to tamper-safing. Crane access logs will be reviewed *daily* for unauthorized use to confirm" integrity.[164]

a. Parties' Positions on Verification of Integrity

(i) INTERVENORS' POSITION ON VERIFICATION OF INTEGRITY

Intervenors argue that Applicant's proposed approach fails to satisfy the "quantitative" requirements of section 74.55(b)(1), and instead relies on a containment boundary approach to verification of item integrity that is essentially "qualitative" in nature as it relies solely on physical protection features.[165] Intervenors also contend that Applicant does not satisfy the regulation because its approach does not involve direct access to items to verify the presence and integrity of cans, reading bar codes and inspecting seals, but instead relies solely on the data within the MMIS and PLCs and the presence of physical protection features.[166] Intervenors' witness, Dr. Lyman, testified at the initial hearing that Applicant's "concept of a containment integrity boundary is something that does not appear in the regulations or the guidance. . . . it is a novel concept."[167] According to

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[161] *See* Applicant Direct Testimony at 53-55; *see also* Tr. at 1698-99 (Clark).

[162] *See* Applicant Direct Testimony at 53-55; *see also* Tr. at 1865 (Clark). In the supplemental hearing, Mr. Clark made clear that all of the TIDs used for item integrity containment boundaries are "uniquely identified," tracked and accounted for from receipt to disposal, and may be accessed by only a small number of persons. It bears note that this activity involves direct human action — the particular method which Intervenors have asserted is absent and must be used more broadly.

[163] Applicant Direct Testimony at 55.

[164] *Id.* "Fuel assemblies weigh around 1500 lbs and are about 13 feet in length." *Id.* at 33.

[165] Intervenor Direct Testimony at A.5(5); Tr. at 1244 (Lyman). We note, however, that the assertion that there is a quantitative aspect to the determination of boundary integrity was not accompanied by any evidence respecting what that quantitative requirement is or should be.

[166] *See* Intervenor Direct Testimony at A.5(5).

[167] Tr. at 1389 (Lyman).

Dr. Lyman "the [NRC] regulations . . . already assume that you have items that are tamper safed or placed in a vault or a controlled access area that provides protection at least equivalent to tamper safing. That is the prerequisite for the item monitoring program."[168] Dr. Lyman asserts that the tamper-safing of items cannot be used by Applicant to "verify on a statistical sampling basis the . . . integrity of SSNM items."[169]

Intervenors fault Applicant's integrity verification approach for failing to involve statistical sampling of the items within the containment boundaries to meet the 99% power of detection and assert, as they did respecting item presence, that section 74.55(b)(1) requires physical verification of item presence and integrity and that Applicant's approach does not physically verify item integrity.[170] As Dr. Lyman indicated at the initial hearing, he "believe[s] that the regulations mean when you do statistical sampling for item monitoring purposes that you actually locate, that you take a random sample of items, and you actually physically inspect them for identity *and integrity purposes.*"[171] According to Intervenors, if it were acceptable to verify item integrity by verifying the integrity of storage area boundaries, then it should be possible to verify presence the same way.[172] Intervenors conclude that, "[a]s a result of this logical inference . . . much of the language in 10 C.F.R. [§] 74.55 would be superfluous, starting with the header 'Item Monitoring' — because no items would need to be monitored."[173] The net result of this argument is the assertion that an interpretation of the regulation which accepts Applicant's boundary integrity concept is invalid because it renders other parts of that regulation meaningless.

Furthermore, Intervenors assert that Applicant's approach renders all items

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[168] Tr. at 1403-04 (Lyman).

[169] Tr. at 1404 (Lyman).

[170] *See* Intervenor Consolidated Response at 8 (stating that "[a]n applicant must demonstrate the same capability to statistically sample and physically inspect items to verify their integrity as it does to verify their presence").

[171] Tr. at 1231 (Lyman) (emphasis added).

[172] *See* Intervenors' Statement of Position in Rebuttal to NRC Staff's Statement of Position on Contentions 9, 10, and 11 at 5 (Dec. 19, 2011) [hereinafter Intervenor Reply Statement of Position] (stating that "[a]fter all, if the system is sensitive enough to detect removal of the partial contents of a container it should also be sensitive enough to detect the removal of the entire container"). In so doing, Intervenors asserted that "[i]f one knows the identity of all items within the containment boundary at any time, and it is assumed that the area has not been entered as long as the boundary remains intact, then there would never be a need to re-verify the identity of the items within the boundary." Intervenors' Proposed Cumulative Findings of Fact and Conclusions of Law Regarding Contentions 9, 10, 11 (July 1, 2013) ¶ 4.63 [hereinafter Intervenor Proposed Cumulative Findings].

[173] Intervenor Reply Statement of Position at 5.

stored within a single containment boundary to be a single item and complicates the ability to conduct an inventory in the event of breach.[174]

(ii) APPLICANT'S POSITION ON VERIFICATION OF INTEGRITY

Applicant's witness, Ms. Williams, disputed Dr. Lyman's claim that Applicant's integrity boundary concept is novel, citing other Category 1 facilities' use of 55-gallon drums as containment boundaries with TIDs.[175] According to Applicant's witnesses, item integrity refers to the condition of the containment boundary around a discrete quantity of SSNM.[176] They asserted that, just as a single item of SSNM may be sealed to ensure its integrity, Applicant has expanded the concept to encompass the tamper-safing of entire storage areas behind containment boundaries.[177]

Applicant's witnesses testified that its "robust physical protection features control direct physical interaction between humans and SSNM items,"[178] with human access beyond containment boundaries controlled by design or security features.[179] Except in controlled repair situations, humans cannot enter beyond or breach these boundaries, and material movements across any of these boundaries

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[174] *See id.* at 6 (arguing that Applicant's approach would mean that any containment boundary breach would require a full inventory of the storage area's content to verify integrity).

[175] *See* Tr. at 1396-97 (Williams). Ms. Williams identified these other Category 1 facilities as Babcock & Wilcox in Lynchburg, VA, and Nuclear Fuel Services in Erwin, TN. Though these facilities were in existence prior the effective date of Part 74, they have since established regulatory compliance without the use of the highly automated systems at issue here. Tr. at 1394-95 (Williams). XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX *See* Applicant Reply Testimony at 24.

[176] Applicant Direct Testimony at 52; *see* Tr. at 1695 (Clark) (stating that "the reason why you do that is because you have measured this stuff and you put it in something and you don't have to measure it every time you want to verify it. You want an easier, faster way to be able to figure out if something has happened to contents [sic] of the container. So you seal it with something. The regulations talk about tamper indicating in the context that this measurement then — this good accountability measurements that you have on this stuff is then preserved by this feature, so you don't have to repeat the measurements over and over.").

[177] *See* Applicant Direct Testimony at 52.

[178] *Id.* at 48; *see also* Tr. at 1798 (Bell) (stating that "our system is based upon, you know, no human access to the storage areas. XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX).

[179] *See* Applicant Direct Testimony at 52.

are executed using PLC-controlled equipment.[180] The containment boundaries are either tamper-safed or protected by methods equivalent to tamper-safing.[181]

Applicant's witnesses assert that protection of the storage areas, coupled with "[c]onfirmation that the containment boundary has not been breached ensures the integrity of all the items contained therein."[182] Applicant's witness, Mr. Clark, asserts that the integrity aspect of the 99% power of detection requirement is met not by the fact that there are controlled areas, but by Applicant "verifying daily the [tamper-safed] integrity boundaries around [100% of the items in storage]" (i.e. determinations as to integrity are not made based upon the fact that each item storage area is in a vault or PCAA, it is based upon Applicant checking, on a daily basis, the integrity of the boundaries, the TIDs, and the unique identifier on the TIDs).[183] Applicant's witnesses conclude that "these detection methods . . . would be effective in detecting the loss of integrity of an SSNM item well within the 30 and 60 day requirements."[184]

In response to Intervenors' argument that Applicant's approach makes section 74.55(b)(1)'s item presence requirements superfluous, Applicant's witnesses testified that due to automated movement of SSNM items throughout the MOX Facility, "even if a containment boundary is not breached, items will move in and out of the storage area (and through portals that are not accessible to humans under normal operation)."[185] As a result, they argue, verifying item integrity through examination of storage area boundaries could not be used to replace the necessary item presence verification component of section 74.55.[186]

(iii) NRC STAFF'S POSITION ON VERIFICATION OF INTEGRITY

Staff's witness, Mr. Pham, stated that the MOX Facility SSNM storage areas meet the acceptance criteria in NUREG-1280 for providing protection equivalent to tamper-safing.[187] As such, Staff found that Applicant can verify the integrity of SSNM items inside the storage areas at the MOX Facility through verifying the integrity of the storage area containment boundaries.

In the Final Safety Evaluation Report, Staff concluded that Applicant's "tamper-safing procedures are acceptable to ensure the continuing validity of pre-

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[180] *Id.*

[181] *Id.*

[182] *Id.* at 53.

[183] Tr. at 1351 (Clark).

[184] Applicant Direct Testimony at 56.

[185] Applicant Reply Testimony at 26.

[186] *See id.*

[187] *See* Staff Direct Testimony at 11-13. Mr. Pham asserted that Applicant's "verification of the integrity of the vault boundaries on a daily basis . . . also exceeds the regulatory requirement to verify the integrity of the items every 30 or 60 days, as required by 10 C.F.R. § 74.55(b)(1)." *Id.* at 4.

viously measured and attested to nuclear material values assigned to unique items, and the personnel access controls, surveillance and records procedures for entrance and exit of personnel to and from control access areas."[188]

Staff's witness, therefore, agreed with Applicant that confirmation that the containment boundary has not been breached ensures the integrity of all of the items contained therein.[189] Additionally, Mr. Pham agreed that Applicant's approach was not novel and is currently employed at other facilities.[190]

b. Board Determinations on Verification of Integrity

Intervenors' claim that Applicant's approach "do[es] not involve . . . sampling"[191] rests upon the faulty premise that sampling requires physical action (and that the interrogation of data stored in computer records is not considered statistical sampling). Intervenors also err in asserting that Applicant's examination of computer data representing 100% of the items in any storage area cannot satisfy the requirement to take a sufficiently sized sample to achieve the 99% power of detection goal of statistical sampling. Moreover, Intervenors err in asserting that "[a]n applicant must demonstrate the same capability to . . . physically inspect items to verify their integrity as it does to verify their presence."[192] Neither the plain language of section 74.55(b)(1) nor its regulatory history suggests that verifications of item integrity must be in any way "physical."[193] Intervenors offer no support for the proposition that there is some requirement imbedded within 10 C.F.R. § 74.55(b)(1) for physical action in integrity (or presence) verification. In contrast, Applicant provided substantial testimony, which is supported by Staff's witnesses, regarding their approach to verifying the integrity of 100% of items, and we find that their approach satisfies the statistical sampling requirement and achieves the 99% power of detection required by 10 C.F.R. § 74.55(b). Additionally, Applicant's integrity verification approach *does* involve daily, physical, human confirmation that the containment boundaries around SSNM items have not been breached. Although the rule does not require any physical aspect to item

[188] FSER at 13-6.

[189] *See* Staff Direct Testimony at 4. The NRC Staff position on item integrity verification was also summarized at the initial hearing by Mr. Klukan by referring to direct testimony that "if a storage area provides protection equivalent to tamper safing it is generally acceptable for an applicant to verify the integrity of the storage area including the boundaries thereof and any tamper safing devices on access points as opposed to the integrity of each item contained in that storage area." Tr. at 1096 (Klukan).

[190] Tr. at 1403 (Pham).

[191] Intervenor Consolidated Response at 8.

[192] *Id.*

[193] *See* 10 C.F.R. § 74.55(b)(1); 52 Fed. Reg. at 10,033-43; 49 Fed. Reg. at 4,091-97.

integrity verification, Applicant's approach involves daily, physical confirmation of the integrity of SSNM item containment boundaries.

As to the argument that a containment boundary integrity approach would make part of our regulations irrelevant, a containment boundary that has not been breached will nonetheless have items moving in and out as the facility operates. Thus, item presence is not assured by confirming boundary integrity, and section 74.55 is not, as Intervenors claim, rendered "superfluous" by a reading that verifying the integrity of a storage area boundary will suffice to verify the integrity of the items contained therein.[194] We therefore find that Applicant could not use its integrity verification approach for presence verification as well. And, the boundary integrity concept is inapplicable to certain other facilities to which these regulations apply. As Applicant's witnesses explained, those other facilities have item storage areas that are regularly accessed by humans and thus, the storage area boundary of those facilities cannot be used to verify integrity.[195]

To be clear, we also find that verifying the integrity of SSNM item storage area containment boundaries enclosing the particular, uniquely identified SSNM items ensures that those SSNM items retain their integrity. If the boundaries have not been breached, the discrete, identified, and previously measured SSNM contained within those items could not have been changed from the previously measured value.

We view the physical protection features, which prevent intruder access, as providing assurance that the data as originally generated in the PLCs represent an unchanged condition of storage of the items so tracked and recorded.

Finally, Intervenors assert that if we accept the concept of the use of boundary integrity to determine integrity, "all SSNM items within a single 'containment boundary' would effectively become a single 'item' for the purposes of item monitoring."[196] We find this argument to be more reasonably directed to the subject matter of Contention 10, which regards the alarm conditions that would occur once a storage area boundary is found to have been breached. Because we separately address Applicant's compliance with that particular regulatory requirement in Contention 10,[197] we do not address this assertion here.

Based upon the foregoing, and the other evidence before us, we find that Applicant's program, which requires checking, on a daily basis, the integrity of the boundaries, the TIDs, and the unique identifier on the TIDs satisfies the quantitative requirements of the rule and is sufficient to provide the integrity verification required within the 30- and 60-day time frames.

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[194] *See* Intervenor Reply Statement of Position at 5.

[195] Applicant Reply Testimony at 24.

[196] Intervenors assert that if the containment boundary were breached, "it would be necessary to inventory the entire vault in order to resolve an alarm." Intervenor Reply Statement of Position at 6.

[197] *See supra* Part V.B.

That said, however, we distinguish the matter of "integrity" of the SSNM from the accuracy of the data in the computer systems, a matter we discuss in depth below.

6. Power of Detection and Accuracy

The third issue raised by Contention 9 involves two subissues: (1) whether section 74.55(b) includes a requirement regarding the accuracy of the data in the computer systems that are being used to satisfy the required 99% power of detection;[198] and (2), if the regulation does include an accuracy requirement for these computer and automated systems, what standard is to be used to measure whether Applicant has satisfied the requirement and whether that standard has been met.[199]

a. Quantitative Requirement for Accuracy

(i) PARTIES' POSITIONS ON QUANTITATIVE REQUIREMENT FOR ACCURACY

(1) Intervenors' Position on Quantitative Requirement for Accuracy

Intervenors assert that section 74.55(b)(1)'s requirement for statistical sampling with a 99% power of detection includes, directly or indirectly, some accuracy requirement to ensure that "the PLC memory is an accurate reflection of the location of the items."[200] Dr. Lyman agreed with the distinction between "power of detection" and "accuracy," testifying that he "mean[s] accuracy the same way the Applicant means it."[201] However, he faults Applicant for "assum[ing] that the PLC mapping data is at least 99 percent accurate" without providing "*quantitative* evidence supporting this claim" and relying solely on "*qualitative* reassurance that physical protection measures will ensure accuracy of the PLC mapping data."[202]

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[198] The regulation's definition of "power of detection" does not explicitly require a demonstration of data accuracy. *See* 10 C.F.R. § 74.4.

[199] In considering the accuracy of Applicant's approach, we remain cognizant that the alternative approach suggested by Intervenors would itself be susceptible to inaccuracies, such as human error, which NRC regulatory guidance documents attempt to reduce through the use of automated systems. That is to say, the accuracy question cannot be considered in a vacuum. Rather, it must be judged in terms of whether or not Applicant's approach provides the required reasonable assurances that it will have the ability to fulfill the regulatory performance requirements.

[200] Tr. at 1230 (Lyman) (quoting Applicant's Reply Testimony); *see also* Intervenor Direct Testimony at A.5(5-6).

[201] Tr. at 1230-31 (Lyman) (stating that "[a]ccuracy means the representation of the actual items by . . . the information in the PLCs. . . . It has nothing to do with the power of detection or anything.").

[202] Intervenor Direct Testimony at A.5(5).

Thus, Dr. Lyman asserts, Applicant fails to meet the requirements and the intent of the regulation.[203] Dr. Lyman further asserts that

> [i]n order to provide the required assurance that the PLC mapping system is accurate to desired quantitative standard, it would be necessary to periodically physically *validate* the data provided by the system. This would entail comparing the data with the actual physical inventories of the storage areas at the plant. There is no indication in the testimony of [Applicant] that it intends to do such validation.[204]

Moreover, as we noted earlier, Dr. Lyman asserts that Applicant's interrogation of the remote PLC mapping data does not constitute item "sampling," which he suggests would normally involve the random selection, location, removal, and physical inspection of an item's identification and integrity.[205] Underlying this argument is Intervenors' assertion that Applicant assumes that the "PLC mapping data is at least 99 percent accurate."[206]

(2) Applicant's Position on Quantitative Requirement for Accuracy

Applicant asserts that no accuracy concept is imbedded in the regulation because the power of detection of the statistical sampling plan is not affected by the accuracy of the method employed to confirm item presence.[207] Moreover, Applicant's witnesses assert that the power of detection and the accuracy of underlying data are two distinct concepts and section 74.55(b)(1) contains no explicit quantitative accuracy requirement.[208] Rather, Applicant's witnesses testified that the regulation has two explicit quantitative aspects: (1) the required 99% power of detection for the licensee's statistical sampling plan; and (2) the time within which such losses must be detected (i.e., 30 or 60 calendar days).[209]

Applicant's witnesses asserted that, "[a]s suggested by NRC guidance (i.e., NUREG-1280), 'power of detection' is mathematically related to the sample size,

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[203] *Id.*

[204] *Id.* at A.5(6).

[205] *Id.* at A.5(5).

[206] *Id.*

[207] *See* Applicant Reply Testimony at 7-8, 11.

[208] *See id.* at 11. At the hearing, however, Dr. Lyman expressed his view that Applicant actually samples "not 100 percent of items but *zero* percent." Tr. at 1231 (Lyman) (emphasis added). His perspective is that Applicant's automated mapping function fails to satisfy the regulation because an actual physical removal of items from storage locations is required to meet the regulation. Tr. at 1231-32 (Lyman). This rests upon his view that there is an underlying assumption by MOX that the information in the PLCs is exactly equivalent to the state of all the items in the plant at all times, and that, to him, this means they have assumed that the information is 100% accurate. Applicant's witnesses argue that Dr. Lyman's view conflates "power of detection" with "accuracy."

[209] Applicant Reply Testimony at 5.

the number of items that comprise a target quantity of SSNM, and the total number of items in the inventory."[210] Using the calculation provided in NUREG-1280 for illustration, Applicant's witnesses further stated:

> The only variables that affect power of detection are the minimum number of items to divert 2000 g Pu [5 formula Kg] (d), the number of items in the population (N), and the number of items to be verified (n). And the only variable that can be adjusted for a given storage area (that is, where d and N are fixed), is the number of items to be verified (n). Thus, the only way to increase the power of detection in a given storage area is to increase the number of items to be verified.[211]

When a power of detection of 99% is achieved, "there is a 99 percent chance that a missing item (or collection of items) totaling 5 formula kilogram [of SSNM] will be selected to be included in the subset of items to be verified during the item monitoring checks."[212] The only variable that will affect power of detection for a given population is the number of items in the sample.[213] By sampling a greater portion of the population, one increases the power of detection.

Applicant's witnesses testified that mapping of 100% of the items in storage via the MMIS and PLCs constitutes a statistical sample that involves a sample size of 100% of the item population.[214] Applicant's witness, Mr. Clark, explained that sampling 100% of the population satisfies the power of detection requirement because the only factor that can affect the power of detection is the sample size.[215]

Mr. Clark testified that "[a]ccuracy . . . goes to how confident you are that if you select the defective item for the item monitoring test, [you will] be able to detect that it is, in fact, defective. . . . The regulations don't actually have any . . . quantitative measure" to determine the accuracy of this detection.[216]

Nonetheless, Applicant agrees that there is an accuracy requirement. Regarding the question of whether the Staff would allow an Applicant to use inaccurate data, Applicant's witnesses testified that "whatever methods the licensee chooses,

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[210] *Id.* at 6.

[211] *Id.* at 7. In addition, Applicant's witness, Ms. Williams, testified that the formula identified by the NRC Staff in its NUREG-1280 guidance for determining power of detection "does not take into consideration accuracy." Tr. at 1214 (Williams). As an aside, Intervenors' witness suggested at the hearing that Applicant's approach of using computer data to monitor the location of 100% of items fails to satisfy the requirement for at least a 99% power of detection. *See* Tr. at 1231 (Lyman) (claiming Applicant actually samples "not 100 percent of items but zero percent").

[212] Applicant Reply Testimony at 5.

[213] *See id.* at 5-8; Tr. at 1211-13 (Clark) (stating that the 99% power of detection requirement "refers, ultimately, to the size of the population that will be subjected to the item test").

[214] *See* Applicant Reply Testimony at 9.

[215] Tr. at 1249 (Clark).

[216] Tr. at 1211-12 (Clark).

those methods must be able to provide reasonable assurance that item losses . . . will be detected."[217] In response to a follow-up question regarding whether an inspection method that had only 50% accuracy would be acceptable, Mr. Clark indicated "that the regulator at that point would not allow that verification process. If there was that kind of effectiveness, that would not be ruled a sufficient check of the integrity or the presence of those items."[218] Applicant's witnesses stated that "there is no requirement [in section 74.55(b)(1)] that the licensee *demonstrate the accuracy* of its method on a *quantitative* basis, and [section] 74.55(b)(1) does not even speak to method accuracy."[219] Nonetheless, Applicant noted that whatever methodology is used must satisfy the overarching requirements of NRC regulations and the Atomic Energy Act by providing reasonable assurance of public health and safety and environmental protection[220] — in this instance, that the data can be used to demonstrate that item losses totaling 5 formula kilograms will be detected.[221]

Applicant's witness, Mr. Clark, described the relationship between power of detection and accuracy by explaining that:

> the 99 percent power of detection that means you have a 99 percent probability that that particular item in question will be selected to be verified.
>
> Accuracy is — actually goes to how confident you are that if you select the defective item for the item monitoring test, [you will] be able to detect that it is, in fact, defective. It goes to how effective is your — or how effective is your test itself.[222]

(3) NRC Staff's Position on Quantitative Requirement for Accuracy

NRC Staff's witness, Mr. Pham, agreed with Applicant's position that "accuracy" and "power of detection" are distinct concepts and that there is no explicit quantitative accuracy requirement in the power of detection requirement. Mr. Pham also provided testimony regarding his view on the scope and limits of the quantitative requirements of section 74.55(b)(1):

> [a] 99% power of detection means there is a 99% probability that the test will detect a loss of five formula kilograms of material. The term "power of detection" refers only to the missing item or the item(s) missing material being chosen for verification

[217] Applicant Reply Testimony at 11.
[218] Tr. at 1213 (Clark).
[219] Applicant Reply Testimony at 11.
[220] *See supra* Part III.A.
[221] *See* Applicant Reply Testimony at 11.
[222] Tr. at 1211 (Clark).

as part of the statistical sample. It does not address the accuracy of the method used to detect if an item is missing or missing material.[223]

(ii) BOARD DETERMINATION ON QUANTITATIVE REQUIREMENT FOR ACCURACY

All parties agree that the regulation's power of detection requirement is a concept distinct from the accuracy of the method used to determine item presence and integrity. There is also testimony that, for an automated, computer-based methodology, the accuracy of the method used to establish the presence and integrity required by the regulation must logically include a consideration of accuracy.[224] Based on the foregoing, and the other evidence before us, we conclude that accuracy of the methodology is an integral component of the requirement to provide reasonable assurance of item presence and integrity with a 99% power of detection, especially when item sampling is entirely computer-based.

As a result, the Board finds that consideration of the quantitative accuracy of the MMIS/PLC computer system data must be considered in determining whether or not requirements of 10 C.F.R. § 74.55(b)(1) are satisfied by Applicant's plans.

b. The Standard for Quantitative Accuracy of Applicant's Data

Having found that quantitative accuracy must be considered, we consider next the standard against which the accuracy of Applicant's item monitoring method must be judged ("reasonable assurances" of meeting the regulatory requirement) and then evaluate whether a preponderance of the evidence in the record supports a finding that Applicant's item monitoring method meets that standard.

(i) PARTIES' POSITIONS ON QUANTITATIVE ACCURACY OF APPLICANT'S DATA

(1) Intervenors' Position on Quantitative Accuracy of Applicant's Data

Dr. Lyman asserts that Applicant must establish specific quantitative accuracy requirements for the data in the MMIS/PLCs in addition to the qualitative measures that are described in the FNMCP.[225] This rests upon Intervenors' view

[223] Staff Reply Testimony at 1.

[224] In response to questions regarding whether the regulations were developed assuming human involvement in the inspection process and that being the reason why accuracy is not included, Mr. Clark responded that "I suppose that could be possible, yes. The regs, though, do specify that you are to verify presence and integrity, so they expect that you will do that with a very high confidence." Tr. at 1212 (Clark). Moreover, Mr. Pham testified that Applicant's move toward computerization implies the "need to go back and revise" the regulation to include the consideration of computer control and automation. Tr. at 1243 (Pham). Presumably this would include explicit consideration of the accuracy of the data in the computer systems.

[225] Intervenor Direct Testimony at A.5(5).

that Applicant relies upon an assumption that the information in the PLCs is 100% accurate and exactly equivalent to the state of all the items in the plant at all times.[226] Intervenors assert that the regulation's accuracy requirements require an additional verification of the MMIS/PLC data.[227]

Intervenors' position, restated by Dr. Lyman at the supplemental hearing, is that in order to establish adequate accuracy for the MMIS/PLC data, there has to be sufficient verification of the data. In this regard, Intervenors noted that a procedure for data verification was scheduled to be developed "some time in the future" and argued that that procedure should be developed prior to issuance of the license.[228]

Dr. Lyman claims that unless there is independent and periodic verification of the data used for MMIS and PLC mapping, Applicant's approach to item presence only shows that the MMIS and PLCs are consistent and does not provide assurance that a diverted item will be detected in a timely manner.[229] He argued that "[w]ithout providing detailed procedures to periodically verify the performance of the PLCs, MOX Services has simply failed to demonstrate the system can operate with this astonishingly high level of accuracy."[230] At the supplemental hearing, Intervenor's witness, Dr. Lyman, repeated Intervenors' position that in order for Applicant to establish adequate accuracy of the MMIS/PLC data, there has to be sufficient verification of the data but confirmed that, in his view, process movements could be used to provide this verification.[231] Regarding the number of such process movements that would be necessary, Dr. Lyman stated his opinion that:

> In our view of reading those requirements, we — it's not clear how many actual item process moves would be necessary to comply with the regulations. But we aren't clear — the regulations are clear. You want to know, you want to be able to verify the presence and integrity of a certain quantity of plutonium to a certain standard

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[226] *See* Intervenor Consolidated Response at 6; Intervenor Direct Testimony at A.5(14).

[227] Intervenor Direct Testimony at A.5(6).

[228] Tr. at 1108 (Curran).

[229] Intervenor Direct Testimony at A.5(20).

[230] *See id.*

[231] *See* Tr. at 1756 (Lyman) (stating "[s]o I do think that if you are conducting a verification of the accuracy of the MMIS and PLC data, that the data that you acquire through certain process operations and movements on a case-by-case basis could be used to verify the data in the computer."); *see also* Tr. at 1790 (Lyman) (stating that "I think what I said was that on a case-by-case basis, that doing the kind of verification of data that's been described could be accomplished through process movements. At least, a process movement could provide verification that the data in the PLCs is correct for that particular item. But, again, on a case-by-case basis, depending on what you're actually doing. But, you know, in principle it's not a bad approach.").

within a certain period of time. And we would need to see further demonstration of how a particular verification plan would actually comply with the regulations.[232]

Other than acknowledging the acceptability of process movements for establishing data accuracy, Intervenors did not provide any prefiled direct testimony regarding inadequacies of the quantitative standard chosen by Applicant in response to the Board's June 29, 2012 Order nor did they identify any other quantitative standard that they would find acceptable.

(2) Applicant's Position on Quantitative Accuracy of Its Data

Applicant's witnesses maintain that Applicant "has not asserted that its PLC mapping data is '100 percent accurate' . . . Rather, [its] item monitoring program relies on multiple, redundant methods to provide reasonable assurance of the accuracy and integrity of the MMIS and PLCs."[233]

Applicant's witnesses testified that there is neither a quantitative accuracy requirement in 10 C.F.R. § 74.55(b)(1) nor any such expectation in the applicable Staff guidance document, NUREG-1280.[234] However, Applicant expressed its view, which we believe consistent with the general dictates of the Atomic Energy Act, that the NRC does not intend to allow licensees to use "inaccurate" item monitoring methods and thus, as Applicant's witnesses stated, "[w]hatever methods the licensee chooses . . . must be able to provide reasonable assurance that item losses totaling five formula kilograms will be detected."[235]

Applicant provided documentary evidence, as well as prefiled and live testimony, to describe its programs for assuring the accuracy of its item monitoring method. Applicant asserts that these programs will include multiple features that both *prevent* errors and *detect* errors in the MMIS and PLC data.

(a) Features That Prevent Errors

Applicant's witnesses presented largely uncontroverted testimony discussing at least six program features that prevent errors in MMIS and PLC data: (1) the software is derived from the operating reference facility;[236] (2) control of the

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[232] Tr. at 1757 (Lyman).

[233] Applicant Direct Testimony at 36.

[234] *Id.* at 11.

[235] *Id.*

[236] *See id.* at 20-22 (responding to Dr. Lyman's assertion that the MOX Facility's software was developed by foreign nationals and therefore could include malicious code, Applicant's witness, Mr. Bell, noted that the software "has been used successfully for 15 years" and was developed prior to the institution of efforts to build the MOX Facility, so intentional corruption respecting this facility was not credible.)

development and life cycle of the software used in MMIS and PLC data systems is in accordance with applicable NRC and industry-accepted ASME NQA-1 Quality Assurance (QA) standards[237] and use of a specific software life cycle process that provides a defined and structured approach to software development and testing and originates from Industry Standard IEEE 1012-1998, IEEE Standard for Systems and Software Verification and Validation; (3) extensive preoperational, in-plant testing of MMIS and PLC software and operating procedures;[238] (4) rugged and resilient design of MMIS and PLC hardware;[239] (5) MOX Facility elements and procedures that provide physical protection of MMIS and PLC software and hardware;[240] and (6) the use of automation in the MOX Facility.

Applicant's witnesses testified that "[b]y using automated systems, [Applicant] is able to significantly reduce the potential for human errors that could adversely affect the accuracy of item monitoring results. Indeed, human error is the single

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[237] *See id.* at 20-22; Tr. at 1180, 1189-91 (Bell). Intervenors challenged Applicant's use of NQA-1. *See* Intervenor Consolidated Response at 13-14. Why Intervenors believe that use of NQA-1 is inadequate or inappropriate is not at all clear. It appears they believe this is the case because they state that "[Applicant] has testified that the PLC and MMIS were not developed for safety, security or MC&A purposes" but instead for "managing the MOX Facility inventory." *Id.* But Applicant's witnesses testified that the MMIS was developed for multiple purposes, including material balance, MC&A, and non-IROFS, defense-in-depth criticality prevention. *See* Tr. at 1202-03 (Bell) (providing testimony on the multiple purposes of the MMIS). Even if Intervenors' claim were true, that does not support a challenge to the adequacy of the use of NQA-1.

[238] Applicant Supplemental Direct Testimony at 10 (stating that "[t]he goal of the in-plant testing is to demonstrate that the MOX Facility components, process units, and systems meet their functional requirements, and that the Facility is ready to accept radioactive material").

[239] Tr. at 1155 (Bell) (explaining the reliability of the hardware of the computer systems used for item monitoring. He explained that the PLCs, which control the MOX process at a local level, are digital computers that have been used in industry since the late 1960s. The PLCs are ruggedly designed to operate in a wide range of environments, including extended temperature ranges, dusty, vibrating and noisy environments, and have no moving parts, such as disk drives or fans. Moreover, the PLCs execute preprogrammed instructions on movement of items and retain item movements in memory; thus information recorded in PLC memory can then be called upon to identify the location of items in storage. And, PLC memory is nonvolatile, solid state with battery backup, "[s]o, even if [the MOX Facility] lost total power, with the battery, [PLCs] will retain memory for six months."). As to the MMIS, Mr. Bell testified that it is "comprised of two redundant servers, each with its own disk array, which are mirrored, which means they are kept identical at all times." Tr. at 1149 (Bell). And the servers are in separate locations, each has an uninterruptable power supply, and each can perform all of the MMIS functions "alone indefinitely." *See* Applicant Direct Testimony at 39.

[240] *See* Applicant Direct Testimony at 10-18, 53-55 (describing MOX facility features that, in addition to external barriers, provide physical protection, including: the "two-person rule," which prohibits any single individual from having access to SSNM; "separation of duties," which prohibits any person from having access to both MC&A records and SSNM; "compartmentalization," which limits the SSNM to which individuals have access; and protection of individual SSNM items via individual tamper-safing, encapsulation, placement in a vault or PCAA that provides protection at least equivalent to tamper-safing, containment boundaries, or some combination of the above).

most common cause for item monitoring discrepancies."[241] Mr. Clark supported this view when he testified that Applicant's

> method is less subject to error than the traditional method that we have talked about here, because the traditional method relies on human intervention and human checking of numbers from one list to the other. . . . [T]he NRC has encouraged applicants to use automation, specifically so that you can reduce the chance for human error.[242]

(b) Features That Detect Errors

In addition to the methods it employs to prevent errors in MMIS and PLC data, Applicant's witnesses presented five actions that are used to detect errors in MMIS and PLC data and thereby provide further assurance that the MMIS and PLCs present an accurate representation of SSNM items in storage: (1) Applicant verifies that the records maintained by the MMIS and PLCs are accurate by comparing the two;[243] (2) Applicant continually verifies the accuracy of PLC and MMIS mapping data during facility operation;[244] (3) Applicant will be able to detect any failure of the systems because of the process stops or because all errors are logged;[245] (4) Applicant "will verify *operational* MMIS and PLC

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[241] Applicant Reply Testimony at 14.

[242] Tr. at 1256 (Clark); *see also* Tr. at 1257-59 (Pham), 1715 (Bell), 1723-24 (Williams).

[243] *See* Applicant Reply Testimony at 14-16; Applicant Direct Testimony at 49 (stating that the daily mapping comparison of the MMIS and PLC data provides an effective mechanism for verifying the accuracy of each data system against the other, confirming MMIS records of where items should be located and PLC records of where items actually are located). And, we note that because the MOX facility is designed to ensure that items are moved only with automation, and because PLCs control automated movements, PLCs can reasonably be expected to have an accurate record of the actual location of all items in the facility (i.e., the PLCs have a continuous "actual inventory").

[244] *See* Applicant Direct Testimony at 38 (stating that the MMIS receives "continuous updated information" on the location and quantity of materials in containers. XXXX).

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software against *approved* MMIS and PLC software on a daily basis;"[246] and (5) the Physical Inventory requirements will validate the accuracy of MMIS and PLC mapping. Applicant's witnesses expressed their opinion that the physical inventory requirements will add further reasonable assurance of the accuracy of MMIS and PLC mapping.[247]

(3) NRC Staff's Position on Quantitative Accuracy of Applicant's Data

As indicated earlier, the NRC Staff review in its FSER has concluded that Applicant has provided adequate measures to provide assurance that the data in the MMIS/PLCs are accurate.[248] The NRC Staff provided testimony that discussed specific provisions of Applicant's 2010 FNMCP that provide measures to protect and ensure the integrity of the data stored in the PLCs, including (1) control measures and program features to prevent falsification of the data stored in the MMIS and PLCs;[249] and (2) measures on MC&A data access, redundancy, integrity, periodic review, auditability, and traceability.[250] Mr. Pham also testified that Chapter 4.9 of Applicant's 2010 FNMCP discusses measures proposed by Applicant to prevent human error and reduce the likelihood of data falsification.[251] Staff witness, Mr. Grice, concluded that Applicant's approach not only meets the requirements of the rule, but is an improvement on more conventional means of item monitoring.[252]

Mr. Pham further testified that "[t]here is no regulatory distinction between a

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[246] *See* Applicant Supplemental Direct Testimony at 5.

[247] Tr. at 1306-07 (Trikouros, Bell) 1185-86 (McDade, Clark). *See also* Tr. at 1357 (Trikouros) (noting that "[w]e have also talked about for a period of time following the startup tests there would be biannual checks to do physical inventory and compare that to the results of the mapping to make sure [the mapping] is working correctly.").

[248] *See* FSER at 13-5, 13-6.

[249] *See* FNMCP Chapter 2, at 128-29.

[250] *See* MOX Fuel Fabrication Facility MC&A FNMCP Chapter 4.6 (Apr. 2010) (Exh. NRC000010).

[251] *See* Staff Reply Testimony at 2; *see also* MOX Fuel Fabrication Facility MC&A FNMCP Chapter 4.9 (Apr. 2010) (Exh. NRC000011).

[252] *See* Tr. at 1829 (Grice) (stating that "I do personally, professionally believe it is better").

quantitative and qualitative approach to meet the statistical sampling provision of 10 C.F.R. § 74.55(b)(1)."[253]

(ii) BOARD DETERMINATION ON QUANTITATIVE ACCURACY OF APPLICANT'S DATA

(1) Board Finding Regarding the Standard for Determination of Accuracy

For the reasons set out previously we find that there is a general overarching requirement that Applicant's item monitoring method be sufficiently accurate to provide reasonable assurance that the specific regulatory requirement of 10 C.F.R. § 74.55(b)(1) is satisfied.[254] Thus, because there is no applicable explicit standard of accuracy set out in our regulations, the standard by which the determination as to whether Applicant's methodology is satisfactorily accurate is whether or not that methodology provides reasonable assurance that the explicit requirements of that regulation are met.

For the reasons that follow, we find that a preponderance of evidence in the record demonstrates that Applicant's item monitoring approach, when taken together with the supporting programs and the MMIS Verification Procedure, satisfies the "reasonable assurance" standard.

Applicant has demonstrated that multiple features of the MOX Facility tend to identify and/or prevent errors in MMIS and PLC data. Both the MMIS and PLCs use reliable hardware and are based on software that has been in use for more than a decade at the reference facility. MMIS and PLC software is developed using the NQA-1 industry standard, which assists in assuring that the data systems are accurate by strictly controlling the software life cycle and requiring a series of preoperational and startup tests which include physical inventory requirements. Finally, PLCs are likely to provide accurate representations of items in the MOX Facility because the design and physical protection features of the MOX Facility prevent humans from physically accessing items and require that all item movements be automated. With regard to physical protection features of the MOX Facility, we refer to the overview of these features presented in Applicant's direct testimony.[255] We find that these physical protection features also protect the integrity of the MMIS and PLC software and hardware.

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[253] Staff Reply Testimony at 3.

[254] *See supra* Part III.A.

[255] *See* Applicant Direct Testimony at 10-18, 53-55 (describing, among other things, protective features, barriers and control of the SRS; the MOX Facility Controlled Area Boundary and Protected Area, XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

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(2) Applicant Response to Board's June 29, 2012 Order Requesting Further Information

While the Board finds that there are indeed multiple program elements to detect and prevent errors, the Board agreed with Intervenors that the FNMCP compliance item to develop an "MMIS Item Verification Procedure" should be provided prior to the issuance of the license. Consequently, in its June 29, 2012, Memorandum and Order, the Board stated that "the method Applicant intends to use to verify the accuracy of the MMIS and PLC data" was not evident.[256] The Board noted that Applicant's FNMCP called for the future development of an "MMIS Item Verification Procedure" to "verify the reliability of the MMIS to conduct . . . item monitoring tests," and that Applicant had not "set forth and memorialize[d] a plan to verify the accuracy of the data generated by the PLCs and MMIS."[257] Therefore, the Board asked Applicant to provide:

> a document, accompanied by supporting testimony and evidence, setting forth the approach to and criteria underlying its planned process for verifying the accuracy of the data generated by the PLCs and MMIS throughout the life of the MOX Facility. The Applicant may provide an amendment to the 2010 FNMCP, or a similarly consequential document of its choosing [that is] easily identifiable and enforceable . . . .[258]

While Applicant and Staff take the position that there is no such requirement,[259]

XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX; the MOX Facility "vaults" and PCAAs as defined in 10 C.F.R. § 74.4, protected by the "Argus" security system; the "two-person rule," which prohibits any single individual from having access to SSNM; "separation of duties," which prohibits any person from having access to both MC&A records and SSNM, and "compartmentalization," which limits the SSNM to which individuals have access; and protection of individual SSNM items via individual tamper-safing, encapsulation, placement in a vault or PCAA that provides protection at least equivalent to tamper-safing, containment boundaries, or some combination of the above.).

[256] Order Requesting Further Information at 10.

[257] *Id.* at 11.

[258] *Id.* at 12.

[259] Applicant Supplemental Statement of Position at 10-11; NRC Staff's Response at 4. *See* Tr. at 1662 (Klukan) (stating that "[b]oth the MOX Services and the staff are of the position that the additional information requested by the Board is not required by the regulations"); Tr. at 1667-68 ("Q (Abramson): Just let me make sure I understand the staff's position. I think it's pretty clear, that there's two issues here. The fundamental legal question is what's required here. And that, in my mind, overrides everything. Then there are technical questions about what was submitted which the members of the Board want to address. But that's a second issue and there's still the primary issue of the legal requirement for this information. Is that right? A (Klukan): That is correct, Your Honor. I think that's the staff's position. Q (Abramson): And do I read the Applicant's pleadings to essentially say the same? A (Jones): That's correct, Your Honor.").

Applicant nonetheless provided a response to the question by accelerating and completing development of the "MMIS Item Verification Procedure," which it had committed to provide in FNMCP Chapter 2, to proceduralize Applicant's approach for verifying the accuracy of its MMIS and PLC data used for item monitoring.[260] Applicant satisfied this compliance item by providing this newly developed procedure.[261] Applicant also provided a page change revision to the FNMCP that, among other things, explains this verification approach and removes the associated compliance item.[262]

The revised FNMCP also specifically commits Applicant to take actions to ensure the accuracy of item identity and location data provided by the MMIS and PLCs. This includes commitments to various preoperational development and testing activities, as well as routine verifications of the accuracy of the data during operations.

These routine operational verifications, states Applicant, will involve physically retrieving items, reading unique item identifiers, and comparing that information to the data retained by the PLCs. Additionally, the information stored in the PLCs will be compared against the information in the MMIS during the nightly mapping reconciliation. The number of item verifications conducted will be comparable to that required to detect a 3% data defect rate at a 99% confidence level (a conservative industry standard discussed below). Applicant will verify enough items to meet that target quantity every 30 days. Applicant's accompanying testimony and new procedure provided details about this verification process.[263]

The Staff's guidance recognizes that process operations are a valid mechanism for verifying the presence of an item. Specifically, NUREG-1280 § 2.1.7 states that "[p]rocess control and accounting, quality control testing, and other production operations routinely generate information that can serve to verify the identity and presence of sealed items."[264]

Intervenors do not challenge this proposition. As indicated earlier, at the first evidentiary hearing, Intervenors' witness, Dr. Lyman, addressed process operations as a means to verify the accuracy of PLC data. Dr. Lyman took issue with this approach only to the extent that, based on the information available to

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[260] *See* FNMCP Chapter 2, at 127.

[261] *See* SSNM Procedure; *see also* FSER Supplement at 4.

[262] FNMCP Revised 2, at 127.

[263] *See* Applicant Supplemental Direct Testimony at 13-17; SSNM Procedure.

[264] Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, Standard Format and Content Acceptance Criteria for the Material Control and Accounting (MC&A) Reform Amendment, NUREG-1280, at 29 (Rev. 1 Apr. 1995) (Exh. APP000030) [hereinafter NUREG-1280, Chapters 2-3].

him at that time, he believed that the number of items moving through processing would be insufficient to verify the data systems:

> we don't believe that simple normal operations gives you the necessary throughput of items that would naturally lead to an accurate verification of the PLC information.[265]

Applicant addressed Dr. Lyman's concern regarding the number of verifications by requiring in its new procedure that MC&A personnel must determine the number of items that must be verified in a 30-day period to equate to a number that, for a statistical sampling test, would detect a 3% data defect rate with a 99% confidence level.[266] The procedure then provides that MC&A personnel will determine the number of items that are physically accessed in each storage location, identified, and compared to PLC records during process operations. Applicant stated in its procedure that it will physically access and confirm the presence of an additional number of items if doing so is necessary to satisfy its statistical test.[267]

Applicant explained that its "test parameters in no way indicate that an error rate of 3% is acceptable . . . [t]hey simply are test parameters utilized as tools to quantify the data accuracy confidence."[268] And, in setting values for the test parameters, Applicant stated that it (1) looked to accepted and available industry standards for similar types of activities, and (2) applied the most stringent sampling parameters used in connection with Physical Inventories of Category I SSNM or for verification of material quantities.[269]

No written testimony or evidence was presented by Intervenors on this topic.

We explored Applicant's choice of a 3% data defect rate at the supplemental hearing. Applicant's witness, Mr. Clark, testified that "three percent represents the detection target,"[270] and that

> the detection target of three percent of the data is similar to the 5kg target [from 10 C.F.R. § 74.55(b)(1)], a number that you used in the other formula that's in [NUREG-1280]. Those are parallel terms. Just like it doesn't mean that it's okay to lose 5kgs of SNM material because we have 5 kgs as the detection target there.

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[265] Tr. at 1237 (Lyman). Similarly, at the supplemental hearing, Dr. Lyman testified: "I do think that if you are conducting a verification of the accuracy of the MMIS and PLC data, that the data that you acquire through certain process operations and movements on a case-by-case basis could be used to verify the data in the computer." Tr. at 1756 (Lyman).

[266] *See generally* Applicant Supplemental Direct Testimony at 16-17; SSNM Procedure; *see also* Tr. at 1914 (King).

[267] SSNM Procedure at 8.

[268] Applicant Supplemental Direct Testimony at 16.

[269] *See id.* at 14-15.

[270] Tr. at 1913 (Clark).

> Similarly, the three percent doesn't mean it's okay to have three percent defect. In fact, when you calculate your sample size, the first defect you have you fail the test.[271]

Applicant's witness agreed with Judge Trikouros' inquiry into whether the relevance of the defect rate could be stated as follows:

> [The 3% data defect rate is] used to calculate the number of item movements required. That's to me the key. They will use that number to come up with the number of process moves that they need to do. . . . The defect rate appears to be one number that goes into the equation. And I've seen these equations. . . . So that's it. If you can't come up with a physical reason for it, it doesn't matter, because it's the outcome that I think is important. . . . And in that equation you would have to say how many failures you would accept and the answer's going to be no, zero failures.[272]

(3) Board Finding on Applicant's Proposed Accuracy Standard

While Intervenors questioned the use of existing DOE criteria for selecting the 3% data defect rate and 99% confidence level parameters,[273] Intervenors cite no alternative standard and provide no testimony or evidence challenging the technical validity of Applicant's use of these DOE criteria. This use, according to Applicant, is appropriate as there is no NRC standard for evaluating item monitoring data accuracy. Applicant's witnesses testified that they had researched, but found no precedent for, a requirement for an item monitoring data verification process, and it therefore used "industry standard practices for activities such as item monitoring, verification or confirmation measurements, and physical inventories."[274] Intervenors provided no evidence challenging the adequacy of Applicant's procedure.[275] Staff provided evidence supporting Applicant's position, and concluded that the procedure provided "sets out a robust process for both verifying the accuracy of SSNM item identity and location data provided by the MMIS and PLCs, and confirming the accuracy of the item monitoring tests."[276]

NRC regulations do not set forth any quantitative standard to measure the acceptability of this methodology; therefore the applicable standard is whether it provides reasonable assurances for the accuracy of the data. We find that,

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[271] Tr. at 1913-14 (King).

[272] Tr. at 1921-22 (Trikouros).

[273] Intervenor Consolidated Response at 12 n.3.

[274] Applicant Supplemental Direct Testimony at 14.

[275] *See* Tr. at 1671 (Curran) (stating that "in our view, the Applicant has not given us anything new that would show that it satisfies the regulations. We do not need to submit evidence.").

[276] Staff Supplemental Testimony at 7; *see generally id.* at 6-8.

in creating a statistical test for a process for which no standard exists in NRC regulations, Applicant has appropriately looked to similar industry tests and conservatively applied the most stringent parameters of those tests. We therefore conclude that there is reasonable assurance that Applicant's use of the DOE procedure is sufficient to support the accuracy of the data from which reasonable assurances of satisfaction of the regulatory criteria are to be measured.

By describing its approach and criteria for its verification process in testimony and a revision to the FNMCP, and by providing the applicable procedure, Applicant has satisfied the Board's request and addressed its concerns. Because they have done so, and thereby strengthened their application, we need not address their assertion that they should not have been required to supply the additional information.

Intervenors provide nothing that would contradict Applicant and NRC Staff testimony or challenge a conclusion that the preponderance of evidence in the record demonstrates that the reasonable assurance test is met. This evidence includes information about the design of the MMIS and PLCs, the physical protection features that preserve the integrity of the MMIS and PLCs, and the ways through which Applicant can prevent and detect errors in MMIS and PLC data, including the new verification procedure.

For the foregoing reasons, we agree with Applicant and the Staff, and conclude that Applicant's item monitoring approach, as enhanced by the newly provided (in response to our June 29, 2012 Order) item verification procedure, provides reasonable assurance that the quantitative accuracy of the MMIS/PLC data is sufficient to enable the procedures employing those data to meet the requirements in section 74.55(b)(1).

7. Additional Matters

a. Proposal for Further Assurance of Item Monitoring Accuracy

During the May 21, 2013 supplemental hearing, Applicant provided testimony and discussion that suggested the possibility of Applicant committing to some further form of MMIS and PLC data accuracy verification that would involve greater "physical" involvement.[277]

Following the hearing, Applicant responded to the Board's follow-up request about that possibility. In a letter dated June 12, 2013, Applicant offered to establish an additional data accuracy verification process involving Operations personnel visually verifying unique identifiers from a sample of items for the

[277] *See* Tr. at 1942-44 (King, Farrar, Silverman, Abramson, Jones).

period during which bimonthly Physical Inventories are required by 10 C.F.R. § 74.51(d).[278]

We appreciate Applicant's consideration of our request and proposed commitment. However, we have determined that such a commitment would not add appreciably to what it is already doing during the period of bimonthly physical inventories, which meets the applicable requirements without the suggested additional operator verification.[279]

b. Additional Intervenor Challenges and Concerns

Throughout this proceeding, Intervenors have raised additional concerns regarding Applicant's proposed approach for verifying item presence that are beyond the scope of this proceeding.[280] The Board addressed and resolved many of those concerns as Intervenors raised them.

(i) THREATS FROM ADVERSARIES

Intervenors would have us find that there is a need to "quantify the potential for an adversary to take measures to conceal any abnormalities [in MMIS and PLC mapping]."[281] No such requirement can reasonably be found in (or implied by) the language of § 74.55(b)(1). Nowhere does the rule require or even suggest such quantification is necessary.[282] Intervenors have provided no evidence in support for their position. We conclude that there is no such requirement in our regulations.

(ii) IMPACT OF THE WITHDRAWN EXEMPTION REQUEST

Intervenors asserted, based upon information contained in superseded versions

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[278] Letter from Kelly Trice, President and COO of Shaw AREVA MOX Services, LLC, to the Atomic Safety Licensing Board, Regarding MOX Services' Commitment in Connection with Contention 9 (June 12, 2013).

[279] We note that the Commission recently announced it is planning to conduct a future rulemaking involving consideration of a two-person rule to verify the accuracy of MC&A information within a fuel cycle facility. 78 Fed. Reg. at 67,226.

[280] *See e.g.,* Shaw AREVA MOX Services, LLC's Proposed Findings of Fact and Conclusions of Law for Contentions 9, 10, and 11 (Apr. 13, 2012) at 43-45 (discussing Intervenors' Euratom reference, the Board's conclusion that Euratom requirements are not binding on Applicant, and also Applicant's testimony that Euratom requirements are not relevant to the item monitoring requirements at issue in the admitted contentions); *id.* at 34-35 (evaluating an Intervenor exhibit, presented at the initial hearing, and concluding that it is not relevant because it pertains to Applicant's business software and that the vulnerabilities of that software do not exist for MMIS or PLC software).

[281] Intervenor Proposed Cumulative Findings ¶ 4.36.

[282] *See* 10 C.F.R. § 74.55(b)(1).

of the FNMCP and the withdrawn Exemption Request, that Applicant cannot meet the item monitoring requirements of 10 C.F.R. § 74.55(b)(1).[283] Those documents predate and are not at issue in Contentions 9, 10, and 11 and are not part of Applicant's pending license application.[284] We find no merit in Intervenors' concerns respecting these prior documents.

(iii) CYBER-SECURITY CONCERNS

Intervenors also expressed concern respecting the absence of NRC requirements for cyber-security for fuel cycle facilities. Applicant's witnesses testified that Applicant specifically committed in the FNMCP that the MOX Facility Software Security will meet DOE's National Nuclear Security Administration ("NNSA") cyber-security standards.[285] The software is under development on a computer network that is also certified and accredited to those standards.[286]

At the supplemental hearing, Intervenors raised a concern that the NRC has not yet adopted any cyber-security requirements for fuel cycle facilities licensed under 10 C.F.R. Part 70. Intervenors claim "cybersecurity is fundamental to the Board's licensing determination."[287] However, Intervenors provided no evidence on the matter and did not raise this concern before the supplemental hearing.

Applicant and Staff agreed that the NRC has no cyber-security requirements for fuel cycle facilities, but explained that the MOX Facility is contractually obligated to adhere to DOE's cyber-security standards.[288] Applicant provided extensive

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[283] *See* Intervenor Direct Testimony at A.6(1, 4), A.7(3) (citing the timing commitments and other features in prior iterations of the FNMCP and Exemption Request).

[284] Tr. at 1881 (Abramson) (stating that "[t]he FNMCP that's presently before the Board [is] what we should be considering").

[285] Applicant Reply Testimony at 20-21; Applicant Supplemental Direct Testimony at 11-12 (discussing that the cyber-security policy to which Applicant has committed — NNSA NAP 14.2C — requires that Applicant document the information system baseline and inventory the system's constituent components. Applicant states that it will routinely confirm that the software that manages MMIS and PLC data is the current approved software and that the software has not been changed in an unauthorized fashion.). The configuration management software is subject to the same protections for MOX Facility software that Applicant's witnesses described. *See* Applicant Supplemental Reply Testimony at 3 (explaining that protections for MOX Facility software apply to the configuration management software as well), including: (1) life cycle controls and testing in accordance with NQA-1, Applicant Supplemental Direct Testimony at 5-10 (discussing controls on software development); (2) access that is limited by separation of duties, *id.* at 50 (explaining that, because of Applicant's use of separation of duties and the two-person rule, corruption of item monitoring data would require a team of at least eight individuals); and (3) application of DOE's cyber-security policy, *id.* at 37-40 (describing the electronic and cyber-security measures at the MOX Facility).

[286] Applicant Reply Testimony at 22.

[287] Tr. at 1857 (Curran).

[288] *See* Tr. at 1750 (Klukan) (stating that "the Applicant is required by DOE regulations to conform to the DOE Manual regarding cybersecurity which is very stringent.").

testimony about its cyber-security provisions in the context of Contention 11.[289] Applicant committed in NRC licensing documents to adhere to the full suite of DOE cyber-security standards,[290] and the NRC can inspect against and enforce Applicant's commitment.[291] Although the NRC does not currently have cyber-security requirements in place for fuel cycle facilities, the NRC is in the process of initiating a rulemaking on this very matter.[292] But the fact that the NRC lacks its own cyber-security requirements for fuel cycle facilities is beyond the scope of Contentions 9, 10, and 11. Furthermore, it is well established that licensing proceedings are not the appropriate venue for generic issues, especially those that are about to become the subject of a rulemaking.[293] Thus, we conclude that the question of whether or not the NRC may license the MOX Facility without NRC

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[289] *See, e.g.,* Applicant Supplemental Direct Testimony at 37-40. Mr. Bell testified:

> in the FNMCP plan, we've made very specific references that I've also repeated in our written testimony submitted for this hearing on the cybersecurity rules we're meeting which the Department of Energy's, the two different NAPS, one for cyber systems and accreditation systems and for classified systems. In no uncertain terms, these are very strong cybersecurity requirements that we're meeting and we did not decide to do those because we're using this computer system for MC&A. We use that because this is a plutonium facility that we have to meet — we have the Government's plutonium, so we have to meet a very high level of cybersecurity. I held this back earlier because you were asking the question about Part 73 guidance for cybersecurity which is true. But the DOE standards which are also in line with the national standards NIST 800.53. We have a high level of cybersecurity built from the beginning into our system.

Tr. at 1742-43 (Bell).

[290] *See* FNMCP Chapter G.3.4.12, at 15; *see also* Applicant Reply Testimony at 20-21; Tr. at 1849 (Clark) (stating that "it is a commitment and it's an enforceable commitment . . . in an NRC licensing document"); Tr. at 1759 ("Q (Trikouros): Are you picking and choosing or are you really meeting a full DOE standard for a computer system? A (Bell): We're meeting the full standard. DOE requirements apply to the entire information system.").

[291] *See* Tr. at 1844 (Tiktinsky).

[292] *See* SECY-12-0088, The Nuclear Regulatory Commission Cyber Security Roadmap at 4-5 (June 25, 2012) (discussing the NRC's approach for a rulemaking on cyber-security requirements for fuel cycle facilities); *see also* Cyber Security Initiative for Fuel Cycle Facilities (available at http://www.nrc.gov/security/domestic/phys-protect/reg-initiatives/fuel-cycle-cyber-security.html) (Mar. 28, 2013).

[293] *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), CLI-11-8, 7 NRC 214, 228-29 (2011) (reaffirming that "a contention that . . . seeks to litigate a matter that is, or clearly is about to become, the subject of a rulemaking, is inadmissible") (citation omitted). *See Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), ALAB-655, 14 NRC 799, 816 (1981) (instructing that matters that are or are about to become the subject of a general rulemaking are not appropriate subjects for contentions before individual licensing boards); *Potomac Electric Power Co.* (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85 (1974) ("[C]onsideration in adjudicatory proceedings of issues presently to be taken up by the Commission in rulemaking would be, to say the least, *a wasteful duplication of effort*" (emphasis added)).

cyber-security regulations in effect is beyond the scope of this proceeding and not relevant to our determination on the contentions before us.

8. Conclusion

We find that Applicant's proposed item monitoring system, including the data recorded by the computer systems, satisfies the requirements of the relevant regulations. Accordingly, we hold that Contention 9 is resolved in Applicant's favor.

B. Contention 10

1. Text of Contention 10

As admitted by the Board, Contention 10 asserts:

> The Revised FNMCP is inadequate to satisfy the alarm resolution requirements in 10 C.F.R. § 74.57(b), which requires that licensees "shall resolve the nature and cause of any MC&A alarm within approved time periods." In the event that alarm resolution requires an inventory of one of the four item storage areas identified in [Applicant's] December 17, 2009 Exemption Request, [Applicant] has not demonstrated that it can meet its commitment to normally resolve the alarm within three days.[294]

2. The Relevant Regulation

Contention 10 challenges Applicant's compliance with 10 C.F.R. § 74.57(b), which requires applicants to "resolve the nature and cause of any MC&A alarm within approved time periods." The regulation requires applicants applying to possess 5 or more formula kilograms of SSNM to maintain alarm resolution capabilities designed to achieve the performance objectives of section 74.51(a).[295] An MC&A alarm exists when there is:

> (1) an out-of-location item or an item whose integrity has been violated, (2) an indication of a flow of SSNM where there should be none, or (3) a difference between a measured or observed amount or property of material and its corresponding predicted or property value that exceeds a[n established] threshold . . . .[296]

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[294] Contention Text Order at 1.

[295] *See* 10 C.F.R. §§ 74.51(a) and 74.57(a). The capability to resolve alarms within approved time periods is most clearly aimed at the "[p]rompt investigation of anomalies potentially indicative of SSNM losses." 10 C.F.R. § 74.51(a)(1).

[296] 10 C.F.R. § 74.4.

The regulation provides no guidance as to what constitutes an appropriate time period for alarm resolution. Thus, in its FNMCP, an applicant may propose a time period for alarm resolution, which must be approved by the NRC Staff. The fact that a time period has been approved by the NRC Staff does not, however, ensure that an applicant's commitment satisfies the regulation. Ultimately, the time period approved by the NRC Staff must be adequate to provide reasonable assurance that Applicant will achieve the performance objectives.

3. Issues Raised by Contention 10

a. Acceptability of Applicant's Alarm Resolution Commitment

The first issue raised by Contention 10 is whether Applicant's alarm resolution commitment, which has been approved by the NRC Staff, satisfies the regulatory requirement of § 74.57(b).

b. Applicant's Ability to Conduct an Inventory for Alarm Resolution

The second issue raised by Contention 10 is whether, in the event that an inventory is necessary for alarm resolution, Applicant would be able to conduct a complete inventory within the approved time period.

c. Normal Conditions Subject to the Approved Time Period

The final issue raised by Contention 10 is whether the inclusion of the term "normal" within Applicant's approved time period for alarm resolution creates a potential opt-out from regulatory compliance during any condition that is considered abnormal.

4. Acceptability of Applicant's Alarm Resolution Commitment

Section 3.1.3 of Applicant's FNMCP commits that "[t]he alarm resolution procedures of Sections 3.1.1.4 and 3.1.4.1 of [the FNMCP] will normally be completed within three calendar days after an item is declared missing."[297] Applicant identified twelve procedures or methods it intends to use, alone or in combination, to resolve an alarm within 3 days.[298] In section 13.2.3.3 of the SER,

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[297] FNMCP Chapter 3, at 152.

[298] *See id.* at 147. In his direct testimony, Dr. Lyman suggested that Applicant's approach to alarm resolution should also include a review of the computer code for MMIS. *See* Intervenor Direct Testimony at A.6(5). Mr. Pham stated that Staff did not require Applicant to adopt code review as an *(Continued)*

the NRC Staff concluded that Applicant's alarm resolution program, including its timing commitment, "demonstrates that [Applicant] will have the ability to respond to and resolve MC&A alarms of the potential loss of nuclear materials."[299]

a. Parties' Positions

(i) INTERVENORS' POSITION

Intervenors contend that Applicant's proposed alarm resolution procedures fail to satisfy § 74.57(b) because Applicant cannot complete an inventory of certain storage areas within 3 days.[300] In support of Intervenors' contention, Dr. Lyman asserts that Applicant must demonstrate that "each and every method it has identified can be completed within the approved time period."[301] Dr. Lyman asserts that "as long as the possibility exists that an inventory may be needed (and there is surely such a circumstance in the broad universe encompassing 'any' MC&A alarm), then MOX Services needs to show that it can be completed within the approved time period."[302]

(ii) APPLICANT'S POSITION

Applicant's witnesses, on the other hand, assert that the proposed approach satisfies 10 C.F.R. § 74.57(b) because the regulation "does *not* require MOX Services to demonstrate that it can resolve the nature and cause of any MC&A alarm within the approved time period by any one particular means, such as an 'inventory.'"[303]

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alarm resolution method. *See* Staff Reply Testimony at 8. Applicant's and Staff's witnesses claim that review of the MMIS computer code would neither facilitate alarm resolution nor provide any further insight beyond that which would be provided by a record review. *See* Applicant Reply Testimony at 35 (Mr. Bell testified that "[a] software error would be revealed by corrupted or errant data identified during the records review without a review of the code. A code review would likely be part of the corrective action, not the alarm resolution." He also testified that a computer code review would not be a useful method to resolve an alarm.); Staff Reply Testimony at 8. We see no reason to require inclusion of code review as an additional alarm resolution method.

[299] FSER at 13-7.

[300] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

[301] Intervenor Direct Testimony at A.6(3).

[302] *Id.* When asked at the hearing, Dr. Lyman stated that "if I sat down and thought, I probably could come up with scenarios" for an alarm resolution in which an inventory would be necessary. Tr. at 1564-65 (Lyman).

[303] Applicant Direct Testimony at 59.

(iii) NRC STAFF'S POSITION

NRC Staff's witness, Mr. Pham, testified that Applicant's proposed alarm resolution procedures are consistent with the guidance set out in Chapter 3 of NUREG-1280 regarding alarm resolution time commitments.[304] Mr. Pham offered support for Applicant's position by testifying that "MOX Services can use any method, or multiple methods, to resolve any alarm within [the] approved time period. A physical inventory of a storage vault is not the sole method for resolving an item alarm."[305] Rather, according to Mr. Pham, Applicant may "use any number of alarm resolution methods so long as the applicant provides reasonable assurance that an available alarm resolution method or a combination of methods can meet the timing commitments."[306]

b. Board Determinations

Section 74.57(b) contains no regulatory requirement that MC&A alarms be resolved within any particular time frame, and requires only that a time period be approved by NRC Staff.[307] Here, Applicant proposed a plan to resolve alarms "normally . . . within three calendar days after an item is declared missing,"[308] which the NRC Staff approved. Applicant proposes a suite of procedures which can be performed individually or in combination to resolve alarms,[309] but Contention 10 alleges only that Applicant cannot meet the approved time period by one of its proposed methods — an inventory. Our reading of the regulations reveals no regulatory requirement that Applicant must resolve an MC&A alarm by means of an inventory.[310] As we noted several times above, when a performance-oriented regulation fails to specify a particular method for compliance, an applicant may choose any method that provides reasonable assurance that compliance will be achieved. We see no support for the proposition that Applicant must demonstrate that each individual resolution method can be completed, by itself, within the approved time period.[311]

The Board finds that Applicant has provided reasonable assurance that its

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[304] Staff Direct Testimony at 14-16; Tr. at 1455-56 (Pham).

[305] Staff Reply Testimony at 8; *see also* Staff Direct Testimony at 16.

[306] Staff Direct Testimony at 16.

[307] 10 C.F.R. § 74.57(b).

[308] FNMCP Chapter 3, at 152; *see also* FSER at 13-7.

[309] *See* Applicant Direct Testimony at 63-66.

[310] This is indeed the approach that Staff took in its review. *See, e.g.,* Staff Direct Testimony at 16; Tr. at 1446 (Pham).

[311] *See* 10 C.F.R. § 74.57(b); 52 Fed. Reg. at 10,033.

proposed alarm resolution procedures, as a group, can resolve MC&A alarms within the 3-day period to which Applicant has committed.

5. Applicant's Ability to Conduct an Inventory Within Approved Time Period

Notwithstanding the foregoing finding, we also consider whether Applicant has provided reasonable assurance that it can resolve an alarm within 3 days if resolution requires an inventory.

a. Parties' Positions

(i) INTERVENORS' POSITION

Intervenors assert that Applicant must demonstrate the ability to complete an inventory within 3 days. In support of this claim, Intervenors point to Mr. Pham's acknowledgment that "an inventory may be necessary 'in unusual circumstances.'"[312] Dr. Lyman posited, though the need for an inventory may be rare, when necessary, Applicant could not resolve an alarm within 3 days and, therefore, cannot satisfy its approved time-frame commitment.[313]

(ii) APPLICANT'S POSITION

Applicant's witnesses assert that storage vault inventories for alarm resolution would be rare, occurring only "where a discrepancy may involve a relatively large storage location or population of items and where the integrity of the inventory perimeter protection is in question."[314] Ms. King testified that more typically alarms are caused when items are moved manually without corresponding updates to the MMIS records.[315] Applicant's witnesses described how Applicant will focus alarm resolution efforts on the storage areas or boundaries in question, or on movements conducted since completion of the last mapping reconciliation.[316] For example, because Applicant would divide the inventory of nuclear material into discrete populations whose boundaries are monitored for material movement, alarm resolution can be focused narrowly on the specific population in question.[317]

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[312] *See* Intervenor Reply Statement of Position at 8.

[313] *See* Intervenor Direct Testimony at A.6(3).

[314] Applicant Direct Testimony at 66.

[315] *See* Tr. at 1443 (King).

[316] *See* Applicant Direct Testimony at 63 (noting that "the performance of the daily MMIS and PLC item mapping comparison and the daily integrity checks focus alarm resolution efforts by permitting the investigation to focus on the activities of the previous (at most) 24 hours").

[317] *See id.*

Applicant's witnesses also described specific combinations of methods — such as access control checks, exit monitor checks, and physical inventories — that could resolve an alarm triggered by the breach of a storage area integrity boundary.[318]

If an inventory were required XXXX XXXX XXXX XXXX XXXX XXXX XXXX, then Applicant's witnesses testified that Applicant can normally complete an inventory within 3 days.[319] Applicant's calculations[320] claim the following:

(1) XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[321] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[322]

(2) XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[323] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[324] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[325]

(3) XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[326] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[327] XXXX

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[318] *See* Applicant Reply Testimony at 35-36.

[319] *See* Applicant Initial Statement at 31-32; Applicant Direct Testimony at 66.

[320] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

[321] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

[322] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

[323] *See* Applicant Direct Testimony at 67, Table 2; MOX Process, Store Sizing (Sept. 29, 2011) at 19 (Exh. APP000023) [hereinafter MOX Capacity].

[324] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

[325] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

[326] *See id.* at 67, Table 2; MOX Capacity at 10; Update Storage Sizing Document, ECR-013808 (Sept. 29, 2011) at 2 (Exh. APP000024) [hereinafter MOX Capacity Update].

[327] *See* Applicant Direct Testimony at 67, Table 2; XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX.

> XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[328]

(4) XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[329] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[330] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[331]

XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[332] XXXXXXXXXXXXX, Applicant's witnesses suggested the following three reasons why their capabilities satisfy the alarm resolution commitment.

First, the witnesses claimed that maximum capacity XXXX XXXX XXXX is not an expected condition. They testified that the "number of items normally in storage is taken from an engineering calculation used for sizing of the vaults. The 'normal' capacity is based on assumed lag between upstream and downstream processes from the storage area. XXXXXX, the planned [PuO_2 container] receipt schedule from NNSA was used."[333]

Second, according to Applicant's witness, Ms. King, an inventory would not be expected to assist in resolution of alarms XXXX.[334] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[335] XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[336]

> XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

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328 *See* Applicant Direct Testimony at 26 (XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX).

329 *See id.* at 67, Table 2; MOX Capacity at 9; MOX Capacity Update at 3.

330 *See* Applicant Direct Testimony at 67, Table 2; XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX.

331 *See* Applicant Direct Testimony at 23 (XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX).

332 *Id.* at 67, Table 2.

333 *Id.* at 67.

334 Tr. at 1437 (King).

335 *See* Tr. at 1436-39 (King).

336 *See* Tr. at 1438-39 (King).

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Third, even if an inventory XXXX XXXX XXXX became necessary, inventory of the entire storage area would not normally be required to resolve an alarm. XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
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XXXX[340] According to Applicant's witnesses, in this situation, Applicant could reasonably complete an inventory of such a subsection within 3 days.[341]

(iii) NRC STAFF'S POSITION

NRC Staff's witness, Mr. Pham, agreed that the need for an inventory for alarm resolution would be rare.[342] He further agreed that "[o]ne of the most common causes of MC&A alarms is human error in recordkeeping."[343] Mr. Pham supported Applicant's proposition that a combination of alarm resolution procedures can typically resolve alarms caused by recordkeeping in only a few minutes or a few

[337] FNMCP Chapter 3, at 154.

[338] *Id.*

[339] *See* Tr. at 1438-39 (King).

[340] *See* Tr. at 1438-40 (King).

[341] *See* Applicant Direct Testimony at 67.

[342] *See* Staff Reply Testimony at 8; Tr. at 1467-68 (Pham) (claiming that an inventory is the last option to resolve an alarm). Mr. Pham went on to testify that, since an inventory was included on the approved list of alarm resolution methods, it becomes binding on Applicant to consider its use for potential alarm resolution as a part of the license. *See* Tr. at 1462-64 (Pham). If Applicant later decides to remove that method from the list, it would have to follow the change process prescribed by 10 C.F.R. § 70.32(c) or the license amendment process prescribed by 10 C.F.R. § 70.34. *See* Tr. at 1448-49 (Pham), 1464 (Silverman).

[343] Staff Direct Testimony at 15.

hours.[344] Finally, Mr. Pham agreed that, if necessary, Applicant could normally complete an inventory XXXX XXXX XXXX XXXX XXXX XXXX within 3 days, based on the expected quantity of items in each storage area.[345]

b. Board Determinations

As discussed above, section 74.57(b) does not require an applicant to show that an alarm can be resolved within 3 days by the use of any particular resolution method separately. Even if an inventory were necessary, which we consider unlikely, we find that Applicant has demonstrated that it can conduct an inventory XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX within 3 days, even at full capacity. Additionally, we find that Applicant has demonstrated its ability to conduct an inventory of the other two storage areas — DCM and DCE — within 3 days with the normal or expected number of items in these areas. Indeed, Applicant's normal capacity time estimates XXXX XXXX XXXX XXXX XXXX XXXX XXXX indicate the possibility that it could complete an inventory within 3 days for those two locations even if they were to contain more items than "normally" expected. Accordingly, we conclude that Applicant has provided reasonable assurance of its ability to use an inventory to normally resolve alarms in each of the four storage areas within the 3 days committed to in its FNMCP.

6. Normal Conditions Subject to the Approved Time Period

Finally, we consider whether Applicant can satisfy its alarm resolution commitment if it takes longer than 3 days to complete an inventory XXXX XXXX XXXX when the storage areas are at maximum capacity. To assess that situation, we must consider whether the circumstances under which the need would arise would be "normal."

a. Parties' Positions

(i) INTERVENORS' POSITION

Intervenors' witness, Dr. Lyman, alleges that Applicant's use of the term "normally" in its alarm resolution timing commitment creates an "opt-out" from regulatory compliance "should an alarm arise whenever the plant is operating

[344] *Id.*

[345] *Id.* at 17.

under conditions that MOX Services contends are abnormal or atypical."[346] The basis of this view is his perception that "most alarms would actually arise under circumstances that could be considered abnormal," and his belief that "abnormal" conditions "should be confined to extreme events such as major natural disasters."[347]

Intervenors claim that a very narrow construction of what is "normal," could lead to Applicant claiming abnormal conditions exist in nearly every situation in which they are unable to meet the approved time period for alarm resolution.

(ii) APPLICANT'S POSITION

Applicant's witness, Mr. Clark, disputed Intervenors' characterization of the term "normally" as an opt-out, stating his opinion that NRC Staff would require an explanation for any failure to resolve an alarm within 3 days:

> It would be my expectation that — and my experience bears this out, that we could normally, typically resolve an MC&A alarm in those three days. If we were unable to do that for some reason, then additional actions would result. For instance, the regulator — I would expect that the regulator would begin to help us after that many days, and we would have a number of more questions to answer. But, typically, we can resolve those alarms in three days.[348]

Applicant's witnesses interpreted the term "normally" "to indicate a condition or state that is expected to be typical while the facility is in operation."[349] They asserted that, "'normal' values and conditions can be contrasted with design parameters, maximum/minimum capacities, worst-case analyses, etc., which bound the 'normal' values, but are generally more extreme than the 'normal' values expected during facility operation."[350]

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[346] Intervenor Direct Testimony at A.6(2, 6, 7). The Board pursued the meaning of the word "normally" at some length. Due to the circumstances of this case and the manner in which the issue came before us, we need not resolve all questions raised.

[347] *Id.* at A.6(7).

[348] Tr. at 1435 (Clark). Section 74.57(c) of 10 C.F.R. requires notification of the NRC within 24 hours of failure to resolve an alarm within the approved time period. Mr. Pham asserted that the NRC would then determine what response actions were necessary to resolve the event. *See* Tr. at 1459-60 (Pham). Mr. Grice also noted that "if you don't have that resolved in three days you start to question, do you have a bigger issue that requires a more thorough, larger, greater scale of investigation into what's happening." Tr. at 1930 (Grice).

[349] Applicant Direct Testimony at 61-62 (stating that Applicant will be able to resolve an alarm within 3 days in "most cases," and that "[t]ime frames in excess of three calendar days would be considered unusual").

[350] *Id.* at 62. Additionally, Ms. Williams testified that from a practical standpoint "[l]icensees cannot commit to *always* resolve alarms within a certain time frame" and that use of the term "normally" is entirely appropriate in light of NRC guidance. Applicant Reply Testimony at 32.

(iii) NRC STAFF'S POSITION

Mr. Pham agrees with Applicant's use and interpretation of the term "normally."[351] At the supplemental hearing, Mr. Grice also put "normally in three days" in context by testifying that "[w]hen you have an item that is missing and it's been tamper-safed or is encapsulated, or it's been in a physical protection form such as a vault, you would expect that if that shows up as missing there will be sufficient evidence to resolve that within three days."[352] Thus, he states,"[i]t would be unusual that a facility would not be able to resolve that issue within three days and find out what happened."[353] Mr. Pham also asserted that NRC MC&A inspectors would review Applicant's alarm response and determine whether it met the requirements of 10 C.F.R. Part 74 and the commitments in Applicant's FNMCP.

As to the very serious event types described by Dr. Lyman as the type he would consider "abnormal," Mr. Pham asserted that "[a]bnormal events such as fires, earthquakes, hurricanes, and other accidents, whether caused by man or nature, are outside the scope of 10 C.F.R. Part 74."[354] Although NRC MC&A inspectors would take such events into account when investigating an applicant's failure to resolve an alarm within 3 days, Mr. Pham testified that such events are not part of this aspect of the licensing review.[355]

b. Board Determinations

Applicant's timing commitment — including the term "normally" — derives from NUREG-1280, which states that "[t]he maximum time for completion of the resolution procedure for alarms indicating a possible abrupt loss of items that were tamper-safed, encapsulated, or retained in a vault that provided protection equivalent to tamper-safing *should normally not exceed 3 calendar days.*"[356] The guidance does not explain how licensees should use the term "normally." After review, we find that extreme events such as natural disasters are not the abnormal conditions anticipated by Applicant when it committed to resolve alarms normally within 3 days, nor by Staff when it approved that time period. Moreover, nothing before us convinces us that Applicant's use of the term, and Staff's interpretation of that use, is contradictory to a reasonable interpretation of the rule. We find that "normal" conditions, during which Applicant has committed to resolve alarms

[351] *See* Staff Reply Testimony at 8.

[352] Tr. at 1929 (Grice).

[353] Tr. at 1929-30 (Grice).

[354] Staff Reply Testimony at 9.

[355] *See id.*

[356] NUREG-1280, Chapters 2-3, at 43-44 (emphasis added).

within 3 days, are those which are reasonably to be expected for each of the storage areas.

We do not view as normal the conditions under which alarm resolution would be expected to take more than 3 days. We find, from the preponderance of the (indeed largely uncontroverted) evidence, that for such resolution to require more than 3 days and for an inventory to be necessary, the following five conditions must occur simultaneously: (1) the alarm concerns material stored XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX in the MOX Facility; (2) the actual contents XXXX XXXX XXXX exceeds that which is anticipated; (3) multiple other alarm resolution methods fail to resolve the alarm; (4) an inventory of the stored items is deemed necessary to resolve the alarm; and (5) an inventory of a portion XXXX XXXX XXXX contents where the alarm would appear to be focused is inconclusive, such that the *entire* capacity XXXX XXXX XXXX must be inventoried. Each of these circumstances is itself an unexpected or unusual condition for the MOX Facility.[357] We find that the simultaneous occurrence of all five circumstances cannot be considered normal.[358]

7. Conclusion

We therefore hold that Applicant has provided reasonable assurance of its ability to normally resolve alarms within its approved time period of 3 days, whether through a combination of alarm resolution methods or through the use of an inventory alone.

For the foregoing reasons, we decide Contention 10 in favor of Applicant.

C. Contention 11

1. Text of Contention 11

As admitted by the Board, Contention 11 asserts:

> [Applicant] claims that in the event of alleged theft of plutonium from the [MOX Facility], it is capable of confirming the presence of a specific individual plutonium item within eight hours and verifying the presence of all Pu in item form in vault

[357] Dr. Lyman asserts that "minor deviations from MOX Services' assumptions of 'normal' conditions could easily lead to a situation where an inventory could exceed the three calendar day time period." Intervenor Direct Testimony at A.6(8). But the deviations suggested by Intervenors would only reduce the probable occurrence of the already unlikely scenario described above. Such a confluence, therefore, would be even farther from 'normal' than the circumstances we consider outside the scope of Applicant's commitment.

[358] Though some hypothetical scenario may exist in which Applicant is not able to resolve an alarm within 3 days, this does not call into question Applicant's compliance with its commitment.

> storage within 72 hours. But [Applicant] does not support this assertion with any information that would show how such confirmation and verification will be carried out in the specified timelines. In addition, as discussed above in Contentions 9 and 10, other statements by [Applicant] in its exemption application and RAI responses strongly indicate that in fact, [Applicant] is not capable of meeting these timelines with respect to certain categories of plutonium in vault storage. Therefore [Applicant] has not demonstrated that it satisfies 10 C.F.R. § [74].57(e).[359]

2. The Relevant Regulation

Contention 11 challenges Applicant's compliance with 10 C.F.R. § 74.57(e), which requires applicants to "provide an ability to rapidly assess the validity of alleged thefts"[360] in order to achieve the performance objectives of section 74.51(a).[361] Part 74 does not define "rapidly," and prescribes no method for assessment of alleged thefts.[362] The regulation, therefore, provides an applicant with the flexibility to determine the most cost-effective means of meeting the requirement. Ultimately, an applicant's proposed approach to rapid theft assessment must provide reasonable assurance that it will achieve the performance objectives.

Section 3.3 of NUREG-1280, though nonbinding, establishes timing guidelines for theft assessment and suggests that an applicant should be able "to locate on demand any specific tamper-safed or encapsulated item or an unencapsulated item stored in a vault equivalent to tamper-safing within 8 hours, and to verify the presence of all items in a vault within 72 hours."[363] The guidance document also identifies several response methods for rapid assessment of the validity of alleged thefts.[364] These described capabilities suggest that facilities operate with an item control system, inventory procedures, and time estimates for inventory performance and reconciliation.[365]

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[359] Contention Text Order at 1. The text of the contention, as presented by Intervenors and admitted by the Board, incorrectly cites 10 C.F.R. § 75.57(e), which does not exist. The correct reference is to 10 C.F.R. § 74.57(e), which Intervenors correctly cite in presenting the basis for the Contention. Petition at 14.

[360] 10 C.F.R. § 74.57(e).

[361] The capability to rapidly assess the validity of alleged thefts is most clearly aimed at the "[r]apid determination of whether an actual loss of five or more formula kilograms occurred." 10 C.F.R. § 74.51(a)(3).

[362] Though not defined in the regulations, NUREG-1280 defines alleged thefts to mean "alarms that originate external to the MC&A system." NUREG-1280, Chapters 2-3, at 50.

[363] *Id.* at 49.

[364] *Id.* at 48-49.

[365] *Id.*

3. Issues Raised by Contention 11

a. Acceptability of Applicant's Theft Assessment Commitment

The first issue raised by Contention 11 is whether Applicant's theft assessment commitment satisfies the requirements of 10 C.F.R. § 74.57(e) even though it relies upon an underlying assumption of 100% accuracy of Applicant's MMIS/PLC computer records system.

b. Ability to Assess in the Event of a Compromised Computer System

The second issue raised by Contention 11 is whether, in the event that the MMIS/PLC computer records system has been compromised, Applicant must still be prepared to assess the validity of an alleged threat within its committed timelines.

4. Acceptability of Applicant's Theft Assessment Commitments

a. Parties' Positions

(i) INTERVENORS' POSITION

Intervenors assert that Applicant made a commitment in its revised FNMCP and during the initial hearing to assess the validity of alleged thefts by maintaining the capability to locate on demand a specific item within 8 hours and to verify the presence of all stored items within 72 hours, based on the NUREG-1280 timelines.[366] Intervenors claim that Applicant backed away from this commitment, with Applicant now arguing "that NUREG-1280's quantitative guidelines for timely detection of alleged thefts apply only to updating records systems and not actual physical location of items."[367] Thus, if a physical inventory — or even a thorough check of the presence and identity of all items — were needed, Intervenors claim an assessment would take Applicant far longer than its time commitments.[368]

The problem, according to Intervenors' witness, Dr. Lyman, arises out of Applicant's reliance on an assumption of 100% accuracy of its computer-generated records without an independent verification of the validity of the information generated by Applicant's automated systems.[369] Dr. Lyman suggests that by assuming

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[366] Intervenor Consolidated Response at 3.

[367] *Id.* Intervenors further argue that "this legal argument is based on an illogical and incomplete reading of the guidance." They claim that, in responding to the board's questions, Applicant has weakened its MC&A program instead of providing new evidence of its strength. *Id.* at 3-4.

[368] Intervenor Direct Testimony at A.7(3).

[369] *Id.* at A.5(6).

accuracy, through the equating of PLC mapping data with the actual physical state of all items, Applicant effectively takes the position that no physical inventory is ever necessary, even in the face of an alleged theft.[370]

Intervenors fault Applicant for focusing on the acceptance criteria of NUREG-1280 § 3.3.1, which recommends "that the records of the identity and location of every item can be updated with sufficient speed to support" Applicant's 8- and 72-hour commitment.[371] Intervenors suggest that the importance of record maintenance can only be understood in the context of the affirmation portion of section 3.3.1, which states that "[a] contingency capability[372] is maintained to locate on demand any specific tamper-safed or encapsulated item or an unencapsulated item stored in a vault equivalent to tamper-safing within 8 hours, and to verify the presence of all items in a vault within 72 hours."[373] In other words, Intervenors argue that Applicant's computer records may be used to support rapid theft assessment, but would be "of little use in assessing the validity of alleged thefts unless licensees are also able to confirm that they actually have [the stored items] they expect to have."[374]

(ii) APPLICANT'S POSITION

Applicant's witnesses assert that reliance on the MMIS/PLC system data to meet the 8- and 72-hour theft assessment commitments is legally sufficient and will verify the identity and location of all items in any storage area, XXXX XXXX XXXX XXXX, "almost instantaneously."[375] Applicant maintains that NUREG-1280's acceptance criteria explicitly anticipate that applicants will rely on their records systems.[376] In the opinion of Applicant's witnesses, the purpose of this provision in the guidance is to encourage licensees to maintain current or near-current records that can be used in an emergency theft assessment.[377] Accurate and current records of the facility inventory are essential to the assessment of any alleged theft, so applicants are advised to maintain their records in a condition such

[370] *Id.* at A.5(3-4).

[371] NUREG-1280, Chapters 2-3, at 49.

[372] Both parties agreed that a NUREG-1280 contingency capability is equivalent to the primary capability in the face of an alleged theft. Tr. at 1902-03 (Trikouros, Pham, Curran, Lyman).

[373] NUREG-1280, Chapters 2-3, at 49.

[374] Intervenor Consolidated Response at 16.

[375] Applicant Direct Testimony at 72-73.

[376] *See* NUREG-1280, Chapters 2-3, at 49.

[377] Applicant Supplemental Direct Testimony at 30-32. Without up-to-date knowledge of what SSNM is expected to be present onsite, it would be impossible to assess what SSNM might be missing in the face of an alleged theft.

that the records can be updated "with sufficient speed" to support a commitment to locate one item in 8 hours or all items in 72 hours.[378]

Applicant's witnesses point out that the 8- and 72-hour capabilities exist alongside NRC regulations and guidance that ensure the integrity, redundancy, and veracity of an applicant's records system.[379] Applicant asserts that its commitments in FNMCP § 3.3.1.3 regarding the integrity of its records system, its commitments in FNMCP § 3.3.1.6 to confirm the presence of one item in 8 hours and all items in 72 hours, and all of its many other commitments in FNMCP § 3.3 collectively "establish[ ] the integrity of its records system" such that it may assume its accuracy for the purposes of theft assessment.[380]

Applicant's witnesses testified that theft assessment does not end after the initial 8- and 72-hour period during which the validity of an alleged theft is determined.[381] Rather:

> [a]lthough MOX Services has committed to be able to locate one item in vault storage in 8 hours and all items in vault storage in 72 hours through the use of its MMIS and PLC records systems (in accordance with the specific acceptance criterion in NUREG-1280, Section 3.3.1), there is nothing in the regulation or guidance that requires MOX Services to complete all of the actions it would take to, more broadly, assess an alleged theft, in 8 or 72 hours. And there are, indeed, other actions MOX Services would take to assess an alleged theft. While the Staff guidance uses the ability of an applicant's records system to identify one item and all items in vault storage in 8 hours and 72 hours respectively to gauge the applicant's ability to rapidly assess an alleged theft, it does not require or anticipate that all other actions to be taken to assess an alleged theft must also be completed in those time frames.[382]

At the supplemental hearing, Ms. King testified that:

> the guidance and the requirements aren't set up to resolve [an alleged theft] using those techniques, they are to show you have the capability to do those things so that the NRC has confidence that you have the capability to rapidly assess an alarm that will encompass those tasks in part, but maybe a lot of other tasks in addition.[383]

Finally, Applicant's counsel argued that "the way we demonstrate that we have

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[378] NUREG-1280, Chapters 2-3, at 49.

[379] Applicant Supplemental Direct Testimony at 29-30. For example, Applicant's FNMCP describes how the integrity of MC&A data is maintained. *See* FNMCP Chapter 3, at 152-53.

[380] Applicant Supplemental Direct Testimony at 29-30.

[381] *See id.* at 26-27.

[382] *Id.*

[383] Tr. at 1891-92 (King).

those capabilities is through the record system, the computer system. But in the actual event of an . . . alleged theft there are any host of ways that we might verify or assess the validity of that theft, some using the computer system, some not."[384]

(iii) NRC STAFF'S POSITION

NRC Staff approved Applicant's proposed approach for assessing the validity of alleged thefts. Mr. Pham testified that Applicant's program provides an acceptable demonstration of the ability to rapidly assess the validity of alleged thefts.[385] He agreed that comparison of the data maintained by the MMIS and PLCs "would confirm both where the item should be located and the presence of the item at that location."[386] Mr. Pham concluded that, "[a]ny discrepancies would be identified in a very short time frame (*e.g.,* a few minutes)."[387]

Mr. Pham further supported Applicant's position by testifying that

> [i]t is correct that the regulation in 10 C.F.R. § 74.57(e) simply requires the licensee to provide the capability to rapidly assess the validity of alleged thefts. Because this is a performance-based rule, it does not either determine a timeframe for the completion of a theft assessment or stipulate a method to be taken to assess an alleged theft. However, the guidance NUREG-1280 recommends a number of discrete capabilities that a licensee may adopt in order to demonstrate its ability to comply with the regulatory requirement. Because MOX Services has committed to

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[384] Tr. at 1888 (Jones). Applicant's Revised FNMCP describes the possible actions in response to a theft allegation as follows:

> Actions taken to investigate an allegation or other indication of the diversion of SSNM from its authorized location will develop evidence that supports either a confirmation or a denial of the allegation. The investigation activities conducted will depend on the fact-specific details of the allegation. A summary of typical steps to rapidly assess the validity of an alleged theft is listed:
>
> - XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
> - XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
> - XXXX XXXX XXXX XXXX XXXX XXXX XXXX
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FNMCP Revised 3.3, at 162-63.

[385] Staff Direct Testimony at 20; *see also* Staff Reply Testimony at 10 (stating that "[t]he use of the MMIS and PLC to confirm the presence of an individual item and the presence of all items in a vault is acceptable.").

[386] Staff Reply Testimony at 19.

[387] *Id.*

> comply with the guidance in NUREG-1280 by updating item records in order to identify one item and all items in vault storage in 8 hours and 72 hours respectively, the staff finds that MOX Services is in compliance with the regulatory requirement to provide the capability to rapidly assess the validity of alleged thefts.[388]

Mr. Pham added, "the rule and guidance do not require the licensee to complete all of the other actions to be taken to assess an alleged theft within those [8- and 72-hour] timeframes."[389]

b. Board Determinations

To the extent that NRC Staff and its witness suggest that Applicant's mere compliance with NUREG-1280 satisfies the regulatory requirements of section 74.57(e), they are mistaken. As noted earlier, guidance documents are not binding law and should not be treated as such by applicants, NRC Staff, or this Board. More fundamentally, though performance-oriented regulations provide applicants with flexibility to determine how best to achieve the stated performance objectives, the method chosen must still be found to demonstrate reasonable assurance that it complies with the underlying regulatory standard. Here, it was incumbent on NRC Staff to scrutinize Applicant's chosen approach and determine whether or not it provides reasonable assurance that the alarm resolution capability required by section 74.57(e) will be met. Upon review, we hold that Applicant's chosen approach does provide that reasonable assurance.

Applicant's theft assessment commitments in section 3.3 of its FNMCP follow NUREG-1280's recommendations,[390] proposing to use the computer system to identify the location of items in the event of an alleged theft. While Applicant assumes the accuracy of its records systems, we find this acceptable because other NRC regulations and other elements of Applicant's proposal provide reasonable assurance of the security and accuracy of its MC&A system. Additionally, and very importantly, the computer system is not the exclusive means by which Applicant will assess an alleged theft.[391] We therefore hold that Applicant has provided reasonable assurance of its ability to rapidly assess the validity of alleged thefts within the 8- and 72-hour time frames.[392]

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[388] Staff Supplemental Testimony at 13.

[389] *Id.*

[390] FNMCP Chapter 3, at 157-58.

[391] *See* Applicant Supplemental Direct Testimony at 36. *See also* Tr. at 1896-97 (Jones).

[392] While it is correct that the Affirmations section of NUREG-1280 § 3.3.1 does not address recordkeeping, the NUREG does not exclude but clearly contemplates the use of facility records for MC&A purposes. *See* NUREG-1280, Chapters 2-3, at 48-50.

5. Ability to Assess in the Event of a Compromised Computer System

a. Parties' Positions

(i) INTERVENORS' POSITION

Intervenors assert that if the MMIS and PLCs were maliciously manipulated, Applicant might be unable to meet its theft assessment timing commitments. For instance, if an individual alleged that he or she diverted a formula quantity of plutonium and infiltrated and corrupted the MMIS and PLC systems in order to conceal the alleged theft, then all data would be immediately rendered suspect.[393] In such a case, Dr. Lyman asserted, there would be no way to assess the validity of the threat without conducting a complete inventory of the facility, including an inventory XXXX XXXX XXXX.[394] Dr. Lyman observed during the initial hearing:

> we haven't seen any details about the ability to actually rule out the possibility of compromise of the computer system within time lines. If, for instance, the applicant were able to show that they have two options, either they can show within eight hours to everyone's satisfaction that the computer system has not been compromised and therefore you can trust the data from the mapping and the data from the mapping checks out, then they've satisfied it.
>
> If they can physically locate any randomly selected item within eight hours through retrieval of the item, then they meet it, but they don't meet these time lines if they don't have a demonstrated and credible way of resolving the issue of data tampering within eight hours.[395]

According to Intervenor, Applicant's inability to either ensure the integrity of its computer system or physically locate items within 8 hours prevents it from providing the rapid theft assessment capability required by section 74.57(e).[396]

(ii) APPLICANT'S POSITION

In response to the Board's June 29, 2012 request,[397] Applicant's witnesses asserted that it was not required and did not commit to updating its records system

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[393] Intervenor Direct Testimony at A.7(5).

[394] *Id.*

[395] Tr. at 1527 (Lyman).

[396] Intervenor Consolidated Response at 16-17.

[397] Prior to the supplemental hearing, the Board was concerned about Applicant's ability to assess an alarm within the timelines, and, in its June 29, 2012 M&O, asked Applicant to "provide us with its contingency plan, along with supporting testimony and evidence, for assessing, within the 8 and 72 hour timeframes . . . an external alarm that includes an assertion that an external entity compromised

(Continued)

and meeting the 8- and 72-hour criteria "under every conceivable alarm or alleged theft scenario," such as following alleged corruption of the MMIS/PLC system.[398] Applicant's witnesses stressed that Applicant's commitment to maintain the 8- and 72-hour capabilities assumed the use of its records system, and did not anticipate defending or verifying the integrity of its records system while also locating items within the time period.[399] Applicant maintains that the assumptions inherent in its commitment were appropriate because the relevant provisions of NUREG-1280 likewise assume that the licensee will rely on its records system.[400]

Notwithstanding that position, Applicant now represents that, when a theft allegation includes a claim that the MMIS or PLCs have been compromised, the following additional steps will be taken, as appropriate:

- XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
- XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
- XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
- XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX[401]

Applicant does not claim to be able to complete these additional steps within the 8- and 72-hour time period,[402] but argues that the regulation does not require it to do so.[403]

(iii) NRC STAFF'S POSITION

NRC Staff supports Applicant's position. Mr. Pham concurred that the require-

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the MMIS and PLC systems remotely and maliciously changed their respective data. Again, this document may be an amendment to the 2010 FNMCP, or a similarly consequential document of Applicant's choosing. In any event, this document must also be easily identifiable and enforceable by future inspectors." Order Requesting Further Information at 15.

[398] Tr. at 1897 (Jones).

[399] *See* Applicant Supplemental Direct Testimony at 29-30.

[400] Shaw AREVA MOX Services, LLC Reply to Intervenors' April 19, 2013 Response to MOX Services and NRC Staff Submittals (May 3, 2013) at 22 n.94.

[401] FNMCP Revised 3.3, at 163. LANMAS is the Local Area Network Material Accounting System, a separately maintained recording of MMIS data that is managed by DOE. Applicant Supplemental Direct Testimony at 46-49.

[402] *See* Applicant Supplemental Statement of Position at 25.

[403] Applicant Supplemental Direct Testimony at 29.

ment "to assess theft allegations in 8 and 72 hours [is] not applicable to every conceivable theft scenario."[404] He further testified that:

> [t]he staff agrees with MOX Services that the 8-hour and 72-hour capabilities recommended by NUREG-1280 assume the integrity of the supporting MMIS and PLC records system. MOX Services maintains separate protection measures to control the integrity of its records system through the FNMCP, the Physical Protection Plan, and cyber security program requirements; thus, MOX Services provides reasonable assurance that it will establish and maintain the integrity of its records system.
>
> In addition, section 3.3.1 of NUREG-1280 does not suggest that the 8-hour and 72-hour capabilities include reestablishment of the facility's records system. The NRC guidance simply recommends that the licensee should provide a performance capability to update the facility's records with sufficient speed and in order to locate selected items within specified time frames.[405]

b. Board Determinations

NRC regulations do not require an applicant to show the ability to rapidly assess the validity of alleged thefts in every conceivable theft scenario. Nor do our regulations require an applicant to rapidly assess without the use of its records system. In light of Applicant's commitment to take a specific set of additional steps in the event of an allegation of MMIS/PLC corruption, we find that Applicant has provided reasonable assurance of its ability to rapidly assess the validity of alleged thefts within the 8- and 72-hour time frames. We are satisfied that Applicant will take "whatever actions are appropriate and necessary to evaluate the theft as it is alleged,"[406] including performance of a variety of steps that have been identified that are designed to respond to a claim that the records system has been compromised.[407]

6. Conclusion

NRC regulations, including 10 C.F.R. § 74.57(e), do not require licensees to conduct assessments of alleged thefts without the use of their records systems, or by first verifying the integrity and accuracy of those records systems. All that is required under the regulation is a rapid assessment. The guidance in

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[404] Staff Supplemental Testimony at 14.

[405] *Id.* at 14-15.

[406] Applicant Supplemental Direct Testimony at 27.

[407] For example, Applicant's witnesses testified that Applicant will be able to compare data stored in the LANMAS with MMIS records to check for discrepancies. *Id.* at 46-49.

NUREG-1280 suggests that assessment should be completed within an 8- or 72-hour timeline, and we find that Applicant's compliance with this guidance provides reasonable assurance of its ability to make the "rapid determination of whether an actual loss"[408] has occurred as required by the performance objectives in section 74.51(a).

For the foregoing reasons, we resolve Contention 11 in favor of Applicant.

VI. BOARD CONCLUSIONS

Having considered all of the material presented by the parties on Contentions 9, 10, and 11, and based upon our review of the evidentiary record relative to these contentions and the proposed findings of fact and conclusions of law submitted by the parties, and in accordance with our views expressed in Sections I-V, above — which we find to be supported by a preponderance of the evidence — we conclude as follows:

Applicant's daily reconciliation of the MMIS Perpetual Inventory Report and PLC mapping, as supported by its various accuracy-related programs and the MMIS verification procedure, provides reasonable assurance that it can verify the presence of all SSNM items in storage within the 30- and 60-day time frames required by 10 C.F.R. § 74.55(b)(1).

By verifying the integrity of storage area boundaries, Applicant can verify the integrity of all SSNM items in storage within the 30- and 60-day time frames required by 10 C.F.R. § 74.55(b)(1).

Applicant provides reasonable assurance that it can normally resolve an alarm within 3 days, fully satisfying the requirements of 10 C.F.R. § 74.57(b) and its commitments in the FNMCP, even if it must conduct an inventory XXXX XXXX XXXX XXXX XXXX.

Using its MMIS and PLC mapping, Applicant has the capability to locate one SSNM item in 8 hours, and all SSNM items in vault storage in 72 hours. Therefore, Applicant provides reasonable assurance of its ability to rapidly assess the validity of an alleged theft, satisfying the requirements of 10 C.F.R. § 74.57(e) and Applicant's commitments in the FNMCP.

Applicant has met its burden of proof as to Contentions 9, 10, and 11. Therefore, Contentions 9, 10, and 11 are resolved in favor of Applicant.[409]

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[408] 10 C.F.R. § 74.51(a)(3).

[409] To the extent that any of Intervenors' arguments are not addressed herein, it is either because we have determined that a response is unnecessary to our decision or because, in rejecting them, we simply intend to rely upon the reasoning reflected in the post-hearing briefs of the Staff and/or Applicant regarding those arguments, finding those arguments to be persuasive and, to the extent necessary to resolve any such matters, those reasonings are hereby adopted.

VII. ORDER

WHEREFORE, IT IS ORDERED, in accordance with 10 C.F.R. § 2.1210, that Intervenors' Contentions 9, 10, and 11 are resolved on the merits in favor of Applicant.

IT IS FURTHER ORDERED that this Initial Decision will constitute a final decision of the Commission forty (40) days from the date of issuance (or the first agency business day following that date if it is a Saturday, Sunday, or federal holiday),[410] unless a petition for review is filed in accordance with 10 C.F.R. § 2.1212, or the Commission directs otherwise.

IT IS FURTHER ORDERED that any party wishing to file a petition for review on the grounds specified in 10 C.F.R. § 2.341(b)(4) must do so within twenty-five (25) days after service of this Initial Decision. The filing of a petition for review is mandatory for a party to have exhausted its administrative remedies before seeking judicial review. Within twenty-five (25) days after service of a petition for review, parties to the proceeding may file an answer supporting or opposing Commission review. Any petition for review and any answer shall conform to the requirements of 10 C.F.R. § 2.341(b)(2)-(3).

IT IS FURTHER ORDERED that the supplemental transcript corrections are accepted by the Board.[411]

IT IS FURTHER ORDERED that the Record in this proceeding is hereby closed.

THE ATOMIC SAFETY AND
LICENSING BOARD*

Nicholas G. Trikouros
ADMINISTRATIVE JUDGE

Dr. Paul B. Abramson
ADMINISTRATIVE JUDGE

Rockville, Maryland
February 27, 2014

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[410] *See* 10 C.F.R. § 2.306(a).

[411] *See* Intervenors' Proposed Corrections to Hearing Transcript (July 1, 2013); Shaw AREVA MOX Services, LLC's Proposed Corrections to the Hearing Transcript (June 14, 2013); NRC Staff's Proposed Corrections in the Hearing Transcript (May 21, 2013).

*Judge Farrar is not subscribing to the above opinion. His separate statement is set forth on the following pages.

Separate Statement of Judge Michael C. Farrar

Although my approach would have differed from theirs, I am in essential agreement with most of the substance of my colleagues' determinations, so far as they go, that lead them to resolve the merits of the three pending contentions against Intervenors. I write separately for three primary purposes:

- First, to be sure the matters before us are understood in their full context, which I present in Part A, below.
- Second, to express in brief fashion my dissent from portions of the majority's rulings. Specifically, I take issue with their (1) declining to impose upon Applicant the additional steps it agreed to take to alleviate lingering concerns regarding Contention 9; and (2) approving Applicant's presentation regarding Contention 11 notwithstanding the present lack of a cyber-security plan, a plan which all parties agree must be developed for Applicant's proposals to succeed. Those matters, as well as some ancillary ones, are discussed in Part B, below.
- Third, with respect to that cyber-security issue, to indicate why I believe, based on what came before us, that Applicant's long-ago promise to create a sound MC&A system will not — indeed cannot — be fulfilled until it puts forward, and this Agency reviews, the cyber-security measures that are the inherent underpinning, from both a regulatory and a practical standpoint, of a dependable MC&A system. But those matters — having not yet been addressed either by Applicant or this Agency — could not have been raised by the contentions filed at this stage of the proceeding, and are thus not before us for decision now. Accordingly, to urge that this critical issue eventually be thoroughly addressed, I present in Part C, below, my thinking in that regard, focusing on what must be done later in this proceeding.

A. Contextual Background

Although the majority explains the purpose of this facility (Maj. Op. at p. 45), it assumes the reader will understand from that what the underlying dangers are. To review, the facility at issue before us — being built at DOE's Savannah River Site — has been envisioned as a place for the fabrication of MOX fuel for nuclear reactors. More specifically, in furtherance of a U.S. treaty with Russia intended to achieve mutual reduction in both countries' nuclear weapons, plutonium extracted from surplus nuclear weapons (at a colocated sister facility) would be converted to plutonium oxide, mixed with uranium oxide — the typical ingredient of nuclear fuel — and formed into MOX fuel.

One of the primary concerns about facilities that handle weapons-grade plutonium is that during its storage and processing that hazardous substance might be

subject to diversion by terrorists or other determined adversaries with malicious motives. Such diversion could result in enormous, dreadful consequences, if those eventually obtaining access to the material had the resources and wherewithal to create devices that, if used for nefarious purposes, could have widespread devastating impact. As a result, the security risk here is critical and must be managed accordingly. For this reason, the Nuclear Regulatory Commission has enacted regulations establishing standards that such a facility's MC&A systems must meet in terms of tracking its inventory in storage and in process.

Those regulations were issued two decades ago and were drafted with then commonly employed, but now technologically superseded, manual tracking systems in mind. As the majority has discussed, a major issue before us involves determining what the standards embodied in that admittedly antiquated regulation mean in terms of modern, computerized systems, and how to apply those standard to Applicant's proposals.

Not only are the issues difficult, but there is no doubt about their significance and importance. The parties recognized this, for in a sharp departure from the norm in our proceedings, neither Staff nor Applicant opposed the admission of Intervenors' three contentions into this proceeding on any ground other than their asserted untimeliness. And our former colleague, Judge McDade, who believed the contentions were untimely, went so far as to suggest to the Commission that, were they indeed deemed untimely, *approval should be given for the Board to consider them sua sponte — a step not invoked in many years and a step the full Board endorsed — given their fundamental importance.* LBP-11-9, 73 NRC 391, 413-14, 417-18 (2011).

It is in this context and against this background that I indicate where I disagree with the majority.

B. Dissenting Points

1. Imposition of Additional Measure (Contention 9)

The majority quite well describes the steps Applicant has taken to mesh its modern tracking system with an antiquated regulation. The ultimate problem Applicant faced was establishing that the comparison of computerized data in one system with similar data in another system is the equivalent of physically sampling the actual material (whether conducted by robotic or by human action). In that regard, the majority mentions certain measures Applicant will take to bolster its data-to-data comparison with physical checks.

These measures include checks that naturally occur during the processing of materials. For instance, every time the MMIS calls for retrieval of a specific

item from a given location, a successful retrieval by a PLC confirms that the data were correct. Maj. Op. at p. 65. Applicant has also undertaken to add additional physical verification, if the process checks turn out to be too infrequent to meet the statistical sampling demands. Maj. Op. at pp. 88-91. Additionally, daily physical inspection of containment boundaries will confirm the fact that the SSNM items contained within have not been tampered with. Maj. Op. at pp. 70-71, 74. In part, these measures and others were created and adopted by Applicant in response to the original Board's calling, after the first hearing, for additional exposition on this point. Maj. Op. at pp. 88-91 (citing Licensing Board Memorandum and Order (Requesting Further Information from the Applicant) (June 29, 2012) at 10 (unpublished) [hereinafter Order Requesting Further Information]).

The majority quite rightly approves of those measures as bolstering Applicant's efforts to comply with the regulatory requirements. But the majority falls short, I believe, in not requiring Applicant to adopt an additional measure that it created in response to the Board's inquiry and suggestion at the second hearing. *See* Maj. Op. at pp. 92-93.

I dissent from the majority's failure to impose that requirement. As should be clear from the majority's extensive discussion of Contention 9, the business of meshing Applicant's modern proposal with the demands of an antiquated regulation is not an easy one. To satisfy those demands, and at the majority's behest, Applicant was willing to adopt an additional check to physically validate its comprehensive data systems.

That step was, for me, sufficient to convert a close case into a compliant one. I would impose that step, as suggested by Applicant, and make it part of the licensing documents along with the other measures Applicant is pursuing (so that future inspectors and enforcers do not have to pore through numerous, lengthy Licensing Board decisions to determine the licensing basis and compliance status of the facility they are evaluating).

2. Absence of Cyber-Security Measures (Contention 11)

On its face, Contention 11 does not challenge Applicant's cyber-security plans or its failure to have a full-blown cyber-security system in place at this juncture. Strictly speaking, then, the matter could be viewed as not being before us and thus not within our jurisdiction to address.

But both the Applicant and the NRC Staff, in defending against the challenges that Intervenors did make to the MC&A system, relied upon the salutary impact that correlative physical security and cyber-security measures would have. Maj. Op. at pp. 94-96, 115-16. By raising the cyber-security argument to defend against those challenges, Applicant can fairly be said to have brought that matter into play before us. And that provides me the latitude to point out that there are two things wrong with that argument.

The first is that Applicant is otherwise *required* to have a physical security system that meets other NRC regulations that are not before us here. Applicant cannot be given extra credit for doing what is already required.

The second is that Applicant does not have a cyber-security system in place (nor does the NRC have in place a regulation defining what is to be required in that regard, a point I will come back to). But Applicant defends against Contention 11 by arguing that its data systems are adequate for purposes of meeting the governing regulation, and that, albeit not now in place, cyber-security measures can eventually be counted on to assure the noncorruption of those data systems.

We don't know that. Perhaps there will come a time when it will be known. But strictly speaking, one could justifiably conclude that Applicant, in taking that position as part of its affirmative case, is entitled at this stage to, at most, a Scottish verdict of "not proven."

The Board already gave Applicant an opportunity to bolster the presentation it made at the first hearing with a supplemental showing during the second hearing phase. *See* Order Requesting Further Information. This being so, one would not normally be inclined to provide a third opportunity. With Applicant having the burden of proof, then, a "not proven" verdict would lead to the contention being upheld.

If we did that, however, Applicant could amend and resubmit its application once it had a cyber-security plan in place. (As will be seen, I reject the notion that something as fundamental and challenging as developing a cyber-security system adequate to foil increasingly capable and determined adversaries could be sloughed off to a mere "compliance item" to be handled after a license is issued.) To avoid such procedural inefficiencies, then, I would rule that the Applicant's presentation, *so far as it goes,* prevails against Contention 11, but would also rule that any reliance upon that ruling to obtain a license is subject to, and fully dependent upon, future actions and plans which, once put into place, will routinely trigger full-blown NRC review *before* a license can be issued. If that approach is not to be implemented, then my dissenting vote is "not proven."

This leaves some ancillary, less significant matters to address. These relate to three points which, if I understand them correctly, raise the following concerns:

My *first* concern arose when, during the course of the proceeding, it was at least intimated that the cyber-security matter could be relegated to a post-licensing "compliance item." *See e.g.,* Tr. at 1851-58. If that were done, the license would issue first, leaving approval of the final version of the MC&A system, together with its eventual cyber-security provisions, to be resolved along with other routine "compliance items" by Staff in the ordinary course of its preoperational review.

There is a major reason not to do this — calling a matter a mere "compliance item" does not make it so, and thus cannot serve to take it out of the prelicensing

regulatory review bailiwick. As indicated earlier, by any measure and by all accounts the adequacy of the MC&A system is a paramount issue, it has been fairly raised in the adjudication, and because it is so fundamental to proper creation of the facility it deserves to be resolved — along with its cyber-security underpinnings — *prior* to the grant of a license.

If this were not self-evident, the recent decision of another Board points in that direction. In *San Onofre,* the Board was faced with a process that the NRC Staff had labeled as a "Confirmatory Action Letter" — which is an enforcement process that does *not* allow for public intervention. *See Southern California Edison Co.* (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-13-7, 77 NRC 307, 316, 324-25 (*vacated as moot,* CLI-13-9, 78 NRC 551, 552 (2013)). Despite the Staff labeling it in that fashion, the Board determined that it was indeed a *de facto* license amendment, which *does* indeed allow for public intervention. *Id.* at 344. In other words, the Board refused to let the matter turn on attempts by the Staff and Applicant to *label* a controversial matter in a way that would avoid adjudication. *Id.* at 326. Instead, the Board examined in great detail the facts behind the situation, and concluded that the *reality* pointed toward the adjudicatory approach, not the administrative one. *Id.*

Here, the matter can be resolved without the need for the level of analysis that the San Onofre Board proffered. This important substantive matter quite justifiably came up during adjudication, and the attempt to remove it from the reach of that process and even from the prelicensing regulatory process — by placing upon it a label that would relegate it to the category of matters that involve merely administrative details — must fail.

My *second* concern stems from the majority's apparent reliance upon Applicant's contractual commitment to adhere to the DOE developed and developing cyber-security standards. Maj. Op. at pp. 94-96. This may be good as far as it goes, but it does not go far enough. Quite apart from the adjudication, it cannot be overlooked that DOE stands in the shoes of a mere Applicant here. Whatever regard might otherwise be owed to the extensiveness of DOE's capabilities and the quality of its analyses, its proposals regarding this application are subject, as in all other licensing proceedings, to the approval of the NRC.

Thus, absent a Commission-level Memorandum of Understanding or similar agreement with DOE expressing a willingness by this agency to accept DOE's work without review, DOE's application, and all aspects of it, remain subject to NRC scrutiny. That scrutiny will include (1) establishing a governing cyber-security standard (via rulemaking or otherwise), or in the alternative proceeding under some analogy to "best engineering judgment" that satisfies the demands of the Atomic Energy Act, and then (2) making a determination as to whether that standard or judgment has been met, i.e., evaluating that aspect of the application for compliance with the requisite norm.

Put another way, for all practical purposes, DOE is the real-party-in-interest Applicant here. Unless the NRC Commissioners formally adopt DOE's standards, or formally cede jurisdiction to set a standard to DOE, the setting of the applicable standards, and the determination of whether those standards have been met, belongs to the NRC, not DOE.

My *third* concern involves inherent limitations on the hoary doctrine the majority cites to the effect that matters that are, or are about to become, subjects of rulemaking are not suitable for adjudication. Maj. Op. at pp. 95-96. That doctrine has its purposes — to prevent the inefficiencies and duplication and waste that would be engendered by considering the same "generic" issue in several or a multiplicity of, say, nuclear reactor licensing proceedings.

But caution must be exercised in applying that longstanding principle to other situations. That principle plainly made eminent sense when there were large numbers of reactor permitting or licensing cases pending, or when consideration need be given to how existing licensees should proceed in the aftermath of an event like the Fukushima disaster. In both situations, there exists a real threat of duplication — indeed multiplication — in individual licensing proceedings.

Importantly, it bears mention that in neither situation was that principle intended to minimize the importance of the underlying matter to the various individual licensing proceedings. To the contrary, so-called "generic" issues were not less important to individual adjudications just because they affected more than one reactor; put another way, their generic character served to make them even more important to resolve.

And it was never doubted that deferring the underlying issue to a rulemaking proceeding was not viewed as the full response to that issue, and that there was a *quid pro quo* for taking that step. Specifically, it was the norm that at the conclusion of the rulemaking a way would have to be found to apply its result to the individual facility licensing proceeding in which the matter was sought to have been raised. In other words, when issues are handled in a generic rulemaking, it has always been the case that *the outcome of that rulemaking has to be applied to the individual facilities that were spared the adjudication of that issue.*

Moreover, the threat of duplication is not so apparent here. In this instance, we have before us a unique facility, which will likely have to be governed by unique standards. Similarly, from the beginning, licensing of the MOX facility has been governed by a two-part licensing process designed specifically for it. *See* Maj. Op. at pp. 45-46; *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 411 (2001). It also presents unique dangers. And even after a cyber-security rulemaking, there will have to be a determination made that the facility complies with the rule — and that is a fit subject about which there may need to be a later determination about an opportunity for adjudication.

C. Future Cyber-Security Considerations

Even if Applicant prevails on the contentions, as the majority holds, the cyber-security matter will demand far more future attention within the NRC than the Staff, Applicant, and majority seem to envision. In that regard, I have already mentioned the "compliance item," DOE role, and generic rulemaking matters. But there are others as well.

Even if Applicant prevails herein upon appellate review, or if no such review is undertaken, I would go beyond what my colleagues say (Maj. Op. at pp. 46-47, 94-96) and urge the Commission not to let this proceeding end as it began, with the NRC Staff planning to take a shortcut to licensing (*See* LBP-08-11, 67 NRC 460, 498-500 (2008) (Farrar, J., concurring) (expressing concern over Staff's earlier attempt to issue Applicant a possession and use license prior to completion of construction)). Just as the Staff eventually abandoned that opening approach, the Commission should insure that it does not contemplate such a closing step. To that purpose, I urge the Commission, as already indicated, to forbid the Staff from treating the creation of a cyber-security system as a mere "compliance item."

On that score, there should be no need to write at length to establish the complexity of the cyber-security problem and the difficulty of protecting against cyber-breaches. Rather than listing the litany of recent and ongoing national and worldwide concerns about the cyber-intrusion capability, motivation, and dedication of adversarial governments and individuals, it is sufficient to put forward two brief quotations.

The first is a maxim announced by a federal court wrestling (in an entirely different context) with whether the record facts before it established the position being advocated. The court looked beyond the record by indicating that "what everybody knows, the court must know." *Meredith v. Fair,* 305 F.2d 343, 344-45 (5th Cir. 1962) (quoting *Jacobson v. Massachusetts,* 197 U.S. 11, 30 (1905)). In a similar manner, the world, the Board and the Commission know of the enormity and pervasiveness of the cyber-security threat and what it could mean to the viability of Applicant's required MC&A system.

And it is not a given that the response to that threat will be adequate — as former NRC Chairman Dale Klein is said to have observed, in the context of the Fukushima disaster, the company involved "didn't play enough of [the] what-if games . . . and didn't have enough of that questioning attitude." Chico Harlan, *For Tepco and Japan's Fukushima Daiichi Nuclear Plant, Toxic Water Stymies Cleanup,* Wash. Post, Oct. 21, 2013, at A1. In that regard, Applicant's witnesses here provided the Board with assurances that the cyber-security threat could be, and was being, dealt with. *See e.g.,* Tr. at 1846-51. But in a perverse manner, their reassurances might have been more compelling had they contained more recognition of the difficulty of the task and the need to envision what future, highly skilled, capable and formidable adversaries might be plotting.

The upshot is simple. The Board has dealt with the contentions as presented, to the extent possible at this time. There is no reason to say that Applicant cannot eventually accomplish what it has been promising to do for over a decade. But the Board's review of the contentions has pointed to problems that remain to be solved. Because Applicant's papers do not yet provide the manner in which those problems will be addressed, I suggest that any contention filed on that topic at this juncture would have been subject to rejection as premature, as we explained in some detail at an earlier stage. *See* LBP-08-11, 67 NRC at 503-05 (Farrar, J., concurring) (discussing issues related to the filing of timely contentions).

That being so, I urge that the Commission continue to make available the remedy we found appropriate earlier herein and thereby provide an opportunity for the filing — free of any "good cause for lateness" strictures — of further contentions when the long-promised system is eventually available for scrutiny. Specifically, early in this proceeding we set forth a rule for filing new contentions. *See* LBP-08-11, 67 NRC at 493-94. This rule established that the Board would consider new or amended contentions timely if filed within 60 days of any "triggering event."

We took that action to provide a reasonable and practical time frame for Intervenors to research and analyze new developments in this unique and evolving proceeding. The Commission affirmed the Board's rule that new contentions would be deemed timely if filed within 60 days after pertinent information first becomes available. CLI-09-2, 69 NRC 55, 58 (2009).

In the same vein, I respectfully propose that, subject to appropriate security constraints, the Commission specifically allow Intervenors — whose dedicated, long-term participation and measured, thoughtful testimony herein advanced the inquiry into the matters raised by their contentions — an opportunity to file a motion to admit one or more new contentions into this proceeding within 60 days of their notification of the availability of Applicant's cyber-security plans and procedures. At that time, determinations can be made about the suitability, or not, of the matter for adjudication. And in any event, I urge the Commission to devote its personal, nonadjudicatory attention to reviewing Staff's analysis of Applicant's final cyber-security-included proposal, once completed, to be sure that the complex, significant problems threatening the safety of this unique facility, and until now guided by antiquated or empty regulations, are fully addressed. *See also* Maj. Op. at p. 54 n.72 and accompanying text.

In conclusion, I urge that the decision today in Applicant's favor be viewed as resolving no more than the very narrow set of issues before us now in a very narrow fashion. Whether and how all the facility's infrastructure and security will

come together to guard its raw materials against diversion is to this day an open issue, and today's decision should not be taken as affording any assurances in that regard.

APPENDIX A

Definitions

- *Alleged Thefts* "alarms that originate external to the MC&A system." (NUREG-1280, at 50)
- *Category 1A material* "means SSNM directly useable in the manufacture of a nuclear explosive device, except if: (1) The dimensions are large enough (at least two meters in one dimension, greater than one meter in each of two dimensions, or greater than 25 cm in each of three dimensions) to preclude hiding the item on an individual; (2) The total weight of an encapsulated item of SSNM is such that it cannot be carried inconspicuously by one person (i.e., at least 50 kilograms gross weight); or (3) The quantity of SSNM (less than 0.05 formula kilograms) in each container requires protracted diversions to accumulate five formula kilograms." (10 C.F.R. § 74.4)
- *Category 1B material* "means all SSNM material other than Category lA." (10 C.F.R. § 74.4)
- *Controlled Access Area* "means any temporarily or permanently established area which is clearly demarcated, access to which is controlled, and which affords isolation of the material or persons within it." (10 C.F.R. § 74.4)
- *Formula Kilogram* "SSNM in any combination in a quantity of 1000 grams computed by the formula, grams = (grams contained U-235 + 2.5 (grams U-233 + grams plutonium)." (10 C.F.R. § 74.4)
- *Item* "means any discrete quantity or container of special nuclear material or source material, not undergoing processing, having an unique identity and also having an assigned element and isotope quantity." (10 C.F.R. § 74.4)
- *MAA (Material Access Area)* "means any location which contains special nuclear material, within a vault or a building, the roof, walls, and floor of which constitutes a physical barrier." (10 C.F.R. § 74.4)
- *MC&A Alarm* "means a situation in which there is: (1) an out-of-location item or an item whose integrity has been violated, (2) an indication of a flow of SSNM where there should be none, or (3) a difference between a measured or observed amount or property of material and its corresponding predicted or property value that exceeds a threshold established to provide the detection capability required by § 74.53." (10 C.F.R. § 74.4)
- *Power of Detection* "means the probability that the critical value of a

statistical test will be exceeded when there is an actual loss of a specific SSNM quantity." (10 C.F.R. § 74.4)

- *Sealed Source* "means any special nuclear material that is physically encased in a capsule, rod, element, etc. that prevents the leakage or escape of the special nuclear material and that prevents removal of the special nuclear material without penetrations of the casing." (10 C.F.R. § 74.4)
- *SSNM (Strategic Special Nuclear Material)* "means uranium-235 (contained in uranium enriched to 20 percent or more in the U235 isotope), uranium-233, or plutonium." (10 C.F.R. § 74.4)
- *Tamper-safing* "means the use of devices on containers or vaults in a manner and at a time that ensures a clear indication of any violation of the integrity of previously made measurements of special nuclear material within the container or vault." (10 C.F.R. § 74.4)
- *Vault* "a windowless enclosure with walls, floor, roof and door(s) designed and constructed to delay penetration from forced entry." (10 C.F.R. § 74.4)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ronald M. Spritzer, Chairman
William J. Froehlich
Brian K. Hajek

In the Matter of **Docket No. 55-23694-SP**
(ASLBP No. 13-925-01-SP-BD01)

CHARLISSA C. SMITH
(Denial of Senior Reactor Operator License) **March 18, 2014**

In this Initial Decision, the Atomic Safety and Licensing Board (Board) resolves the claim of Charlissa C. Smith that the Nuclear Regulatory Commission Staff (Staff) unlawfully denied her 2012 application for a senior reactor operator (SRO) license. The Board concludes that the Staff acted inconsistently with its own guidance and applied that guidance in an inconsistent manner when it denied Ms. Smith's application for an SRO license in 2012. The Board directs the Staff to issue an SRO license to Ms. Smith, subject to the satisfaction of any other licensing requirements not considered in this proceeding, such as health, that the Staff must also assess before issuing a license pursuant to 10 C.F.R. § 55.33. The license shall be effective as of the date it is issued and shall be subject to the usual terms and conditions. *See* 10 C.F.R. § 55.1.

REGULATIONS: INTERPRETATION (10 C.F.R. Part 55)

Part 55 of the Commission's regulations establishes procedures and criteria for the issuance of licenses to operators and senior operators of nuclear facilities

licensed under the Atomic Energy Act of 1954 as amended or section 202 of the Energy Reorganization Act of 1974, as amended.

REGULATIONS: INTERPRETATION (10 C.F.R. Part 55)

Any individual who manipulates the controls of any facility licensed under Parts 50, 52, or 54 of the agency's regulations is required to have an operator's license. *See* 10 C.F.R. § 55.2.

REGULATIONS: INTERPRETATION (10 C.F.R. Part 55)

An SRO is "any individual licensed under [10 C.F.R. Part 55] to manipulate the controls of a facility and to direct the licensed activities of licensed operators." 10 C.F.R. § 55.4. To obtain an SRO license, the applicant must pass both a written test and an operating test and meet the other requirements specified in 10 C.F.R. Part 55. *See id.* § 55.33(a).

REGULATIONS: INTERPRETATION (10 C.F.R. § 55.40)

Section 55.40 of 10 C.F.R. states that the Commission shall use NUREG-1021 to prepare and evaluate licensing examinations. Pursuant to 10 C.F.R. § 55.40, the Commission "shall use the criteria in NUREG-1021, 'Operator Licensing Examination Standards for Power Reactors,' in effect six months before the examination date to prepare the written examinations required by [10 C.F.R.] §§ 55.41 and 55.43 and the operating tests required by [10 C.F.R.] § 55.45." 10 C.F.R. § 55.40(a). Thus, NUREG-1021 criteria that apply to the preparation of written examinations and operating test are binding upon the Staff.

NUREG-1021: INTERPRETATION (POLICES, PROCEDURES, AND PRACTICES)

NUREG-1021 specifies the Staff's policies, procedures, and practices for administering the initial and requalification written examinations and operating tests. It lists both goals and specific procedures for the preparation, administration, and grading of the operator license examination. NUREG-1021 states that the goal of the tests is to determine "whether the applicant's level of knowledge and understanding meet the minimum requirements to safely operate the facility for which the license is sought." NUREG-1021 further states that it is intended to "ensure the equitable and consistent administration of examinations for all applicants." Additionally, NUREG-1021 provides that the NRC's regional offices shall obtain approval from the Office of Nuclear Reactor Regulation (NRR) operator

licensing program office at agency headquarters before knowingly deviating from the intent of any of the NUREG-1021 standards.

REGULATIONS: INTERPRETATION (10 C.F.R. § 55.35)

Under the agency's regulations and NUREG-1021 standards, an applicant who was denied a license after the first examination may elect to retake the tests. In this scenario, the regulations governing the application process provide that "[a]n applicant who has passed either the written examination or operating test and failed the other may request in a new application on Form NRC-398 to be excused from re-examination on the portions of the examination or test which the applicant has passed." 10 C.F.R. § 55.35(b).

REGULATIONS: INTERPRETATION (10 C.F.R. § 55.35)

The NRC regional office has the discretion to grant a waiver request "if it determines that sufficient justification is presented." 10 C.F.R. § 55.35(b).

NUREG-1021: INTERPRETATION (CONFLICT OF INTEREST)

NUREG-1021 includes conflict of interest provisions that address the assignment of examiners to an examination team. NUREG-1021 instructs that "[t]he regional office shall not assign an examiner who failed an applicant on an operating test to administer any part of that applicant's retake operating test." This specific prohibition is supplemented by a broader requirement, which directs that "[i]f an examiner is assigned to an examination that might appear to present a conflict of interest, the examiner shall inform his or her immediate supervisor of the potential conflict." When informed of a potential conflict, the supervisor "must apply sound judgment to the facts of each case" and, if any doubt exists, "consult with regional management and/or the NRR operator licensing program office to resolve the issue."

REGULATIONS: INTERPRETATION (10 C.F.R. § 2.336)

Pursuant to Subpart L, each party and the NRC Staff are required to make initial disclosures under paragraphs (a) and (b) of section 2.336, based on the information and documentation then reasonably available to it. A party, including the NRC Staff, is not excused from making the required disclosures because it has not fully completed its investigation of the case, it challenges the sufficiency of another entity's disclosures, or that another entity has not yet made its disclosures. *See* 10 C.F.R. § 2.336(c). All disclosures under this section must be accompanied

by a certification (in the form of a sworn affidavit) that all relevant materials required by this section have been disclosed, and that the disclosures are accurate and complete as of the date of the certification. *See id.* The duty of disclosure is continuing.

Parties must update their disclosures every month after initial disclosures on a due date selected by the presiding officer in the order admitting contentions. *See id.* § 2.336(d). Disclosure updates shall include any documents subject to disclosure that were not included in any previous disclosure update. *See id.* A party, including the Staff, may be sanctioned for noncompliance with the disclosure regulations. *See id.* § 2.336(e)(1). The presiding officer may impose sanctions on a party that fails to provide any document required to be disclosed, unless the party demonstrates good cause for its failure to make the disclosure. *See id.* § 2.336(e)(2).

REGULATIONS: INTERPRETATION (10 C.F.R. § 2.1203)

The NRC Staff is under a special obligation to create and to maintain a hearing file. *See* 10 C.F.R. § 2.1203(a). The NRC Staff has a continuing duty to keep the hearing file up to date. *See id.* § 2.1203(c).

RULES OF PRACTICE: STANDARD OF REVIEW

The standard of review in this case, as in most administrative proceedings, is a preponderance of the evidence, with the applicant or proponent of an order bearing the burden of proof. *See Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 302 n.22 (1994) (citations omitted), *aff'd, Advanced Medical Systems, Inc. v. NRC,* 61 F.3d 903 (6th Cir. 1995). This is consistent with 10 C.F.R. § 2.325 which states "[u]nless the presiding officer otherwise orders, the applicant or the proponent of an order has the burden of proof." 10 C.F.R. § 2.325.

In assessing whether an applicant satisfies the burden of establishing that the Staff's determination of the applicant's performance was inappropriate, unjustified, arbitrary, or an abuse of discretion, the Board should consult NUREG-1021. *See Frank J. Calabrese Jr.* (Denial of Senior Reactor Operator License), LBP-97-16, 46 NRC 66, 86 (1997).

RULES OF PRACTICE: STANDARD OF REVIEW

NUREG-1021: INTERPRETATION (STANDARD OF REVIEW)

NUREG documents do not generally establish regulatory requirements, but NUREG-1021 states that it is intended to "help NRC examiners and facility

licensees [to] better understand the . . . initial and requalification [examination processes and to] ensure the equitable and consistent administration of examinations for all applicants."

The Commission issued NUREG-1021 "[t]o set forth consistent standards for operator and SRO examinations at various facilities." *Randall L. Herring* (Senior Reactor Operator License for Catawba Nuclear Station), LBP-98-30, 48 NRC 355, 357 (1998). In order to avoid a finding of arbitrary and capricious agency action, the Staff may not depart from its established policies, procedures, and practices without a reasonable explanation for the change. *See Atchison, Topeka & Santa Fe Railway Co. v. Wichita Board of Trade,* 412 U.S. 800, 808 (1973) ("Whatever the ground for the [agency's] departure from prior norms, . . . it must be clearly set forth so that the reviewing court may understand the basis of the agency's action . . . ."); *Citizens Awareness Network, Inc. v. NRC,* 59 F.3d 284, 291 (1st Cir. 1995); *Northern California Power Agency v. Federal Energy Regulatory Commission,* 37 F.3d 1517, 1522 (D.C. Cir. 1994).

RULES OF PRACTICE: PRESUMPTION OF REGULARITY

While public officials are afforded a presumption of regularity in the discharge of their duties (*see McIntyre-Handy v. West Telemarketing Corp.,* 97 F. Supp. 2d 718, 727 (E.D. Va. 2000)), this presumption can be shifted upon the presentation of evidence showing official actions that are irregular. If the facts before the Board do not appear regular, then the presumption does not attach. *See Collins v. Shinseki,* 2013 WL 6000535 at *6 (Vet. App. 2013). The presumption "does not help to sustain an action that on its face appears irregular. . . . [In fact,] the presumption operates in reverse. If it appears irregular, it is irregular, and the burden shifts to the proponent to show the contrary." *United States v. Roses Inc.,* 706 F.2d 1563, 1567 (Fed. Cir. 1983).

RULES OF PRACTICE: PREJUDICIAL ERROR RULE/HARMLESS ERROR RULE

The idea behind the prejudicial error rule (also known as the harmless error rule) is that if the agency's error did not affect the outcome, it did not prejudice the petitioner. *See Jicarilla Apache Nation v. U.S. Department of the Interior,* 613 F.3d 1112, 1121 (D.C. Cir. 2010). In general, the burden of proving prejudicial error by a federal agency rests with the party challenging the agency's action. *See Shinseki v. Sanders,* 556 U.S. 396 (2009). However, this is "'not . . . a particularly onerous requirement.'" *Jicarilla Apache Nation,* 613 F.3d at 1121 (quoting *Shinseki v. Sanders,* 556 U.S. at 410). It is sufficient "that the agency's error may have affected the outcome." *Charlton v. Donley,* 846 F. Supp. 2d 76, 85 (D.D.C. 2012); *accord Evans v. Perry,* 944 F. Supp. 25, 29 (D.D.C. 1996).

REGULATIONS: INTERPRETATION (10 C.F.R. § 2.1203)

RULES OF PRACTICE: NRC STAFF COMPLIANCE (10 C.F.R. § 2.1203)

The NRC Staff has an obligation to lay all relevant materials before the Board to enable it to adequately dispose of the issues before it. *Consolidated Edison Co.* of New York (Indian Point, Units 1, 2, and 3), CLI-77-2, 5 NRC 13 (1977); *Louisiana Power and Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1091 n.18 (1983), citing *Indian Point,* CLI-77-2, 5 NRC at 15. *See generally Tennessee Valley Authority* (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC 1387 (1982); *Allied-General Nuclear Services* (Barnwell Nuclear Fuel Plant Separation Facility), ALAB-296, 2 NRC 671, 680 (1975). All parties, including the Staff, are obligated to bring any significant new information to the Board's attention. *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), ALAB-738, 18 NRC 177, 197 n.39 (1983), *rev'd in part on other grounds,* CLI-85-2, 21 NRC 282 (1985), citing *Tennessee Valley Authority* (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC at 1394; *Union Electric Co.* (Callaway Plant, Unit 1), ALAB-750, 18 NRC 1205, 1210 n.11 (1983); *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 152-53 n.46 (1993). An agency of the government must scrupulously observe the rules, regulations, or procedures which it has established. *See United States ex rel. Accardi v. Shaughnessy,* 347 U.S. 260 (1954); *United States v. Heffner,* 420 F.2d 809, 811 (4th Cir. 1970).

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INITIAL DECISION

In this Initial Decision, the Board resolves the claim of Charlissa C. Smith that the Nuclear Regulatory Commission Staff (Staff) unlawfully denied her 2012 application for a senior reactor operator (SRO) license. We also address her allegations that (1) the Staff should have granted her a waiver of the 2012 operating test; (2) the Staff allowed her to be evaluated by a team of examiners in 2012 that was biased against her based on their knowledge of her 2011 operating test performance; and (3) the Staff, acting on her request, improperly performed its administrative review of her 2012 operating test.

We agree with Ms. Smith that the Staff acted inconsistently with its own

guidance and applied that guidance in a discriminatory manner when it denied her application for an SRO license in 2012. We further conclude that, had the Staff conducted its administrative review of the grading of the simulator portion of Ms. Smith's 2012 SRO exam in accordance with its guidance and in a fair and even-handed manner, Ms. Smith would have passed the 2012 simulator exam and, as she also passed the 2012 written exam and walkthrough exam, she should have received a license. We therefore direct the Staff to issue an SRO license to Ms. Smith, subject to the satisfaction of any other licensing requirements not considered in this proceeding, such as health, that the Staff must also assess before issuing a license pursuant to 10 C.F.R. § 55.33. The license shall be effective as of the date it is issued and shall be subject to the usual terms and conditions.[1]

I. PROCEDURAL HISTORY

In March/April 2011, Ms. Smith, an employee of the Southern Nuclear Operating Company (SNC) applied for and was tested for an SRO license at her place of employment, the Vogtle Electric Generating Plant.[2] The test was approved and administered by examiners from NRC Region II. Ms. Smith was one of six applicants who passed the walkthrough and simulator elements (the operating test) of the examination but failed the written test.[3] Because she did not pass both components, Ms. Smith was not eligible to receive an SRO license at that time.

In instances when an applicant passes the operating portion of an SRO examination but fails the written test, the NRC operator license testing procedures allow the reactor licensee to request a waiver so that when the SRO examination is next offered, the applicant need not retake the passed portion of the exam. SNC subsequently submitted preliminary waiver requests for all six of its employees

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[1] *See Alfred J. Morabito* (Senior Operator License for Beaver Valley Power Station, Unit 1), LBP-88-16, 27 NRC 583 (1988).

[2] The Vogtle Electric Generating Plant is located in Burke County near Waynesboro in eastern Georgia near the South Carolina border. Unit 1 began commercial operation in May 1987. Unit 2 began commercial operation in May 1989. Each unit is capable of generating 1,215 megawatts (MW) for a total capacity of 2,430 MW. The plant is powered by pressurized water reactors (PWRs) manufactured by Westinghouse. *See* Southern Company — Plant Vogtle, About Us, *available at* http://www.southerncompany.com/about-us/our-business/southern-nuclear/vogtle.cshtml (last visited Mar. 16, 2014).

[3] *See* Letter from Ho K. Nieh, Director, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation, to Charlissa C. Smith (Ex. CCS-014), Encl. 2, Independent Review of Contentions Related to Waiver Process and Examiner Bias at 10 (Nov. 15, 2012) [hereinafter Nov. 15 Denial Letter]. As a note, Ms. Smith self-paginated many of her exhibits. For ease of reference and for the purposes of this Order, the Board uses Ms. Smith's numbering system for any exhibit that she self-paginated.

who passed the operating portion of the 2011 test but failed the written portion. After a series of phone calls and e-mails among Region II examiners and staff at SNC, final waiver requests were submitted for all SNC applicants, except for Ms. Smith. Ms. Smith, thus, was the only SNC applicant who passed the simulator portion of the test in 2011 for whom a waiver was not requested. As a consequence, in March/April 2012, Ms. Smith retook both the operating test and the written test, this time failing the former and passing the latter.[4] The Staff informed Ms. Smith that it proposed to deny her SRO license application, and that she could seek an informal Staff review of the grading of her examination.[5]

On June 5, 2012, Ms. Smith requested the NRC review the denial of her SRO license application in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors."[6] In response, the Staff conducted an informal review of her allegations. In its November 15, 2012 Denial Letter, the Staff upheld its prior denial of Ms. Smith's SRO license application.[7] The Denial Letter stated that, if Ms. Smith did not "accept the proposed denial," she could, "within 20 days of the date of th[e] letter, request a hearing pursuant to 10 C.F.R. § 2.103(b)(2)."[8]

On December 5, 2012, Charlissa C. Smith timely filed, pursuant to 10 C.F.R. § 2.103(b)(2), a demand for a hearing, challenging the denial of her 2012 application for an SRO license.[9] Oral argument on the hearing demand was held on January 23, 2013,[10] and on February 19, 2013, over the Staff's objection, the Board granted her demand for a hearing.[11] Thereafter, telephonic prehearing conferences were held on February 26, March 18, and July 1, 2013.[12]

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[4] *See* Form ES-303-1, Individual Exam Report: Charlissa Carlette Smith (Ex. CCS-045) at 1 (Rev. 9) (May 10, 2012) [hereinafter Smith's Individual Exam Report].

[5] *See* Letter from Malcolm T. Widmann, Chief, Operation Branch 1, Division of Reactor Safety, to Charlissa C. Smith (Ex. CCS-033) (May 11, 2012) [hereinafter May 11, 2012 Widmann Letter].

[6] *See* Nov. 15 Denial Letter (Ex. CCS-014) at 10; *see also* NUREG-1021, "Operator Licensing Examination Standards for Power Reactors" (Exs. CCS-005A and 005B) at 231-34 (Rev. 9 July 2004 & Supp. 1 Oct. 2007) [hereinafter NUREG-1021]. Ms. Smith filed NUREG-1021 in two parts, exhibits CCS-005A and 005B. For the purposes of this Order, the Board uses Ms. Smith's exhibits, CCS-005A and 005B, when referring to NUREG-1021. As mentioned, Ms. Smith self-paginated several of her exhibits. For ease of reference, the Board refers to the repagination of these documents, including NUREG-1021.

[7] Nov. 15 Denial Letter (Ex. CCS-014) at 1.

[8] *Id.*

[9] *See* Licensing Board Order (Scheduling Oral Argument) (Jan. 9, 2013) (unpublished); *see also* Tr. at 1-52. Ms. Smith appeared *pro se* throughout this proceeding.

[10] Tr. at 1-52.

[11] Decision (Granting Demand for Hearing), LBP-13-3, 77 NRC 82, 98 (2013).

[12] *See* Memorandum (Memorializing February 26, 2013, Teleconference) (Feb. 26, 2013) (un-

(Continued)

The Board conducted an evidentiary hearing in Augusta, Georgia, on July 17 and 18, 2013.[13] At the hearing, the NRC Staff presented eight witnesses and offered 59 exhibits. Ms. Smith testified and presented three additional witnesses and 121 exhibits. The Board also admitted 13 Board-sponsored exhibits.[14] Transcript corrections were proposed on August 22, 2013, and were approved by the Board on September 17, 2013.[15] On September 21, 2013,[16] September 23, 2013,[17] and September 29, 2013,[18] proposed findings of fact were filed. NRC Staff filed a motion to strike on October 7, 2013,[19] to which Ms. Smith filed a response on October 22, 2013.[20] The Board closed the evidentiary record on September 17, 2013.[21]

II. REGULATORY BACKGROUND

A. Operator Licensing

Part 55 of the Commission's regulations establishes procedures and criteria for the issuance of licenses to operators and senior operators of nuclear facilities licensed under the Atomic Energy Act of 1954 as amended or section 202 of the Energy Reorganization Act of 1974, as amended.[22] Any individual who manipulates the controls of any facility licensed under Parts 50, 52, or 54 of the agency's regulations is required to have an operator's license.[23]

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published); Order (Memorializing March 18, 2013 Teleconference and Establishing Procedures) (Mar. 20, 2013) (unpublished); Order (Memorializing July 1, 2013 Prehearing Conference) (July 3, 2013) (unpublished); *see also* Tr. at 53-128.

[13] *See* 78 Fed. Reg. 31,988 (May 28, 2013).

[14] Tr. at 141-43, 700; *see also* Licensing Board Order (Adopting Joint Proposed Transcript Corrections, Granting in Part and Denying in Part Staff Motion to Admit Additional Exhibits, Admitting Board Exhibit 13, and Closing the Evidentiary Record) (Sept. 17, 2013) (unpublished) [hereinafter Sept. 17 Board Order].

[15] *See* Sept. 17 Board Order at 2.

[16] The Petitioner's Propose[d] Findings of Fact and Conclusions of Law Regarding Statements of Position 1-12 (Sept. 21, 2013).

[17] NRC Staff Proposed Findings of Fact and Conclusions of Law (Sept. 23, 2013) [hereinafter Staff PFF].

[18] The Petitioner['s] Response to the NRC [Staff's] Propose[d] Findings of Fact and Conclusions of Law Regarding Statements of Position 1-12 (Sept. 29, 2013) [hereinafter Smith's Response to Staff PFF].

[19] NRC Staff Motion to Strike Petitioner's Reply to the NRC Staff's Proposed Findings of Fact and Conclusions of Law or in the Alternative, to File a Staff Reply (Oct. 7, 2013).

[20] C. Smith's Response to NRC Staff Motion to Strike (Oct. 22, 2013).

[21] Sept. 17 Board Order at 8.

[22] *See* 10 C.F.R. § 55.1.

[23] *See id.* § 55.2.

An SRO is "any individual licensed under [10 C.F.R. Part 55] to manipulate the controls of a facility and to direct the licensed activities of licensed operators."[24] To obtain an SRO license, the applicant must pass both a written test and an operating test and meet the other requirements specified in 10 C.F.R. Part 55.[25] If an applicant passes only one of the two parts of the licensing test, he will not receive a license.

B. NUREG-1021

Section 55.40 of the regulations states the Commission shall use NUREG-1021 to prepare and evaluate licensing examinations.[26] NUREG-1021 specifies the Staff's policies, procedures, and practices for administering the initial and requalification written examinations and operating tests.[27] It lists both goals and specific procedures for the preparation, administration, and grading of the operator license examination. The procedures are generally set forth in chapters called "Examiner Standards." NUREG-1021 states that the goal of the tests is to determine "whether the applicant's level of knowledge and understanding meet the minimum requirements to safely operate the facility for which the license is sought."[28] NUREG-1021 further states that it is intended to "ensure the equitable and consistent administration of examinations for all applicants."[29]

NUREG-1021 provides that the NRC's regional offices shall obtain approval from the Office of Nuclear Reactor Regulation (NRR) operator licensing program office at agency headquarters before knowingly deviating from the intent of any of the NUREG-1021 standards. Moreover, the regional offices are to obtain NRR program office[30] approval before undertaking any initiative that could undermine examination consistency among the regions.[31]

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[24] *See id.* § 55.4. The provisions of 10 C.F.R. Part 55 govern applications for Reactor Operator and SRO licenses. *See id.* § 55.1.

[25] *See id.* § 55.33(a); *see also* NUREG-1021 (Ex. CCS-005A) at 33.

[26] *See* 10 C.F.R. § 55.40.

[27] *See generally* NUREG-1021 (Exs. CCS-005A and -005B).

[28] NUREG-1021 (Ex. CCS-005A) at 141; *see also* 10 C.F.R. § 55.33(a)(2).

[29] NUREG-1021 (Ex. CCS-005A) at 13.

[30] Within the Office of Nuclear Reactor Regulation is a Division of Inspection and Regional Support which provides centralized management for several programs concerning operating power reactors including reactor inspection, performance assessment (the reactor oversight process), operational events, operator licensing, financial assessments, allegations, and international programs.

[31] *See* NUREG-1021 (Ex. CCS-005A) at 41.

C. The Waiver Process

Under the agency's regulations and NUREG-1021 standards, an applicant who was denied a license after the first examination may elect to retake the tests. In this scenario, the regulations governing the application process provide that "[a]n applicant who has passed either the written examination or operating test and failed the other may request in a new application on Form NRC-398 to be excused from reexamination on the portions of the examination or test which the applicant has passed."[32] In effect, the applicant is able to request a waiver of the portion of the examination that he passed.

Applicants are directed to

> submit preliminary, uncertified license applications . . . for review by the NRC's regional office at least 30 days before the examination date. This will permit the NRC staff to make preliminary eligibility determinations, . . . evaluate any waivers that might be appropriate, and obtain additional information, if necessary, while allowing the facility licensee to finish training the applicants before the certified applications are due.[33]

To initiate a waiver request, the applicant must mark Item 4.f on the preliminary form NRC-398 and explain the basis for requesting a waiver in Item 17, "Comments."[34] The preliminary form NRC-398 need not be signed by either the applicant or the company that employs the applicant.[35] The NRC regional office must review the preliminary applications "as soon as possible after they are received," including evaluating any waiver requests in accordance with NUREG-1021, ES-204.[36]

The final form NRC-398 is due at least 14 days before the examination date.[37] On the final NRC-398, "[t]he facility licensee's senior management representative on site must certify the final license application, thereby substantiating the basis for the applicant's waiver request."[38] The NRC regional office has the discretion to grant a waiver request "if it determines that sufficient justification is presented."[39]

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[32] 10 C.F.R. § 55.35(b); *see also* NUREG-1021 (Ex. CCS-005A) at 84.

[33] NUREG-1021 (Ex. CCS-005A) at 72.

[34] *Id.* at 82.

[35] *See* Tr. at 281 (Tucker).

[36] NUREG-1021 (Ex. CCS-005A) at 73; *see also id.* at 47.

[37] *Id.* at 73.

[38] *Id.* at 82.

[39] 10 C.F.R. § 55.35(b); *see also* NUREG-1021 (Ex. CCS-005A) at 84.

D. Conflict of Interest Limitations

NUREG-1021 includes conflict of interest provisions that address the assignment of examiners to an examination team. Two such provisions are relevant here. First, "[t]he regional office shall not assign an examiner who failed an applicant on an operating test to administer any part of that applicant's retake operating test."[40] This specific prohibition is supplemented by a broader requirement, which directs that "[i]f an examiner is assigned to an examination that might appear to present a conflict of interest, the examiner shall inform his or her immediate supervisor of the potential conflict."[41] When informed of a potential conflict, the supervisor "must apply sound judgment to the facts of each case" and, if any doubt exists, "consult with regional management and/or the NRR operator licensing program office to resolve the issue."[42]

E. The Operating Exam

The operating exam consists of a plant walkthrough and a simulator test.[43] "The walk-through portion of the operating test consists of two parts ('Administrative Topics' and 'Control Room/In-Plant Systems'), each focusing on specific knowledge and abilities (K/As) required for licensed operators to safely discharge their assigned duties and responsibilities."[44] For the Administrative Topics, "[t]he applicant's competence in each topic is evaluated by administering job performance measures (JPMs) and asking specific 'for cause' followup questions, as necessary, based on the applicant's performance. . . ."[45] Similarly, for Control Room/In-Plant Systems, "[t]he applicant's knowledge and abilities relative to each system are evaluated by administering JPMs and, when necessary, specific followup questions based on the applicant's performance of each JPM."[46]

The simulator test is administered on an NRC-approved or plant-referenced simulator.

> The simulator test is administered in a team format with up to three applicants (or surrogates) filling the RO and SRO license positions (as appropriate) on an operating crew. . . . This format enables the examiner to evaluate each applicant's ability to function within the control room team as appropriate to the assigned position, in such a way that the facility licensee's procedures are adhered to and that the

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[40] NUREG-1021 (Ex. CCS-005A) at 53.
[41] *Id.*
[42] *Id.* at 52.
[43] *See id.* at 102.
[44] *Id.*
[45] *Id.* at 103.
[46] *Id.* at 104.

> limitations in its license and amendments are not violated. . . . Each team or crew of applicants is administered a set of scenarios designed so that the examiners can individually evaluate each applicant on a range of competencies applicable to the applicant's license level.[47]

F. Grading of the Simulator Exam

In NUREG-1021, ES-303 states that simulator examinations are to be graded in accordance with six performance-related competencies, stated here with minor clarification. The first four in the list are for Reactor Operator (RO) candidates. The last two are for SRO candidates. All six performance-related competencies are to be evaluated for candidates who are being examined as Instant SRO candidates — those SRO candidates (like Ms. Smith) who have not previously held RO licenses. These six are:

1. Interpretation and Diagnosis of Instrumentation Indications and Plant Conditions
2. Use of Plant Procedures
3. Control Board Operations
4. Communications and Crew Interactions
5. Directing Operations
6. Use of and Compliance with Technical Specifications[48]

Each competency is further divided into several Rating Factors (RFs) for grading purposes. Scores are given for each RF, and are then added together to provide a total score for each Competency. The range of scores is from 1 to 3 in each RF. The RFs are weighted within each Competency. To pass the simulator examination, a candidate must either

1. Score greater than 1.80 (out of a maximum of 3) in every evaluated Competency, or
2. Score at least 2.00 in competencies 1, 2, 3, 5, and 6 if Competency 4, Communications, is scored less than 1.80 but greater than 1.00.[49]

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[47] *Id.* at 105.

[48] *See id.* at 142-49.

[49] *Id.* at 146. NUREG-1021 describes the competencies. *See id.* at 252-54. ES-303 Attachment Forms ES-303-1, the Individual Examination Report, and ES-303-3 and ES-303-4, worksheets for the RO and SRO simulator examinations, respectively, break down each competency into a number of specific rating factors (RFs) to be considered during the grading process. *See id.* at 150-59.

G. Administrative Review of a License Application Denial

NUREG-1021 provides a procedure under which an applicant who has received an initial license application denial may request an administrative review of the denial.[50] In an instance such as this in which the applicant failed the operating exam, he may request an administrative review under ES-502 C.1.b. In such a case,

> [T]he NRR operator licensing program office will determine whether to (1) review the appeal internally; (2) have the regional office review the appeal, or (3) convene a three-person board to review the applicant's documented contentions. The appeal board will normally be composed of a branch chief and two examiners or subject matter experts; it may also include a representative from the affected region, but no one who was involved with the applicant's licensing examination.[51]

Based on the findings and recommendations from this review, the NRR operator licensing program office will decide whether to sustain or to overturn the applicant's license examination failure.[52] NUREG-1021, ES-502 D.2.c, states that "[w]hen the NRR operator licensing program office has concurred in the results of the review, the NRC's regional office will . . . (2) review the examination results of the other applicants to determine whether any of the licensing decisions are affected. . . ."[53] This provision is intended to ensure that all applicants who took the same exam will be graded under the same criteria because, if the review panel modifies the criteria for the applicant who sought administrative review, the results of other applicants must be reviewed to determine whether they would be affected by the change.

H. Subpart L Disclosure Requirements

Because parties to a Subpart L proceeding[54] may not seek discovery from the other parties to the proceeding,[55] the Commission's regulations require all such parties to make periodic mandatory disclosures.[56] Each party and the NRC Staff are required to make initial disclosures under paragraphs (a) and (b) of section 2.336, based on the information and documentation then reasonably available to

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[50] *Id.* at 231-35.

[51] *Id.* at 234.

[52] *Id.*

[53] *Id.* at 235.

[54] *See generally* Subpart L — Informal Hearing Procedures for NRC Adjudications, 10 C.F.R. § 2.1200 *et seq.*

[55] *Id.* § 2.1203(d).

[56] *Id.* § 2.336(b).

it. A party, including the NRC Staff, is not excused from making the required disclosures because it has not fully completed its investigation of the case, it challenges the sufficiency of another entity's disclosures, or that another entity has not yet made its disclosures.[57] All disclosures under this section must be accompanied by a certification (in the form of a sworn affidavit) that all relevant materials required by this section have been disclosed, and that the disclosures are accurate and complete as of the date of the certification.[58] The duty of disclosure is continuing. Parties must update their disclosures every month after initial disclosures on a due date selected by the presiding officer in the order admitting contentions.[59] Disclosure updates shall include any documents subject to disclosure that were not included in any previous disclosure update.[60]

The NRC Staff is also under a special obligation to create and to maintain a hearing file.[61] The NRC Staff has a continuing duty to keep the hearing file up to date.[62] A party, including the Staff, may be sanctioned for noncompliance with the disclosure regulations.[63] The presiding officer may impose sanctions on a party that fails to provide any document required to be disclosed, unless the party demonstrates good cause for its failure to make the disclosure.[64]

III. SCOPE AND STANDARD OF REVIEW

The Staff's November 15, 2012 Denial Letter stated that the decision was based upon two Staff administrative reviews.[65] The first, performed by an "Informal Review Panel" (the IRP), sustained Ms. Smith's failure of the 2012 operating exam.[66] The second Staff administrative review, referred to as the "fairness review," rejected her claims regarding the handling of a potential waiver of the 2012 operating exam and NRC examiner bias.[67] The results of both reviews were enclosed with the November 2012 Denial Letter.[68]

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[57] *Id.* § 2.336(c).
[58] *Id.*
[59] *Id.* § 2.336(d).
[60] *Id.*
[61] *Id.* § 2.1203(a).
[62] *Id.* § 2.1203(c).
[63] *Id.* § 2.336(e)(1).
[64] *Id.* § 2.336(e)(2).
[65] *See* Nov. 15 Denial Letter (Ex. CCS-014) at 1.
[66] *See id.,* Encl. 1, Summary of Informal Review Results Sustaining Failure of Operating Test at 3-9.
[67] *See id.,* Encl. 2, Independent Review of Contentions Related to Waiver Process and Examiner Bias at 10-17.
[68] *See id.* at 1.

The Board's review of Ms. Smith's claims that the Staff unlawfully denied her application for an SRO license must be based on the November 2012 Denial Letter and the administrative reviews upon which it was founded. In *Michel A. Philippon,* the presiding officer stated that the Staff's decision at the conclusion of its administrative reviews is the final Staff position and "hence the only Staff position open to [the applicant] to challenge before the Presiding Officer."[69] Accordingly, the Staff "may not take a position or assert facts before the Presiding Officer contrary to a matter decided by the appeal board (i.e., the Staff itself) on [the applicant's] informal appeal absent an explicit confession of error."[70]

Although the Commission reversed the presiding officer's decision in *Philippon,* it did so because the presiding officer erred in concluding that the Staff had departed from the findings of its appeal board (the equivalent of the IRP in the present case). The Commission did not disagree with the presiding officer's ruling that the Staff could not defend its decision on a basis inconsistent with its own informal review. On the contrary, the Commission's analysis is fully consistent with that ruling.[71]

Consistent with this approach, other licensing boards have limited their review to those issues that were resolved against the license applicant in the Staff's informal review. For example, in *Randall L. Herring,*[72] the applicant received a grade of unsatisfactory on four topics of his operating test. The Staff's informal review determined that he had, in fact, answered two of the topics satisfactorily. Therefore, the presiding officer only addressed the two answers that the Staff's review considered unsatisfactory. In *Calabrese,* the applicant initially failed both the written exam and the operating test.[73] The administrative review, however, determined he had passed the written exam. Therefore, the only issues before the presiding officer were those relating to the operating test.

We have an analogous situation here with respect to the grading of Ms. Smith's 2012 simulator exam. The IRP agreed with Ms. Smith that three alleged errors identified during the simulator exam should not have counted against her.[74] Thus, the Staff itself resolved those alleged errors in Ms. Smith's favor, and we therefore

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[69] *Michel A. Philippon* (Denial of Senior Operator License Application), LBP-99-44, 50 NRC 347, 377 (1999), *rev'd on other grounds,* CLI-00-3, 51 NRC 82 (2000).

[70] *Philippon,* LBP-99-44, 50 NRC at 378.

[71] *See Philippon,* CLI-00-3, 51 NRC at 85.

[72] *Randall L. Herring* (Senior Reactor Operator License for Catawba Nuclear Station), LBP-98-30, 48 NRC 355, 358 (1998).

[73] *Frank J. Calabrese Jr.* (Denial of Senior Reactor Operator License), LBP-97-16, 46 NRC 66, 68-69 (1997).

[74] The errors occurred during Scenario 7, Event 1; Scenario 3, Event 7; and Scenario 7, Event 6. *See infra* pages 186-201.

need not consider them further. We will thus limit the scope of our review to the determinations of the informal review that were adverse to Ms. Smith.

The Staff has not confessed error with respect to the grading issues the IRP resolved in Ms. Smith's favor (or any other issue).[75] It maintains, however, that Ms. Smith must prove that those IRP rulings in her favor were correct (i.e., that the Exam Team determinations on those issues were incorrect).[76] But, as the presiding officer in *Philippon* recognized, the result of the Staff's informal review is the position of the Staff, and thus it may not be questioned by the Staff in an adjudicatory proceeding absent a confession of error.[77] This proceeding is not a forum for the Staff to revisit issues that its informal review resolved in Ms. Smith's favor. Accordingly, Ms. Smith is not required to present evidence to justify Staff rulings that support her position. She is required to meet her burden of proof only with respect to the Staff determinations that she challenges.

The standard of review in this case, as in most administrative proceedings, is a preponderance of the evidence, with the applicant or proponent of an order bearing the burden of proof.[78] This is consistent with 10 C.F.R. § 2.325 which states "[u]nless the presiding officer otherwise orders, the applicant or the proponent of an order has the burden of proof."[79] This Board has held that Ms. Smith bears the burden of proof in this proceeding.[80]

The Staff argues that the Supreme Court and the Commission recognize a presumption that "governmental officials, acting in their official capacities, have properly discharged their duties" and that, in order to rebut this presumption, a petitioner's burden of proof involves the presentation of "clear evidence" to the

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[75] *Philippon,* LBP-99-44, 50 NRC at 377 ("Silence is not a confession of error. Nor can there be an implied confession of error.").

[76] *See* NRC Staff Statement of Position Concerning the Claim by Charlissa C. Smith that the NRC Improperly Denied Her 2012 Senior Reactor Operator License Application (Ex. NRC-001) at 74-85 (May 31, 2013) [hereinafter Staff's Statement of Position].

[77] *Philippon,* LBP-99-44, 50 NRC at 378 ("Although the Staff . . . [is] free to carry on internecine warfare, [it is] not free to wage it in this adjudicatory proceeding where all elements of the Staff appear as a single party.").

[78] "[T]he Commission has never adopted a 'clear and convincing' standard as the evidentiary yardstick in its enforcement proceedings, nor are we required to do so under the AEA or the APA. Typically, NRC administrative proceedings have applied a 'preponderance of the evidence' standard in reaching the ultimate conclusions after hearing in resolving a proceeding. . . . The 'preponderance' standard is also the one generally applied in proceedings under the APA." *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 302 n.22 (1994) (citations omitted), *aff'd, Advanced Medical Systems, Inc. v. NRC,* 61 F.3d 903 (6th Cir. 1995).

[79] Staff PFF ¶ 41.

[80] *See, e.g.,* Tr. at 109 (J. Spritzer) ("[Ms. Smith] has the burden of proof in this [proceeding]."); *see also* Staff PFF ¶ 42.

contrary.[81] For instance, the Staff acknowledges that applicants may prevail if they prove that a particular contested assessment of a deficiency was "inappropriate or unjustified"[82] or if the assessment was "arbitrary or an abuse of . . . discretion."[83] The Staff also states:

> The Staff improperly discharges its duties with respect to the grading of an operating test if the grading is "inappropriate or unjustified" or if the grading "stray[s] too far afield of the . . . twin goals of equitable and consistent examination administration" thus becoming "arbitrary or an abuse of discretion." In assessing whether an applicant satisfies the burden of establishing that the Staff's determination of the applicant's performance was inappropriate, unjustified, arbitrary, or an abuse of discretion, the Board should consult NUREG-1021.[84]

We agree with the Staff that NUREG-1021 standards should guide our review in this case. To be sure, NUREG documents do not generally establish regulatory requirements, but NUREG-1021 states that it is intended to "help NRC examiners and facility licensees [to] better understand the . . . initial and requalification [examination processes and to] ensure the equitable and consistent administration of examinations for all applicants."[85] The Commission issued NUREG-1021 "[t]o set forth consistent standards for operator and SRO examinations at various facilities."[86] In order to avoid a finding of arbitrary and capricious agency action, the Staff may not depart from its established policies, procedures, and practices without a reasonable explanation for the change.[87] We therefore agree with the presiding officer in *Calabrese,* as well as the Staff, that we may properly look to NUREG-1021 to determine whether the Staff has strayed too far from its stated goals of "equitable and consistent" examination administration,[88] and whether its actions were arbitrary or an abuse of discretion.

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[81] Staff's Statement of Position (Ex. NRC-001) at 5 (quoting *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-06-22, 64 NRC 37, 49 n.48 (2006)).

[82] *Philippon,* LBP-99-44, 50 NRC at 358 ("[T]he dispute between Mr. Philippon and the Staff comes down to the question whether Mr. Philippon has met his burden of establishing that the Staff's scoring of his performance . . . was inappropriate or unjustified.").

[83] *Calabrese,* LBP-97-16, 46 NRC at 89; *see also* Staff PFF ¶ 44.

[84] Staff's Statement of Position (Ex. NRC-001) at 5 (quoting *Calabrese,* LBP-97-16, 46 NRC at 86).

[85] NUREG-1021 (Ex. CCS-005A) at 13.

[86] *Herring,* LBP-98-30, 48 NRC at 357.

[87] *See Atchison, Topeka & Santa Fe Railway Co. v. Wichita Board of Trade,* 412 U.S. 800, 808 (1973) ("Whatever the ground for the [agency's] departure from prior norms, . . . it must be clearly set forth so that the reviewing court may understand the basis of the agency's action . . . ."); *Citizens Awareness Network, Inc. v. NRC,* 59 F.3d 284, 291 (1st Cir. 1995); *Northern California Power Agency v. Federal Energy Regulatory Commission,* 37 F.3d 1517, 1522 (D.C. Cir. 1994).

[88] *Calabrese,* LBP-97-16, 46 NRC at 86; *cf. Ralph L. Tetrick* (Denial of Application for Reactor

(Continued)

Moreover, pursuant to 10 C.F.R. § 55.40, the Commission "shall use the criteria in NUREG-1021, 'Operator Licensing Examination Standards for Power Reactors,' in effect 6 months before the examination date to prepare the written examinations required by [10 C.F.R.] §§ 55.41 and 55.43 and the operating tests required by [10 C.F.R.] § 55.45." Thus, NUREG-1021 criteria that apply to the preparation of written examinations and operating tests are binding upon the Staff.

Accordingly, the Board will evaluate the evidence to determine whether the Staff discharged its duties in a "regular" manner, and whether or not Ms. Smith has shown that her treatment was inconsistent with NUREG-1021 or otherwise irregular, inequitable, arbitrary, or an abuse of discretion. While the Board recognizes that public officials are afforded a presumption of regularity in the discharge of their duties,[89] this presumption can be shifted upon the presentation of evidence showing official actions that are irregular. If the facts before the Board do not appear regular, then the presumption does not attach.[90] The presumption "does not help to sustain an action that on its face appears irregular. . . . [In fact,] the presumption operates in reverse. If it appears irregular, it is irregular, and the burden shifts to the proponent to show the contrary."[91]

IV. MS. SMITH'S STATEMENT OF POSITION

Ms. Smith's Statement of Position lists twelve issues.[92] Statement of Position 1 concerns the NRC's response to the preliminary waiver request. Ms. Smith states that (1) "[g]rade comparison between the students and the pass criteria contradict the decision to deny the waiver if submitted;" and (2) the Staff improperly contacted the facility to question the submittal of the preliminary waiver request rather than processing it according to their procedure. According to Ms. Smith, "[t]he NRC does not provide a valid justification as to why C. Smith was singled out and the facility was contacted to determine if the submittal was intentional."[93]

Ms. Smith's Statement of Position 2 maintains that, under the conflict of interest restrictions in NUREG-1021, Messrs. Meeks and Capehart should not have been assigned to her 2012 examination team because both individuals had

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Operator License), CLI-97-10, 46 NRC 26, 31-32 (1997) (because agency practice is one indicator of how agency interprets regulations, consistently held Staff view on operator testing policy matter will not be disturbed).

[89] *See McIntyre-Handy v. West Telemarketing Corp.,* 97 F. Supp. 2d 718, 727 (E.D. Va. 2000).

[90] *See Collins v. Shinseki,* 2013 WL 6000535 at *6 (Vet. App. 2013).

[91] *United States v. Roses Inc.,* 706 F.2d 1563, 1567 (Fed. Cir. 1983).

[92] *See* [Smith's] Statements of Position (Ex. CCS-075) (May 1, 2013) [hereinafter Smith's Statement of Position]; [Smith's] Prefiled Testimony on Statements of Position (Ex. CCS-076) (May 1, 2013) [hereinafter Smith's Prefiled Testimony].

[93] Smith's Statements of Position (Ex. CCS-075) at 2.

been members of her 2011 operating exam team and had formed strong negative opinions about her at that time that necessarily influenced the grading of her 2012 operating exam.[94]

Ms. Smith's Statement of Position 3 contends that the IRP, after initially finding she had passed the simulator examination, was unduly influenced by the Region II Exam Team and Operator Licensing and Training Branch (IOLB) pressures. Ms. Smith alleges that the Exam Team initiated continual contact[95] with the IRP after the initial interviews, and also that the IOLB provided direction based on examiner comments to potentially sustain the failure.[96] She also objected that the IRP should not have included noncontested items in its review,[97] because noncontested items are not discussed in the NRC procedure for Processing Requests of Administrative Review and Hearings.[98] Noncontested items are those items that were not listed in her original request for a review of her original grading.[99] Finally, Ms. Smith complained that a complete grade sheet was not included with the Denial Letter.[100]

Ms. Smith's Statements of Position 4-12 concern alleged errors in the scoring of her 2012 operating exam during the administrative review.[101] Ms. Smith alleges that she was denied equal treatment because she was graded in a manner and held to a higher standard than her peers, in violation of NUREG-1021.[102] Ms. Smith maintains that she was "treated differently" from other license applicants,[103] and that she "has only requested to be treated equivalent to her peers."[104] Ms. Smith also alleged nine specific Staff errors in the grading of her 2012 operating

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[94] *See id.*

[95] *See* Vogtle Operating Exam Appeal (Ex. CCS-101) (Undated) [hereinafter Vogtle Operating Exam Appeal]; *see also* Grading Philosophy and Consistency (Ex. NRC-032) (Undated) [hereinafter Grading Philosophy and Consistency].

[96] *See* E-mail from Donald Jackson, Chief, Region I, Operations Branch to David Muller & Chris Steely (Ex. CCS-059) (Oct. 16, 2012 2:01 PM) [hereinafter Oct. 16, 2012 Jackson E-mail] & E-mail from John McHale to Donald Jackson (CCS-059) (Oct. 16, 2012 11:22 AM) [Oct. 16, 2012 McHale E-mail]. As a note, CCS-059 contains two different e-mails.

[97] Smith's Statement of Position (Ex. CCS-075) at 3.

[98] OLMC-500: Processing Requests for Administrative Reviews and Hearings (Ex. CCS-030) (Dec. 2011) [hereinafter OLMC-500].

[99] *See* Smith's Request for NRC Staff Review of 2012 Exam — Letter from Charlissa C. Smith to NRC Staff (Ex. CCS-034) (Undated) [Smith's 2012 Review Request Letter] and supporting material.

[100] Smith's Statement of Position (Ex. CCS-075) at 3 (referring to the Nov. 15 Denial Letter (Ex. CCS-014)).

[101] *See* Smith's Prefiled Testimony (Ex. CCS-076) at 21-48.

[102] *Id.* at 54-55. As a note, there is a blank sheet between pages 54 and 55 of this document.

[103] Smith's Prefiled Testimony (Ex. CCS-076) at 54.

[104] *Id.* at 54.

exam.[105] Statements of Position 4 through 11 concern errors she also contested in the original review request of June 5, 2012.[106]

Statement of Position 12 concerns an error in Scenario 7, Event 5, in which Ms. Smith had taken a control switch for a Power Operated Relief Valve (PORV) initially to the open position before taking it to the close position.[107] Ms. Smith's original review request of June 5, 2012, did not contest this error. However, during its review, the IRP designated the error as related to a Critical Task, even though it had not been treated as such by the Exam Team in its development of and grading of her 2012 operating exam. In an analysis developed in preparation for the IRP review, the Exam Team changed its original position, claiming that it had "mis-graded" this event "because it was a failed critical task."[108] Accepting the Exam Team's reversal of its original position, the IRP stated that "[t]his review determined that the applicant's incorrect action . . . was related to a critical task . . . in accordance with NUREG-1021, Appendix D, Item D.1.a."[109] Because of this change by the IRP, Ms. Smith was assessed a greater scoring deduction for the error. This resulted in a downgrading of RF 3.a. to a 1 from what had earlier been a 2 in the IRP's assessment.[110] This single change resulted in the failure determination for Ms. Smith by the IRP.

In her Statement of Position 12, Ms. Smith maintained that (1) her error in operation of the PORV control switch should not have been reevaluated by the IRP because she did not contest that error; (2) designating operation of the PORV control switch as a critical task during the informal review, 6 months after the simulator exam had been completed, violated the requirement that critical tasks be defined and identified in the examination outline distributed to examiners before the exam is given; and (3) the IRP failed to define the critical task as required by NUREG-1021, Appendix D, including failing to provide

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[105] *Id.* at 21-48.

[106] *See generally* Smith's 2012 Review Request Letter (Ex. CCS-034), wherein Ms. Smith noted seven (4, 5, 6, 7, 9, 10, 11) Statements of Position related to the grading of her 2012 operating examination.

[107] Form ES-303-1, Smith's Individual Examination Report: Charlissa Carlette Smith (Ex. NRC-045) at 19 (Rev. 9) (Undated) [hereinafter Smith's Individual Exam Report].

[108] Rating Factor 3.A.: Control Board Operations, Locate & Manipulate (Ex. CCS-039) at 3 (Undated) [hereinafter Rating Factor 3.A.].

[109] Memorandum from Donald Jackson, Chief, Operations Branch, Division of Reactor Safety, Region I, to Jack McHale, Operator Licensing and Training Branch, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation (Ex. NRC-054) at 37-38 (Undated) [hereinafter NRC Panel Review Results].

[110] Letter from Ho K. Nieh, Director, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation, to Charlissa C. Smith (Ex. CCS-024) at 37 (Undated) [hereinafter Informal Review Results].

a measurable performance indicator to determine whether the critical task was performed correctly.[111]

In response to Ms. Smith's claims, the NRC Staff argues that it "properly and reasonably discharged its duties with respect to Ms. Smith's preliminary waiver request,"[112] there was no Staff bias or conflict of interest in the administrative review and a final waiver request was not actually denied because SNC did not submit a final waiver request for Ms. Smith. The Staff maintains that all Staff duties were discharged consistent with the requirements of 10 C.F.R. Part 55, the guidance in NUREG-1021 and OLMC-500,[113] past NRC precedent, and common sense.[114]

V. RACIAL AND GENDER DISCRIMINATION

Ms. Smith is an African American female. She has alleged from the start that she was treated differently than other examination candidates. The record indicates that of the ten license applicants in 2011, eight were men and two were women. Both women were African American and both were denied licenses.[115] Ms. Smith was the only black female license applicant for the 2012 exam and was again denied a license. Currently, at Plant Vogtle, there are two female SROs but no African American SROs.[116]

Nevertheless, this Board was established to conduct an adjudicatory licensing safety proceeding under 10 C.F.R. Part 2, Subpart L, procedures. It was not established to perform an investigation into the Staff's compliance with the antidiscrimination statutes and regulations impacting the operator licensing program. The NRC Staff maintains that "this Board does not have the authority to rule on issues of race or sex bias or discrimination."[117] The NRC Staff is correct that this proceeding was not established as a forum to adjudicate a racial or gender discrimination case. There is insufficient evidence in this record to make findings of racial or gender discrimination, and in any event we have not been empowered to do so.

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[111] Smith's Statement of Position (Ex. CCS-075) at 9-10.

[112] *See* Tr. at 151 (Wachutka).

[113] Operator Licensing Manual Chapter (OLMC) is to provide additional guidance to the Staff on the implementation of the requirements contained in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," section ES-502, concerning the processing of applicant-requested administrative reviews and hearings. *See* OLMC-500 (Ex. CCS-030) at 1; *see also* NUREG-1021 (Ex. CCS-005A) at 231-35.

[114] Tr. at 151 (Wachutka).

[115] Tr. at 184, 186 (Smith).

[116] Tr. at 202 (Smith).

[117] Staff PFF ¶ 511.

VI. THE STAFF'S MOTION TO STRIKE

On September 21, 2013,[118] Ms. Smith filed proposed findings of fact and conclusions of law. The NRC Staff filed its proposed findings of fact and conclusions of law on September 23, 2013,[119] and Ms. Smith filed a reply to the Staff's proposed findings of fact and conclusions of law on September 29, 2013.[120] NRC Staff filed a motion on October 7, 2013, requesting the Board to: (1) strike Ms. Smith's reply in its entirety because the Board's scheduling orders did not state that Ms. Smith could submit such a reply, (2) strike the specific portions of the reply that constitute new proposed facts and arguments, or (3) allow the Staff to file a reply to Ms. Smith's proposed findings of fact and conclusions of law.[121] Ms. Smith filed a response to the Staff motion to strike on October 22, 2013.[122] The specific portions of Ms. Smith's reply to which the Staff objects deal with: (1) the educational background of the only other African American female tested in 2011,[123] (2), the large number of examiner comments both African American females received from the Region II examiners in 2011;[124] and (3) the level of scrutiny and the number of comments both received.[125]

Inasmuch as these three specific portions deal with the issue of racial or gender discrimination and we have concluded that racial and gender claims are beyond the scope of this adjudicatory proceeding, we grant the Staff's motion and strike the three identified passages in Ms. Smith's reply. As to the remainder of her reply, the Board has not considered it in this ruling. Accordingly, the Motion to Strike is moot as to the request to strike the reply in its entirety or permit the Staff to file its own reply.

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[118] The Petitioner's Propose[d] Findings of Fact and Conclusions of Law Regarding Statements of Position 1-12 (Sept. 21, 2013) [hereinafter Smith PFF].

[119] *See generally* Staff PFF.

[120] The Petitioner['s] Response to the NRC [Staff's] Propose[d] Findings of Fact and Conclusions of Law Regarding Statements of Position 1-12 (Sept. 29, 2013) [hereinafter Smith's Response to Staff PFF].

[121] *See* NRC Staff Motion to Strike Petitioner's Reply to the NRC Staff's Proposed Findings of Fact and Conclusions of Law or in the Alternative, to File a Staff Reply (Oct. 7, 2013).

[122] C. Smith's Response to NRC Staff Motion to Strike (Oct. 22, 2013).

[123] *See* Smith's Response to Staff PFF at 5.

[124] *See id.* at 19.

[125] *See id.* at 27.

VII. FINDINGS OF FACT AND BOARD ANALYSIS OF MS. SMITH'S CLAIMS

A. Charlissa Smith's 2011 SRO License Examination

1. Ms. Smith is currently employed by SNC as a member of the Vogtle Emergency Preparedness Group.[126] She holds a bachelor of science degree in general chemistry.[127] She was an officer in the United States Army for 6 years, serving as a Nuclear, Biological, and Chemical Officer for 3 of those years.[128] Prior to her current employment, she was a nuclear chemistry technician for 3 years and a chemistry foreman for 3 years at Vogtle.[129]

2. Ms. Smith worked in the Operations section at the Vogtle plant. Ms. Smith was approached by SNC to apply for the Senior Reactor Operator course.[130]

3. In 2009, Ms. Smith applied to, and was selected for, Vogtle's operator training program as an SRO-instant student.[131]

4. Ms. Smith was a member of the operator training program class called "Hot License 16" (HL-16), which was preparing twenty students for the March/April 2011 operator licensing exam.[132]

5. As a member of HL-16, her full-time job was training in preparation for the SRO examination.[133]

6. The operator training program was 2 years in duration. It covered the general fundamentals of nuclear power generation, nuclear power plant systems, and control room operations.[134]

7. Ms. Smith's overall performance in the operator training program placed her approximately in the middle of the HL-16 class.[135]

8. Toward the end of the 2-year operator training program, its students were required to take a "company audit," which was a written examination and operating test developed and administered by Vogtle that was intended to mimic

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[126] Affidavit of Charlissa C. Smith (Ex. CCS-077) at 1 (April 30, 2013) [hereinafter Smith's Aff.].

[127] Smith's Aff. (Ex. CCS-077) at 1; Tr. at 187 (Smith).

[128] Smith's Aff. (Ex. CCS-077) at 1.

[129] *Id.* at 1; Tr. at 188 (Smith); Staff PFF ¶ 47.

[130] Tr. at 188 (Smith).

[131] SRO-Instant indicates the applicant has not previously held a Reactor Operator's license. *See* NUREG-1021 (Ex. CCS-005B) at 461; Staff PFF ¶ 60.

[132] Tr. at 168-69, 191 (Smith); Staff PFF ¶ 61.

[133] Tr. at 191 (Smith); Staff PFF ¶ 62.

[134] Tr. at 189-91 (Smith); Staff PFF ¶ 63.

[135] Tr. at 192 (Smith), 288 (Tucker); Staff PFF ¶ 64.

the actual NRC written examination and operating test.[136] Ms. Smith passed both the written and the operating HL-16 company audits.[137]

9. Of the twenty students originally selected for HL-16, ten students completed the SNC operator training program, including Ms. Smith.[138]

10. On March 7, 2011, SNC submitted operator license applications on behalf of these ten students.[139] Subsequently, these ten applicants took the operating test and written examination in March/April 2011.[140]

11. From March 16 to March 24, 2011, Ms. Smith was administered an SRO-instant operating test.[141] Her NRC examiners during this operating test were Jay Hopkins, Examiner of Record, Philip Capehart, Chief Examiner, and Michael Meeks.[142] Mr. Hopkins administered seven of the required fifteen job performance measures (JPMs), Mr. Capehart administered six, and Mr. Meeks administered two.[143] As Ms. Smith's Examiner of Record, Mr. Hopkins was assigned to evaluate the entirety of her performance during the simulator portion of the operating test, write her individual examination report, and recommend whether she passed or failed the operating test.[144]

12. The 2011 examiners acted as a team. They evaluated Ms. Smith as a unit and collectively agreed on the grading of the various scenarios and were unanimous in their final scoring of Ms. Smith.[145]

13. Ms. Smith passed the 2011 operating exam. She received "Satisfactory" on all the Administrative JPMs, "Satisfactory" on all the Systems Control Room JPMs, "Satisfactory" on all the In-Plant JPMs, and scored above 1.80 on each competency of the simulator test.[146] She received 2.50 on Interpretation/Diagnosis,

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[136] Tr. at 192-93 (Smith).

[137] Tr. at 193 (Smith); Staff PFF ¶ 65.

[138] Tr. at 191 (Smith); Staff PFF ¶ 66.

[139] *See, e.g.,* NRC Form 398, Personal Qualification Statement — Licensee: Charlissa C. Smith (Ex. NRC-009) (Mar. 7, 2011).

[140] *See, e.g.,* Form ES-303-1, Individual Examination Report: Charlissa C. Smith (Ex. CCS-007) at 1 (Rev. 9) (May 3, 2011) [hereinafter Smith's Individual Examination Report]; Staff PFF ¶ 66.

[141] *See* Smith's Individual Examination Report (Ex. CCS-007) at 1-2.

[142] *Id.* at 1-2.

[143] *See id.* at 2.

[144] *See id.* at 1, 10-22; *see also* Staff PFF ¶ 162.

[145] NRC Staff Testimony of Phillip G. Capehart Concerning the Claim by Charlissa C. Smith that the NRC Improperly Denied Her Senior Reactor Operator License Application (Ex. NRC-003) at 2 (May 31, 2013) [hereinafter Capehart's Prefiled Testimony] ("Based on the consensus opinion of the 2011 examiner's [sic] we were in agreement that Ms. Smith should not receive a standard waiver for passing the operating portion of the 2011 examination . . . ."); *see also id.* at 6 ("The other two examiners and I were in agreement that Ms. Smith's performance was weak . . . .").

[146] Smith's Individual Examination Report (Ex. CCS-007) at 2-3.

2.20 on Procedures, 2.33 on Control Board Operations, 2.00 on Communications, 2.80 on Directing Operations, and 3.00 on Technical Specifications.[147]

14. Ms. Smith was administered the required SRO written examination on April 1, 2011.[148]

15. Ms. Smith had an overall score of 79.59 on the written examination.[149] She scored 84.93 on the Reactor Operator portion of the written test and 64.00 on the Senior Reactor Operator portion.[150] To pass the written examination, an SRO applicant must have an overall score of 80 and a score of 70 on the SRO part.[151]

16. Ms. Smith's scores on the 2011 examination are summarized in the Table below.[152]

C. Smith	2011 Examination	Grade	NRC Grader
Written Exam	84.93/64.00/79.59	Fail	P. Capehart
Walk Through (Overall)	Satisfactory Overall	Satisfactory	J. Hopkins
Administrative Topics	All 5 Satisfactory		
Systems: Control Rm.	All 7 Satisfactory		
Systems: In-Plant	All 3 Satisfactory		
Simulator	2.50/2.20/2.33/2.00/2.80/3.00	Pass	J. Hopkins
License Recommendation		Deny License	M. Widmann[153]

17. Mr. Capehart signed Ms. Smith's 2011 Form 303. Mr. Capehart checked "Fail" on Ms. Smith's Form 303 for the Written Examination and signed it on May 2, 2011. Mr. Capehart also checked "Fail" for the Final Recommendation on Ms. Smith's Form 303 on May 2, 2011.[154]

18. One applicant failed both the 2011 operating test and written examination. Six other applicants, including Ms. Smith, passed the 2011 operating test but failed the written examination.[155]

19. The 2011 operating examination had problems with validating the simulator scenarios and "was out of normal" in that it started with the JPMs first and the simulator scenarios second. Mr. Meeks testified that the written examination

[147] *Id.* at 2-3.

[148] *See id.* at 1; *see also* Staff PFF ¶ 16.

[149] *See* Smith's Individual Examination Report (Ex. CCS-007) at 1.

[150] *See id.* at 1; *see also* Consolidated Grading Report for Comparison of Hot License 16 Personnel (JPM/Simulator/Written Exam Results) (Ex. CCS-003) [hereinafter Hot License 16 Results].

[151] NUREG-1021 (Ex. CCS-005A) at 210.

[152] Smith's Individual Examination Report (Ex. CCS-007) at 1-3.

[153] Malcolm T. Widmann is Branch Chief, Operation Branch 1, Division of Reactor Safety in Region II. *See* Statement of Professional Qualifications, Malcolm T. Widmann (Ex. NRC-011) (Undated).

[154] Smith's Individual Examination Report (Ex. CCS-007) at 1.

[155] *See* Tr. at 154 (Smith), 382 (Capehart), 530-31 (Capehart & Meeks); *see also* Staff PFF ¶ 68.

was also "out of the norm" in that "seven of the ten did not pass the written exam portion, and that is outside of the norm for a typical Region II test. . . ."[156]

20. The 70% failure rate on the 2011 Vogtle written examination was unusually high.[157] A root cause analysis determined that this high failure rate was due to a relatively new Vogtle licensee examination team, which administered to the applicants a company audit written examination that was significantly different from the actual, NRC-approved written examination that was later administered.[158]

21. Ms. Smith appealed the grading of the 2011 written examination,[159] but the appeal did not result in her examination score being changed from failing to passing and her proposed denial was confirmed.[160] Ms. Smith did not demand a hearing regarding this proposed denial within the specified time period and, therefore, the proposed denial became final.[161]

22. Of the ten license applicants in 2011, eight were men and two were women.[162] Both women were African American and both were denied licenses.[163] Currently, there are no African American SROs at Plant Vogtle.[164] There are two female SROs.[165]

23. Despite her passing scores on all six competencies, Mr. Hopkins was "very surprised" that Ms. Smith passed the operating exam based on his own scoring of the six competencies,[166] and discussed with Mr. Capehart and Mr. Meeks the possibility of finding her operating exam performance unacceptable despite her passing scores.[167] Under NUREG-1021, "an examiner may conclude that an applicant's performance is unacceptable even though the documented deficiencies would normally result in a passing grade."[168] Mr. Capehart did not feel that course of action was reasonable, but he agreed to discuss the possibility

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[156] Tr. at 381 (Meeks).

[157] *See* Tr. at 381-82 (Meeks).

[158] *See* Tr. at 381-82 (Meeks); *see also* Staff PFF ¶ 69.

[159] *See* Letter from Charlissa C. Smith to Director, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation (Ex. NRC-010) (May 20, 2011).

[160] *See* Staff's Statement of Position (Ex. NRC-001) at 22-23.

[161] *See id.* at 22-23.

[162] Tr. at 186 (Smith).

[163] Tr. at 184 (Smith), 531 (Capehart). *See also* BRD-006, noting the Region II examiners in 2011 for the only other African American female candidate were P. Capehart and M. Meeks. As with Ms. Smith, Branch Chief, Malcolm Widmann signed the license denial.

[164] Tr. at 202 (Smith).

[165] *Id.*

[166] *See* E-mail from Phillip Capehart to Janet Vincent & Malcolm Widmann (Ex. CCS-015) at 2 (Feb. 4, 2013 8:38 PM) [hereinafter Feb. 4, 2013 Capehart E-mail].

[167] Tr. at 478-79 (Capehart), 480 (Capehart & Meeks).

[168] NUREG-1021 (Ex. CCS-005A) at 148.

with Mr. Widmann, the Branch Chief.[169] There was no precedent for such an action and it would have required extensive documentation.[170] After discussing the issue with Mr. Widmann, the 2011 examination team decided they would not take that path.[171] Thus, had Ms. Smith passed the written exam in 2011, she would have received an SRO license despite the Exam Team's concerns about her performance on the 2011 operating exam.[172]

B. The Waiver Request

24. Ms. Smith contends that the Staff improperly contacted SNC to question the submittal of the preliminary waiver request for Ms. Smith rather than processing it according to the NRC's procedure, causing SNC to change its plan and not submit the final waiver request.[173] She also argues that the Staff lacked adequate justification for its position that it would deny the request for a waiver if one was submitted.[174] We address her arguments in turn.

1. The Staff Unjustifiably Discouraged SNC from Submitting a Final Waiver Request for Ms. Smith

25. Following the 2011 exam, the next operator examination at Vogtle was scheduled for March/April 2012. The NRC Region II examiners initially assigned to this examination were Mark Bates, Chief Examiner, Michael Meeks, Chief Examiner in Training, and Bruno Caballero.[175]

26. SNC contemplated developing a retake of the written examination for the six 2011 Vogtle applicants who had passed the operating test and failed the written examination.[176] In support of this possibility, in May 2011, SNC asked Mr. Widmann, who asked the 2011 examiners, Mr. Capehart, Mr. Hopkins, and Mr. Meeks, to make a preliminary evaluation of which of these applicants would likely be granted a waiver of the operating test if one were requested.[177] Mr.

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[169] Tr. at 479 (Capehart).

[170] *Id.*

[171] *Id.*

[172] *See* Tr. at 480-82 (Capehart).

[173] *See* Smith's Statement of Position (Ex. CCS-075) at 2.

[174] *Id.*

[175] *See* Scheduling the Exam and Examiner Independence (Ex. NRC-031) (Undated) at 1, 3 [hereinafter Binder Tab 3]; Staff PFF ¶ 165.

[176] *See* Tr. at 466-67 (Meeks).

[177] Tr. at 619-20 (Widmann).

Capehart, Mr. Hopkins, and Mr. Meeks informed Mr. Widmann that all of the applicants except for Ms. Smith would likely be granted a waiver of the operating test based solely on their 2011 operating test performance.[178] Subsequently, Mr. Widmann provided this preliminary determination to SNC.[179]

27. Mr. Caballero of the 2012 examination team did not participate in this May 2011 preliminary determination because it was directed to the 2011 examination team, which had just finished administering the 2011 examination, and not the 2012 Examination Team, which had not yet begun to develop the 2012 examination.[180]

28. Mr. Bates of the 2012 Examination Team did participate in this preliminary determination and consulted with both Mr. Meeks and Mr. Widmann concerning a waiver for Ms. Smith.[181]

29. SNC ultimately decided not to pursue a retake written examination before the regularly scheduled March/April 2012 examination and informed Region II of this decision.[182] At this point, the duties of the 2011 examination team of Mr. Hopkins, Mr. Capehart, and Mr. Meeks were complete, and the SNC point of contact regarding operator license examinations became Mr. Meeks, the Chief Examiner in Training for the 2012 examination team of Mr. Meeks, Mr. Bates, and Mr. Caballero.[183]

30. In August 2011, Mr. Caballero was replaced on the 2012 Exam Team by Mr. Capehart, an examiner from Ms. Smith's 2011 Exam Team.[184]

31. In June 2011, SNC requested from Mr. Meeks a preliminary evaluation of whether or not Region II would approve an Operating Exam waiver of the regularly scheduled March/April 2012 operating test.[185]

32. On August 1 or 2, 2011, in response to SNC's June 2011 request, Mr. Meeks discussed the request with Mr. Capehart, the other examiner who had observed Ms. Smith's 2011 operating test performance.[186] Mr. Meeks did not

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[178] Tr. at 466-68 (Meeks), 619-20 (Widmann); *see also* The Carla Smith Waiver Process (Ex. NRC-013) at 4 (Undated) [hereinafter Smith Waiver Process]; Correspondence Regarding Vogtle NRC Exam Waiver Question (Ex. CCS-001) at 17-18 (April 30, 2013) [hereinafter Exam Waiver Question Correspondence].

[179] *See* Tr. at 619-20 (Widmann); *see also* Staff PFF ¶ 166.

[180] *See* Tr. at 467-68 (Meeks); *see also* Staff PFF ¶ 167 (in part).

[181] *See* Exam Waiver Question Correspondence (Ex. CCS-001) at 25.

[182] *See* Tr. at 468 (Meeks).

[183] *See* Tr. at 468 (Meeks); *see also* Staff PFF ¶ 168.

[184] Binder Tab 3 (Ex. NRC-031) at 1, 4.

[185] Smith Waiver Process (Ex. NRC-013) at 7; Exam Waiver Question Correspondence (Ex. CCS-001) at 19; Staff PFF ¶ 169.

[186] Tr. at 469-70 (Meeks).

discuss this request with Mr. Hopkins, the third examiner who had observed Ms. Smith, because he had since retired.[187]

33. If Ms. Smith applied for an SRO license in 2012, she would have to retake the written exam and either obtain a waiver of the operating exam or retake that exam as well. Because of their concerns about Ms. Smith's performance on the 2011 operating exam, even though she passed, the Exam Team determined that they would "see her again in a simulator in 2012 to make another determination," which would require that Ms. Smith be denied a waiver of the operating exam if one were requested.[188]

34. Mr. Meeks and Mr. Capehart discussed this determination with their supervisor, Mr. Widmann, in order to get his approval before responding to SNC that a waiver request for Ms. Smith would likely be denied.[189] Mr. Widmann provided his approval subject to his direction that the language reflect that this was a preliminary, not a final, determination.[190]

35. Since Mr. Meeks was the Chief Examiner in Training, he also sought the approval of Mr. Bates, the actual Chief Examiner for the Vogtle 2012 examination, before providing this preliminary determination to SNC that a waiver request would likely be denied.[191]

36. NUREG-1021 sets the passing grade on the operational portion of the RO/SRO and provides for the grant of a waiver for portions of the examination passed.[192] The evidence in the record unequivocally shows that SNC always requests a waiver for an employee who passed a portion of the examination.[193] Testimony from Mr. Tucker and Exhibit CCS-002 demonstrate that a preliminary waiver request was prepared and submitted for Ms. Smith.[194] The July 13, 2011 letter from T.E. Tynan, Vice President of Southern Company (Vogtle), further indicates SNC was affirmatively seeking a waiver for Ms. Smith.[195]

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[187] Tr. at 592 (Ehrhardt), 627-28 (Widmann); Staff PFF ¶ 170.

[188] Tr. at 479-80 (Capehart).

[189] Tr. at 469-70 (Meeks).

[190] *See* Tr. at 470-71 (Meeks), 621-22 (Widmann); *see also* Staff PFF ¶ 172.

[191] NRC Staff Testimony of Michael K. Meeks Concerning the Claim by Charlissa C. Smith That the NRC Improperly Denied Her Senior Operator License Application (Ex. NRC-006) at 17-18 (May 31, 2013) [hereinafter Meeks' Prefiled Testimony]; Staff PFF ¶ 173.

[192] *See* NUREG-1021 (Ex. CCS-005A) at 71.

[193] *See* Tr. at 265, 273-74, 277, 286, 292-93 (Tucker).

[194] *See* Affidavit of Perry L. Tucker (Ex. CCS-002) at 14 (April 25, 2013) [hereinafter Tucker's Aff.].

[195] *See id.* at 18.

37. Ms. Smith's preliminary request for a waiver (Form 398) was received by Region II in February 2012. Mr. Meeks, Chief Examiner (in Training) for the 2012 examination and a member of the 2011 examination team that evaluated Ms. Smith, testified that consideration of Ms. Smith's preliminary waiver request was handled properly, consistent with NUREG-1021 and that neither he nor Region II personnel tried to dissuade SNC from submitting a final waiver request for Ms. Smith.[196] The evidentiary record in this case, especially the testimony of Mr. Tucker (the SNC employee who prepared the waiver requests for the 2011 candidates) indicates the opposite — that the processing of Ms. Smith's preliminary waiver request was anything but normal and was inconsistent with NUREG-1021.

38. NUREG-1021 § ES-201 C.2.g discusses preliminary applications, stating that "[u]pon receiving the preliminary license applications, approximately 30 days before the examination date, the regional office shall review the applications in accordance with ES-202. In addition, the regional office shall evaluate any waiver requests in accordance with ES-204 to determine if the applicants meet the eligibility criteria specified in 10 C.F.R. 55.31."[197] Section C.2.a of ES-202 states the "NRC's regional office shall review preliminary applications as soon as possible after they are received. In that way, the regional office can process the medical certifications, evaluate and *resolve any waiver requests in accordance with ES-204,* and obtain from the facility licensee any additional information that might be necessary in order to support the final eligibility determinations."[198] Section C.2.b of ES-202 states, "[i]f the applicant is reapplying after a previous examination failure and license denial, *the regional office shall evaluate the applicant's additional training* to determine if the facility licensee made a reasonable effort to remediate the deficiencies that caused the applicant to fail the previous examination."[199]

39. Contrary to the provisions of NUREG-1021, the evidentiary record indicates there was no review of Ms. Smith's preliminary waiver request, nor was there an evaluation of her additional training to gauge the level of remediation she received. Instead, there were telephone calls from the Exam Team to SNC questioning why a preliminary waiver request had been submitted for Ms. Smith. In the words of Mr. Tucker, the preparer of the preliminary waiver requests, he was told that he had "stirred up a hornet's nest" at Region II by submitting the preliminary waiver request for Ms. Smith.[200] He was further told that, if SNC

[196] Meeks' Prefiled Testimony (Ex. NRC-006) at 3.

[197] NUREG-1021 (Ex. CCS-005A) at 47.

[198] *Id.* at 73 (emphasis added).

[199] *Id.* at 75.

[200] Tr. at 274 (Tucker).

insisted on submitting a final waiver request for Ms. Smith, the processing of that request might delay the 2012 exam for all of SNC's RO and SRO license applicants.[201] Faced with these threats, SNC did not submit a final waiver request for Ms. Smith.[202]

40. Mr. Tucker unequivocally testified that, "it was our intent to apply for waivers for everybody that passed, any part that passed, and that included Carla [Ms. Smith]."[203] There is no credible explanation for the departure from SNC's practice of requesting waivers for all who passed a part of the exam, other than the pressure exerted by Region II not to submit a final request for Ms. Smith. Mr. Tucker summed it up clearly by stating, "I mean I just didn't understand why they seemed surprised we asked for it. I guess that's the best way for me to state it, and I don't want to upset them. . . . I mean obviously, you know, you don't — the guy that's coming in to do the exam, you don't go, you don't want to be their enemies obviously. I mean that's just good business. You want to do things fair and right. That's all my ever intentions were."[204]

41. Having heard the testimony of the witnesses and reviewed the written evidence, the Board finds the testimony of Mr. Tucker credible. By contrast, the Board does not find credible Mr. Meeks' conflicting testimony that his calls to SNC were merely to determine if a mistake was made and that he did not discourage the filing of final Form 398 with a waiver request for Ms. Smith.

42. Further, the Region II examiners ignored a letter from the Site Vice President of Vogtle Electric Generating Plant requesting a waiver for Ms. Smith for 2 months. Vogtle Site Vice President Tynan requested, in writing, that if there were any questions concerning waivers for any SNC employees who passed one part of the examination and failed another, they should be directed to Mr. Gunn.[205]

43. As the Operations Training Supervisor, Mr. Gunn is the SNC management official with the authority to make decisions on waiver requests. The Region II examiners instead communicated with Mr. Wainwright and Mr. Thompson, subordinates to Mr. Gunn and Mr. Tynan.[206] The Region II Exam Team contacted persons within SNC whose responsibilities were to design and prepare examinations;[207] they did not communicate with the SNC officials who had the responsibility and authority to request waivers.

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[201] Tr. at 275 (Tucker).

[202] *Id.*

[203] Tr. at 265 (Tucker).

[204] Tr. at 315-16 (Tucker).

[205] Tucker's Aff. (Ex. CCS-002) at 18.

[206] Tr. at 444 (Meeks).

[207] *See* Tr. at 443 (Meeks).

44. NUREG-1021 provides that a preliminary waiver request be submitted 30 days before the scheduled examination[208] and that the final waiver requests be submitted 14 days before the scheduled examination.[209] In the period between the submission of the preliminary waiver requests and the final waiver requests the Region II examination team called and wrote to the licensee concerning Ms. Smith. They did not inquire about any other of the applicants that passed the simulator portion of the 2011 examination; their repeated inquiries dealt solely with Ms. Smith.[210]

45. The facility submitted final waiver requests for all the individuals who took the licensing examination in 2011 and received a passing score on the operating test, except for Ms. Smith. All individuals for whom a waiver was requested received a waiver. Indeed, individuals with averaged competency scores of 2.55 and 2.58 in 2011 received waivers.[211] Further, in 2012, an applicant was graded with an average competency score of 2.46 on the simulator portion of the examination and was granted an SRO Instant license.[212] Ms. Smith's 2011 average competency score was 2.47 on her simulator examination.[213]

46. The Board concludes that the Staff improperly discouraged SNC from submitting the final Form 398 with a waiver request for Ms. Smith. The Exam Team went beyond its role of determining whether a waiver should be granted and actively dissuaded SNC from filing a final waiver request for Ms. Smith. This action was inconsistent with NUREG-1021's goal of "ensur[ing] the equitable and consistent administration of examinations for all applicants."[214] On this record, it was also unjustified, arbitrary, and an abuse of discretion.

2. The Staff's Error Was Prejudicial

47. Ms. Smith argues that the Staff lacked adequate justification for its position that it would likely deny a request for a waiver on her behalf if one had been submitted.[215] The Staff counters that, "even if [it] had received an operating test waiver request on behalf of Ms. Smith as part of a new and final license

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[208] NUREG-1021 (Ex. CCS-005A) at 72.

[209] *Id.* at 73.

[210] *See* Tr. at 459-60 (Meeks).

[211] *See* Region II Seven Years' of Initial Licensed Operator Exam Data (Waiver 'Request' Issue) (Ex. NRC-008) (Undated) [hereinafter Region II Waiver Request Exam Data].

[212] *See* Staff Response to Board's Information Request 2 (Ex. BRD-003) (Undated) at 14.

[213] *See* Hot License 16 Results (Ex. CCS-003); *see also* Smith's Individual Examination Report (Ex. CCS-007) at 3.

[214] NUREG-1021 (Ex. CCS-005A) at 13.

[215] Smith's Statement of Position (Ex. CCS-075) at 2.

application as required, the Staff would likely not have granted such a request."[216] The Staff further argues that "Ms. Smith does not prove by clear evidence that such a determination would be arbitrary or an abuse of discretion."[217]

48. Given our ruling in the previous section that the Exam Team unjustifiably discouraged SNC from submitting a final Form 398 with a waiver request for Ms. Smith, the parties are in substance arguing whether that error was prejudicial. The idea behind the prejudicial error rule (also known as the harmless error rule) is that if the agency's error did not affect the outcome, it did not prejudice the petitioner.[218] In general, the burden of proving prejudicial error by a federal agency rests with the party challenging the agency's action.[219] However, this is "'not . . . a particularly onerous requirement.'"[220] It is sufficient "that the agency's error may have affected the outcome."[221] We think it clear that, by discouraging the submission of a final waiver request, the Exam Team affected the outcome. The Staff's denial of the waiver request was not inevitable, and the reasons it relies on to support its "likely" denial of a waiver are not persuasive.

49. The evidence clearly shows that a waiver denial is an extremely rare event.[222] Region II records indicate that only once in the past seven (7) years was a waiver request denied.[223] Staff witness Lea testified, "You know, granting a waiver is not automatic, but, again, I've never seen one not granted in Region II for an operating test. I have seen waivers denied. However, it was not for an operating portion of the test."[224] Thus, it is likely that if the applicant passes one portion she will be granted a waiver of the portion passed and be extended the opportunity to retake only the portion of the test which she failed.[225] Given that a waiver denial is such a rare event, discouraging submission of the final Form 398 with a waiver request is necessarily prejudicial.

50. The Staff claims only that it is "likely" it would not have granted Ms. Smith a waiver of the 2012 operating test had SNC submitted a final waiver request. That is sufficient to show that, had a final waiver request been filed,

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[216] Staff's Statement of Position (Ex. NRC-001) at 8.

[217] *Id.*

[218] *See Jicarilla Apache Nation v. U.S. Department of the Interior,* 613 F.3d 1112, 1121 (D.C. Cir. 2010).

[219] *Shinseki v. Sanders,* 556 U.S. 396 (2009).

[220] *Jicarilla Apache Nation,* 613 F.3d at 1121 (quoting *Shinseki v. Sanders,* 556 U.S. at 410).

[221] *Charlton v. Donley,* 846 F. Supp. 2d 76, 85 (D.D.C. 2012). *Accord Evans v. Perry,* 944 F. Supp. 25, 29 (D.D.C. 1996).

[222] *See* Region II Waiver Request Exam Data (Ex. NRC-008) at 3-10. Of the 47 waiver requests over the past 7 years in Region II, only one waiver request was denied. *See id.*

[223] Region II Waiver Request Exam Data (Ex. NRC-008) at 10.

[224] Tr. at 675 (Lea).

[225] Region II Waiver Request Exam Data (Ex. NRC-008); Tr. at 675 (Lea).

Ms. Smith might have received a waiver. As an applicant whose career will be significantly impacted by the Staff's action on her license application, she was entitled to a final Staff decision based on an evaluation of all relevant factors rather than a mere prediction that denial was "likely."

51. To justify a denial, moreover, the Staff would have to consider additional information. Mr. Meeks acknowledged that "[t]he basis of the decision to grant or deny the waiver is heavily weighed, as to the documentation that the facility licensee provides, as to what training has been given and the correction of any deficiencies that were noted on the previous exam. . . ."[226] Mr. Meeks further testified that information the facility provides as part of a certified license application regarding the applicant's retraining "would influence us as to our determination as to whether to grant or to deny the waiver. . . ."[227] But the Exam Team's preliminary determination that it likely would not grant Ms. Smith a waiver could not have been based on that information because the Exam Team reached that determination before the preliminary application had been submitted. Moreover, the Exam Team never began to formally evaluate an operating test waiver for Ms. Smith after the preliminary application was submitted because Mr. Wainwright, after being called and asked by Mr. Meeks whether box 4.f being checked was a typo, notified them that the decision to submit a preliminary waiver request for Ms. Smith was a mistake.[228] Thus, the Exam Team did not evaluate the information supplied in Ms. Smith's preliminary application concerning her remediation training before it concluded she likely would not receive a waiver. To justify an actual decision denying a waiver, the Staff would have to evaluate this information.

52. We are also not persuaded by the Exam Team's asserted justification for its "likely" decision to deny Ms. Smith a waiver. An SRO applicant's overall performance on the simulator portion of the operating test is satisfactory if all of the six competency grades are greater than 1.80. Ms. Smith scored 2.00 or greater on all six competencies of the simulator portion of the operating test.[229] Given these scores, the Exam Team had no Examiner Standard justification under NUREG-1021 for deciding that it would likely deny her a waiver. The NRC Staff conceded that if Ms. Smith had passed the written portion of the examination in

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[226] Tr. at 388 (Meeks).

[227] Tr. at 389 (Meeks).

[228] Tr. at 409 (Meeks).

[229] Ms. Smith received Satisfactory on all the Administrative Topics, Satisfactory on all the Systems Control Room topics. She received 2.50 on the Interpretation/Diagnosis segment, 2.20 on the Procedures segment, 2.33 on Control Board Operations segment, 2.00 on Communications segment, 2.80 on Directing Operations, and 3.00 on the Technical Specifications segment. *See* Smith's Individual Examination Report (Ex. CCS-007) at 3.

2011 she would have been entitled to and would have been issued an SRO license in 2011.[230]

53. NUREG-1021 states that "[i]f an applicant made an error with *serious safety consequences,* the examiner may recommend an operating test failure even if the grading instructions in Section D would normally result in a passing grade."[231] Ms. Smith passed the simulator portion of the test and no recommendation that she should have failed was made by any of the examiners. If Ms. Smith was below standard she could have/should have been failed (even though she had a passing score).

54. In 2011, Ms. Smith passed the operational portion of the RO/SRO test with an overall average grade of 2.47.[232] There are no guidelines for waivers in NUREG-1021.[233] Acknowledging there are no objective, quantitative criteria to evaluate whether to grant a waiver,[234] the NRC examiners cite the number of comments made during the simulator examination as justification for denial of a waiver. The Staff would have us find that, although Ms. Smith passed the operating test according to the criteria specified in NUREG-1021, the subjective opinions of the examiners and a criteria (number of comments) that is not mentioned in NUREG-1021 would have prevented Ms. Smith from receiving a routine waiver.

55. The number of comments on an operating test is not indicative of the level of performance on that operating portion of the examination nor is it criteria listed in NUREG-1021.[235] "The procedures contained herein require the examiner to evaluate each applicant's performance on the operating test and make a judgement [sic] as to whether the applicant's level of knowledge and understanding *meet the minimum requirements* to safely operate the facility for which the license is sought."[236] The fairness review confirms that "[t]he NRC's examinations are not intended to distinguish among levels of competency or to identify the most qualified individuals, but to make reliable and valid distinctions at the minimum level of competency that the agency has selected in the interests

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[230] *See* Tr. at 492 (Capehart).

[231] NUREG-1021 (Ex. CCS-005A) at 141 (emphasis in original).

[232] Hot License 16 Results (Ex. CCS-003); Smith's Individual Examination Report (Ex. CCS-007) at 3.

[233] Tr. at 501-03 (Meeks); *see also* Staff PFF ¶ 81.

[234] *See* Feb. 4, 2013 Capehart E-mail (Ex. CCS-015) at 11; *see also* Tr. at 633-34 (McHale).

[235] *See* Meeks' Prefiled Testimony (Ex. NRC-006) at 29-30; *see also* Tr. at 295-98 (Tucker), 515 (Capehart).

[236] *See* NUREG-1021 (Ex. CCS-005A) at 141 (emphasis added).

of public protection."[237] Thus, once an applicant demonstrates by passing the operating exam that she meets the minimum requirements to safely operate the facility for which she seeks a license, she should receive a waiver of that exam if she must retake the written exam. Given that the Staff's operating exams are not intended to distinguish among levels of competency, the Staff may not justify its "likely" denial of a waiver on a comparison of Ms. Smith's operating exam scores with those of other applicants.

56. Moreover, the record evidence shows that an individual with a score only .01 higher than Ms. Smith was granted a waiver by Region II.[238] The record evidence also shows that an individual with a score .01 *lower* than Ms. Smith was granted a license by Region II.[239] Thus, Ms. Smith's 2011 scores would not have justified the Staff's "likely" denial of a waiver.

57. The record also indicates that the plant-administered audit exam is usually more difficult than the NRC exam.[240] Ms. Smith passed all of the company-administered audit examinations leading up to the NRC examinations in both 2011 and 2012.[241]

58. The Board therefore finds that Ms. Smith has clearly met her burden to show that the Exam Team committed prejudicial error by unjustifiably discouraging SNC from submitting a final Form 398 with a waiver request on her behalf.

C. The Denial of an Impartial Examination Team

59. Two of the 2012 examiners for Ms. Smith's retest were examiners from Ms. Smith's 2011 test. Mr. Capehart was Ms. Smith's Chief Examiner in 2011. Mr. Meeks was also a member of the 2011 exam team. Both evaluated Ms. Smith's simulator performance in 2011. Ms. Smith's Statement of Position 2 maintains that, under the conflict of interest restrictions in NUREG-1021, Messrs. Meeks and Capehart should not have been assigned to her 2012 Examination Team because both individuals had formed strong negative opinions about her at that time that necessarily influenced the grading of her 2012 operating exam.[242]

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[237] Memorandum from Frank Ehrhardt, Branch Chief, Division of Reactor Projects, to John McHale, Branch Chief, Operating Licensing, Division of Inspection and Regional Support (Ex. NRC-014) at 7 (Sept. 4, 2012) [hereinafter Ehrhardt's Independent Review].

[238] Region II Waiver Request Exam Data (Ex. NRC-008) at 8. This individual failed one JPM while Ms. Smith did not fail any.

[239] Form ES-303-1, "V" Individual Examination Report (Ex. CCS-057) (Rev. 9) at 3 (May 10, 2012) [hereinafter "V" Individual Examination Report].

[240] *See* Tr. at 382 (Capehart).

[241] Tr. at 197 (Smith), 291 (Tucker).

[242] Smith's Statement of Position (Ex. CCS-075) at 2.

60. Mr. Capehart, the Chief Examiner in 2011, formally signed Ms. Smith's 2011 NRC Form 303. He "failed" Ms. Smith on the Written Examination and the Overall Examination.[243] Mr. Capehart advocated against granting Ms. Smith a waiver of the 2012 operating exam.[244]

61. Mr. Meeks, a member of the 2011 examination team, believed Ms. Smith to be an "unsafe operator" and advocated against giving Ms. Smith a waiver of the 2012 operating exam.[245]

62. Both Mr. Meeks and Mr. Capehart stated that going into the 2012 examination they believed (as did 2011 examiner of record, Mr. Hopkins) Ms. Smith to be an unsafe operator.[246] Mr. Meeks stated that Ms. Smith "stood out as being unsafe."[247] The entire 2011 examination team formed an opinion as to Ms. Smith's qualifications during the 2011 examination.[248] The 2011 examination team was unanimous in their evaluation of Ms. Smith's operation of the simulator.[249] The 2011 examination team likewise coordinated their recommendation as to the desirability of a potential waiver denial for Ms. Smith.[250] Since recommending denial of a routine waiver of a portion of the test that an applicant passed is admittedly a rare decision, those who recommend it must have very strong opinions and those strong opinions should preclude them from participating in retesting of that applicant.

63. NUREG-1021 states, "[t]he regional office shall not assign an examiner who failed an applicant on an operating test to administer any part of that applicant's retake operating test."[251] The Staff argues that the 2011 examination team (Hopkins, Meeks, Capehart) did not "fail" Ms. Smith on her operating examination, and therefore Meeks and Capehart were free to reexamine her again in 2012. The Staff ignores the conflict of interest limitation in NUREG-1021. The participation of Mr. Meeks and Mr. Capehart as examiners for Ms. Smith in 2012 was inconsistent with the additional requirement of NUREG-1021 directing that "[i]f an examiner is assigned to an examination that *might appear to present a conflict of interest,* the examiner shall inform his or her immediate supervisor

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[243] *Id.* at 1.

[244] *See* Tr. at 467, 470-71 (Meeks).

[245] *See id.*

[246] *See* Feb. 4, 2013 Capehart E-mail (Ex. CCS-015) at 10-11.

[247] Tr. at 526-27 (Meeks).

[248] Tr. at 527 (Meeks) ("[A]ll three of us at the time where we were evaluating the retake exam agreed that the performance was very marginal, specifically on the simulator scenario portion.").

[249] Tr. at 466-68 (Meeks), 619-20 (Widmann); *see* Smith Waiver Process (Ex. NRC-013) at 4; Exam Waiver Question Correspondence (Ex. CCS-001) at 17-18.

[250] *See* Feb. 4, 2013 Capehart E-mail (Ex. CCS-015) at 2-3, 10-11.

[251] NUREG-1021 (Ex. CCS-005A) at 53.

of the potential conflict."[252] When informed of a potential conflict, the supervisor "must apply *sound judgment* to the facts of each case," and, if any doubt exists, "consult with regional management and/or the NRR operator licensing program office to resolve the issue."[253] Because this requirement applies to any situation that might appear to present a conflict of interest, it is a substantially broader limitation than the specific prohibition against an examiner who failed an applicant on a previous operating test taking any part in that applicant's retake operating test.

64. Both Mr. Meeks and Mr. Capehart made clear through their statements and conduct that they had formed a belief Ms. Smith was an unsafe operator and, therefore, in their view she was not qualified to receive an SRO license.[254] As a practical matter, there is little meaningful difference between an examiner who fails an applicant and one who determines that the applicant is an unsafe operator and therefore not qualified to receive an SRO license. Moreover, the denial of a routine waiver request is tantamount to a failure. Dissuading a company from requesting a routine waiver is an even stronger indication of prejudgment. NUREG-1021 is written not only to prevent prejudgment but to prevent even the appearance of prejudgment. Therefore, the Board finds unavailing the Staff's assertion that Mr. Meeks and Mr. Capehart could serve on Ms. Smith's 2012 Exam Team because she was not failed by either of them (or by Mr. Hopkins) in 2011.

65. Equally troubling, after being informed of the appearance of a conflict of interest, Mr. Meeks and Mr. Capehart's immediate supervisor (Mr. Widmann) nevertheless approved their assignment to the 2012 Exam Team for Ms. Smith. Mr. Widmann's decision does not satisfy the "sound judgment" requirement of NUREG-1021[255] and resulted in a biased Exam Team in 2012.

66. NUREG-1021 is written to prevent prejudgment and even the appearance of prejudgment. Given the circumstances here the Board finds unavailing the Staff's response that Mr. Meeks and Mr. Capehart need not have been precluded by conflict of interest considerations from being on Ms. Smith's 2012 examination team because she was not "failed" by either of them (or by Mr. Hopkins) in 2011 and that Mr. Widmann's determination to assign them to her 2012 examination team was consistent with the bias avoidance standards in NUREG-1021.

67. Ms. Smith was entitled to an examination team in 2012 that had not already concluded that she was an unsafe operator. Neither Mr. Meeks nor Mr. Capehart should have taken any part in Ms. Smith's 2012 examination. Mr.

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[252] *Id.* (emphasis added).

[253] *Id.* at 52 (emphasis added).

[254] *See* Feb. 4, 2013 Capehart E-mail (Ex. CCS-015) at 2-3, 10-11; *see also* Tr. at 527 (Meeks); Exam Waiver Question Correspondence (Ex. CCS-001) at 3-4.

[255] Tr. at 522-23 (Meeks), 654-55 (Widmann & McHale).

Meeks and Mr. Capehart's participation in Ms. Smith's 2011 test, together with their strong opinions as to her performance and their efforts to prevent Ms. Smith from receiving a routine waiver, should have precluded them from evaluating Ms. Smith's 2012 retest.

68. The Staff also maintains that it satisfied the conflict of interest requirements because it assigned Mr. Bates, not Mr. Meeks or Mr. Capehart, to be Ms. Smith's examiner of record in 2012. The Board disagrees. Each examiner took notes on the communications and actions of all of the applicants to enhance the overall accuracy of the evaluation.[256] The record is clear that the examiners functioned as a team in grading each applicant.[257] The Staff testified, "[i]t is important to note that the examiners *acted as a team,* assisting each other with the evaluation of all the applicants."[258]

69. Mr. Capehart testified that "[t]he other two examiners and I were in agreement that Ms. Smith's performance was weak. . . ."[259] while Mr. Meeks testified, "All three examiners from 2011 exam agreed that Ms. Smith's performance, specifically on the simulator scenario portion, was poor enough to warrant additional evaluation."[260]

70. Following the 2012 simulator exam, the Exam Team, two of whom were on the 2011 examination team, assert, "[a]fter observing Ms. Smith on three scenarios during the first week of the exam, *the exam team* recognized that her performance was marginal. Therefore, *the team* used this intermediate week to document her simulator performance while their observations were fresh in their minds. Following this first draft of grading, the examiners understood that her performance could possibly result in a failing grade on the simulator portion of the exam."[261]

71. Thus, the very composition of the Exam Team belies the Staff's assertion that "the assignment of Mr. Bates as Ms. Smith's examiner of record represented an added measure in the interest of assuring objectivity."[262] Ms. Smith was entitled to have *all* of the members of the examination team free from bias against her. The Staff failed in its obligation under NUREG-1021 to provide an examination team free of bias against Ms. Smith.

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[256] *See* NRC Staff Testimony of Mark A. Bates, Phillip G. Capehart, and Michael K. Meeks Concerning the Claim by Charlissa C. Smith that the NRC Improperly Denied Her Senior Reactor Operator License Application (Ex. NRC-002) at 14 (May 31, 2013) [hereinafter Prefiled Testimony of Bates, Capehart, & Meeks.

[257] *See id.* at 14-15.

[258] *Id.* at 14.

[259] Capehart's Prefiled Testimony (Ex. NRC-003) at 6.

[260] Meeks' Prefiled Testimony (Ex. NRC-006) at 16.

[261] Prefiled Testimony of Bates, Capehart, & Meeks (Ex. NRC-002) at 15 (emphasis added).

[262] *Id.* at 12.

72. The Staff maintains that it is "unlikely" that examiner bias, even if it existed, could have affected the Exam Team's determination that Ms. Smith failed the simulator exam.[263] According to the Staff, "[t]he required criteria of NUREG-1021 have evolved over many years specifically in order to minimize the subjectivity of the NRC operator licensing process."[264]

73. This is at bottom another harmless error argument. The substance of the Staff's position is that, even if it was error to assign Mr. Meeks and Mr. Capehart to the Exam Team, the error was not prejudicial because it is "unlikely" that bias could have affected the result. We disagree. It is sufficient to defeat a claim of harmless error "that the agency's error may have affected the outcome."[265] Thus, the Staff cannot support a claim of harmless error by mere assurances that a prejudicial impact is "unlikely." Furthermore, the record of this case is replete with evidence of opportunity for biased examiners to affect the outcome of the simulator exam. For example, as we have seen, NUREG-1021 authorizes a waiver of the simulator exam for applicants who previously passed the exam, but it provides no standard to guide the exercise of that authority.[266] Similarly, as we discuss in more detail later, when an applicant has a RF score of 1 based on two errors, NUREG-1021 § ES-303 D.2.b allows the score to be increased to 2 if this can be justified based on the applicant correctly performing other activities related to the RF.[267] The examiner must decide whether there is adequate justification, but NUREG-1021 provides no specific criteria to determine when that is present. Also, the record evidence shows that the Exam Team encouraged the IRP to hold Ms. Smith to a higher standard by deviating from the prescripted Forms ES-D-1 and ES-D-2 and elevating a task (closing a PORV) to a critical task *after* the examination.[268] The record evidence further shows that the Exam Team encouraged the IRP to grade Ms. Smith more severely than other candidates by double counting her errors.[269] Thus, we find clear evidence to show prejudice to Ms. Smith from the assignment of a biased Exam Team.

D. The 2012 SRO License Examination

74. Subsequent to the 2011 examination, Ms. Smith was placed in the next

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[263] Staff's Statement of Position (Ex. NRC-001) at 52.
[264] *Id.*
[265] *Charlton,* 846 F. Supp. 2d at 85.
[266] *See supra* ¶¶ 36, 49, 54, 55.
[267] *See infra* ¶¶ 96, 102-05.
[268] *See infra* ¶¶ 92-93, 145.
[269] *See infra* ¶¶ 73, 99, 105, 156.

Vogtle training class, Hot License 17.[270] She received 25 weeks of daily full-time remediation to prepare to retake the examination in 2012.[271]

75. Ms. Smith was in the top five of the Hot License 17 class. There were 16-17 candidates in the class.[272]

76. Ms. Smith did very well in the simulator portion of the company's audit examination. Indeed, she did better on the 2012 company audit examination than she did in the 2011 company audit examination.[273]

77. In 2012, Region II administered the operating test to Ms. Smith from March 26 to April 13.[274] Ms. Smith was also administered the required SRO written examination on April 20, 2012.

78. Ms. Smith passed the 2012 written test. Ms. Smith's 2012 written examination score was 89.00% overall, with a score of 92.00% on the SRO portion and 88.00% on the RO portion.[275]

79. In 2012, Ms. Smith was again denied an SRO license because she failed the simulator part of the operating exam. The summary scoring sheet for Ms. Smith's 2012 simulator examination, Form ES-303-1 (normally page 3 of the Individual Examination Report (IER)), is included on page 175 as Table 1. Because Ms. Smith's score on Competency 4, Communications, was 1.20, she could pass the simulator exam only if she scored 2.00 or above on all the other competencies. She failed to do so, scoring 1.70 on Competency 1, Interpretation/Diagnosis, and 1.99 on Competency 3, Control Board Operations. Ms. Smith therefore failed the 2012 Operating Exam.

80. Ms. Smith's scores on both the written and operating examinations are summarized in the table below.

C. Smith	2012 Examination	Grade	NRC Grader
Written Exam	88.00/92.00/89.00	Pass	M. Meeks
Walk Through (Overall)	Satisfactory Overall	Satisfactory	M. Bates
Administrative Topics	All 5 Satisfactory		
Systems: Control Rm.	All 7 Satisfactory		
Systems: In-Plant	All 3 Satisfactory		
Simulator	1.70/3.00/1.99/1.20/3.00/2.20	Fail	M. Bates
License Recommendation		Deny License	M. Widmann

[270] Tr. at 193 (Smith).

[271] *See* Tr. at 194-95 (Smith).

[272] Tr. at 196 (Smith).

[273] *See* Tr. at 197 (Smith).

[274] *See* Smith's Individual Exam Report (Ex. CCS-045) at 1.

[275] *See id.*

NRC-045
Submitted: May 31, 2013

ES-303, Rev. 9 Individual Examination Report Form ES-303-1

PRIVACY ACT INFORMATION - FOR OFFICIAL USE ONLY

Applicant Docket Number: 55-23694					
Senior Reactor Operator Simulator Operating Test Grading Details					
Competencies/ Rating Factors (RFs)	RF Weights	RF Scores	RF Grades	Comp. Grades	Comment Page No.
1. Interpretation/Diagnosis					
a. Recognize & Attend	0.20	3	0.60		
b. Ensure Accuracy	0.20	1	0.20	1.70	8, 10
c. Understanding	0.30	1	0.30		12, 14
d. Diagnose	0.30	2	0.60		16
2. Procedures					
a. Reference	0.30	3	0.90		
b. EOP Entry	0.30	3	0.90	3.00	
c. Correct Use	0.40	3	1.20		
3. Control Board Operations					
a. Locate & Manipulate	0.34	1	0.34		18, 19, 20
b. Understanding	0.33	3	0.99	1.99	
c. Manual Control	0.33	2	0.66		21
4. Communications					
a. Clarity	0.40	1	0.40		23, 24, 25
b. Crew & Others Informed	0.40	1	0.40	1.20	26, 27
c. Receive Information	0.20	2	0.40		28
5. Directing Operations					
a. Timely & Decisive Action	0.30	3	0.90		
b. Oversight	0.30	3	0.90	3.00	
c. Solicit Crew Feedback	0.20	3	0.60		
d. Monitor Crew Activities	0.20	3	0.60		
6. Technical Specifications					
a. Recognize and Locate	0.40	1	0.40		29, 30, 31
b. Compliance	0.60	3	1.80	2.20	

[NOTE: Enter RF Weights (nominal, adjusted, or "0" if not observed (N/O)), RF Scores (1, 2, 3, or N/O), and RF Grades from Form ES-303-4 and sum to obtain Competency Grades.]

Table 1. Original Simulator Test Grading Sheet from 2012 Examination[276]

[276] Smith's Individual Exam Report (Ex. NRC-045) at 3. This single page is taken from the complete 32-page IER that includes Form ES-303-1 and generally one page, identified in the Comment column, for each comment made by the examiners.

E. The Administrative Review of the Grading of Ms. Smith's 2012 Simulator Exam

81. Following the 2012 Operator Licensing Examination, Ms. Smith was notified in a letter dated May 11, 2012, that she had failed the examination, that her license application would be denied, and that she could request either an informal Staff review or a hearing within 20 days in writing by mail, implying either U.S. mail or private carrier.[277] In order to initiate a Staff review, the letter stated:

> Your request must identify the portions of your examination that you believe were graded incorrectly or too severely. In addition, you must provide the basis, including supporting documentation (such as procedures, instructions, computer printouts, and chart traces) in as much detail as possible, to support your contention that certain of your responses were graded incorrectly or too severely.[278]

82. In response, Ms. Smith requested an NRC Staff review in accordance with NUREG-1021, ES-502 C.1.b(2),[279] in a two-part letter that included supporting material.[280] The NRC received Ms. Smith's request on June 5, 2012.[281]

83. The NRC Staff's guidance for conducting administrative reviews is in NUREG-1021, ES-502, and OLMC-500, Processing Requests for Administrative Reviews and Hearings, which provides three alternatives for selecting a review panel.[282]

> The Chief, IOLB, in consultation with the affected region and the IOLB staff, will determine whether to: (1) have an independent qualified examiner from one of the regions perform the review; (2) have IOLB perform the review; or (3) convene a three-person appeal panel to perform the review. Since all administrative review results are subject to final approval by IOLB, in order to enhance efficiency, IOLB

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[277] *See* May 11, 2012 Widmann Letter (Ex. CCS-033).

[278] *Id.* at 1.

[279] NUREG-1021 (Ex. CCS-005A) at 232.

[280] *See* Letter from Charlissa C. Smith to Director, Division of Inspection and Regional Support, NRR (Undated) (Ex. NRC-015); *see also* Smith's 2012 Review Request Letter (Ex. CCS-034). As a note, CCS-034 contains the same two pages as NRC-015 as well as some additional material. The letter is addressed to Director, Division of Inspection and Regional Support, in Washington, D.C., in accordance with the instructions provided in the denial letter. The letter is not dated. Both complete parts of the letter were later uploaded to the EIE by Ms. Smith on January 7, 2013, according to her transmittal letter of that date (ADAMS Accession No. ML13007A033). Part 1 is ML13007A037 and Part 2 is ML13007A035.

[281] The Nov. 15 Denial Letter (CCS-014) specifies this date of receipt. *See* Nov. 15 Denial Letter (Ex. CCS-014) at 1.

[282] *See* NUREG-1021 (Ex. CCS-005A) at 231-35; *see generally* OLMC-500 (Ex. CCS-030).

> will typically perform the review and document the results, taking into account any regional/examiner of record input. Option 1 might be necessary if IOLB does not have an examiner certified on the affected facility, and Option 3 might be appropriate for particularly complex or contentious cases.[283]

84. In accordance with NUREG-1021, the Chief of the Operator Licensing Branch in NRR (IOLB), John McHale, was responsible for addressing Ms. Smith's review request. Mr. McHale separated Ms. Smith's technical grading arguments from her arguments having to do with the processing of a waiver request and the alleged bias of her 2012 examiners based on their knowledge of her 2011 operating test performance (hereinafter "improper conduct arguments"). He assigned the technical grading arguments to a three-person appeal panel to perform a scoring review and the improper conduct arguments to the Deputy Regional Administrator of Region II, Mr. Len Wert, to do a fairness review.[284]

85. OLMC-500 states that, when a three-person panel is selected to perform the review, it "shall be impartial, *i.e.,* it may include a representative from the affected region, but it will not include individuals involved with the applicant's licensing examination."[285]

86. Mr. McHale appointed Mr. Donald Jackson from NRC Region I as the chairman of the three-person review panel to evaluate the errors alleged by Ms. Smith in the scoring of her 2012 simulator exam.[286]

87. Mr. Jackson deliberately selected a panel that consisted entirely of individuals from outside Region II. In addition to Mr. Jackson, it included Mr. Chris Steely from Region IV and Mr. David Muller from Headquarters. Mr. Jackson testified that "I chose a group of people that were not, in my thought, were not influenced by Region II. So, I reached out to Region IV for a person and Headquarters for a person, just to ensure that there was absolutely no influence from Region II when we conducted this review."[287]

88. Ms. Smith identified her issues by referencing specific examiner comments identifying errors she allegedly made related to the competencies and rating factors for which the Examiner Standards require comments to be made in the ES-303 Individual Examination Report (IER). Ms. Smith identified grading

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[283] OLMC-500 (Ex. CCS-030) at 3.

[284] *See* Tr. at 656 (McHale); E-mail from John McHale to Malcolm Widmann (Ex. CCS-022) (June 19, 2012 3:08 PM) [hereinafter June 19, 2012 McHale E-mail]; Letter from Malcolm T. Widmann to Charlissa C. Smith (Ex. NRC-016) (May 9, 2011); NUREG-1021 (Ex. CCS-005A) at 234. The fairness review is discussed *infra* ¶¶ 234-271.

[285] OLMC-500 (Ex. CCS-030) at 3. As explained *infra* ¶¶ 234-271, a separate administrative review evaluated Ms. Smith's claims regarding the handling of a potential waiver of the 2012 operating exam and NRC examiner bias.

[286] *See* June 19, 2012 McHale E-mail (Ex. CCS-022).

[287] Tr. at 608-09 (Jackson).

concerns in three competencies detailed in NUREG-1021, ES-303, § D.[288] She requested review of comments associated with Competency 1, Interpretation and Diagnosis (Comments on pages 8, 10, 12, and 14 of her IER), and Competency 3, Control Board Operations (Comments on pages 18, 20, and 21 of her IER). She also requested a review of all the comments associated with Competency 4, Communications.[289]

89. Supporting material, provided in or with Ms. Smith's review request letter[290] and identified by reference to the IER examiner notes pages, identified seven specific events for review:

a. Trip of the operating Main Turbine EHC pump, Scenario 3, Event 5;[291]

b. Response to a Design Basis Accident (DBA) Steam Generator Tube Rupture, Scenario 3, Event 7;[292]

c. Controlling Pressurizer Pressure Channel PT-455 Fails High, Scenario 3, Event 4;[293]

d. Controlling Pressurizer Level Transmitter LT-459 Failed Low, Scenario 6, Event 4;[294]

e. Raise Power in Accordance with Procedure, Scenario 7, Event 1;[295]

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[288] NUREG-1021 (Ex. CCS-005A) at 142-49.

[289] Smith's 2012 Review Request Letter (Ex. CCS-034) at 3. This letter is identified as having been received on June 5, 2012.

[290] Note that Smith's 2012 Review Request Letter (Ex. CCS-034) has supporting material only for the first event detailed here. Other supporting material was provided as required, but is not included as exhibits. An example is a 76-page document titled Smith Filed Contentions Part 2 Applicant Response to NRC Comments. This document includes plant procedures, plant system descriptions to help with the review, candidate explanations for each event, and examiner comments. These materials have been selectively summarized in Exhibit NRC-018, which is further identified in testimony, Jackson's Prefiled Testimony (Ex. NRC-004) at 8, as being the Rev. 1 of the final Review Panel report in response to the review requested in CCS-034. *See* Letter from Ho K. Nieh, Director, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation, to Charlissa C. Smith (Ex. NRC-018) (Undated) [hereinafter Nieh's Response to Smith Letter].

[291] Smith's 2012 Review Request Letter (Ex. CCS-034) at 3, 10, 18; Smith's Individual Exam Report (Ex. CCS-045) at 8.

[292] Smith's 2012 Review Request Letter (Ex. CCS-034) at 3, 10; Smith's Individual Exam Report (Ex. CCS-045) at 10.

[293] Smith's 2012 Review Request Letter (Ex. CCS-034) at 3, 10; Smith's Individual Exam Report (Ex. CCS-045) at 12.

[294] Smith's 2012 Review Request Letter (Ex. CCS-034) at 3, 10; Smith's Individual Exam Report (Ex. CCS-045) at 14.

[295] Smith's 2012 Review Request Letter (Ex. CCS-034) at 3, 10; Smith's Individual Exam Report (Ex. CCS-045) at 18.

f. Reactor Water Storage Tank (RWST) Sludge Mixing Line Pipe Break, Scenario 7, Event 6; and[296]

g. Loss of Cooling to Letdown Heat Exchanger (TE-0130 fails low), Scenario 7, Event 3.[297]

90. The Informal Review Panel (IRP) first met as a team from June 25 to 27, 2012, in a private conference room at the NRC's Region II office in Atlanta, Georgia.[298] The Region II Exam Team provided the IRP with reference material before that meeting. The reference materials included:

a. A summary of the 2011 Vogtle examination documentation and Ms. Smith's IER from that exam;

b. IERs for the two members of Ms. Smith's crew who took the 2012 simulator examination scenarios with her;

c. Clean copies of the three simulator scenario detailed descriptions (Forms ES-D-1 and ES-D-2 for Scenarios 3, 6, and 7);

d. A tabbed binder (14 tabs) prepared by the Region II Exam Team containing descriptions of the events Ms. Smith contended in greater detail than previously recorded on the official IERs, along with a description of the Region II grading philosophy, and other supporting material related to the 2012 operating examination; and

e. Rough notes from each examiner recorded during the simulator scenarios.[299]

91. The IRP met for a day and a half reviewing the contentions and the documentation provided by the Exam Team. The results of this review were recorded on large flip charts.[300] On the afternoon of the second day, the IRP interviewed the Exam Team to request clarification of questions they had, and to obtain additional insights on Ms. Smith's performance. On the third day the IRP used information from the interview with the Region II Exam Team, plus re-reviews of the reference materials to answer any previous panel member

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[296] Smith's 2012 Review Request Letter (Ex. CCS-034) at 3, 10; Smith's Individual Exam Report (Ex. CCS-045) at 20.

[297] Smith's 2012 Review Request Letter (Ex. CCS-034) at 3, 10; Smith's Individual Exam Report (Ex. CCS-045) at 21.

[298] NRC Staff Testimony of Donald E. Jackson Concerning the Claim by Charlissa C. Smith That the NRC Improperly Denied Her Senior Reactor Operator License Application (Ex. NRC-004) at 3 (Undated) [hereinafter Jackson's Prefiled Testimony].

[299] *Id.* at 4-5.

[300] *Id.* at 6 (referring to Notes on Interpret/Diagnose Scenario 3/Event 5 (Ex. CCS-065) (Undated)).

questions. The IRP then roughed out determinations of the rating factors against which her documented and contested errors should be assessed.[301]

1. The Exam Team's Belated Identification of a New Critical Task

92. The binders supplied by the Exam Team included documents in which the Exam Team stated its positions concerning Ms. Smith's allegations of error.[302] But the Exam Team also advocated changing the grading of the simulator exam in ways that would further reduce Ms. Smith's scores. The first such change concerned Scenario 7, Event 5, in which Ms. Smith took a control switch for a PORV initially to the open position before taking it to the close position.[303] For this error in connection with a noncritical task, she was assessed a one-point reduction to RF 3.a on her IER, Form ES-303-1.[304] Ms. Smith's original review request of June 5, 2012, did not contest this error. But in the binder document addressing Rating Factor 3.a, the Exam Team changed its position, claiming that it had "mis-graded" this event "because it was a failed critical task."[305] An error on a critical task must be assessed a two-point reduction. The Exam Team maintained that the low RF score it had assigned to RF 3.a (1 out of a maximum of 3) was reinforced by its new determination that Ms. Smith's error was related to a critical task.[306]

93. Mr. Bates of the Exam Team revisited this issue in his e-mail to Mr. Muller on July 5, 2012, barely 1 week after the IRP had its meeting in Atlanta. In transmitting Revision 6 of the Exam Team's regrade of Ms. Smith's 2012 operating exam,[307] Mr. Bates stated that the "[t]he exam team missed an opportunity during exam development to code this error as a critical task on Form ES-D-2. It was recognized during grading that the error was related to a critical task, but due to the fact that three errors were already assigned to Rating Factor 3.a, there

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[301] Jackson's Prefiled Testimony (Ex. NRC-004) at 7.

[302] *See, e.g.,* Smith Waiver Process (Ex. NRC-013); Binder Tab 3 (Ex. NRC-031); Rating Factor 1.B.: Interpretation/Diagnosis, Ensure Accuracy (Ex. NRC-033) (Undated); Factual Sequence of Events (Ex. NRC-037) (Undated) [hereinafter Factual Sequence of Events]; The 2011 Vogtle License Exam (Ex. NRC-046) (Undated). A list of all the documents that the Exam Team included in the binders appears in Jackson's Prefiled Testimony. *See* Jackson's Prefiled Testimony (Ex. NRC-004) at 5 n.8.

[303] Smith's Individual Exam Report (Ex. NRC-045) at 19.

[304] *Id.* at 3, 19.

[305] Rating Factor 3.A. (Ex. CCS-039) at 3.

[306] *Id.* at 4.

[307] *See* E-mail from Mark Bates to David Muller (Ex. CCS-062) (July 5, 2012 2:50 PM) [hereinafter July 5, 2012 Bates E-mail] (referencing Vogtle Operating Exam Appeal (Ex. CCS-101) as the referenced attachment).

would be no impact on the score."[308] The Staff provided no record of this alleged earlier recognition and reasoning, and the Board has found none in the evidentiary record. All of the evidence the Board has reviewed shows that the Exam Team's interest in coding Ms. Smith's error on Scenario 7, Event 5, as the failure of a critical task arose after Ms. Smith filed her administrative appeal.

94. To understand why maintaining Ms. Smith's low score on RF 3.a was of such importance to the Exam Team, we must revisit Table 1. As that table shows, Ms. Smith scored 1.20 on Competency 4, Communications. Therefore, to pass the exam, she had to score 2.00 or above on the other competencies. She failed to do so, and accordingly failed the exam, because she scored 1.70 on Competency 1, Interpretation/Diagnosis, and 1.99 on Competency 3, Control Board Operations. Her score on Competency 3 resulted from her score of 1 on RF 3.a; if her score on that RF increased to either 2 or 3, she would score above 2.00 on Competency 3. If her score on Competency 1 also increased to 2.00 or greater, she would pass the exam. Those changes were more than a theoretical possibility. As shown in Table 2, the IRP's first simulator test grading sheet, the IRP did increase Ms. Smith's score on RF 3.a to 2, with the result that her score on Competency 3 increased to 2.33. The IRP also increased her score on Competency 1 to 2.20. Had this been her final grading sheet, Ms. Smith would have passed the Operating Exam and received an SRO license.

95. The IRP eventually agreed that Ms. Smith's error in failing to immediately close the PORV during Scenario 7, Event 5, should be treated as the failure of a critical task. Explaining its determination, the IRP stated "[t]his review determined that the applicant's incorrect action during Scenario 7, Event 5 (Pressurizer Pressure Transmitter (PT-456) Failed High causing PORV to Open, PORV Block Valve Failed to Automatically Close) was related to a critical task. During this event, the applicant incorrectly operated a PORV hand switch, which resulted in the PORV remaining open. Approximately 30 seconds later, the applicant was directed to close the PORV by the [shift supervisor], at which point the applicant successfully closed the PORV. This was considered an error associated with a critical task in accordance with NUREG-1021, Appendix D, Item D.1.a, in that if left uncorrected, the applicant would have allowed a small-break loss-of-coolant accident to continue (degraded fission product barrier), which would have required an automatic reactor trip and safety injection to mitigate."[309]

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[308] Vogtle Operating Exam Appeal (Ex. CCS-101) at 12.

[309] Letter from Donald Jackson, Chief, Operations Branch, Division of Reactor Safety, Region I, to Jack McHale, Chief, Operator Licensing and Training Branch, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation (Ex. CCS-037) at 37-38 (Oct. 25, 2012) [hereinafter NRC Panel Review Results].

2. The Exam Team's Proposal That Ms. Smith Be Subject to a More Critical Grading Approach Than Other Applicants

96. NUREG-1021, ES-303 D.2.b, which provides directions for grading of simulator examinations, authorizes but does not require errors to be assigned to more than one Rating Factor (RF).[310] In its grading of Ms. Smith's 2012 simulator exam, consistent with Region II grading policy, the Exam Team had been very careful to assign only the one RF identified as the root cause for any single performance error *for every candidate in the class.* That Region II policy was expressly affirmed in the document entitled "Vogtle Operating Exam Appeal"[311] sent from Mr. Bates to Mr. Muller on July 5, 2012.[312] The document emphasized that, to ensure fairness, the Region II grading policy of assigning one error to only the RF determined to be the root cause had been applied consistently to all members of the 2012 operating exam class, including Ms. Smith (Carla):

> Another point worth noting is that errors were not double-counted for any applicant, including Carla. If we had double-counted (assigned an error to more than one rating factor) errors only for Carla, *then we would have been applying a different standard to Carla as compared to the other applicants.* The exam team applied the exact same criteria to Carla for what was considered an error and for how those errors were assigned to only the root cause rating factor.[313]

97. That equal-treatment policy was also clearly stated in another Exam Team document that explained the "grading philosophy" applied to the 2012 operating exam.[314] The Exam Team reported that it "decided to only place each error in one rating factor that was most closely related to the root cause of the error, although [NUREG-1021] allowed for up to two different rating factors to be documented under normal circumstances."[315]

98. In spite of this twice-stated equal-treatment grading philosophy, the Exam Team backed away from this approach early in the IRP process, suggesting instead that Ms. Smith — and only Ms. Smith — should be graded under the more critical method of assigning errors to multiple RFs. Following the June 25-27 meeting, the Exam Team provided the IRP with a suggested regrade of Ms. Smith's simulator examination in its document entitled "Vogtle Operating Exam

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[310] Jackson's Prefiled Testimony (Ex. NRC-004) at 4.

[311] Vogtle Operating Exam Appeal (Ex. CCS-101) at 1.

[312] July 5, 2012 Bates E-mail (Ex. CCS-062) (identifying an attachment as VG 2012-301 Carla Regrade After Appeal rev 6.docx).

[313] Vogtle Operating Exam Appeal (Ex. CCS-101) at 1 (emphasis added).

[314] Grading Philosophy and Consistency (Ex. NRC-032) at 2.

[315] *Id.* at 2.

Appeal."[316] This document from Mr. Bates begins with a description of the Exam Team's general grading approach for the entire class.[317] The e-mail transmitting the document stated that "[w]e still remain committed to our original licensing decision, but within this file you will be able to see options that could be used in a more critical evaluation."[318]

99. The "Vogtle Operating Exam Appeal" document included a more detailed explanation of the grading of Ms. Smith's 2012 examination than the Exam Team had provided in its original ES-303 Individual Examination Report for Ms. Smith.[319] The Exam Team also described ways in which Ms. Smith's performance could have been graded more critically so as to lower her overall scores on three competencies, even though doing so would require double counting errors for Ms. Smith and thus applying a different standard to her as compared to the other applicants.[320] The Exam Team explained that, although it had not assigned errors to more than one RF, lower grading would have been permissible under NUREG-1021 because it allows errors to be assigned to more than one RF factor.[321]

100. To explain how the Exam Team's suggested new approach would impact the grading, we will take as an example the Exam Team's proposed regrading of Competency 1, Interpretation/Diagnosis.[322] Ms. Smith's original scores on that competency were as follows:[323]

a. Original Scoring of Competency 1

Competencies/ Rating Factors (RFs)	RF Weights	RF Scores	RF Grades	Comp. Grades	Comment Page No. from original 303
1. Interpretation/Diagnosis					
a. Recognize & Attend	0.20	3	0.60		
b. Ensure Accuracy	0.20	1	0.20	1.70	8, 10
c. Understanding	0.30	1	0.30		12, 14
d. Diagnose	0.30	2	0.60		16

[316] *See* Vogtle Operating Exam Appeal (Ex. CCS-101).
[317] *Id.* at 1.
[318] July 5, 2012 Bates E-mail (Ex. CCS-062).
[319] Vogtle Operating Exam Appeal (Ex. CCS-101) at 1-3.
[320] *See id.* at 4-20.
[321] *See id.* at 1.
[322] *See id.* at 4-8.
[323] *Id.* at 4.

The last column identifies the pages of Ms. Smith's IER, Form ES-303-1,[324] which report the errors that led to the score reductions ("hits") for each RF. For example, Ms. Smith received a 2-point reduction on RF 1.b, Ensure Accuracy (i.e., a score of 1). This resulted from errors identified on pages 8 and 10 of her IER. Each error resulted in a 1-point hit. Because of the Exam Team's policy of applying each error to only one RF, those two errors were applied to only RF 1.b. Thus, those errors are not allocated to any other RFs on the IER grade sheet. *See* Table 1, last column.

101. The Exam Team's suggested more critical grading approach in response to Ms. Smith's appeal[325] would have changed the scoring as shown below:

b. Potential Scoring of Competency 1 (Re-evaluation in response to appeal)

Competencies/ Rating Factors (RFs)	RF Weights	RF Scores	RF Grades	Comp. Grades	Cross Ref Below
1. Interpretation/Diagnosis					
a. Recognize & Attend	0.20	2	0.40		A
b. Ensure Accuracy	0.20	1	0.20	1.50	B, C, D
c. Understanding	0.30	1	0.30		E, F, G
d. Diagnose	0.30	2	0.60		H

The capital letters in the last column refer to errors documented in the IER that the Exam Team proposed allocating to the Competency 1 RFs under the proposed stricter grading approach.[326] For example, the error identified by the letter "A" is on page 18 of the IER. It occurred during Scenario 7, Event 1, and under the IER it was allocated to RF 3.a. Under the Exam Team's proposed stricter grading approach, however, it would also be allocated to RF 1.a, to which no error was allocated in the original grading. This would impact the scoring by reducing Ms. Smith's score of RF 1.a from 3 to 2, which in turn reduced her score on Competency 1 to 1.50.

102. As the immediately previous tables also show, the Exam Team's stricter grading approach increased the number of errors attributed to RFs 1.b and 1.c from 2 to 3. The additional errors would not decrease the RF scores of 1, because that is the lowest possible RF score. But those changes nevertheless would have had an effect on the grading. When an applicant has an RF score of 1 based on two errors, NUREG-1021, ES-303 D.2.b, allows the score to be increased to 2 if this can be justified based on the applicant correctly performing other activities related to the RF. Three or more errors, by contrast, generally require a score of

[324] Smith's Individual Exam Report (Ex. NRC-045).

[325] Vogtle Operating Exam Appeal (Ex. CCS-101) at 8.

[326] *Id.*

1, regardless of correct actions taken relative to the same RF.[327] Under the Exam Team's "Re-evaluation in response to [Ms. Smith's] appeal," three errors rather than two would have been allocated to RFs 1.b and 1.c, which would mean that the potential grading increase under ES-303 D.2.b would not be possible.

103. The Exam Team's proposal of a more critical evaluation for Ms. Smith was partly in response to this potential for increasing Ms. Smith's RF scores based on her correctly performing other activities related to the RF. In an e-mail to Mr. Jackson dated July 18, 2012, Mr. Muller of the IRP outlined his plan for reviewing the grading of Ms. Smith's 2012 operating exam and preparing a draft decision for review by the other IRP members.[328] He stated that, once he had assigned all errors to RFs, he would determine whether the resulting score would be a 2 or a 1. Although three errors in the same RF would require a score of 1, he explained that "[t]wo errors in a RF score of 1 will likely result in a score of 2 because I am thinking that the applicant likely did something correct in that RF elsewhere during the simulator exam." The Exam Team was aware that the IRP was considering applying ES-303 D.2.b to increase Ms. Smith's scores on some RFs.[329] In its "Vogtle Operating Exam Appeal" document, the Exam Team attempted to justify its failure to grant Ms. Smith any credit for the activities she had performed correctly based on undocumented errors that it argued should be counted against her under its proposed stricter grading approach.[330]

104. The Exam Team also proposed adding additional undocumented hits in other competencies. On Competency 2, Procedures, Ms. Smith achieved the maximum possible score of 3 on all the RFs in the original scoring. The Exam Team, however, proposed adding hits to RFs 2.a and 2.c, thereby reducing her overall score on that competency from 3.00 to 2.30.[331] On Competency 3, Control Board Operations, the Exam Team proposed adding an additional hit to RF 3.b, which would reduce the overall score on that competency from 1.99 to 1.66.[332] On Competency 4, Communications, the Exam Team proposed adding three new hits to Competency 4.b, thereby precluding the application of ES-303 D.2.b.[333] On Competency 5, Directing Operations, Ms. Smith achieved the maximum possible score of 3 on all the RFs in the original grading. The Exam Team, however,

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[327] NUREG-1021 (Ex. CCS-005A) at 145.

[328] E-mail from David Muller to Donald Jackson (Ex. CCS-035) (July 18, 2012 7:39 AM) [hereinafter July 18, 2012 Muller E-mail].

[329] *See* Vogtle Operating Exam Appeal (Ex. CCS-101) at 2-3.

[330] *See id.*

[331] *Id.* at 9.

[332] *See id.* at 11-13.

[333] *See id.* at 14-17.

proposed adding two hits to RF 5.b and one hit to RF 5.d, thereby reducing her overall score on the competency from 3.00 to 2.50.[334]

105. The Exam Team's suggestion that the IRP apply "a more critical evaluation" to Ms. Smith, like its advocacy of adding a new critical task, was an attempt to revise the grading approach after the appeal had been filed to ensure that the failure would be sustained. The Exam Team advocated applying a different and stricter grading standard to Ms. Smith than had been applied to the other applicants who took the 2012 operating exam, which would both decrease her RF scores directly and also prevent her receiving credit under ES-303 D.2.b for actions she performed correctly. The Exam Team, however, failed to justify departing from its stated policy of grading Ms. Smith under the same standards that were applied to the other applicants.[335]

3. The IRP's Draft and Final Decisions

106. The first draft IRP decision included a cover letter and a document entitled, "INFORMAL REVIEW RESULTS — CHARLISSA C. SMITH SENIOR REACTOR OPERATOR APPLICANT, VOGTLE ELECTRIC GENERATING PLANT."[336] The cover letter and page one of this draft stated that Ms. Smith "did not pass the [simulator] test."[337] However, Mr. Muller began working from a report issued in another case, so it is not clear that those statements represented a conclusion regarding Ms. Smith.[338] The draft did not include a conclusion or a grade sheet in support of any such conclusion.[339] We therefore cannot determine what tentative decision, if any, the IRP may have reached at this point.

107. The next two IRP draft decisions[340] and accompanying correspondence[341] show that, at the time, the result of the review was that Ms. Smith passed. The first of these two draft decisions begins with a draft letter from Ho K. Nieh, Director of the Division of Inspection and Regional Support, notifying Ms. Smith that, after review, the Staff determined that she passed the operating test and

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[334] *See id.* at 18-19.

[335] *Id.* at 1.

[336] *See* Nieh's Response to Smith Letter (Ex. NRC-018).

[337] *Id.* at 1, 4.

[338] Tr. at 554 (Jackson).

[339] Nieh's Response to Smith Letter (Ex. NRC-018); Staff PFF ¶ 248.

[340] Informal Review Results (Ex. CCS-024); Informal Review Results — Charlissa C. Smith Senior Reactor Operator Applicant, Vogtle (Ex. CCS-066) (Undated) [hereinafter Informal Review Results — Rev. 1].

[341] E-mail from David Muller to John McHale, Donald Jackson, & Chris Steely (Ex. CCS-023) (Sept. 20, 2012 4:01 PM) [hereinafter Sept. 20 Muller E-mail]; E-mail from David Muller to Donald Jackson, Chris Steely & John McHale (Oct. 3, 2012 12:09 PM) (Ex. CCS-029) [hereinafter Oct. 3, 2012 Muller E-mail].

would be issued an SRO license.[342] The draft letter was followed by a new draft 35-page version of the Informal Review Results document (hereafter Rev. 0).[343] Both the draft cover letter and Rev. 0 are undated. An e-mail accompanying the documents is dated September 20, 2012, indicating that they must have been prepared on or before that date. The e-mail requests comments on the draft and states that "[e]ven if the panel did not toss out some errors and changed up some RFs (and assigned some new ones), the applicant still would have passed, based upon the simple fact that TWO errors in a RF does not equal a score of '1.'"[344]

108. In Rev. 0, as well as in later IRP reports, the IRP partially agreed with Ms. Smith and disagreed with the original grading concerning three of the specific events for which she sought review.[345] In particular, the IRP partially agreed with Ms. Smith's arguments and concluded that she had been incorrectly graded regarding Scenario 3, Event 7, "[Design Basis Accident] Steam Generator Tube Rupture on [Steam Generator] #1"; Scenario 7, Event 1, "Raise Power in accordance with Procedure 12004-C, Power Operation (Mode 1)"; and Scenario 7, Event 6, "[Reactor Water Storage Tank] Sludge Mixing Line Pipe Break with Failue [sic] to Automatically Isolate."[346] Accordingly, the IRP did not assign any error to Ms. Smith for her performance during those contested events.[347] In subsequent versions of the IRP's report, those determinations did not change.[348]

109. In Rev. 0, as well as in later IRP reports, the IRP reviewed not only the specific grading errors alleged by Ms. Smith but also errors that she did not contest. The IRP referred to these additional comments as "non-contested errors". Rev. 1 states:[349]

> In order to complete the re-grading as requested by applicant, it was necessary for this review to examine *all* aspects of the applicant's original NRC simulator scenario grading, not just the grading contested by the applicant. In particular, there were five errors documented in the original NRC grading (per the applicant's Individual Examination Report) that were re-examined and integrated into the overall re-grade of the applicant. The results of this review are presented below:

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[342] Informal Review Results (Ex. CCS-024) at 1.

[343] *Id.* at 3.

[344] Sept. 20 Muller E-mail (Ex. CCS-023).

[345] The specific events for which Ms. Smith sought review are identified in paragraph 89, *supra,* and in Section IV. Ms. Smith's Statement of Position.

[346] *See* Informal Review Results (Ex. CCS-024) at 7-10, 19-22, and 22-25.

[347] *See id.* at 9, 21, 24.

[348] *See* Informal Review Results — Rev. 1 (Ex. CCS-066) at 7, 19, 22; *see also* NRC Panel Review Results (Ex. CCS-037) at 8, 20, 23; *see generally* Smith's Compilation of Grading Changes (Ex. CCS-082) (Undated) [hereinafter Smith's Compilation of Grading Changes].

[349] Informal Review Results (Ex. CCS-024) at 35 (emphasis in original).

Non-Contested Error	Agree with Original Grading?	Affected RF
1. Scenario 6, Event 6: Power Reduction Due to High Vibrations on "B" MFPT	YES	1.d
2. Scenario 7, Event 5: Pressurizer Pressure Transmitter (PT-456) Failed High causing PORV to Open, PORV Block Valve Failed to Automatically Close	YES	3.a
3. Scenario 3, Event 4: Controlling Pressurizer Pressure Channel PT-455 Failed High	YES	6.a
4. Scenario 6, Event 4: Controlling Pressurizer Level Transmitter (LT-459) Failed Low	YES	6.a
5. Scenario 7, Event 5: Pressurizer Pressure Transmitter (PT-456) Failed High causing PORV to Open, PORV Block Valve Failed to Automatically Close	YES	6.a

The table identifies the noncontested errors and the specific rating factor to which the IRP assigned each error. The first noncontested error is related to incorrectly ordering the lowering of control rods to correct a temperature deviation. The second is associated with incorrect manual control of a PORV manual control switch. The remaining three are associated with recognition of Technical Specification requirements. The table also shows that in each instance the IRP agreed with the original grading.[350] Subsequent versions of the IRP's report contain the same table and accompanying text.[351] Thus, this aspect of the IRP's analysis did not change.

110. Rev. 0 states that none of Ms. Smith's errors was related to a critical task.[352] It also reports that

> From this review, all RFs which had two assessed errors [noncritical] were given a score of "2". This is because there were many other scenario events where there were *no* documented applicant errors (per the applicant's original grading as contained in her Individual Examination Report), such that other activities were correctly performed related to the RFs with two assessed errors (i.e., RFs 1.c, Interpretation/Diagnosis — Understanding; 4.a, Communications — Clarity; Communications — Crew & Others Informed; and 5.b, Directing Operations — Oversight).[353]

[350] *Id.* at 36.

[351] Informal Review Results — Rev. 1 (Ex. CCS-066) at 37; NRC Panel Review Results (Ex. CCS-037) at 37.

[352] Informal Review Results (Ex. CCS-024) at 36.

[353] *Id.* at 36 (emphasis in original).

The report lists sixteen scenario events for which Ms. Smith committed no documented errors.[354]

111. The IRP prepared several draft grading sheets (Form ES-303-1). The earliest of these appears at the end of Rev. 0.[355] This grading sheet was made available to Ms. Smith only after her successful challenge to the Staff's claim of deliberative process privilege for this and related documents.[356] As shown in Table 2, on the next page, the grading sheet in Rev. 0 gave Ms. Smith passing scores in all competencies.

[354] *See id.*

[355] *See id.* at 37.

[356] *See* Licensing Board Order (Granting Motion to Compel Discovery), LBP-13-5, 77 NRC 233 (2013).

REVISED SIMULATOR OPERATING TEST GRADING SHEET:

ES-303 **3.b** **Form ES-303-1**

PRIVACY ACT INFORMATION - FOR OFFICIAL USE ONLY

Applicant Docket Number: 55-23694					**Page 1 of 1**
Senior Reactor Operator Simulator Operating Test Grading Details					
Competencies/ Rating Factors (RFs)	RF Weights	RF Scores	RF Grades	Comp. Grades	Comment Page No. (See previous page)
1. Interpretation/Diagnosis					
a. Recognize & Attend	0.20	3	0.60		
b. Ensure Accuracy	0.20	2	0.40	2.20	
c. Understanding	0.30	2	0.60		
d. Diagnose	0.30	2	0.60		
2. Procedures					
a. Reference	0.30	3	0.90		
b. EOP Entry	0.30	3	0.90	2.60	
c. Correct Use	0.40	2	0.80		
3. Control Board Operations					
a. Locate & Manipulate	0.34	2	0.68		
b. Understanding	0.33	3	0.99	2.33	
c. Manual Control	0.33	2	0.66		
4. Communications					
a. Clarity	0.40	2	0.80		
b. Crew & Others Informed	0.40	2	0.80	2.40	
c. Receive Information	0.20	2	0.80		
5. Directing Operations					
a. Timely & Decisive Action	0.30	3	0.90		
b. Oversight	0.30	2	0.60	2.70	
c. Solicit Crew Feedback	0.20	3	0.60		
d. Monitor Crew Activities	0.20	3	0.60		
6. Technical Specifications					
a. Recognize and Locate	0.40	1	0.40		
b. Compliance	0.60	3	1.80	2.20	

Table 2. IRP Simulator Test Grading Sheet (Rev. 0) Showing Ms. Smith Passing[357]

[357] Informal Review Results (Ex. CCS-024) at 37.

112. Although the first page of Rev. 0 contained the earlier boilerplate statement that "the applicant did not pass the operating test,"[358] the grading sheet, conclusion, and accompanying e-mail[359] confirm that at this point the result of the IRP review was that Ms. Smith passed the simulator exam and the operating test.

113. E-mails among IRP panel members in September 2012 show that they were in agreement with the draft report passing Ms. Smith and were prepared to send it forward to Mr. McHale for his approval.[360] Although some of the e-mails suggest changes to the report, they concern details that would not change the final result. An e-mail from Donald Jackson dated September 28 states: "Just a few comments of mine, please incorporate these and Steely's, and then let's get this to Jack [IOLB Chief John McHale] . . . ASAP."[361] We are thus not persuaded by Mr. Jackson's claim that early revisions had "no significance."[362] Mr. Jackson himself acknowledged that "there were periods of time in the September timeframe of 2012 that I believed that we were going to make a recommendation to headquarters that Ms. Smith passed the operating exam."[363]

114. On October 3, 2012, in an e-mail entitled "Vogtle Appeal — look for additional hits,"[364] Mr. Muller distributed to the IRP the latest draft of the Informal Review Results document (Rev. 1).[365] The new grading sheet (Table 3, below) and conclusion still indicated that Ms. Smith passed, although her simulator scores were lower.[366] This was also the first grading sheet in which Ms. Smith's error on Scenario 7, Event 5, in which she failed to immediately close the PORV, was

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[358] *Id.* at 1.

[359] Sept. 20 Muller E-mail (Ex. CCS-023).

[360] *Id.*; E-mail from Chris Steely to David Muller (Ex. CCS-026) (Sept. 26, 2012 3:36 PM); Steely Appeal Comments (Ex. CCS-027) (Undated); E-mail from Donald Jackson to David Muller (Ex. CCS-028) (Sept. 28, 2012 8:58 AM) [hereinafter Sept. 28, 2012 Jackson E-mail].

[361] Sept. 28, 2012 Jackson E-mail (Ex. CCS-028).

[362] Tr. at 559 (Jackson).

[363] Tr. at 556 (Jackson).

[364] Oct. 3, 2012 Muller E-mail (Ex. CCS-029).

[365] Informal Review Results — Rev. 1 (Ex. CCS-066); Staff PFF ¶ 261.

[366] Informal Review Results — Rev. 1 (Ex. CCS-066) at 35-36; Staff PFF ¶ 267.

REVISED SIMULATOR OPERATING TEST GRADING SHEET:

ES-303	**3.b**	**Form ES-303-1**

Applicant Docket Number: 55-xxxxx					**Page 1 of 1**
Senior Reactor Operator Simulator Operating Test Grading Details					
Competencies/ Rating Factors (RFs)	RF Weights	RF Scores	RF Grades	Comp. Grades	Comment Page No. (See previous page)
1. Interpretation/Diagnosis					
a. Recognize & Attend	0.20	3	0.60		
b. Ensure Accuracy	0.20	2	0.40	1.90	
c. Understanding	0.30	1	0.30		
d. Diagnose	0.30	2	0.60		
2. Procedures					
a. Reference	0.30	3	0.90		
b. EOP Entry	0.30	3	0.90	2.60	
c. Correct Use	0.40	2	0.80		
3. Control Board Operations					
a. Locate & Manipulate	0.34	1	0.34		
b. Understanding	0.33	3	0.99	1.99	
c. Manual Control	0.33	2	0.66		
4. Communications					
a. Clarity	0.40	2	0.80		
b. Crew & Others Informed	0.40	2	0.80	2.40	
c. Receive Information	0.20	2	0.80		
5. Directing Operations					
a. Timely & Decisive Action	0.30	3	0.90		
b. Oversight	0.30	2	0.60	2.70	
c. Solicit Crew Feedback	0.20	3	0.60		
d. Monitor Crew Activities	0.20	3	0.60		
6. Technical Specifications					
a. Recognize and Locate	0.40	1	0.40		
b. Compliance	0.60	3	1.80	2.20	

[NOTE: Enter RF Weights (nominal, adjusted, or "0" if not observed (N/O)), RF Scores (1, 2, 3, or N/O), and RF Grades from Form ES-303-4 and sum to obtain Competency Grades.]

Table 3. Second IRP Simulator Test Grading Sheet (Rev. 1) Showing Ms. Smith Passing[367]

[367] Informal Review Results — Rev. 1 (Ex. CCS-066) at 36. Note: there is an error in the Competency 4 calculation and the overall score should be 2.00.

treated by the IRP as the failure of a critical task.[368] Nevertheless, Mr. Muller, in describing the impact of this and other "additional hits" he had applied, reported "OVERALL GRADING IMPACT: APPLICANT STILL PASSES, competency scores drop but still passes."[369] Later the same day, Mr. Muller sent Mr. Jackson an e-mail enclosing Rev. 1, indicating that he had modified the grading "a bit" by adding additional hits, reiterating that the PORV error was now a critical task, and stating that "if you are OK with the overall grading . . . , pass on to Region II."[370]

115. Rev. 1 included the language from Rev. 0 quoted in Paragraph 110, *supra,* explaining that "all RFs which had two assessed errors (non-critical) were given a score of '2.'"[371] Rev. 1 also lists the same sixteen scenario events for which Ms. Smith committed no documented errors.[372]

116. The next revision of the Informal Review Report (Rev. 2)[373] was undated, like the earlier versions. Rev. 2 no longer contained the original statement on its first page that "the applicant did not pass the operating test."[374] The Staff acknowledges that it contained the same grading of the contested and noncontested errors as Rev. 1.[375] It also contained the same language describing the failed-open pressurizer PORV as a critical task.[376] However, Rev. 2 no longer contained the discussion regarding the grading of RFs with two assessed errors and it also did not include a grading sheet. Nevertheless, because the grading did not change between Rev. 1 and Rev. 2 and the grading sheet for Rev. 1 shows Ms. Smith passing, we conclude that Rev. 2 was also consistent with her passing.

117. Rev. 3 was the next revision of the Informal Review Report.[377] The Staff states that the differences between this revision and Exhibit CCS-067 are simply editorial.[378] Rev. 3 was therefore also consistent with Ms. Smith passing. It was

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[368] Informal Review Results — Rev. 1 (Ex. CCS-066) at 34.

[369] Oct. 3, 2012 Muller E-mail (Ex. CCS-029).

[370] E-mail from David Muller to Donald Jackson (Ex. CCS-031) (Oct. 3, 2012 3:34 PM) [hereinafter Oct. 3, 2012 Muller's "Vogtle Appeal" E-mail].

[371] Informal Review Results — Rev. 1 (Ex. CCS-066) at 34.

[372] *Id.* at 35.

[373] Informal Review Results — Rev. 2, Charlissa C. Smith Senior Reactor Operator Applicant, Vogtle Electric Generating Plant (Ex. CCS-067) (Undated) [hereinafter Informal Review Results — Rev. 2].

[374] *See id.* at 1.

[375] Staff PFF ¶ 270.

[376] Informal Review Results — Rev. 2 (Ex. CCS-067) at 33.

[377] *See* Informal Review Results — Charlissa C. Smith Senior Reactor Operator Applicant, Vogtle Electric Generating Plant (Ex. NRC-019) (Undated) [hereinafter Informal Review Results — Draft]; Informal Review Results — Charlissa C. Smith Senior Reactor Operator Applicant, Vogtle Electric Generating Plant (Ex. CCS-102) (Undated).

[378] Staff PFF ¶ 277.

prepared on October 10, 2012, and sent to Region II for comments on October 11, 2012.[379]

118. We find the Staff's statement of only editorial changes between Rev. 2 and Rev. 3 to be correct. However, there is one editorial change that should be noted. This is the correction in the analysis statement for the IRP's removal of a communications clarity error in Rating Factor 4.a. This change was detailed by Ms. Smith as she tracked the changes among the sequence of revisions.[380]

119. In Rev. 0, the IRP removed one communications error for Scenario 6, Event 4, in which Ms. Smith directed the OATC to perform Immediate Operator Actions (IOAs) that were not actually in the procedure for response to the event. The OATC clearly understood what the direction was and told Ms. Smith as SS that the required response did not have any IOAs.[381] Yet the examiners assigned an error to Ms. Smith for this direction stating:

> The applicant was downgraded in this competency because she did not communicate in a clear, accurate, and easily understood manner when she provided direction to the UO to perform Immediate Operator Actions that did not exist for the failure of LT-459.[382]

120. The IRP in Rev. 0 agreed with the applicant rather than the original grading and removed the error assessment:

> The applicant requested reconsideration of this apparent error based upon her assertion that directing immediate operator actions did NOT hinder procedure entry or performance, cause any confusion, effect event diagnosis, and ultimately, had no adverse consequences. This review agreed with the applicant, and determined that no error should be assessed in this case. When an event occurs, this review determined that it is not an error for a SS to "generically" request the performance of immediate operator actions, even if the specific event does not have immediate operator actions.[383]

121. In Rev. 2, the analysis wording was changed to read "[t]his review disagreed with the applicant, and determined that an error should be assessed in this case."[384] But in the follow-up Rev. 3 three days later, it was changed back to

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[379] *Id.*

[380] Smith's Compilation of Grading Changes (Ex. CCS-082) at 5, 12, 17, 27.

[381] *See* Smith's Individual Exam Report (Ex. CCS-045) at 24; *see also* Form ES-D-1, App. D — Scenario 6 Outline (Ex. CCS-054) at 83 (Undated).

[382] Smith's Individual Exam Report (Ex. CCS-045) at 24.

[383] Informal Review Results (Ex. CCS-024) at 30. The last sentence was removed without explanation from later versions of the report but the grading was not changed. *See generally* Smith's Compilation of Grading Changes (Ex. CCS-082).

[384] Informal Review Results — Rev. 2 (Ex. CCS-067) at 28.

read, "[t]his review disagreed with the original grading, and determined that no error should be assessed in this case."[385]

122. Region II sent a detailed response and critique to Rev. 3 in a document entitled *Region II Recommendations/Comments on the "Final" Independent Review Panel Document, October 12, 2012.*[386] It is clear to the Board from reading this document that the "'Final' Independent Review Panel Document" had Ms. Smith passing the simulator exam. The Staff argues that as the document sent to the Region was cleaned up to eliminate all reasons for changing the grading and did not include any statement of pass/fail or a grade sheet, it was a clean copy submitted to the Region for technical comments without a pass/fail indication. But the Exam Team would have little difficulty using the error analyses in Rev. 3 to determine whether the result was a pass or fail. Region II certainly would not have put together this ten-page detailed response and critique unless Ms. Smith passing was at least probable at this point.

123. The Region II document begins:

> This response to the Review Panel's conclusion is intended to show the NRR Program Office, the most accurate evaluation of the applicant's performance. The following conclusions by Region II's Exam Team are based on the observation of three examiners with extensive Industry and NRC experience. Region II considered the Review Panel's Report in combination with the Exam Team's first hand observation of the applicant's performance and applied the guidance of NUREG-1021 to provide the Program Office with an accurate evaluation that is defensible by the only three examiners that actually observed the applicant's performance.
>
> The Region II Exam Team concluded, with the opportunity of hindsight and deeper evaluation, that the initial evaluation as documented in the denial was largely accurate. The Region II Exam Team did, however, agree with some aspects of the Review Panel's Report for assigning some errors to additional rating factors. Region II's final conclusion is that the original denial should be sustained.[387]

This introduction is followed by specific recommendations as to how the Panel should change its analysis of Ms. Smith's performance so that the failure would be sustained.[388] The Region II document concludes with a chart detailing the exam team's suggested grading of Ms. Smith's 2012 operating test (Table 4, below), which would sustain the failure.[389]

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[385] Informal Review Results — Draft (Ex. NRC-019) at 28-29.

[386] Region II Recommendations/Comments on the "Final" Independent Review Panel Document (Ex. CCS-060) (Oct. 12, 2012) [hereinafter Region II Recommendations].

[387] *Id.* at 1.

[388] *See id.* at 2-11.

[389] *Id.* at 11.

REGION II RECOMMENDATIONS (as of 10/12/12)					
Senior Reactor Operator Simulator Operating Test Grading Details					
Competencies/ Rating Factors (RFs)	RF Weights	RF Scores	RF Grades	Comp. Grades	Comment Page No.
1. Interpretation/Diagnosis					
a. Recognize & Attend	0.20	3	0.60	1.70	
b. Ensure Accuracy	0.20	1	0.20		EHC, SI/SLI
c. Understanding	0.30	1	0.30		PHtr, FIC121
d. Diagnose	0.30	2	0.60		CR Auto Op
2. Procedures					
a. Reference	0.30	3	0.90	3.00	
b. EOP Entry	0.30	3	0.90		
c. Correct Use	0.40	3	1.20		
3. Control Board Operations					
a. Locate & Manipulate	0.34	1	0.34	1.66	PORV^{CT}, Tave RWST
b. Understanding	0.33	2	0.66		TE130
c. Manual Control	0.33	2	0.66		TE130
4. Communications					
a. Clarity	0.40	1	0.40	1.20	F121, IOA, SI #s
b. Crew & Others Informed	0.40	1	0.40		SM, SM
c. Receive Information	0.20	2	0.40		ACCW 3-way
5. Directing Operations					
a. Timely & Decisive Action	0.30	3	0.90	2.50	
b. Oversight	0.30	2	0.60		FIC-121 to auto
c. Solicit Crew Feedback	0.20	3	0.60		
d. Monitor Crew Activities	0.20	2	0.40		PZR Htrs F/U
6. Technical Specifications					
a. Recognize and Locate	0.40	1	0.40		3 errors (not
b. Compliance	0.60	3	1.80	2.20	contested)

[NOTE: Enter RF Weights (nominal, adjusted, or "0" if not observed (N/O)), RF Scores (1, 2, 3, or N/O), and RF Grades from Form ES-303-4 and sum to obtain Competency Grades.]

Table 4. Region II Grading Recommendations to the Independent Review Panel[390]

[390] *Id.*

124. Shortly afterwards, on October 16, the IRP received direction from Mr. McHale regarding disposition of the Region II comments, including instructions on how error assignments could be rearranged to sustain the failure.[391] Mr. McHale said: "What I think will be critical to the overall outcome is the RF assignment of the second error related to Scenario 7, Event 3, TE-0130 fails low (original comment 21/panel report p. 25/attached R-2 feedback item G). With that shift, plus the PORV critical error, *the failure would be sustained based on Control Board Ops* and dismissing the Tave, SI block, and immediate action comm. errors probably don't matter."[392] This e-mail further recommended that the IRP contact "Mark Bates to discuss any questions and determine if anything provided changes any of your recommendations."[393]

125. To explain why the shift in the RF assignment of the second error related to Scenario 7, Event 3 would sustain the failure, it is necessary to refer first to the October 12 Region II document. The IRP had associated the error with RF 1.c and RF 3.c. Region II, however, argued that "the most appropriate grading of this event is to assign one non-critical error to RF 3.c and a second non-critical error associated with 3.b, 'Control Board Operations -— Understanding.'"[394] Next, it is necessary to return to Table 3, the most recent grading sheet in our evidentiary record.[395] In Competency 3, Ms. Smith had a score of 1 in RF 3.a (because designating the PORV error as associated with a critical task), 3 in RF 3.b (i.e., no assigned errors), and 2 in RF 3.c. Her overall grade in Competency 3 was 1.99, which was sufficient to support a pass as long as her other competency scores were also above 1.80, as they were. But reassigning the second error related to Scenario 7, Event 3 from RF 1.c (to which the Exam Team had originally recommended the IRP assign this "second hit" in their Binder Tab 14[396]) to RF 3.b would reduce the latter score to 2, which would in turn reduce her overall grade in Competency 3 to 1.66. This is shown in Table 4, above, Region II's proposed grading sheet. With that change, the failure would be sustained regardless of Ms. Smith's scores on the other competencies. Thus, as Mr. McHale stated, with that shift, plus the PORV critical error, the failure would be sustained based on Competency 3 regardless of any IRP rulings on other issues.

126. After reviewing the Region II input and Mr. McHale's instructions,

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[391] Oct. 16, 2012 McHale E-mail (Ex. CCS-059).

[392] *Id.* (emphasis added).

[393] *Id.* (emphasis added).

[394] Region II Recommendations (Ex. CCS-060) at 6.

[395] Informal Review Results — Rev. 1 (Ex. CCS-066) at 36.

[396] *See* Rating Factor 3.C: Control Board Operations, Manual Control (Ex. NRC-038) at 2 (Undated). On page 2, 1.b is incorrectly listed but clearly meant to be 1.c and accepted as 1.c by the IRP. *See id.* at 2.

the IRP prepared Rev. 4,[397] which was in agreement with three of the Region II recommendations[398] and sustained the failure. It reflects, among other things, the change advocated by Region II and supported by Mr. McHale: the second error related to Scenario 7, Event 3 was reassigned from RF 1.c to RF 3.b.[399] And the IRP's removal of the communications error associated with generically directing IOAs[400] being reinserted due to Region II's recommendation[401] did not matter as Mr. McHale stated.[402]

127. Mr. Jackson, on October 25, 2012, submitted the Final Informal Review Results document to Mr. McHale.[403] It did not include a grade sheet, but it sustained the failure.

128. The final IRP simulator test grade sheet, Form ES-303-1 (Table 5, below), was included with the Staff's testimony filed on May 31, 2013.[404] It reflects the Rev. 4 changes that sustained the failure. Ms. Smith's score on RF 3.b is now 2 and her overall score on Competency 3 is now 1.66, precisely as recommended by Region II and supported by Mr. McHale. Likewise, her score on RF 4.a is 1 and her overall score on Competency 4 is 1.60.

29. In a letter dated November 15, 2012, Ms. Smith was notified of the results of her review request of June 5, 2012 (the 2012 Denial Letter). The letter states, "[f]ollowing an independent review of the additional information you supplied, the staff has determined that you did not pass the simulator operating

[397] Informal Review Results — Charlissa C. Smith Senior Reactor Operator Applicant, Vogtle Electric Generating Plant (Ex. CCS-069) (Undated) [hereinafter Informal Review Results — Rev. 4].

[398] Staff PFF ¶ 280.

[399] Informal Review Results — Rev. 4 (Ex. CCS-069) at 25.

[400] *See* Informal Review Results (Ex. CCS-024) at 30.

[401] *See* Region II Recommendations (Ex. CCS-060) at 8-9.

[402] *See* Oct. 16, 2012 McHale E-mail (Ex. CCS-059).

[403] NRC Panel Review Results (Ex. CCS-037); Tr. at 560 (Jackson); E-mail from David Muller to Donald Jackson (Ex. CCS-063) (Oct. 23, 2012 12:37 PM); E-mail from John McHale to David Muller (Ex. CCS-064) (Nov. 1, 2012 11:16 AM).

[404] Staff's Statement of Position (Ex. NRC-001) at 122-23.

Competency/ Rating Factors	RF Weights	RF Scores	RF Grades	Comp. Grades
1. Interpretation/Diagnosis				
a. Recognize & Attend	0.20	3	0.60	
b. Ensure Accuracy	0.20	3	0.60	2.4
c. Understanding	0.30	2	0.60	
d. Diagnose	0.30	2	0.60	
2. Procedures				
a. Reference	0.30	3	0.90	
b. EOP Entry	0.30	3	0.90	2.6
c. Correct Use	0.40	2	0.80	
3. Control Board Operations				
a. Locate & Manipulate	0.34	1	0.34	
b. Understanding	0.33	2	0.66	1.66
c. Manual Control	0.33	2	0.66	
4. Communications				
a. Clarity	0.40	1	0.40	
b. Crew & Others Informed	0.40	2	0.80	1.60
c. Receive Information	0.20	2	0.40	
5. Directing Operations				
a. Timely & Decisive Action	0.30	3	0.90	
b. Oversight	0.30	2	0.60	2.30
c. Solicit Crew Feedback	0.20	2	0.40	
d. Monitor Crew Activities	0.20	2	0.40	
6. Technical Specifications				
a. Recognize and Locate	0.40	1	0.40	
b. Compliance	0.60	3	1.80	2.20

Table 5. Final Review Panel Grade Sheet, Form ES-303-1[405]

test. The results of our review are enclosed."[406] In fact, only a summary of the review results was enclosed.[407]

130. Enclosure 1 to the 2012 Denial Letter, as labeled, simply includes a summary of the regrading, "for the sake of brevity,"[408] and only provides the detail regarding Competency 3, included below. Since the grade for this competency is less than 1.80, the conclusion of the Independent Review Panel was that Ms. Smith

[405] *Id.*

[406] Nov. 15 Denial Letter (Ex. CCS-014) at 1.

[407] *See id.* at 2-9.

[408] *Id.* at 4.

"did NOT pass the [2012] Operating Test."[409] As noted in the right-hand column of Table 6, comments are included detailing the Panel's findings/reasoning for Competency 3.

Competency Area 3 Results:

Applicant Docket Number: 55-23694					**Page 1 of 1**
Senior Reactor Operator Simulator Operating Test Grading Details					
Competencies/ Rating Factors (RFs)	RF Weights	RF Scores	RF Grades	Comp. Grades	Comment Page No.
3. Control Board Operations					
a. Locate & Manipulate	0.34	1	0.34		
b. Understanding	0.33	2	0.66	1.66	See below
c. Manual Control	0.33	2	0.66		

Table 6. Independent Review Panel Final Results Regarding Competency 3[410]

131. Because the 2012 Denial Letter and its Enclosures included only a summary of the Competency 3 regrading and no other competency results, Ms. Smith sent an e-mail to Mr. McHale on November 19, 2012, informing him she had received the Denial Letter and asking for a complete grade sheet.[411] Mr. McHale responded by e-mail later that day, stating:

> A revised Form ES-303-1 was not prepared as part of this administrative review. . . . As an administrative review, it was not necessary to prepare a new grading sheet, but rather to focus on how reviewed areas could potentially result in a different outcome from the original grading. Where the review agreed with the original grading for assignment of errors to rating factors, there would be no change to the original grading. For rating factors where there were differences, the review evaluated the results of those outcomes on the pass/fail decision. As detailed in the enclosure to our response, our review of your performance in Competency Area 3, "Control Board Operations," resulted in sustaining failure of the operating test.[412]

132. This response from Mr. McHale is contradicted by the completed ES-303-1 forms developed during the IRP process (Tables 2 and 3, *supra*). As Mr. Jackson acknowledged in his prefiled testimony: "Using the first revision

[409] *Id.* at 3.

[410] *Id. at 4.*

[411] Sept. 14 McHale E-mail and Corresponding E-mails (Ex. CCS-038) [hereinafter Sept. 14, 2012 McHale E-mail and Corresponding E-mails] (includes November 19, 2012 E-mail from Smith to McHale and several E-mail exchanges between Smith and McHale, referenced as FOIA-2013-0206, at 5).

[412] Sept. 14, 2012 McHale E-mail and Corresponding E-mails (Ex. CCS-038) at 5.

of the panel report as a starting point, subsequent revisions to the panel report did typically include a complete regrade of Ms. Smith's simulator scenario examination, by incorporating errors made by Ms. Smith (from her original NRC grading) that she did not contest."[413] Mr. McHale was involved throughout the IRP process and should have known this.

4. Board Ruling on Ms. Smith's Claim That the IRP's Review Was not Independent or Impartial

133. Ms. Smith's Statement of Position 3 contends that the IRP, after initially finding she had passed the simulator examination, was unduly influenced by the Region II Exam Team and IOLB pressures. Ms. Smith alleges that the Exam Team initiated continual contact with the IRP after the initial interviews, and also that the IOLB provided direction based on examiner comments to sustain the failure.

134. In response, the Staff points out that, under the guidance in OLMC-500, "during an appeal panel review, the panel must 'establish and maintain communications with the affected region [and IOLB], in order to ensure that the review results include regional and IOLB input.'"[414] The Staff further argues that "there is no expectation that the informal review panel will remain strictly 'independent' of the affected region and its examiners by somehow walling itself off from input from these sources."[415] According to the Staff, the IRP did no more than obtain necessary information from the Exam Team and consider input from the IOLB and the Region, as it was permitted to do.

135. We recognize that a review panel must obtain necessary information from the Exam Team. But the Staff's documents confirm that the review is nevertheless to be independent. The scoring review is referred to in Staff exhibits and testimony as "informal," "independent," and sometimes both. For example, in the November 15, 2012, denial letter, both terms are used.[416] Enclosure 1 to the denial letter is entitled *Summary of Informal Review Results Sustaining Failure of Operating Test,* but it also states in its first paragraph that "[t]his review was conducted by an independent panel of NRC staff from other NRC regions and headquarters . . . ."[417] The next page also refers to "[t]he independent review."[418] Other than in the title, the word informal is never used again, and the review

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[413] Jackson's Prefiled Testimony (Ex. NRC-004) at 8.

[414] Staff's Statement of Position (Ex. NRC-001) at 59 (quoting OLMC-500 (Ex. CCS-030) at 6).

[415] Staff's Statement of Position (Ex. NRC-001) at 68-69.

[416] *See, e.g.,* Nov. 15 Denial Letter (Ex. CCS-014) at 1-2.

[417] *Id.* at 3.

[418] *Id.* at 4.

describes itself and its process five times to have been independent.[419] The scoring review was thus intended to be conducted by a panel that was independent of the Exam Team, and it was described to Ms. Smith in those terms.

136. The Staff acknowledges that NUREG-1021 and OLMC-500 require that the informal review panel "remain 'impartial' meaning that although it 'may include a representative from the affected region,' it may not 'include individuals involved with the applicant's licensing examination.'"[420] The question, then, is whether the review panel impartially and objectively evaluated the information it received and reached its own decision, or whether it was unduly influenced by pressure from the Region and/or the IOLB.

137. The IRP draft reports (including the grading sheets to the extent we have them or have been able to reconstruct them) between September 20 and October 11 show Ms. Smith passing. We must therefore determine whether the shift in the IRP's decision-making process from a pass to a failure was reached independently or as the result of pressure from the IOLB and the Region. The key documents in this analysis are Region II's detailed comments of October 12 and Mr. McHale's October 16 e-mail, discussed in paragraphs 124-125, above. The e-mail endorsed the critical grading change recommended by Region II which ensured that Ms. Smith would fail regardless of other rulings in her favor by the IRP. Notwithstanding the Staff's arguments, we view Mr. McHale's message not as a recommendation or advice, but an implicit instruction to the IRP to adopt the grading change advocated by Region II. And that is exactly what the IRP did. We find no contemporaneous evidence in the record to show that the IRP engaged in any independent analysis of the critical changes recommended by the Region and endorsed by Mr. McHale. Moreover, rather than encouraging the IRP to reach its own independent decision, Mr. McHale instructed the IRP members that if they had any questions they should contact Mr. Bates. Far from being an objective or neutral source of information, Mr. Bates was a member of the Exam Team advocating the critical grading change in question so that the failure would be sustained.

138. Our conclusion is further supported by what happened next. As we have previously explained, the Staff provided Ms. Smith with only a limited part of the final Informal Review Results document, and, when she asked for more information, misinformed her that no complete grading sheet had been prepared. Thus, the Staff deliberately failed to provide Ms. Smith with information that was essential to her ability to understand the decision that had been reached and to appeal the IRP's decision if she chose to do so. That is not the action of an

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[419] *Id.* at 3-4.

[420] Staff's Statement of Position (Ex. NRC-001) at 69 (quoting OLMC-500 (Ex. CCS-030) at 3; NUREG-1021 (Ex. CCS-005A) at 234).

organization that has just performed an impartial and objective review, and it completely undercuts the credibility of the Staff's assurances that it handled Ms. Smith's appeal fairly.

139. Further evidence that the review was neither impartial nor independent is provided in an e-mail from Mr. Jackson to Mr. McHale dated October 7, attaching Rev. 2 (CCS-067).[421] Mr. Jackson states that "the attached document is ready for Region II comments" and that "[o]nce Region II comments are reviewed and *incorporated,* I will resubmit to you with a short cover letter."[422] Because the Region II comments would almost certainly come from the Exam Team, the IRP must have intended to incorporate in its decision the comments of the examiners whose decision the panel was reviewing. This was far more than requesting necessary factual information from the Exam Team. It allowed the Exam Team to participate in writing the decision that decided whether their grading of Ms. Smith was correct.

140. We therefore agree with Ms. Smith that the IRP's final decision was unduly influenced by the Region II Exam Team and IOLB pressures.

F. Board Findings on Ms. Smith's Objections to the Grading of Her 2012 Simulator Exam

141. The Denial Letter stated that "[i]f you do not accept the proposed denial, you may, within 20 days of the date of this letter, request a hearing pursuant to 10 CFR 2.103(b)(2). Submit your request in writing . . . ."[423] On December 5, 2012, Ms. Smith timely filed, pursuant to 10 C.F.R. § 2.103(b)(2), a demand for a hearing, challenging the denial of her 2012 application for an SRO license.[424]

142. Table 7, below, identifies Ms. Smith's Statements of Positions 4-12 by the specific event to which each relates. Table 7 also compares the Exam Team's original grading for each contested event with the IRP's final grading of each such event.

143. Table 7 shows that the IRP agreed with Ms. Smith's Statements of Positions 4, 5, and 6. Accordingly, the IRP did not assign the contested errors that were the subject of those Statements of Position to any rating factors. Because the IRP resolved those contested errors in favor of Ms. Smith, and the Staff has not

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[421] *See* E-mail from Donald Jackson to John McHale (Ex. CCS-032) (Oct. 7, 2012 10:05 AM) [Oct. 7, 2012 Jackson E-mail]; *see also* Staff PFF ¶ 273.

[422] Oct. 7, 2012 Jackson E-mail (Ex. CCS-032) (emphasis added).

[423] Nov. 15 Denial Letter (Ex. CCS-014) at 1.

[424] Charlissa C. Smith Request for Hearing (Dec. 5, 2012) [hereinafter Dec. 5, 2012 Request for Hearing].

Smith Position Number	Scenario and Event Number	Brief Event Description	2012 Exam Rating Factors[425]	IRP Assigned Rating Factors[426]
4	S7E1	Raise Power, Maintain Tave	3.a.	None
5	S3E7	SG Tube Rupture with Premature SI/SLI Blocking Direction	1.b.	None
6	S7E6	RWST Line Break, Delay in Closing Valves	3.a.	None
7	S3E5	Main Turbine EHC Pump Trips with a Failure of Standby Pump to Auto Start	1.b.	1.d., 5.c.
8	S6E6	Incorrect category of Diagnosis for Auto Rod Control	1.d.	1.d.[427]
9	S7E3	Loss of Cooling to Letdown HX, Mis-operation of Valve Controller	3.c.	3.c., 3.b.
10	S6E4	Controlling Pzr Level Channel Fails Low	1.c.	1.c., 5.b.
11	S3E4	Controlling Pzr Pressure Channel Fails High	1.c.	1.c., 2.c., 5.d.
12	S7E5	Controlling Pzr Pressure Channel Fails High, PORV Opens, Mis-operation of Valve Control	3.a.	3.a. CT

Table 7. Errors Challenged by Ms. Smith in Her Statements of Position 4-12

argued that the IRP's determinations in favor of Ms. Smith were erroneous, we will treat those contested errors as having been resolved in favor of Ms. Smith.[428]

144. Although the IRP decisions concerning Ms. Smith's Statements of Position 4, 5, and 6 were to her benefit, the IRP made several significant changes to the scoring procedure that offset the benefit she received from the IRP's determinations on those contested errors and resulted in the IRP sustaining the

[425] *See* Smith's Individual Exam Report (Ex. CCS-045) at 8, 10, 12, 14, 16, 18, 19, 20, 21. On each of these pages is discussion of the review items.

[426] NRC Panel Review Results (Ex. CCS-037) at 3, 8, 11, 17, 20, 23, 27, 37. On each of these pages is discussion of the review items.

[427] Region II Recommendations (Ex. CCS-060) at 11. Statement of Position 8 was not addressed in the IRP's Final Report except that they listed it in on page 37 in the table of uncontested items since it was not listed in Ms. Smith's letter of December 5, 2012 (CCS-034 at 3). It was addressed in the July 5, 2012, comments from Mr. Bates to Mr. Muller with a recommendation to keep it the same as in the original grading. *See* Vogtle Operating Exam Appeal (Ex. CCS-101) at 7-8. It also was not addressed in the October 12, 2012, recommendation from the Exam Team to the IRP except to have left it unchanged in the examination team's ES-303-1 grade sheet.

[428] *See supra* discussion at pages 147-151.

determination that she did not pass the 2012 Vogtle operating exam. Those changes included, first, the assignment of individual errors to multiple rating factors. Specifically, as shown in Table 7, for the scenario events corresponding to Smith Statements of Position 7, 9, 10, and 11, the IRP assigned Ms. Smith's errors on those events to two or more rating factors, although the Exam Team had assigned each of those errors to only one rating factor.

145. In addition, the IRP designated the event corresponding to Ms. Smith's Statement of Position 12 ("Controlling Pzr Pressure Channel Fails High, PORV Opens, Mis-operation of Valve Control") as a critical task, even though it had not been designated a critical task on the IER.

146. Ms. Smith's Statements of Position allege a number of errors in the grading of her 2012 Simulator Exam. The Board, however, finds it necessary to review only some of her arguments to decide whether she passed the Exam. First, we consider her allegation that the IRP graded her performance on the 2012 Simulator Exam at a more critical level than the other applicants who took that exam, in violation of NUREG-1021.[429] Second, we evaluate Ms. Smith's arguments concerning the PORV control switch error. These include her arguments in her Statement of Position 12 that (1) her error in operation of the PORV control switch should not have been reevaluated by the IRP because she did not contest that error; (2) that designating operation of the PORV control switch as a critical task during the informal review, 6 months after the simulator exam had been completed, violated the requirement that critical tasks be defined and identified in the examination outline distributed to examiners before the exam is given; and (3) that the IRP failed to define the critical task as required by NUREG-1021, Appendix D, including failing to provide a measurable performance indicator to determine whether the critical task was performed correctly.[430]

1. The IRP Arbitrarily Graded Ms. Smith Under Different and More Critical Criteria Than Those Applied to the Other Applicants Who Took the 2012 Simulator Exam

a. The First Denial of Equal Treatment: Double Counting of Errors Solely for Ms. Smith

147. The IRP changed the grading approach so that, for Ms. Smith, individual errors could be counted against more than one rating factor. This change was applied solely to Ms. Smith; all of her peers were graded under the Exam Team's standard that applied each error to only one rating factor. As the Exam Team acknowledged, "[i]f we had double-counted (assigned an error to more than one

[429] Smith's Prefiled Testimony (Ex. CCS-076) at 54-55.

[430] Smith's Statement of Position (Ex. CCS-075) at 9-10.

rating factor) errors only for Carla, then we would have been applying a different standard to Carla as compared to the other applicants."[431] That is exactly what the IRP did when it changed the grading standard solely for Ms. Smith: it applied a different and more critical standard to Ms. Smith than that applied to the other license applicants. This was an arbitrary and unjustified departure from the goal of NUREG-1021 to "ensure the equitable and consistent administration of examinations for all applicants."[432]

(i) THE GRADING CHANGE

148. Both the Exam Team and the Review Panel followed the same guidance from NUREG-1021, ES-303 D.1.d: "Whenever possible, attempt to identify the root cause of the applicant's deficiencies and code each deficiency with no more than two different rating factors. However, one significant deficiency may be coded with additional rating factors if the error can be shown, consistent with the criteria in Section D.3.b, to be relevant to each of the cited rating factors."[433]

149. These criteria were applied differently, however, by the Exam Team in its grading of the 2012 operating examination and by the IRP during its review. For the 2012 Vogtle operating exam, the Exam Team decided in accordance with Region II policy that it would assign an error to only a single rating factor, the one determined to be the root cause of the error. This decision is explained in the General Grading Approach section of the July 5, 2012, e-mail from Mr. Bates to Mr. Muller, including its justification in NUREG-1021.[434]

150. Mr. Widmann's hearing testimony confirmed his Region's approach to operating examination grading. He stated "Region II believes that going after the root cause gets to the underlying element that an applicant that failed would have to be remediated on. So, we feel that represents best that person's error."[435]

151. Although the Exam Team was very careful to explain its policy of assigning each error to only the root cause rating factor for the entire class in their July 5, 2012 document,[436] they changed their approach during the informal review. In their October 12, 2012 response to the IRP,[437] when they were confronted with the IRP's recommendation that Ms. Smith should have passed her simulator examination, they continually endorsed the "double counting" of RFs, sometimes concurring with the IRP's selection of RFs and sometimes recommending a

[431] Vogtle Operating Exam Appeal (Ex. CCS-101) at 1.
[432] NUREG-1021 (Ex. CCS-005A) at 13.
[433] NUREG-1021 (Ex. CCS-005A) at 143.
[434] Vogtle Operating Exam Appeal (Ex. CCS-101) at 1.
[435] Tr. at 638 (Widmann).
[436] Vogtle Operating Exam Appeal (Ex. CCS-101) at 1.
[437] Region II Recommendations (Ex. CCS-060).

different distribution, but never advising that single counting, the Standard for Region II,[438] should be used for Ms. Smith as it had been for all other applicants in her class.

152. The IRP followed a grading policy under which it would, when deemed appropriate, assign the same error to multiple rating factors. Mr. Jackson, in his prehearing written testimony, also referred to ES-303 D.1.d as being the justification for the IRP having coded deficiencies to more than one Rating Factor.[439] Mr. Jackson confirmed that the application of deficiencies to more than one Rating Factor[440] is the approach followed in Region I and Region IV.[441] He stated, "I can tell you for Region I every applicant that sits for an exam in my Region, that is how we apply NUREG-1021. If it is appropriate to put it over two or more rating factors for an error, we do that routinely."[442] Thus, Ms. Smith was regraded by the IRP under the grading approach followed in Regions I and IV rather than that applied in Region II, the region in which she was seeking a license.

153. Both the application of NUREG-1021, ES-303 D.1.d by Region II, and its different application in Regions I and IV, constitute permissible readings of that provision. But the fact that NUREG-1021 is applied differently outside of Region II is not an appropriate reason for the IRP to have applied the Examiner Standards to Ms. Smith differently from how they are normally applied in Region II. Ms. Smith, after all, was applying for a license in Region II, not in Region I or Region IV. Because NUREG-1021 directs equity and consistency in the administration of examinations for all applicants, she should have been graded consistently with all other Region II applicants and all other applicants in the 2012 licensing class. Instead, Ms. Smith was held to a different and more critical standard than not only all the other members of her licensing class, but all other licensing applicants in Region II.

154. Furthermore, the Staff did not comply with the requirement of NUREG-1021, ES-502 D.2.c, which provides that "[w]hen the NRR operator licensing program office has concurred in the results of the review, the NRC's regional office will . . . (2) review the examination results of the other applicants to determine whether any of the licensing decisions are affected. . . ."[443] At no time did Region II review the results of the other applicants who took the 2012 Vogtle operating examination to determine whether those licensing decisions would be affected by the grading changes that the IRP made for Ms. Smith. For the IRP to

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[438] Tr. at 638 (Widmann).

[439] Jackson's Prefiled Testimony (Ex. NRC-004) at 4.

[440] Tr. at 575-76 (Jackson).

[441] Tr. at 577, 586-88 (Jackson).

[442] Tr. at 587 (Jackson).

[443] NUREG-1021 (Ex. CCS-005A) at 235.

change the grading approach for Ms. Smith, it had to comply with this provision of NUREG-1021 to ensure that all license applicants in her class would be subject to the same grading policy. It was arbitrary and an abuse of discretion for the IRP and the Region not to have complied with this provision, regardless of the statement by Mr. Jackson that his panel was charged only with evaluating Ms. Smith.[444]

(ii) THE IMPACT OF THE GRADING CHANGE

155. The change in RF grading from that done by the Region II Exam Team and that done by the IRP is shown in Table 7. The Exam Team assigned Ms. Smith's error on Scenario 3, Event 5, to RF 1.b, but the IRP assigned it to both RFs 1.d and 5.c. The Exam Team assigned Ms. Smith's error on Scenario 7, Event 3, to RF 3.c, but the IRP assigned it to both RFs 3.c and 3.b. The Exam Team assigned Ms. Smith's error on Scenario 6, Event 4, to RF 1.c, but the IRP assigned it to both RFs 1.c and 5.b. The Exam Team assigned Ms. Smith's error on Scenario 3, Event 4, to RF 1.c, but the IRP assigned it to both RFs 2.c and 5.d.

156. The double counting contributed to failing Ms. Smith on Competency 3, Control Board Operations, by reducing her grade on that competency below the passing grade of 1.80. As shown in Table 1, the Exam Team's simulator operating test grading sheet from the 2012 examination gave Ms. Smith a passing grade of 1.99 on Competency 3. This reflected the Region II policy of assigning an error to only one Rating Factor. In particular, the Exam Team assigned Ms. Smith's error in Scenario 7, Event 3 (Loss of Cooling to Letdown HX, Mis-operation of Valve Controller) to Rating Factor 3.c (Control Board Operations, Manual Control). *See* Table 7. Because this was a noncritical error, and Ms. Smith had no other errors assigned to Rating Factor 3.c, her score on that Rating Factor was reduced from 3 to 2. The Exam Team did not assign any of her errors to Rating Factor 3.b (Control Board Operations, Understanding), so her score on that Rating Factor was 3. The Exam Team assigned three separate errors to Rating Factor 3.a (Control Board Operations, Understanding), which reduced her score on that Rating Factor to 1. *See* Table 7. Multiplying Ms. Smith's scores on the respective Rating Factors by the weights assigned to each of those factors yields the passing score of 1.99 on Competency 3. *See* Table 1.

157. The IRP, however, assigned Ms. Smith's error in Scenario 7, Event 3, to *both* Rating Factors 3.b and 3.c. *See* Table 7. This change reduced Ms. Smith's score on both Rating Factors 3.b and 3.c to 2. The change reflected the double-counting grading approach implemented by the IRP during its review. Because of the reduced score on Rating Factor 3.b, Ms. Smith's overall score on Competency 3 was reduced to a failing score of 1.66. *See* Tables 5 and 6.

[444] Tr. at 579-80 (Jackson).

158. Thus, because of the double-counting grading standard implemented by the IRP, Ms. Smith was graded under a more critical standard than the rest of her class, and this more critical standard in fact lowered her score on the simulator part of the 2012 operating exam.

(iii) THE STAFF FAILS TO PROVIDE A PERSUASIVE JUSTIFICATION FOR CHANGING THE GRADING STANDARD SOLELY FOR MS. SMITH

159. The Staff states that it conducted "a complete, *de novo* re-grading of Ms. Smith's simulator test."[445] The Staff claims that such a complete regrading is authorized by OLMC-500.[446] The Staff thus asserts the right to comprehensively regrade Ms. Smith's simulator exam, even if this includes applying grading standards to her that are more strict than (1) those applied to the other applicants in her class and (2) those applied generally in Region II.

160. The Staff overstates its authority. Certainly the administrative review panel may correct *errors* made in the administration and grading of the applicant's simulator exam. But the IRP did not claim, nor could it, that by single-counting errors the Exam Team had inappropriately scored the competencies. Instead, the IRP substituted the double counting of errors standard employed in NRC Regions I and IV, despite the fact that Ms. Smith was seeking an SRO license for the Vogtle Plant in Region II. This change was unjustified, arbitrary, and inconsistent with the purpose of NUREG-1021 that grading standards be applied to "ensure the equitable and consistent administration of examinations for all applicants."[447] Consistent with that purpose, the Exam Team originally graded all applicants in the 2012 Plant Vogtle exam class under the same grading standards. As the Exam Team stated, it "applied the exact same criteria to Carla for what was considered an error and for how those errors were assigned to only the root cause rating factor" in order to ensure that she was graded consistently with other applicants in her exam class.[448] We see no good reason, nor has the Staff provided any, why an applicant who files an administrative appeal forfeits her right to be graded under the same appropriate grading standard that was applied to other members of her exam class and other applicants in her region.

161. Unlike the Staff, we find nothing in OLMC-500 that authorized the IRP to substitute a grading standard used in Regions I and IV for the grading standard appropriately applied in Region II to an applicant seeking a license in that region. As described by the Staff, "OLMC-500 states that, '[u]pon determining the applicant's actual actions during the contested test items, the

[445] Staff PFF ¶ 234.

[446] *Id.* ¶ 233.

[447] NUREG-1021 (Ex. CCS-005A) at 13.

[448] Vogtle Operating Exam Appeal (Ex. CCS-101) at 1.

reviewer(s) shall utilize the grading policies contained in NUREG-1021, ES-303, to regrade the contested portion(s) of the operating test.'"[449] But that statement is followed by additional language which shows that the review panel is not endowed with unlimited regrading authority. In particular, with respect to the simulator exam, the reviewer must determine "whether the competencies were appropriately scored."[450] There would be no reason to direct such a determination if the reviewer were authorized to make "a complete, de novo re-grading of an applicant's simulator test"[451] even when the competencies were appropriately scored by the examiners. The obvious import of this instruction, then, is that to the extent the competencies were appropriately scored by the examiners, the review panel should not alter the scoring. Because the Exam Team's single counting of errors was an appropriate scoring method, the IRP had no justification for substituting a double counting of errors standard merely because it would have applied that standard had Ms. Smith been seeking a license in Region I or Region IV. Moreover, because Ms. Smith was not seeking an SRO license in either of those regions, the IRP's action was unjustified, arbitrary, and an abuse of discretion.

162. Furthermore, even had the IRP concluded that the single counting of errors is an inappropriate scoring standard, the Region would have been obligated under NUREG-1021, ES-502 D.2.c, to review the examination results of the other applicants to determine whether any of the licensing decisions would be affected by a change to a different scoring method.[452] Thus, in order to grade Ms. Smith under the standard applied in Regions I and IV, the Staff had to be willing to regrade the other applicants under the same standard. By arbitrarily failing to comply with that provision, the Staff ensured that Ms. Smith would be graded under a different standard than all other members of her class, thus denying her equal treatment and abusing its discretion.

163. The Staff's second argument to attempt to justify the double counting of errors solely for Ms. Smith acknowledges that the double-counting standard was "more strict" than the single-counting standard applied to the other applicants in her 2012 class.[453] The Staff maintains, however, that this more critical grading standard for Ms. Smith was balanced to some unspecified extent by what it terms the "more lenient" grading standard that the IRP allegedly applied under NUREG-1021, ES-303 D.2.b.[454] As previously explained, ES-303 D.2.b allows an RF score based on two (but not three) errors to be increased from a 1 to a 2 if

[449] Staff PFF ¶ 233 (citing OLMC-500 (Ex. CCS-030) at 8-9).
[450] OLMC-500 (Ex. CCS-030) at 9.
[451] Staff PFF ¶ 234.
[452] *See supra* ¶ 154.
[453] Staff PFF ¶ 257.
[454] *Id.*

this can be justified based on the applicant correctly performing other activities related to the same RF.[455] The Exam Team gave Ms. Smith no such credit. But, according to the Staff, the IRP, in applying ES-303 D.2.b, "always consider[ed] two errors against an RF to constitute a score of a '2' based on the assumption that another related activity was correctly performed."[456] The Staff claims that the IRP's application of the more critical double-counting standard to Ms. Smith and its allegedly more lenient application of ES-303 D.2.b "may very well balance each other out . . . ."[457]

164. We reject this argument for several reasons. First, we disagree with the Staff's claim that the IRP applied a more lenient grading standard under ES-303 D.2.b than the Exam Team.[458] On the double scoring of errors issue, we have clear evidence of a substitution by the IRP of the grading policy used in Regions I and IV for that generally used in Region II. By contrast, we have no persuasive evidence to show that Region II has a clearly defined policy for the application of ES-303 D.2.b, and, if so, what that policy is. Ms. Smith's IER, Form ES-303-1, contains no explanation of whether, or how, the Exam Team applied the grading standard in ES-303 D.2.b.[459] Even though Ms. Smith's IER grade sheet shows several RF scores of 1 based on two errors assigned to the RF,[460] the IER provided no explanation of whether or how the Exam Team applied the standard. Nor do we have any other evidence to reliably establish a Region II policy on that issue.

165. The only explanation for the Exam Team's decision not to give Ms. Smith any credit for correct actions was provided in documents that the Exam Team generated *after* Ms. Smith filed her request for informal review. The Exam Team stated that, even though it assigned Ms. Smith's error to only one rating factor, "the association with other rating factors was used as justification for placing a score of '1' in some rating factors where only two errors were documented."[461] The Exam Team produced a "Table of Errors and Related Rating Factors," which it argued supported this justification for not increasing any of Ms. Smith's RF scores from 1 to 2, as permitted under ES-303 D.2.b.[462]

166. Similarly, in its "Vogtle Operating Exam Appeal" document, the Exam Team argued:

> Although the examiners only documented errors on the applicant's original Form

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[455] *See supra* ¶ 102.
[456] Staff PFF ¶ 257.
[457] *Id.* ¶ 275.
[458] Staff PFF ¶ 257.
[459] Smith's Individual Exam Report (Ex. CCS-045).
[460] *See* Table 1.
[461] Grading Philosophy and Consistency (Ex. NRC-032) at 2.
[462] *Id.* at 7.

> 303 under the rating factor most closely associated with the root cause of the applicant's deficiency, the examiners considered the elements of other errors and their relationship to these rating factors as justification for not assigning a score of "2" when only two rating factors were documented.[463]

This argument does not mention a general Region II policy of not increasing RF scores from 1 to 2. Rather, it asserts that in Ms. Smith's case no such increase was justified because of her "other errors and their relationship to these rating factors. . . ."[464]

167. We also disagree with the Staff's argument that the IRP had a policy of automatically converting a RF score of 1 to a 2 whenever only two errors were involved, without specifically considering whether such a change was justified. If that were true, then the IRP would have ignored the Exam Team's argument for not increasing Ms. Smith's RF scores. But in fact the IRP gave detailed consideration to the Exam Team's "Table of Errors and Related Rating Factors" (which the IRP referred to as the "Table of other errors") in its grading. Mr. Muller, in an e-mail to Mr. Jackson dated October 3, stated:

> For the past several days, I have been reviewing RII's "Table of other errors" to see if additional rating factors could be affected. I have been eliminating any "new" information, but just trying to see for the events where the applicant had problems, if additional hits against rating factors seem justified. I will forward to you and Chris Steely the results of that review. Then if we agree to additional "hits", I will incorporate them into the write-up, along with comments I already have from you and Chris.[465]

Mr. Jackson confirmed that the IRP considered the Exam Team's "Table of other errors."[466] However, he stated that the Table did not change the final grading.[467]

168. We also do not agree that the IRP, in applying ES-303 D.2.b, "always consider[ed] two errors against an RF to constitute a score of a '2' based on the *assumption* that another related activity was correctly performed."[468] The record shows that the IRP did not simply assume that Ms. Smith performed correct actions in related activities. Rather, the IRP reviewed Ms. Smith's IER and concluded that "there were many other scenario events where there were *no* documented applicant errors (per the applicant's original grading as contained in her Individual Examination Report), such that other activities were correctly performed related

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[463] Vogtle Operating Exam Appeal (Ex. CCS-101) at 2.

[464] *Id.* at 2-3.

[465] *See* E-mail from David Muller to Chris Steely (Oct. 3, 2012 11:42 AM) (Ex. CCS-020).

[466] Tr. at 582-83 (Jackson).

[467] Tr. at 583-84 (Jackson).

[468] Staff PFF ¶ 257 (emphasis added).

to the RFs with two assessed errors."[469] Although later versions of the Informal Review Results document omitted that statement, this does not mean that the IRP changed its conclusion. Rather, Mr. Jackson decided that the document should be "limited to addressing how each of the errors was dispositioned."[470]

169. Thus, we reject the Staff's claim that the IRP applied a grading standard under which an RF score of 1 based on two errors was automatically increased to a 2. Instead, we find that the IRP identified correct actions that Ms. Smith performed related to RFs to which two errors had been assigned and concluded that the scoring increase was justified despite the Exam Team's contrary arguments. This was not the application of a more lenient grading standard than that employed by the Exam Team (even assuming it had such a standard), but rather the result of the IRP's different evaluation of the question whether the increases were justified. That different evaluation fails to justify singling out Ms. Smith for a grading change — double counting of errors — that was not applied to any other applicant in her examination class.

170. In addition, the IRP's action of increasing Ms. Smith's scores from a 1 to a 2 in three RFs did not "balance . . . out"[471] the full negative impact of double counting her errors. The IRP increased Ms. Smith's scores from a 1 to a 2 in RFs 1.c, 1.d, and 4.b, because of positive actions coupled with only two identified errors in each of those RFs.[472] In those specific RFs, the scoring increase from a 1 to a 2 did offset the impact of the double counting of errors. But this was not true in Competency 3, Control Board Operations. Pursuant to its double counting of errors policy, the IRP assigned Ms. Smith's error in Scenario 7, Event 3, to both RFs 3.b and 3.c, causing her scores on both those RFs to be reduced from 3 to 2. As a result, Ms. Smith's overall score on Competency 3 was reduced from a passing score of 1.99 to a failing score of 1.66.[473] There was not and could not have been any increase in the RF score of 1 in Competency 3.a because it resulted from an error associated with a critical task, which requires a score of 1.[474] Thus, in Competency 3, there was not, and could not have been, any application of the 1 to 2 scoring increase to offset the negative impact of the double counting of errors.

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[469] Informal Review Results — Rev. 1 (Ex. CCS-066) at 34-35 (emphasis in original). The same statement is in Rev. 0. *See* Informal Review Results (Ex. CCS-024) at 36.

[470] Oct. 7, 2012 Jackson E-mail (Ex. CCS-032).

[471] Staff PFF ¶ 275.

[472] *See* Jackson's Prefiled Testimony (Ex. NRC-004) at 17.

[473] *See supra* ¶¶ 105, 125-128.

[474] NUREG-1021 (Ex. CCS-005A) at 145.

(iv) CONCLUSION

171. The Board therefore concludes, on the basis of clear and largely undisputed evidence, that the IRP's action in changing the scoring procedure so as to apply double counting of errors solely to Ms. Smith was an arbitrary and unjustified departure from the intent of NUREG-1021 to "ensure the equitable and consistent administration of examinations for all applicants."[475] The Staff's action ensured that Ms. Smith would be graded under a different standard than applied to all other members of her class, thus denying her equal treatment.

172. Eliminating the double counting of errors, however, does not result in Ms. Smith passing the simulator part of the 2012 operating exam. This is because Ms. Smith's score on Competency 4, Communications, was 1.60. *See* Table 5. Therefore, to pass, she required a minimum score of 2.00 on all other competencies, not just a passing score on those other competencies. Eliminating the double counting of Ms. Smith's error in Scenario 7, Event 3, would return her overall score on Competency 3 to 1.99, the score she received on the original 2012 simulator operating test grading sheet, because her score on Rating Factor 3.b would revert to 3. *See* Table 5. But she would still fail the simulator part of the operating exam because she needed scores of 2.00 on all competencies other than Competency 4. In other words, she would still fail the operating exam because of the .01 point deficiency on Competency 3. The Board must therefore consider another grading change made by the IRP that also impacted the scoring of Competency 3, the IRP's decision to redefine closing a Power Operated Relief Valve (PORV) as a critical task. We address that issue next.

b. The Second Denial of Equal Treatment: Designation of a New Critical Task Solely for Ms. Smith

173. The IRP made a second important change to the scoring. This change concerned Ms. Smith's error in taking a PORV control switch initially to the open position before taking it to the closed position during Scenario 7, Event 5.[476] The IRP agreed with the Exam Team that the error should have been assessed, and it also agreed with the Rating Factor assessed by the Exam Team. But, although the examination outline did not refer to the event as including a critical task[477] and Ms. Smith's error had not been graded by the Exam Team as the failure of a

[475] *Id.* at 13.

[476] *See* Table 7 of this Order; *see also* Smith's Prefiled Testimony (Ex. CCS-076) at 46-48.

[477] Form ES-D-1, App. D — Scenario 7 Outline (Ex. CCS-047) (Undated) [hereinafter Bates's Notes].

critical task,[478] the IRP nevertheless determined that Ms. Smith's initial incorrect operation of the control switch was a failure of a critical task.[479]

174. As with the double counting of errors, this change was made solely for Ms. Smith. For all other members of her 2012 operating exam class, closing the PORV control switch was not designated a critical task. This was the case not only for the specific scenario (#7) performed by Ms. Smith's crew and two other crews,[480] but also in a second scenario (#4) performed by one other crew 2 weeks later with no corrective changes having been made to the scenario outline.[481] In both Scenario 7 and Scenario 4, had the time-critical task not been completed successfully, the reactor would have scrammed, and malfunctions scheduled later in the scenarios could not have been evaluated.

175. Nothing in the record indicates that Region II at any time reviewed the results of the other applicants who took the 2012 Vogtle operating examination to determine whether those licensing decisions would be affected if closing the PORV had been designated a critical task for all applicants, rather than solely for Ms. Smith. Thus, as with the double counting of errors change, the Staff failed to follow NUREG-1021, ES-502 D.2.c. Even though the Exam Team claimed in its analysis developed for the IRP that it had "mis-graded" this event "because it was a failed critical task,"[482] it never attempted to correct the alleged misgrading of this event for any applicant other than Ms. Smith.

176. There is at least one other applicant whose simulator exam score would have been reduced if correctly closing the PORV had been defined as a critical task for all applicants, rather than only for Ms. Smith. The applicant designated to be the shift supervisor (SS) for Scenario 7, Event 5, failed to instruct Ms. Smith how to close the valve or even which valve (PORV or Block Valve) to close. For this communication error, the SS applicant received a reduction to RF 4.a (Communications, Clarity).[483] But the SS applicant's communications error was not attributed to a critical task even though it concerned the same event and same action — closing the PORV — that was designated a critical task for Ms. Smith.[484]

177. If the SS applicant's error had been treated consistently with Ms. Smith's error in the same event, and thus graded as associated with a critical task, his

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[478] Smith's Individual Exam Report (Ex. NRC-045) at 19.

[479] NRC Panel Review Results (Ex. CCS-037) at 37-38.

[480] Binder Tab 3 (Ex. NRC-031) at 5.

[481] Form ES-303-1, "O" Individual Examination Report (Ex. CCS-091) at 18 (June 30, 2013); Form ES-303-1, "P" Individual Examination Report (Ex. CCS-103) at 19 (June 30, 2013) [hereinafter "P" Individual Examination Report]; Binder Tab 3 (Ex. NRC-031) at 6.

[482] Rating Factor 3.A. (Ex. CCS-039) at 3.

[483] "V" Individual Examination Report (Ex. CCS-057) at 12.

[484] *Id.*

communication competency score would have been reduced.[485] If his other errors during the simulator exam had been subject to double counting, as Ms. Smith's errors were, his score on the simulator part of the operating exam might have been further reduced. But those changes were not made to the scoring of his simulator exam, only to the scoring of Ms. Smith's exam. The SS applicant passed the 2012 exam, received an SRO license, and is now working as a shift supervisor in the control room for the Vogtle Plant. Ms. Smith failed the simulator part of the 2012 exam, was denied an SRO license, and thus may not work as an SRO in the Vogtle control room.

178. We do not suggest that the SS applicant should not have received an SRO license or that we have any doubt about his qualifications. The point of this example is to demonstrate the arbitrariness and inequity of applying different grading standards to different applicants. Had Ms. Smith's error in connection with Scenario 7, Event 5 been graded by the IRP consistently with how the SS applicant's error in the same event was graded by the Exam Team, it would not have been graded as the failure of a critical task and she also would have passed the simulator exam, received an SRO license, and would be eligible to work as a shift supervisor in the control room for the Vogtle Plant.[486]

179. As with the double counting of errors issue, the result of designating the closing of the PORV a critical task solely for Ms. Smith was that the IRP graded her under a stricter standard than that applied to other applicants in her examination class. Because of this change by the IRP, Ms. Smith was assessed a greater scoring deduction for her error in initially failing to close the PORV. This resulted in a downgrading of RF 3.a to a 1 from what would have been a 2, as required by NUREG-1021, ES-303 D.2.b.[487] *See* Tables 5 and 6.

180. The Board therefore concludes, on the basis of clear and largely undisputed evidence, that the IRP's action in designating a critical task solely for Ms. Smith was an arbitrary and unjustified departure from the intent of NUREG-1021 to "ensure the equitable and consistent administration of examinations for all applicants."[488] The Staff's action ensured that Ms. Smith would be graded under a different standard than applied to all other members of her class, thus denying her equal treatment.

181. This single change by the IRP, which was accompanied with little supporting analysis, resulted in the failure determination for Ms. Smith on the 2012 Vogtle Operating Exam. Eliminating that change results in RF scores for competencies 3.a, 3.b, and 3.c of 2, 2, and 2, respectively, and a grade for Competency 3 of 2.00. *See* Table 6. Because Ms. Smith scored a 1.60 in

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[485] *See id.* at 3, 12.

[486] *See infra* ¶ 214.

[487] NUREG-1021 (Ex. CCS-005A) at 145.

[488] *Id.* at 13.

Competency 4, Communications, she was required to score 2.00 or higher in the other five competencies, which is now indicated. *See* Table 5. Given that Ms. Smith meets the scoring requirements of NUREG-1021, ES-303 D.2.b, and since she received Satisfactory scores on all 15 of her JPMs, the Board finds that she passed the 2012 Operating Exam. And, because she received a passing score on her 2012 Senior Reactor Operator written examination, the Board finds that Ms. Smith satisfied the operating and written examination requirements for an SRO license.

182. The Board further concludes that, had the IRP graded Ms. Smith's performance on the 2012 Vogtle Operating Exam by using the same standards applied to the other applicants — thus eliminating both the double counting of errors and the designation of closing the PORV as a critical task — Ms. Smith would have received RF scores for competencies 3.a, 3.b, and 3.c of 2, 3, and 2, respectively, and thus a grade of 2.33 on Competency 3, Control Board Operations. *See supra* Tables 6 and 7; ¶ 94.

183. This further confirms that Ms. Smith meets the scoring requirements of NUREG-1021, ES-303 D.2.b, for the simulator examination. As before, because she received satisfactory scores on all 15 of her JPMs and a passing score on her 2012 Senior Reactor Operator written examination, Ms. Smith satisfied the operating and written examination requirements for an SRO license.

2. Board Review of Ms. Smith's Other Challenges to the IRP's Determination That She Made an Error Associated with a Critical Task

184. If, contrary to our determination above, the IRP could permissibly redefine closing the PORV as a critical task solely for Ms. Smith, we would then have to consider Ms. Smith's other arguments challenging the IRP's determination that she made an error associated with a critical task.

a. Rescoring of a Noncontested Item

185. Ms. Smith did not contest five errors noted on her Form 303-1 from her IER, including her incorrect operation of the PORV control switch. The IRP considered not only errors that Ms. Smith contested, but also errors that were not contested. These included such issues as three Technical Specification omissions or misunderstandings and, most importantly, the issue whether closing the PORV control switch should be a critical task.[489]

[489] *See* NRC Panel Review Results (Ex. NRC-054) at 37; *see also* NRC Panel Review Results (Ex. CCS-037).

186. Ms. Smith states[490] that OLMC-500, the NRC procedure entitled "Processing Requests for Administrative Reviews and Hearings," addresses requirements for assessing contested test items[491] but makes no mention of noncontested test items. She is correct. She infers from this that noncontested test items should not be reviewed.[492] Further, IRP panel member David Muller said in an e-mail on July 18, 2012, before he drafted the "first revision" that he would "[r]eview the errors the applicant did not contest but that were documented by Region II in the original individual examination (grade) report. Hopefully, nothing will change here (and I am a bit hesitant to change things the applicant did NOT contest), and the errors and the RFs assigned by Region II were appropriate."[493]

187. Despite Mr. Muller's understandable concern, the Board finds that the IRP could permissibly consider noncontested items if necessary for a complete evaluation of Ms. Smith's performance on the 2012 Simulator Examination. Though not explicitly stated in OLMC-500, review of noncontested test items is provided for in Section E.1, Review Guidance, which states that "[u]pon determining an outcome for all contested test items, the reviewer(s) shall utilize NUREG-1021, ES-303 to determine the applicant's overall operating test score based on the remaining test items."[494] However, since the IRP chose to review and rule on the noncontested items, at a minimum, its review should have been conducted and documented with the same level of analysis as the contested items.

b. Failure to Comply with NUREG-1021 Standards Related to Critical Tasks

188. We therefore consider Ms. Smith's other arguments related to this issue. We begin by reviewing the definition of a critical task. We then review the record of Scenario 7, Event 5; the potential impact on operation of the reactor; and how Ms. Smith's performance was graded and validated. We then examine Ms. Smith's argument that designating operation of the PORV control switch as a critical task during the informal review, 6 months after the simulator exam had been completed, violated the requirement that critical tasks be defined in the examination outline distributed to examiners before the exam is given.[495] Finally, we evaluate her argument that the IRP failed to define the critical task as required by NUREG-1021, Appendix D, including failing to provide

[490] Smith's Prefiled Testimony (Ex. CCS-076) at 18.
[491] OLMC-500 (Ex. CCS-030) at 8-9.
[492] Smith's Prefiled Testimony (Ex. CCS-076) at 18.
[493] July 18, 2012 Muller E-mail (Ex. CCS-035).
[494] OLMC-500 (Ex. CCS-030) at 9.
[495] Smith's Statement of Position (Ex. CCS-075) at 9-10.

a measurable performance indicator to determine whether the critical task was performed correctly.[496]

(i) DEFINITION OF A CRITICAL TASK

189. NUREG-1021, Appendix D.1, specifies that a Critical Task (CT) must have four elements, summarized below:[497]

1. Safety Significance.
A task is essential to safety if its improper performance or omission by an operator will result in direct adverse consequences or significant degradation in the mitigative capability of the plant. If an automatically actuated plant system would have been required to mitigate the consequences of an individual's incorrect performance, or the performance necessitates the crew taking compensatory action that would complicate the event mitigation strategy, the task is safety significant. Performance that prevents degradation of a fission product barrier may be a CT.

2. Cueing
An external stimulus must prompt at least one operator to perform the task. Cueing may include a verbal direction by or reports from other crew members, procedural steps, or an indication of a system or component malfunction by meters or alarming devices.

3. Measurable Performance Indicator
A measurable performance indicator consists of positive actions that an observer can objectively identify taken by at least one member of the crew.

4. Performance Feedback
At least one member of the crew must receive performance feedback, that is, information about the effect of the crew member's actions or inaction on the CT.

(ii) THE RECORD OF THE EVENT

190. Scenario 7, Event 5 lasted just under 30 minutes on the morning of Tuesday, March 27, 2012,[498] but only the first 30 seconds of the event are important to this issue. At the moment of Scenario 7, Event 5 initiation, the reactor was operating at about 30% power.[499] The crew had essentially completed actions related to Event 4 and Ms. Smith was in the process of withdrawing

[496] *Id.*

[497] NUREG-1021 (Ex. CCS-005B) at 424.

[498] "Tuesday First" Scenario Outline (Ex. CCS-058) at 52, 60.

[499] *Id.* at 1.

control rods as directed by the SS to maintain the directed temperature band. Table 8 contains all the pertinent pressure data for evaluating the event and crew responses.

Parameter	Value (psig)	Normal Action
Normal Reactor Operating Pressure	2235	
Pressurizer High Pressure	2385	Reactor trips
Over-pressure Set Point	2335	PORV 456 opens
Lowering Pressure Set Point	2315	PORV 456 automatically closes
Lowering Pressure Set Point	2185	Block Valve automatically closes
Pressurizer Low Pressure	≤1960	Reactor trips
Pressurizer Low Pressure	≤1870	Safety injection initiation
Pressurizer Relief Tank High Pressure	8	Alarm
Pressurizer Relief Tank Disk ruptures	100	
Pressurizer Relief Tank High/Low Level	High 88% Low 57%	Alarm
Pressurizer Relief Tank High Temperature	115 degrees Fahrenheit	Alarm

Table 8. Vogtle Pressure Protection System Set Points and Actions[500]

191. Simulator data show that at the very moment Ms. Smith was moving control rods at 08:18, the instrument malfunction for the controlling Pressurizer Channel Pressure Indicator 456 was inserted.[501] This resulted in PORV 456 fully

[500] The figures in the Table are based upon data of which the Board took official notice. The Board issued an order pursuant to 10 C.F.R. § 2.337(f) notifying the parties that it intended to take such notice and gave the parties the opportunity to controvert the data. *See* Licensing Board Order (Taking Official Notice) (Jan. 30, 2014) (unpublished). The Staff filed its own Motion controverting some of the data and providing other data that the Staff believed to be correct. *See* NRC Staff Motion Controverting, in Part, the Board's Taking Official Notice of Facts and Requesting that the Board take Official Notice of Additional Relevant Facts (Feb. 10, 2014) [hereinafter "Staff's Official Notice Motion"]. The Board has accepted the data supplied by the Staff and has used it in the Table when it was different from the data initially noticed by the Board. The Board also grants the Staff's request to take official notice of the additional facts set forth in its Motion.

[501] *See* Excel Spreadsheet (Ex. CCS-074) at cells Ay3177-BB3178 and DK3177-DP3178. Relative *(Continued)*

opening due to the false high-pressure indication and actual pressurizer pressure immediately dropping on the three other channels.[502]

192. According to examiner notes from Mr. Bates and Mr. Meeks, as pressure began to drop Ms. Smith took the Immediate Operator Actions to close the spray valves, close the PORV, and operate the pressurizer heaters appropriately. However, she had incorrectly operated the hand switch for the PORV, which the examiners had not seen, and she turned to look at the Shift Supervisor (SS). As pressure continued to drop, according to the examiner notes and their later testimony, the SS loudly said "Carla, shut that valve!"[503] This declaration probably occurred 15 seconds into the event due to the Block Valve not having closed at 2185 psig,[504] rather than some 30 seconds later as reported in her IER.[505] Pressure continued to decrease, bottoming out at about 2147 psig about 25 seconds into the event, after which it began to steadily rise.[506] By 30 seconds into the event, pressure was essentially stable and very slowly rising back to normal while the crew addressed the subsequent operator actions in AOP 18001-C. These latter actions ended for this event when the SS made his crew brief at about 08:44.[507]

193. The failure of Block Valve 8000B to close, as noted in the title of event, was due to a preloaded malfunction.[508] PORV 456 and Block Valve 8000B are in series on a 3-inch-diameter line from the pressurizer to a tank known as the Pressure Relief Tank (PRT). The PRT has a pressure-relief disk that by design will rupture at 100 psig, spilling primary system water into containment.[509] According to Table 8, *supra,* if neither the PORV nor the Block Valve had closed, an alarm should have occurred when pressure in the PRT reached 8 psig, and the reactor scram would have occurred at 1960 psig in the Pressurizer. There is no record of

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to cell content, each row represents about 1 second in time. Columns AY through BB have pressurizer pressure channel data, and Columns DE through DT have control rod position data. CCS-074 is available in Portable Document Format (PDF) on the NRC's Agencywide Documents Access and Management System (ADAMS). *See* ADAMS Accession No. ML13232A116. The PDF version of CCS-074 does not contain the cell information that the Board cites. Thus, the Board admits the Excel spreadsheet version of CCS-074 as CCS-074-01. The Board will provide the Office of the Secretary with an electronic version of CCS-074-01 so that the information can be accessible to the public.

[502] Excel Spreadsheet (Ex. CCS-074-01) at cells AY3177-BB3178.

[503] "Tuesday First" Scenario Outline (Ex. CCS-058) at 52; *see also* Bates's Notes (Ex. CCS-047) at 76.

[504] Excel Spreadsheet (Ex. CCS-074-01) at cells AY3191-BB3194.

[505] Smith's Individual Exam Report (Ex. CCS-045) at 19.

[506] Excel Spreadsheet (Ex. CCS-074-01) at cells AY3202-BB3204.

[507] "Tuesday First" Scenario Outline (Ex. CCS-058) at 60.

[508] Form ES-D-1, App. D — Scenario 7 Outline (Ex. CCS-046) at 1 (Undated) [hereinafter Scenario 7 Outline].

[509] Tr. at 245-46 (Smith); Table 8.

the former, and clearly the latter did not happen given that pressure bottomed out at about 2147 psig.

194. The maximum satisfactory close stroke time for PORV Block Valve HV-8000B is 23 seconds.[510] Therefore, had the preloaded Block Valve failure not been present, the Block Valve would have automatically closed in 23 seconds or less after pressure reached 2185 psig. The maximum satisfactory close stroke time for the PORV 456 is 2.5 seconds.[511] Thus, the Board concludes that Ms. Smith actually ended the event at about the same time as the Block valve would have had it been operational. Further, the first procedural step after the Immediate Operator Actions is usually for the crew to verify those Actions. Indeed, normally a crew is performing such verification in real time even as they will formally soon perform the procedure step. This verification step is documented in Form ES-D-2.[512] But no credit was given in any examiner documentation for this step having been completed.

(iii) EXAM TEAM GRADING

195. Following each scenario, the examiners first caucus to discuss what they observed and to coordinate follow-up questions they may need to ask the crew members. During the question period for Scenario 7, Ms. Smith told Mr. Bates, who had not seen the error occur, that she had first taken the PORV hand switch in the wrong direction.[513] Mr. Bates, in assessing a deduction for this error, recorded on Ms. Smith's Individual Examination Report:

> The applicant correctly diagnosed that PT-456 failed high and immediately closed the pressurizer spray valves. However, she did not immediately close the affected PORV, or its associated PORV Block Valve, and PRZR pressure continued to lower. Approximately 30 seconds after initiation of the failure, the Senior Reactor Operator loudly directed, "Shut that valve!" The applicant then closed the PORV to halt the pressure decrease. After the scenario, the applicant was asked to explain her response to the PT-456 failure. The applicant stated that she had initially manipulated the PORV switch in the wrong direction. The applicant was downgraded in this competency because she did not manipulate the PORV handswitch in an accurate manner.[514]

196. The IRP, however, misreported this event when they stated that "[a]p-

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[510] *See* NRC Staff Motion Controverting, In Part, the Board's Taking Official Notice of Facts and Requesting That the Board Take Official Notice of Additional Relevant Facts at 4 (Feb. 10, 2014).

[511] *Id.*

[512] Scenario 7 Outline (Ex. CCS-046) at 27.

[513] Vogtle Operating Exam Appeal (Ex. CCS-101) at 12.

[514] Smith's Individual Exam Report (Ex. CCS-045) at 19.

proximately 30 seconds later [i.e., after she turned the hand switch in the wrong direction] the applicant was directed to close the PORV by the SS . . . ."[515] In fact, the SS did *not* provide instruction on how to close the valve or even which valve (PORV or Block Valve) to close, a communication for which he received an error to RF 4.a (Communications, Clarity).[516] According to the Individual Examination Report for the applicant who was assigned the SS role for Scenario 7, Event 5 (the SS is referred to as the SRO; Ms. Smith is the RO):

> The applicant, as Senior Reactor Operator (SRO), was expected to clearly state verbal direction to the control room operators, including using proper plant nomenclature. . . . When Pl-456 failed high, the Reactor Operator (RO) correctly closed the PRZR spray valves, but then incorrectly turned the PRZR PORV switch to the "OPEN" position (thinking that she was closing the valve). When the PORV did not go closed, and with PRZR pressure lowering rapidly, the RO turned to the SRO for guidance. At this point, the applicant stated "SHUT THAT VALVE!" *without giving any further nomenclature or clarification as to which valve he wanted to be closed.* The RO then closed the PORV.[517]

Despite the inadequate direction from the SS, Ms. Smith as the OATC took the switch in the proper direction and closed the PORV,[518] demonstrating that she understood the action required of her without specific instruction. The SS provided an update for entering AOP 18001-C in less than 1 minute after initiation of the event.[519]

197. We therefore reject the argument that Ms. Smith should be denied credit for closing the PORV because her action was prompted by the SS.[520] This was not an instance where an error was "corrected by a peer checker."[521] The SS corrected Ms. Smith to the extent of indicating that a valve needed to be closed, but he failed to identify the valve or how to close it. Cueing, which is an essential

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[515] NRC Panel Review Results (Ex. CCS-037) at 38.

[516] "V" Individual Examination Report (Ex. CCS-057) at 12.

[517] *Id.* (emphasis added). The examiners' notes are not entirely consistent on this issue. Mr. Meeks' notes report that the SS stated "Carla, shut that valve." "Tuesday First" Scenario Outline (Ex. CCS-058) at 52. Mr. Bates' notes report the same statement, but they also state that the SS gave Ms. Smith specific direction to the close the PORV. Bates's Notes (Ex. CCS-047) at 76. Mr. Meeks' version must have prevailed, because the IER for the SS states that he did not provide clear direction to close the PORV. "V" Individual Examination Report (Ex. CCS-057) at 12. Both Mr. Meeks and Mr. Bates signed the IER for the SS. *Id.* at 1. The IER for the SS represents the Exam Team's final evaluation of his actions, and we therefore consider it conclusive of any conflict in the examiners' notes.

[518] Bates's Notes (Ex. CCS-047) at 76.

[519] "Tuesday First" Scenario Outline (Ex. CCS-05) at 52.

[520] Rating Factor 3.A (Ex. CCS-039) at 4.

[521] NUREG-1021 (Ex. CCS-005B) at 455.

element of a critical task, may include a verbal direction by or reports from other crew members.[522] We find that the SS's nonspecific direction to "shut that valve" was a permissible type of cueing and should not have been used to support failure of a critical task.

198. We also reject the IRP's assumption that, but for the SS's intervention, Ms. Smith would have "allowed a small break loss of coolant accident to continue (degraded fission product barrier), which would have required an automatic reactor trip and safety injection to mitigate."[523] Ms. Smith intended to close the PORV.[524] Thus, the IRP's assumed course of events would have required that Ms. Smith be inattentive to the need to close the PORV or the Block Valve after initially turning the PORV control switch to the open position. The evidence before the Board shows that she was attentive to the situation.[525] At the time the error occurred, she was performing a series of immediate operator actions, including closing the sprays, closing the PORV, and taking the heaters to the on position. She intended to close the PORV but initially took the switch to the open position.[526] Within this short time span, she realized that the Block Valve had not operated properly and announced this to the Unit Operator.[527] She knew that the next action would be to operate the manual block valve control to make it perform its function but, before she could take that corrective action, the SS intervened.[528]

199. The outline for Scenario 7, Form ES-D-2, specifies concerning Event 5 that "[t]he OATC will be required to manually close PORV 456 or [Block Valve] HV-8000B to prevent a Reactor trip."[529] Thus, either action is an acceptable means of responding to the pressurizer instrument failure.

200. The IRP assumed that Ms. Smith, absent the SS's intervention, would not have closed either the Block Valve or the PORV in time to prevent an automatic reactor trip and safety injection. Given that Ms. Smith was aware of the block valve failure and the operator action needed to compensate for that failure at the time of the SS's intervention, we find it more likely that, absent the intervention, she would have manually shut the Block Valve well before a reactor trip or safety injection.

201. Attempting to rely on precedent, the Staff reaches all the way back to 2005 for an error it alleges is "substantively identical to the error committed by

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[522] *Id.* at 424.

[523] NRC Panel Review Results (Ex. CCS-037) at 38.

[524] Tr. at 240 (Smith).

[525] Tr. at 238-48 (Smith).

[526] Tr. at 239-40 (Smith).

[527] Tr. at 242-43 (Smith); Bates's Notes (Ex. CCS-047) at 76.

[528] Tr. at 243, 247-48 (Smith).

[529] Scenario 7 Outline (Ex. CCS-046).

Ms. Smith."[530] However, the error committed in 2005 was that the applicant, while performing Emergency Operating Procedure steps, failed to verify that all steam generator PORVs were closed, and "was subsequently inattentive to the ongoing cooldown, which continued for another 7 minutes to 494°F. The cooldown was stopped when the BOP (the other board operator on the crew) informed the applicant that the . . . PORV was still open and the SRO directed the applicant to close the associated block valve."[531] Ms. Smith, on the other hand, was attentive to the actions she was required to perform, was aware that either the PORV or the Block Valve needed to be closed, and closed the PORV without specific direction from the SS. The problem was resolved in less than 30 seconds from the initiation of the instrument failure.

202. The Board therefore concludes that the IRP erred in stating that the SS directed Ms. Smith to close the PORV, in denying her credit for her correct action, and in failing to take into account that she likely would have closed the Block Valve had the SS not intervened. Moreover, we find no evidence that her initial error had adverse, let alone serious, safety consequences, nor have we found any evidence that it resulted in any significant degradation of the plant or in the mitigative capability of the plant.

(iv) THE IRP ARBITRARILY DEVIATED FROM SCENARIO 7, EVENT 5, AS IT HAD BEEN REVIEWED, APPROVED, AND VALIDATED

203. Ms. Smith argues that designating operation of the PORV control switch as a critical task during the informal review, 6 months after the simulator exam had been completed, violated the requirement that critical tasks be defined in the examination outline distributed to examiners before the exam is given.[532]

204. The Staff acknowledges that "every required operator action should be included on Form ES-D-2 and that all critical tasks 'shall be flagged in a manner that makes them apparent to the individuals who will be administering the operating test' including 'set points and other parameters . . . to provide an objective method for evaluating the operators' performance.'"[533] But the Staff maintains that the Form ES-D-2 is only an initial indicator of critical tasks and the examiners are free to designate any task on the Form as critical whenever they conclude that it satisfies the definition.[534]

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[530] Staff's Statement of Position (Ex. NRC-001) at 115.

[531] Letter from Bruce A. Boger, Division of Inspection Program Management, Office of Nuclear Reactor, to Mr. [Unnamed Applicant] (Ex. NRC-020) at 9 (March 10, 2005).

[532] Smith's Statement of Position (Ex. CCS-075) at 9-10.

[533] Staff's Statement of Position (Ex. NRC-001) at 116 (quoting NUREG-1021 (Ex. CCS-005B) at 414).

[534] Staff's Statement of Position (Ex. NRC-001) at 116-17.

205. The Staff's position that critical tasks need not be designated in advance of the examination conflicts with the statement of its own witness, Mr. Ehrhardt, in his Fairness Report. He explained that examiners have little discretion in how simulator exams are administered because

> initial examinations are highly pre-scripted, with critical tasks, steps, and key performance elements *explicitly determined and documented in advance* in consultation with facility training representatives. Therefore, there is little, if any, opportunity to hold any applicant to a higher standard of performance than another.[535]

Under the Staff's argument, however, critical tasks can be designated after the exam is administered and even during the administrative review, without consulting facility training representatives. This creates ample opportunity to hold one applicant to a higher standard of performance than another, as in fact happened with Ms. Smith.

206. We agree with Mr. Ehrhardt that under NUREG-1021 critical tasks are to be determined and documented in advance of the simulator exam in consultation with facility training representatives. This is necessary to ensure that critical tasks are developed and approved consistently with NUREG-1021's detailed quality assurance process for developing and validating simulator scenarios. Pursuant to ES-301, "Preparing Initial Tests," § D.5.d, critical tasks are to be included in each scenario. It further indicates that the critical tasks are to be included on Form ES-301-4, the Simulator Scenario Quality Checklist.[536] Section D.5.f requires they be listed on Forms ES-D-1 and ES-D-2, complete with all required actions.[537] These are the forms "that examiners will use to administer the simulator operating tests."[538] "Every required operator action should be included on Form ES-D-2; this is particularly important for the critical tasks . . . and other verifiable actions and behaviors that will provide a useful basis for evaluating the operators' competence. All [critical tasks] shall be flagged in a manner that makes them apparent to the individuals who will be administering the operating test . . . and the measurable performance indicators shall be identified."[539]

207. The critical tasks identified on the Form ES-D-2 will have been reviewed and validated under NUREG-1021's quality assurance process. Under that process, the operating exams are first prepared and reviewed by the licensee and then are submitted to the NRC Region for review and approval.[540] NUREG-1021,

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[535] Ehrhardt's Independent Review (Ex. NRC-014) at 8 (emphasis added).

[536] NUREG-1021 (Ex. CCS-005A) at 117.

[537] *Id.* at 119.

[538] *Id.* at 118.

[539] *Id.* (Ex. CCS-005B) at 414 (emphasis omitted).

[540] *Id.* (Ex. CCS-005A) at 106, 129.

ES-301 D.1,[541] details the process and forms to be used by the plant as well as the plant's internal procedures to be followed before the examination outlines and proposed testing materials are transmitted to the NRC Region. This includes an independent internal review by plant management. Thus, at least two levels of quality checks will have been completed before the examinations are sent to the NRC along with the necessary forms.

208. Once received by the NRC Region, the Exam Team is to perform an additional set of reviews in accordance with ES-301 E.2.[542] By this time, appropriate interactions with the plant will have occurred to assure requirements are met. Reviews will have continued and the Chief Examiner will provide the examination package to the Operator Licensing Supervisor for further review and approval.[543]

209. The responsible NRC supervisor will assure all concerns are met and necessary changes are made, and then sign the Form ES-301-3, the "Operating Test Quality Checklist."[544] Per paragraph E.3.c, this signature would not be provided "until he or she is satisfied that the examination is acceptable to be administered."[545] Among the findings required on the "Operating Test Quality Checklist" is that "[i]t appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level."[546] By this point in the process at least four detailed reviews and approvals will have been performed.

210. To implement the process just described, a rigorous Quality Assurance process was followed and documented for the 2012 Vogtle operating examinations. All of the scenarios, including the designated critical tasks, were subjected to a rigorous quality check and validation before the simulator examinations were administered. This process began with notification of the plant dated October 21, 2011, addressed to Mr. Tom E. Tynan, Vice President, confirming that his staff would prepare both the operating test and written examination, and providing a schedule for the process.[547]

211. Mr. Meeks, the NRC Chief Examiner in Training, stated that prior to the scenarios being sent to NRC, his plant contact, Mr. Wainwright, "would have had

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[541] *Id.* at 106-18.

[542] *Id.* at 120.

[543] *Id.* at 121.

[544] *Id.*

[545] *Id.*

[546] *Id.* at 125.

[547] *See* Letter from Bruno L. Caballero, Acting Chief, Operations Branch 1, Division of Reactor Safety, to Tom E. Tynan, Vice President, Southern Nuclear Operating Company, Inc., Vogtle Electric Generating Plant (Ex. CCS-018) (Oct. 21, 2011).

those materials authorized by his management."[548] Mr. Meeks further stated that Region II Branch Chief Widmann had signed these forms and that "Mr. Widmann was the ultimate authority who would have authorized both the operating test portion and the written exam. . . ."[549]

212. Having been reviewed through this quality assurance process, the approved Scenario 7, Event 5, "PRZR PT-456 fails high resulting in PORV 456 failing open and block valve HV-8000B failure to auto close," was detailed throughout the scenario outline form, ES-D-1, and the Required Operator Actions Form, ES-D-2,[550] that were used during three administrations of the scenario, each time being used for three candidates by each of the three members of the Exam Team.[551] The ES-D-2 provides further clarification of the event, stating: "PRZR pressure channel PI-456 will fail high with the PORB [sic] Block Valve HB-8000B failing to close in automatic on low RCS pressure of 2185 psig. The [Operator at the Controls] OATC will be required to manually close PORV 456 or HV-8000B to prevent a Reactor trip."[552] This is repeated on all six pages needed to describe the expected operator and crew actions for the event.[553] No mention is made of this being a critical task.

213. Thus, throughout the extensive process of developing, reviewing, and validating the simulator exam, closing the PORV during Scenario 7, Event 5, was not designated as one of the critical tasks on which applicants were to be tested. The Exam Team accordingly had no basis for its belated claim that it "mis-graded" Ms. Smith's error in not immediately closing the PORV. On the contrary, when the Exam Team assessed Ms. Smith a one-point reduction to RF 3.a for an error in connection with a noncritical task,[554] it acted in accordance with Scenario 7, Event 5 as validated under the NUREG-1021 procedures.

214. It was only after the extensive quality assurance process had been completed, the 2012 operating exam had been administered and graded, Ms. Smith had filed her administrative appeal, and the IRP review process had begun that closing the PORV or Block Valve during Scenario 7, Event 5 was for the first time declared to be a critical task. This change was accompanied by no analysis, statement, or demonstration from the IRP, but was encouraged by both the Exam Team[555] and IOLB management.[556] Even then, it was designated a critical task

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[548] Tr. at 445 (Meeks).

[549] Tr. at 449 (Meeks).

[550] *See* Scenario 7 Outline (Ex. CCS-046).

[551] *Id.*

[552] *Id.* at 27.

[553] *Id.* at 27-32.

[554] Smith's Individual Exam Report (Ex. NRC-045) at 3, 19.

[555] Vogtle Operating Exam Appeal (Ex. CCS-101) at 12.

[556] *See* Oct. 16, 2012 Jackson E-mail (Ex. CCS-059); Oct. 16, 2012 McHale E-mail (Ex. CCS-059).

only for Ms. Smith; neither the Exam Team nor the IRP evaluated how the change might affect the grading of other applicants.

215. The IRP's decision to declare a new critical task during the administrative appeal effectively bypassed the extensive quality assurance process for the development of simulator scenarios. Of all the members of her class, only Ms. Smith was subject to a critical task that had not been validated through that process. The quality assurance process cannot plausibly be construed as merely one option for the development of simulator scenarios and critical tasks. The intent of NUREG-1021 is that "[e]very facet of the operating test, including the walk-through JPMs and simulator scenarios, should be planned, researched, validated, and documented to the maximum extent possible *before the test is administered.*"[557]

216. To the extent the IRP believed it was required to designate as a critical task any operator action it thought satisfied the definition, it was mistaken. In fact, the effect of the IRP's action was to exceed the recommended number of critical tasks in Scenario 7. Form ES-301-4, the Simulator Scenario Quality Checklist, specifies the target quantitative number of critical tasks to be 2-3 per scenario.[558] Three critical tasks are detailed for Scenario 7 on page 6 of the scenario outline, Form ES-D-1.[559] The same number of critical tasks were included in the other scenarios on which Ms. Smith was tested. For Scenario 6, there are three critical tasks listed on page 5 of the scenario outline,[560] and for Scenario 3, three are listed on page 6.[561] Ms. Smith made no errors related to any of the listed critical tasks she performed.[562]

217. The evidence confirms that, throughout the process of developing, administering, and grading the simulator exam there was no identified need to designate an additional critical task beyond those already identified on the Form ES-D-2. After the quality assurance reviews and approvals, Scenario 7 was used three times for different crew evaluations.[563] Once the examinations were complete and grading had been done back in the Region II office, but prior to issuance of the license denial to Ms. Smith, "the exam team sought independent reviews from two Senior Operations Engineers and one Operations Engineer, all having previously held senior reactor operator licenses. Comments from these reviews were largely incorporated into the final documentation."[564]

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[557] NUREG-1021 (Ex. CCS-005A) at 110 (emphasis added).

[558] NUREG-1021 (Ex. CCS-005A) at 126.

[559] Scenario 7 Outline (Ex. CCS-046) at 6.

[560] Form ES-D-1, App. D — "Monday 1st" Scenario 6 Outline (Ex. CCS-050) at 9 (Undated).

[561] Form ES-D-1, App. D — Scenario 3 Outline (Ex. CCS-048) at 6 (Undated).

[562] Informal Review Results (Ex. CCS-024) at 36.

[563] Binder Tab 3 (Ex. NRC-031) at 5.

[564] Prefiled Testimony of Bates, Capehart, & Meeks (Ex. NRC-002) at 17.

These later reviews obtained by the chief examiner were confirmed during the Fairness Review completed by Mr. Ehrhardt,[565] who also detailed the reasoning and process behind obtaining post-exam reviews.[566] There is no indication that either the use of Scenario 7 for the other candidates or the post-exam review of the documentation completed by the Exam Team indicated that a change from the scenario outline to include an added critical task was warranted.

218. NUREG-1021, ES-303 D.3.a, requires that simulator scenarios be finalized and updated after being run during an operating test to reflect changes to aid in future scenario preparation.[567] No evidence was provided to indicate this had been done, even though, according to the Exam Team, "[t]he exam team missed an opportunity during exam development to code this error as a critical task on Form ES-D-2. It was recognized during grading that the error was related to a critical task. . . ."[568] The "Clean copies of the simulator scenarios that were used to examine Ms. Smith"[569] and that were provided to the IRP for their review had no modifications or notations to indicate this event as a critical task.[570]

219. The Board finds that, given some ten separate reviews of Scenario 7, Event 5, its use in three operating examinations for a total of nine applicants, and an Examiner Standard requirement to appropriately change and finalize scenario content, had Ms. Smith's simulator exam incorrectly omitted a critical task the error would have been identified before the 2012 operating exam was administered, and certainly before the IRP began its review. The Board concludes that the only plausible explanation for the Exam Team's belated identification of its alleged misgrading is that doing so was necessary in order to assure that the failure of Ms. Smith would be sustained.

220. The Staff argues that it did no more than take the event description in the Form ES-D-2 for Scenario 7, Event 5 and classify it as a critical task because it already contained all the necessary elements to permit such a classification.[571] In fact, the Staff did a good deal more than that. As noted, the Form ES-D-2 states that when the pressurizer pressure channel PI-456 fails high with the PORV 456 opening and Block Valve HB-8000B failing to close in automatic on low RCS pressure of 2185 psig, "the Operator at the Control[s] (OATC) will be required to manually close PORV 456 or HV-8000B *to prevent a Reactor trip.*"[572]

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[565] Ehrhardt's Independent Review (Ex. NRC-014) at 8.

[566] Tr. at 595-97 (Ehrhardt).

[567] NUREG-1021 (Ex. CCS-005A) at 146.

[568] Vogtle Operating Exam Appeal (Ex. CCS-101) at 12.

[569] Jackson's Prefiled Testimony (Ex. NRC-004) at 5.

[570] Form ES-D-1, App. D — Scenario Outline (Ex. NRC-051) (Undated).

[571] *See* Staff's Statement of Position (Ex. NRC-001) at 114-17; Prefiled Testimony of Bates, Capehart, & Meeks (Ex. NRC-002) at 40.

[572] *See* Scenario 7 Outline (Ex. CCS-046) at 27-32.

But the Staff redefined the event to require closing the PORV or Block Valve to prevent a small-break loss-of-coolant accident (LOCA) from continuing.[573] Neither the Form ES-D-1 nor the Form ES-D-2 refers to a small-break LOCA or the continuation of such an accident.[574] Thus, during the administrative review, the Staff actually rewrote the event description and then designated the rewritten event as a critical task.

221. The change in the event description, as much as the creation of a new critical task, was crucial to the result in this case. Under the description in the Form ES-D-2, even had taking the PORV or Block Valve hand control switch to the closed position been properly designated a critical task, there could be no failure unless the OATC failed to close the PORV or Block Valve in time to prevent a reactor trip. As we have explained, Ms. Smith, acting without specific direction from the SS, closed the PORV in time to prevent a reactor trip. And, had the SS not intervened, her actions demonstrate that she likely would have closed the Block Valve in time to prevent a reactor trip. But, by rewriting the event description to require closing the PORV or Block Valve to prevent a small-break LOCA, the Staff made it much easier to find a failure because the small-break LOCA began when the PORV opened on the pressurizer instrument failure and continued as long as the PORV remained open.[575] Thus, under the new description, anything other than immediately closing the PORV or Block Valve could be deemed the failure of a critical task.

222. This leads to another reason why critical tasks should not be declared for the first time during an administrative appeal. By then, the applicant's performance has already occurred. An administrative review panel could therefore tailor the critical task to the performance of that applicant. This would open the door to abuse that would be incompatible with the goal of equitable and consistent administration of examinations for all applicants.

223. The Staff argues that "OLMC-500 explicitly recognizes that an informal review can analyze after-the-fact whether an action is critical."[576] In fact, OLMC-500 states that "the reviewer(s) shall examine the validity of the contested operating test items, including whether critical steps were in fact critical, and whether the associated JPM guides/scenario guides were technically and psychometrically correct."[577] Thus, a review panel may review a critical step, if contested by the applicant, to determine whether it was correctly designated critical. There is no corresponding provision authorizing the panel to review noncritical tasks at

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[573] *See* NRC Panel Review Results (Ex. CCS-037) at 38.

[574] *See* Scenario 7 Outline (Ex. CCS-046) at 1-2, 4, 27-32.

[575] *See* Staff's Statement of Position (Ex. NRC-001) at 114 ("[A] failed open pressurizer PORV is essentially a small loss of coolant accident (LOCA).").

[576] Staff's Statement of Position (Ex. NRC-001) at 117 (citing OLMC-500 (Ex. CCS-030) at 9).

[577] OLMC-500 (Ex. CCS-030) at 9.

the behest of the exam team or on its own initiative to determine whether they should be declared critical during the administrative appeal.

224. Finally, we are not persuaded by the Staff's argument from precedent. The Staff has not identified any instance in which a task was defined as non-critical during a simulator examination and through the grading process but then designated a critical task during an administrative appeal.[578]

225. The Board therefore concludes that the IRP arbitrarily imposed on Ms. Smith a new critical task that had not been approved as such under the NUREG's quality assurance and validation process. Designation of a new critical task during the administrative appeal was inconsistent with the precepts of NUREG-1021 and was unjustified, arbitrary, and an abuse of discretion.

(v) THE IRP FAILED TO PROVIDE A MEASURABLE PERFORMANCE INDICATOR CONSISTENT WITH NUREG-1021

226. We next consider Ms. Smith's argument that the IRP failed to provide a measurable performance indicator to determine whether its newly declared critical task was performed correctly.[579] The Staff argues that the IRP's measurable performance indicator, which Mr. Jackson defined as "taking the PORV hand switch or the PORV block valve hand switch to 'closed,'"[580] was consistent with NUREG-1021.[581]

227. A measurable performance indicator consists of positive actions that an observer can objectively identify taken by at least one member of the crew.[582] Taking a PORV control switch to the closed position can be observed by an examiner. But the requirement of objective verifiability also requires a clear and objective identification of the specific standard of performance that must be met.

> The NRC and facility licensee should review each critical task to ensure that it is objective. For example, "If pressure falls below 1400 psi, start pump xyz," is a performance measure that is not objective. The operator performing this task could conceivably start the pump when pressure reaches zero psi and still not violate the performance measure stated in the procedure, even though the facility licensee expects the operator to start the pump sooner. The NRC and facility licensee should agree in writing that the limits for each CT are acceptable before the requalification examination begins. For the example given above, adding an acceptable pressure

[578] Staff's Statement of Position (Ex. NRC-001) at 115.
[579] Smith's Statement of Position (Ex. CCS-075) at 9-10.
[580] Jackson's Prefiled Testimony (Ex. NRC-004) at 33.
[581] Staff's Statement of Position (Ex. NRC-001) at 114-15.
[582] NUREG-1021 (Ex. CCS-005B) at 425.

tolerance (e.g., within 200 psi) would clarify the standard of performance that is expected.[583]

228. Thus, a general performance measure such as starting a pump that is not linked to any objective standard of performance fails the test of objectivity and is not an acceptable measurable performance indicator, even though it can be observed. Without an objective standard of performance, such as a specific pressure tolerance that is not to be exceeded, the examiner lacks an objective basis on which to determine whether the applicant's performance is acceptable. Similarly, when the IRP defined the measurable performance indicator as taking the PORV hand switch or the PORV block valve hand switch to closed but failed to provide a performance measure to identify the point at which such action must occur, it failed to provide an objective standard of performance. Because of its omission of an objective performance measure, the IRP could define any error in failing to close the PORV or Block Valve as a failure, even if the error was corrected within a period that would have been acceptable to the facility licensee. To be consistent with NUREG-1021, the measurable performance indicator should have been based on an objective performance measure that would have provided specific guidance to the examiner concerning not only what must occur (closing the PORV or Block Valve) but when it must occur.

229. The IRP could not have solved this problem by restating the measurable performance indicator as taking the PORV hand switch or the PORV block valve hand switch to the closed position to prevent a small-break LOCA from continuing. As previously stated, the small-break LOCA began when the PORV opened on the pressurizer instrument failure and continued as long as the PORV remained open.[584] Thus, adding the reference to preventing a small-break LOCA from continuing would not provide an objective measurable performance indicator. There would still be no objective standard of performance defining when the PORV or Block Valve must be closed.

230. The second problem with the IRP's measurable performance indicator is that there is no evidence to show that it was developed in conjunction with the licensee. As the NUREG-1021 text quoted above indicates, the measurable performance indicators are to be developed based on the licensee's expectations for operation of the facility. When a critical task is developed through the NUREG-1021 quality assurance and validation process, the licensee will be involved in preparing the exam and can specify an objective standard of performance for the critical task that is consistent with the facility's requirements. For example, SNC could have specified an acceptable tolerance for pressurizer pressure or an

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[583] *Id.*

[584] *See* Staff's Statement of Position (Ex. NRC-001) at 116 ("[A] failed open pressurizer PORV is essentially a small loss of coolant accident (LOCA)").

acceptable time period for successfully completing the critical task. But when a critical task is created for the first time during an administrative appeal without the participation of the facility licensee, the measurable performance indicator may well not be consistent with the licensee's requirements.

231. Mr. Jackson stated that closing a pressurizer PORV has been labeled as a critical task for a simulator examination given at the Salem Nuclear Generating Station in 2010.[585] In that event the reactor was already tripped when the malfunction was inserted. The cue was given that pressure was lowering. The RO was required to close the Block Valve upstream of the stuck-open pressurizer PORV prior to actuation of automatic safety injection.[586] Initiation of automatic safety injection provides a measurable performance indicator to objectively determine whether the critical task was performed as required. The IRP failed to provide such an objective performance measure for Ms. Smith's examination.

232. Because the IRP failed to define a measurable performance indicator consistent with NUREG-1021, its conclusion that Ms. Smith failed a critical task was unjustified, arbitrary, and an abuse of discretion.

(vi) CONCLUSION

233. The Board concludes that the IRP's determination that Ms. Smith made an error associated with a critical task was inconsistent with NUREG-1021, unjustified, arbitrary, and an abuse of discretion. Referring to Table 6, this change in the scoring of Ms. Smith's 2012 Operating Exam results in RF scores for 3.a, 3.b, and 3.c of 2, 2, and 2, respectively, and a grade for Competency 3 of 2.00. Because Ms. Smith scored a 1.60 in Competency 4, Communications, she was required to score 2.00 or higher in the other five competencies, which is now indicated. *See* Table 5. This would be true even if the IRP permissibly applied double counting of errors solely to Ms. Smith. Given that Ms. Smith meets the scoring requirements of NUREG-1021, ES-303 D.2.b, and since she received Satisfactory scores on all 15 of her JPMs and a passing score on her 2012 Senior Reactor Operator written examination, the Board finds that Ms. Smith should have received a passing grade for the simulator examination.

G. The Fairness Review

234. In Ms. Smith's June 5, 2012 request for an administrative review, she alleged improper conduct on the part of the NRC Staff examiners in processing her preliminary waiver request and bias on the part of her 2012 examiners based

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[585] Jackson's Prefiled Testimony (Ex. NRC-004) at 33 (citing Operator Training Program (Ex. NRC-057) at 256, 263).

[586] Operator Training Program (Ex. NRC-057) at 256, 263.

on their knowledge of her 2011 operating test performance.[587] She reiterated these allegations in her December 5, 2012 letter[588] in which she requested a hearing on the results of the administrative review provided to her in the denial letter sent on November 15, 2012.[589] In her Statements of Position, Position 1 concerns handling of the waiver. Position 2 concerns the conflict of interest of the examiners assigned to her 2012 Exam Team.[590] These two positions were addressed in Enclosure 2 of the denial letter.[591]

235. As previously explained, the three-person IRP, which was assigned to review Ms. Smith's grading arguments, consisted of individuals from outside Region II. On the other hand, Mr. Wert, the Deputy Regional Administrator for Region II, selected Frank Ehrhardt, a Branch Chief from Region II, to perform the fairness review.[592] Testimony indicates the IRP never had any contact with Mr. Ehrhardt and their investigations proceeded separately and in parallel.[593]

236. Mr. Ehrhardt's informal review consisted of interviews of Region II examiners and their immediate supervisor, Mr. Widmann.[594] Mr. Ehrhardt also reviewed e-mails.[595]

237. On September 4, 2012, Mr. Ehrhardt completed his investigation of Ms. Smith's improper conduct claims. He concluded that Ms. Smith's claims could not be substantiated.[596]

H. Board Findings on Ms. Smith's Objections to the Fairness Review

238. Ms. Smith challenges the fairness of the fairness review. She disagrees with the conclusions reached in the fairness review because she contends Mr. Ehrhardt was biased[597] and the review he conducted was superficial.[598] She

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[587] Smith's 2012 Review Request Letter (Ex. CCS-034) at 1.

[588] Dec. 5, 2012 Request for Hearing at 1-6.

[589] Nov. 15 Denial Letter (Ex. CCS-014).

[590] Smith's Statement of Position (Ex. CCS-075) at 1-2.

[591] Nov. 15 Denial Letter (Ex. CCS-014) at 10.

[592] Tr. at 589, 612 (Ehrhardt).

[593] Tr. at 547 (Jackson); Tr. at 547 (Ehrhardt).

[594] NRC Staff Testimony of Frank J. Ehrhardt Concerning the Claim by Charlissa C. Smith that the NRC Improperly Denied Her Senior Reactor Operator License Application (Ex. NRC-026) at 2 (May 30, 2013) [hereinafter Ehrhardt's Prefiled Testimony].

[595] Tr. at 591 (Ehrhardt).

[596] Staff PFF ¶ 25.

[597] Smith PFF ¶ 53 ("Frank Ehrhardt's fairness review was biased based on his previous participation on [Exam Teams] with C. Smith's 2011 & 2012 examiners.").

[598] *Id.* ¶ 52 ("Frank Ehrhardt's fairness review only questioned the individuals from the Exam Team to determine if C. Smith was treated fairly. In addition[,] Mr. Ehrhardt investigation lacked a questioning attitude and made no attempts to obtain information, even if it was contradictory[.]").

alleges the review lacked a "questioning attitude" and made no attempts to obtain contradictory information. She also argues that Mr. Ehrhardt's recent working relationships with the examiners he was investigating should preclude him from being an independent or informal reviewer of "fairness."[599]

239. The Staff states Mr. Ehrhardt was selected, in part, because he was previously Chief Examiner qualified and because he had previously worked as a senior operations engineer, making him very knowledgeable about the operator licensing process at issue. He was also selected because, as a manager outside the chain of command of the Region II examiners that administered Ms. Smith's 2012 operating test, he could conduct an impartial investigation.[600]

240. Mr. Ehrhardt's prefiled testimony states that he "was assigned by Region II management to independently assess Ms. Smith's contention of bias in regard to administration of the 2012 examination."[601] At hearing he was asked, if he had contact or interaction with Mr. Meeks, Mr. Bates, and Mr. Capehart over the last 3 or 4 years. He denied any routine contact saying, "there was no routine contact between myself and those three individuals."[602]

241. At hearing Mr. Ehrhardt was asked if he had participated on any examination teams with any of the individuals that he was investigating as part of the fairness review. He testified that he "participated with Mr. Bates in an exam team, and I've participated with Mr. Capehart in an exam team, in approximately, I believe, the 2008-2009 timeframe."[603]

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[599] *See* Letter from Robert C. Haag, Chief of Operations Branch, Division of Reactor Safety to Bo Clark, Training Manager, H.B. Robinson Steam Electric Plant, Progress Energy Carolinas, Inc., regarding Operator Licensing Examination Approval (Ex. CCS-117) (June 21, 2007) [hereinafter Haag Letter]; Letter from Malcolm T. Widmann, Chief of Operations Branch, Div. of Reactor Safety to J.R. Morris, Site Vice President, Duke Power Company, LLC, regarding NRC Operator License Examination Report (Ex. CCS-118) (Feb. 5, 2009) [hereinafter Widmann's Catawba Letter]; Memorandum from Malcolm T. Widmann, Chief of Operations Branch, Div. of Reactor Safety to Kathy H. Gibson, Associate Director, Training and Development, Office of Human Resources Regarding Re-Certification of Operator Licensing Examiner (Ex. CCS-119) (Feb. 11, 2009) [hereinafter Limited Re-Certification of Hopkins], Letter from Malcolm T. Widmann, Chief of Operations Branch, Div. of Reactor Safety to David A. Heacock, President and Chief Nuclear Officer Virginia Electric and Power Co. regarding NRC Operator License Examination (Ex. CCS-120) (Aug. 14, 2009) [hereinafter Widmann's Surry Letter] and Letter from Malcolm T. Widmann, Chief of Operations Branch, Div. of Reactor Safety to T. Preston Gillespie, Jr, Site Vice President, Duke Energy Carolinas, LLC, regarding NRC Examination Report (Ex. CCS-121) (Jun. 14, 2011) [hereinafter Widmann's Oconee Letter] (all of which address certifications where Mr. Ehrhardt was an examiner).

[600] Staff PFF ¶ 226.

[601] Ehrhardt's Prefiled Testimony (Ex. NRC-026) at 1-2.

[602] Tr. at 593 (Ehrhardt).

[603] Tr. at 599 (Ehrhardt).

242. In reality, Mr. Ehrhardt participated on an exam team with Mr. Bates in 2007 at the Robinson facility[604] and in 2009 and 2011 at the Surry facility.[605]

243. Although Mr. Ehrhardt testified his collaborations took place in the 2008-2009 time frame, he served on the Oconee examination team as recently as May 2011 with Mr. Bates.[606]

244. Mr. Ehrhardt did not acknowledge that he worked with Mr. Bates both in 2007 and 2011.

245. Mr. Ehrhardt did not acknowledge that he ever worked with Mr. Meeks.[607]

246. Mr. Ehrhardt participated on an exam team with Mr. Meeks in 2008 at the Catawba facility.[608]

247. In 2008, Mr. Ehrhardt was instrumental in the recertification of Jay Hopkins (the 2011 examiner of record for Ms. Smith) as an operator licensing examiner.[609] "Mr. Hopkins interacted extensively with Region II Chief Examiner, Mr. Frank Ehrhardt, during the Farley operating examination. Mr. Ehrhardt recommended the recertification based upon on-the-job observations."[610]

248. Mr. Ehrhardt did not acknowledge that he worked with Mr. Hopkins in 2008.

249. Mr. Widmann was the approving official on at least four operator license examinations in which Mr. Ehrhardt collaborated with Mr. Meeks, Mr. Hopkins, or Mr. Bates.[611]

250. Mr. Ehrhardt's testimony did not fully indicate the scope of his interactions, the number of interactions, or the dates of the interactions he had with individuals he was to investigate for alleged bias.

251. Mr. Ehrhardt did not reveal his work responsibilities or his interactions with Mr. Meeks, Mr. Bates, and Mr. Capehart as reflected in Exhibits CCS-117 through CCS-121. Mr. Ehrhardt also did not disclose his prior work responsibilities with Mr. Widmann or Mr. Hopkins.

252. Mr. Ehrhardt's prior working relationships with the Region II examiners in this case undermines the efficacy of the review that he conducted. He was neither independent nor was he impartial. His prior working relationships should

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[604] *See* Haag Letter (Ex. CCS-117).

[605] *See* Widmann's Surry Letter (Ex. CCS-120).

[606] *See* Widmann's Oconee Letter (Ex. CCS-121).

[607] *See* Tr. at 592-93 (Ehrhardt).

[608] *See* Widmann's Catawba Letter (Ex. CCS-118).

[609] *See generally* Limited Re-Certification of Hopkins (Ex. CCS-119).

[610] Limited Re-Certification of Hopkins (Ex. CCS-119) at 1.

[611] *See* Widmann's Catawba Letter (Ex. CCS-118); Limited Re-Certification of Hopkins (Ex. CCS-119); Widmann's Surry Letter (Ex. CCS-120); Widmann's Oconee Letter (Ex. CCS-121).

have precluded him from the investigation of allegations made against his prior colleagues.

253. Mr. Ehrhardt concluded that Ms. Smith did not receive a waiver for the operating test portion of the Vogtle 2012 initial license examination because SNC did not request a waiver on behalf of the applicant[612] and that Ms. Smith's contention that the examiners discouraged the licensee from requesting a waiver of the operating test portion of the Vogtle 2012 initial license examination was unsubstantiated.[613]

254. It is undisputed that SNC did not submit a final waiver request for Ms. Smith. Unlike Mr. Ehrhardt, however, we found clear evidence that the examiners discouraged SNC from requesting a waiver of the operating test portion of the Vogtle 2012 initial license examination. Section VII.B.1, *supra.*

255. We are not persuaded by Mr. Ehrhardt's different conclusion because his fairness review of the waiver issue was substantively flawed and incomplete.

256. Ms. Smith alleged that the 2011 examiners from Region II actively dissuaded the licensee from requesting a waiver for her.[614] The licensee prepared Ms. Smith's preliminary waiver request. The preliminary waiver request had box 4.f checked and included a justification in Block 17.[615]

257. Region II received the preliminary waiver request from the licensee for Ms. Smith. When Mr. Ehrhardt conducted his fairness review he tried to obtain the licensee's preliminary waiver request for Ms. Smith from the Region II files. He did not have access to and did not see her preliminary Form 398.[616] He was informed that Region II did not retain preliminary waiver requests.[617]

258. Mr. Meeks told Mr. Ehrhardt that the preliminary waiver request for Ms. Smith was the result of a licensee oversight or a typo.[618] Mr. Bates told Mr. Ehrhardt that Mr. Meeks also told him that the licensee said the waiver request for Ms. Smith was a typo.[619] He took them at their word and made no further inquiry. Mr. Ehrhardt did not request a copy of the preliminary waiver request from the licensee.[620] Mr. Ehrhardt did not request a copy of the preliminary waiver request from Ms. Smith.

259. At the hearing Mr. Ehrhardt acknowledged, "[m]erely checking a box when you don't intend to, to me, could be considered a typo. If you add the

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[612] Ehrhardt's Independent Review (Ex. NRC-014) at 11.

[613] *Id.*

[614] *Id.* at 3.

[615] Tucker's Aff. (Ex. CCS-002) at 14-16.

[616] Tr. at 591, 603 (Ehrhardt).

[617] Tr. at 591, 604 (Ehrhardt).

[618] Feb. 4, 2013 Capehart E-mail (Ex. CCS-015) at 5; Tr. at 600 (Ehrhardt).

[619] Tr. at 603 (Ehrhardt).

[620] Tr. at 604 (Ehrhardt).

comments to it, I would say perhaps didn't intend to submit a waiver, but I'm not sure I would label as merely a typo."[621]

260. The record evidence clearly shows that there was justification included in the preliminary waiver request[622] and that the facility licensee intended to request a waiver for Ms. Smith.[623] Mr. Ehrhardt's independent fairness inquiry did not pursue this issue adequately. He did not investigate the information provided in the preliminary NRC 398 forms.[624] It was only at the hearing that he reviewed Ms. Smith's preliminary Form 398, stating, "it's different than what I expected to see until I had seen actually the preliminary 398 yesterday, as I mentioned earlier. Yes, I was not expecting to see anything in that justification block."[625]

261. Mr. Ehrhardt's prefiled testimony states he "spoke directly with P. Capehart, M. Meeks, and M. Bates."[626] At hearing he testified he also spoke with Mr. Widmann.[627] He did not interview Mr. Hopkins, the Examiner of Record for Ms. Smith's 2011 examination. Mr. Ehrhardt was not aware of the licensee's perspective on the waiver request.[628] He did not interview anyone from Vogtle to investigate the e-mails and numerous phone calls between the 2011 Exam Team and SNC staff concerning a waiver for Ms. Smith.[629] Mr. Ehrhardt also did not interview Ms. Smith.

262. The Board concludes that Mr. Ehrhardt's prior working relationships with all of Ms. Smith's examiners should have disqualified him from conducting the fairness review. The Board also finds his review of the waiver issue inadequate because it did not go beyond questioning fellow examiners in Region II and their supervisor. He did not interview Ms. Smith or anyone from SNC as to Ms. Smith's allegations that the Region II examiners discouraged SNC from submitting a waiver request on her behalf.

263. Mr. Ehrhardt's fairness review concluded that "that the Chief Examiner's assessment of the applicants' performance with respect to suitability for a waiver was consistent with the guidelines contained in NUREG-1021 as well as past practice within Region II.[630]

264. There are no guidelines for waivers in NUREG-1021.[631] Denial of a

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[621] Tr. at 605 (Ehrhardt).

[622] Tucker's Aff. (Ex. CCS-002) at 14-16.

[623] Tr. at 275 (Tucker).

[624] Tr. at 604 (Ehrhardt).

[625] Tr. at 607 (Ehrhardt).

[626] Ehrhardt's Prefiled Testimony (Ex. NRC-026) at 2.

[627] Tr. at 593 (Ehrhardt).

[628] Tr. at 606 (Ehrhardt).

[629] Tr. at 592-93 (Ehrhardt).

[630] Ehrhardt's Independent Review (Ex. NRC-014) at 6.

[631] Tr. at 501-03 (Meeks); see also Staff PFF ¶ 81.

waiver is not consistent with past practice in Region II. Exhibit NRC-008 indicates only one waiver request denial in the past 7 years.[632] Mr. Ehrhardt himself looked at 3 years of Region II data and was unable to find a single instance where an operating test waiver was denied. During that period, 33 operating test waivers were granted.[633]

265. Mr. Ehrhardt's fairness review compared "the simulator test competency scores for those individuals who were granted waivers to those of the applicant and determined that the applicant's simulator test competency scores were, overall, significantly lower than any of the scores for those individuals who were granted waivers."[634] The record evidence, however, shows that an individual with a score only .01 higher than Ms. Smith was granted a waiver by Region II.[635] The record evidence also shows that an individual with a score .01 *lower* than Ms. Smith was granted a license by Region II.[636]

266. The fairness review acknowledges that "[t]he NRC's examinations are not intended to distinguish among levels of competency or to identify the most qualified individuals, but to make reliable and valid distinctions at the minimum level of competency that the agency has selected in the interests of public protection."[637] Given that Ms. Smith established the minimum level of competency by passing the 2011 operating exam, Mr. Ehrhardt failed to provide a valid reason for singling her out for a likely denial of an operating test waiver in 2012.

267. Mr. Ehrhardt was also assigned by Region II management "to independently assess Ms. Smith's contention of bias in regard to administration of the 2012 examination."[638] Mr. Ehrhardt determined that Ms. Smith was examined fairly, in a normal fashion, and in accordance with the guidelines contained in NUREG-1021[639] and concluded that Ms. Smith's allegation of bias by examiners in administering or evaluating her operating test was unsubstantiated.[640]

268. The fairness review states that initial examinations are highly prescripted, with critical tasks, steps, and key performance elements explicitly determined and documented in advance in consultation with facility training representatives. We agree in general with that statement. Mr. Ehrhardt goes on to

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[632] Region II Waiver Request Exam Data (Ex. NRC-008). Of the 47 waiver requests over the past seven years in Region II, only one waiver request was denied. *See id.*

[633] Ehrhardt's Independent Review (Ex. NRC-014) at 6.

[634] *Id.*

[635] Region II Waiver Request Exam Data (Ex. NRC-008) at 8.

[636] "V" Individual Examination Report (Ex. CCS-057) at 3.

[637] Ehrhardt's Independent Review (Ex. NRC-014) at 7.

[638] Ehrhardt's Prefiled Testimony (Ex. NRC-026) at 1-2.

[639] Ehrhardt's Independent Review (Ex. NRC-014) at 11.

[640] *Id.*

conclude, however, that "there is little, if any, opportunity to hold any applicant to a higher standard of performance than another."[641] The record in this case shows that there are indeed such opportunities. The record evidence shows that the Exam Team encouraged the IRP to hold Ms. Smith to a higher standard by deviating from the prescripted administration and elevating a task (PORV) to a critical task *after* the examination.[642] The record evidence also shows that the Exam Team encouraged the IRP to grade Ms. Smith more severely than other candidates by double counting her errors.[643]

269. Mr. Ehrhardt's fairness review "determined that M. Meeks did not review the applicant's 2011 Individual Examination Report before administering the 2012 examination in order to ensure he remained unbiased."[644] At hearing, however, Mr. Meeks testified that both he and Mr. Capehart had reviewed the six retake applicants [including Ms. Smith's] 2011 Form 303s and "talked in detail" with Mr. Widmann about whether to grant waivers. Mr. Meeks further testified that "when we reviewed Ms. Smith's 303 forms was that her performance on that test was, from our viewpoint, much worse than the other five."[645]

270. At hearing Mr. Meeks further testified, "I had read the 303s both in May for the retake, before I had left the Region to go to my training class, and then, I reread them in August because the passage of time had taken place. So, yes, sir, I had reread all six applicants' 303s."[646]

271. The statement in the fairness report that Mr. Meeks did not review Ms. Smith's Individual Examination Report and that not reviewing the report ensured he remained unbiased is clearly erroneous. Moreover, the fairness review fails to mention that Mr. Meeks, in response to questions propounded by Mr. Ehrhardt, stated based on his knowledge of Ms. Smith's performance during the 2011 simulator exam that she "was unsafe" and that he would not want his family to live near a plant where she was the SRO on duty.[647] Ignoring this information, the fairness report relied on the fact that the Examiner of Record, Mr. Bates, did not participate in Ms. Smith's 2011 examination.[648] But, as we have previously explained, Ms. Smith was entitled to an exam team free of bias against her, not just an Examiner of Record who had not participated in the 2011 exam.[649]

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[641] Ehrhardt's Independent Review (Ex. NRC-014) at 8.

[642] *See supra* ¶¶ 173-183.

[643] *See supra* ¶¶ 73, 156, 174-182.

[644] Ehrhardt's Independent Review (Ex. NRC-014) at 9.

[645] Tr. at 387 (Meeks).

[646] Tr. at 473 (Meeks).

[647] Exam Waiver Question Correspondence (Ex. CCS-001) at 4.

[648] Ehrhardt's Independent Review (Ex. NRC-014) at 8.

[649] *See supra* ¶¶ 59-73.

272. Accordingly, we find that the fairness report's review of the bias issue is seriously flawed and its conclusion is unjustified and arbitrary.

I. NRC Staff Compliance with 10 C.F.R. § 2.1203

273. On December 12, 2012, Mr. Edwin Lea, a Region II examiner sent an e-mail entitled "Failure of SRO Applicant in RII" to Michael Johnson, Director of the Office of Nuclear Reactor Regulation (NRR), with copies to Ho Nieh[650] and John McHale.[651] The e-mail states that, "I believe that Rll person[nel] involved in the denial of the license went to extreme measures to make sure that the young lady [Ms. Smith] would not receive a license based on failing the operations portion of the examination."[652] The e-mail continues, "[I]f you look at the paper trail/conversations associated with the failure of the applicant, you will find that after individuals in Headquarters were ready to suggest issuing a license to the applicant, the individuals from Rll involved in failing the applicant went back and came up with additional comments to support a failure. Many of the actions taken by Rll show how determined [they/we] were to make sure that the Region's proposed denial was upheld."[653]

274. Ms. Smith complains of the NRC Staff's failure to timely disclose the e-mail.[654] Although this is not one of Ms. Smith's Statements of Position, we will examine the issue because of the importance of compliance with disclosure requirements in licensing board proceedings.

275. The Commission's regulations in 10 C.F.R. § 2.1203 and the Board's March 20, 2013 order required initial disclosure of all relevant documents in this case by March 21, 2013.[655]

276. The NRC Region II Staff turned Mr. Lea's e-mail over "to OGC when they turned over their initial possible hearing file disclosures."[656]

277. The NRC Staff's March 21, 2013 initial disclosure did not include Mr. Lea's December 12, 2012 e-mail to Michael Johnson, Director of NRR, with copies to Ho Nieh and John McHale.

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[650] Director, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation.

[651] Chief, Operator Licensing and Training Branch, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation.

[652] E-mail from Edwin Lea to Michael Johnson (Ex. NRC-021) (Dec. 12, 2012 7:57 AM) [hereinafter Dec. 12 Lea E-mail].

[653] *Id.*

[654] *See* Smith PFF ¶¶ 83-84.

[655] Licensing Board Order Memorializing March 18, 2013 Teleconference and Establishing Procedures (Mar. 20, 2013) [hereinafter Board's March 20, 2013 Order].

[656] Tr. at 698 (Cylkowski).

278. The NRC Staff informed the Board that "its March 21, 2013 submissions include all documents required to be disclosed at this time."[657]

279. The NRC Staff (OGC) did not disclose Mr. Lea's December 12, 2012 e-mail until May 29, 2013.[658]

280. At hearing, the NRC Staff counsel stated that it [the NRC Staff] believed the e-mail "was not relevant to the admitted contention."[659]

281. Mr. Lea's December 12, 2012 e-mail is clearly relevant to the issues in this case. Although it does not mention Ms. Smith by name, it refers to the allegations raised by Ms. Smith arising from her efforts to obtain an SRO License from Region II.[660] It also addresses the "extreme measures" to which, in Mr. Lea's opinion, Region II personnel went to sustain the denial of Ms. Smith's license application.[661]

282. The NRC Staff has an obligation to lay all relevant materials before the Board to enable it to adequately dispose of the issues before it.[662] All parties, including the Staff, are obligated to bring any significant new information to the Board's attention.[663]

283. The NRC Staff violated the requirements of 10 C.F.R. § 2.1203 and the Board's March 20, 2013 order in this case that required initial disclosure of all relevant documents by March 21, 2013.[664]

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[657] *See* Letter from David Cylkowski, Counsel for NRC Staff, to *Charlissa C. Smith* Licensing Board (March 22, 2013).

[658] Letter from Lloyd Subin, Counsel for NRC Staff, to *Charlissa C. Smith* Licensing Board (May 30, 2013) at 1 ("[T]he Staff also submits the May 29, 2013 testimony of Edwin Lea concerning the claim by Charlissa C. Smith that the NRC improperly denied her senior reactor operator application license (Attachment 2) also intended to be filed, with the May 29th filing.")

[659] Tr. at 698 (Cylkowski).

[660] Dec. 12 Lea E-mail (Ex. NRC-021).

[661] *Id.*

[662] *Consolidated Edison Co. of New York* (Indian Point, Units 1, 2, and 3), CLI-77-2, 5 NRC 13 (1977); *Louisiana Power and Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1091 n.18 (1983), citing *Indian Point,* CLI-77-2, 5 NRC at 15. *See generally Tennessee Valley Authority* (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC 1387 (1982); *Allied-General Nuclear Services* (Barnwell Nuclear Fuel Plant Separation Facility), ALAB-296, 2 NRC 671, 680 (1975).

[663] *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), ALAB-738, 18 NRC 177, 197 n.39 (1983), *rev'd in part on other grounds,* CLI-85-2, 21 NRC 282 (1985), citing *Tennessee Valley Authority* (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC at 1394; *Union Electric Co.* (Callaway Plant, Unit 1), ALAB-750, 18 NRC 1205, 1210 n.11 (1983); *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 152-53 n.46 (1993).

[664] *See* 10 C.F.R. § 2.1203 ("(b) The hearing file consists of . . . any correspondence between the applicant/licensee and the NRC that is relevant to the proposed action. . . . (c) The NRC staff has a continuing duty to keep the hearing file up to date. . . ."); Board's March 20, 2013 Order at 1-2.

284. An agency of the government must scrupulously observe the rules, regulations or procedures which it has established.[665]

285. Mr. Lea's December 12, 2012 e-mail and his testimony at the hearing shed light on a number of the controversies in this case. It is troubling that the NRC Staff did not disclose Mr. Lea's December 12, 2012 e-mail until May 29, 2013, more than 2 months after initial disclosures were due and only 2 days before Ms. Smith's direct testimony was due to be filed. The Staff's claim that the e-mail is not relevant is clearly erroneous. We know of no legitimate reason for the Staff to withhold this document. The fact that Mr. Lea's allegations are detrimental to the Staff position that Ms. Smith was treated fairly is not a basis to withhold relevant documents. Ms. Smith alleges she was treated differently from other SRO candidates, that she was graded more harshly than her peers, and that the informal/independent review was flawed. The NRC Staff, on the other hand, urges us to find that Ms. Smith was treated fairly by Region II in the grading of her examination, that the IRP performed its functions objectively, and that the investigation of her bias claims was objectively reviewed. Staff witness Lea asserts, however, "that R[egion] II person[nel] involved in the denial of the license went to extreme measures to make sure that the young lady [Ms. Smith] would not receive a license. . . ."[666] We find Mr. Lea's testimony compelling because of his years of experience in Region II and his impartiality. Mr. Lea's observations corroborate many of the findings the Board has made after review of the evidence and testimony in this proceeding.[667]

286. Staff witness Lea has been administering examinations for the NRC for over 23 years.[668] He testified he has never met Ms. Smith, and reached his conclusions regarding her unfair treatment by the agency solely by reviewing the documentation of her performance on the operating test.[669] Mr. Lea took the dramatic step of alerting Mr. Michael Johnson, the Director of NRR of his concerns with the treatment Ms. Smith received. He testified to conversations among examiners in Region II, whereby the examiners spoke of their efforts "to make sure that, once the failure was presented to Headquarters, that it would not be overturned."[670] This statement, although not determinative, is relevant to Ms. Smith's allegations that the Exam Team had excessive influence on the outcome of her administrative appeal.

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[665] *See United States ex rel. Accardi v. Shaughnessy,* 347 U.S. 260 (1954); *United States v. Heffner,* 420 F.2d 809, 811 (4th Cir. 1970).

[666] Dec. 12 Lea E-mail (Ex. NRC-021).

[667] *See supra* ¶¶ 46, 48, 137-140.

[668] Tr. at 664 (Lea).

[669] Tr. at 667 (Lea).

[670] Tr. at 669 (Lea).

VIII. CONCLUSIONS OF LAW AND REMEDY

A. Board Conclusions on Ms. Smith's Objections to the Grading of Her 2012 Simulator Exam

The Board concludes that the Staff violated NUREG-1021 and its goals of equitable and consistent examination administration when it changed the scoring procedure so as to apply more stringent criteria to Ms. Smith than were applied to other applicants in her examination class. Such actions were also inappropriate, unjustified, arbitrary, and an abuse of discretion.

As to the double counting of errors issue, both the Exam Team's approach and that applied by the IRP, when considered in isolation, are permissible applications of NUREG-1021, ES-303 D.1.d. An error may permissibly be assigned to only one rating factor, as the Exam Team did, but it is also permissible to assign one error to two or more rating factors. But the Staff may not change the scoring procedure so as to apply a different and more stringent scoring procedure to one applicant unless it applies to the rest of the class. Thus, because the Exam Team followed the Region II policy of assigning one error to only one RF, that policy could not be changed for Ms. Smith unless it was changed for the entire class. The IRP failed to follow this rule. When the IRP deviated from the Exam Team's scoring procedure by assigning errors to two rating factors rather than only one RF, it changed the scoring procedure solely for Ms. Smith. This change meant that the IRP graded her under a different and more stringent scoring procedure than that applied to other members of her class. This violated the requirement of consistency, under which all members of the same class should be evaluated under the same scoring procedure.

The IRP violated the same requirement of consistency when it made closing the PORV a critical task solely for Ms. Smith. That action was also inappropriate and unjustified, arbitrary, and an abuse of discretion under NUREG-1021.

Had the administrative review graded Ms. Smith's operating exam consistently with the standards applied to other applicants and as required by NUREG-1021, she would have passed the 2012 operating exam. She passed the 2012 written exam. She therefore satisfied the operating and written examination requirement for an SRO license.

The Board further concludes that the IRP's determination that Ms. Smith made an error associated with a critical task was inconsistent with NUREG-1021, unjustified, arbitrary, and an abuse of discretion. Absent that IRP error, Ms. Smith would have passed the 2012 operating exam. She therefore satisfied the operating and written examination requirement for an SRO license on that basis as well.

B. Board Conclusions on Ms. Smith's Claims of Mishandling of the Waiver Request, Conflict of Interest, and Biased Administrative Review

The Board has found that the Staff, without justification, discouraged SNC from submitting a request for a routinely issued waiver of the 2012 operating exam for Ms. Smith, denied her an impartial examination team, and failed to provide an impartial administrative review. The Staff argues that even if we find for Ms. Smith on those issues, we may not grant her a license on the basis of any of those claims because they are not causally related to the license denial. The Staff acknowledges, however, that

> [T]his Board has the discretion to order remedies other than the remedy requested by Ms. Smith in response to the findings made during this proceeding. For instance, if the Board found that the alleged bias of the examiners made it so that Ms. Smith's 2012 simulator test was unfair . . . then the Board could order as a possible remedy that Ms. Smith be provided a re-test of only the simulator test and a waiver of all the other SRO requirements.[671]

Because we have concluded that Ms. Smith is entitled to an SRO license based on her successful challenge to the scoring of her 2012 simulator exam, we need not reach this issue. We note, however, that had Ms. Smith not prevailed on her scoring arguments she would certainly be entitled to a remedy on her unfair conduct arguments.

IX. CONCLUSION

The Staff is directed to issue an SRO license to Ms. Smith, subject to the satisfaction of any other licensing requirements not considered in this proceeding, such as health, that the Staff must also assess before issuing a license pursuant to 10 C.F.R. § 55.33. The license shall be effective as of the date it is issued and shall be subject to the usual terms and conditions.[672]

In accordance with 10 C.F.R. § 2.1210, this Initial Decision will constitute a final decision of the Commission forty (40) days after its issuance unless: (1) a party files a petition for Commission review within twenty-five (25) days after service of this Initial Decision; or (2) the Commission directs otherwise. Within twenty-five (25) days after service of a petition for Commission review, parties to the proceeding may file an answer supporting or opposing Commission review.

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[671] Staff's Statement of Position (Ex. NRC-001) at 11 n.39.

[672] *See generally Morabito,* LBP-88-16, 27 NRC 583.

A party who seeks judicial review of this decision must first seek Commission review, unless otherwise authorized by law.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Ronald M. Spritzer, Chair
ADMINISTRATIVE JUDGE

William J. Froehlich
ADMINISTRATIVE JUDGE

Brian K. Hajek
ADMINISTRATIVE JUDGE

Rockville, Maryland
March 18, 2014

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Allison M. Macfarlane, Chairman
Kristine L. Svinicki
George Apostolakis
William D. Magwood, IV
William C. Ostendorff

In the Matter of **Docket No. 50-389**

FLORIDA POWER & LIGHT COMPANY
(St. Lucie Nuclear Power Plant, Unit 2)

April 1, 2014

STAY

A stay pursuant to 10 C.F.R. § 2.342 is available only in those circumstances where a presiding officer or licensing board has issued a decision or taken action in a proceeding to which the movant is a party.

IRREPARABLE INJURY

Merely raising the specter of a nuclear accident does not demonstrate irreparable harm.

MEMORANDUM AND ORDER

The Southern Alliance for Clean Energy (SACE) has filed a hearing request relating to the installation of replacement steam generators at the Florida Power

& Light (FPL) St. Lucie Unit 2 nuclear reactor as a *de facto* license amendment.[1] With its hearing request SACE filed a motion to stay requesting that we suspend restart of St. Lucie Unit 2 and seeking expedited consideration.[2] The NRC Staff and FPL oppose the motion to stay.[3]

In this Order, we address SACE's motion to stay and set a schedule for further briefing with respect to its hearing request.

I. BACKGROUND

SACE's hearing request and motion to stay arise from the replacement of two steam generators at St. Lucie Unit 2 in 2007. FPL replaced the steam generators pursuant to the provisions of 10 C.F.R. § 50.59, which allow licensees to make changes to a facility if certain criteria are satisfied.[4] FPL's evaluation under that regulation concluded that a license amendment was not required for the steam generator replacement.[5] The NRC Staff's review of the steam generator replacement, including the 10 C.F.R. § 50.59 evaluation conducted by FPL, identified no findings of significance.[6]

In February 2011, FPL requested a license amendment to permit operation of St. Lucie Unit 2 at an extended power uprate with the replacement steam

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[1] Southern Alliance for Clean Energy's Hearing Request Regarding De Facto Amendment of St. Lucie Unit 2 Operating License (Mar. 10, 2014) (Hearing Request).

[2] Southern Alliance for Clean Energy's Motion to Stay Restart of St. Lucie Unit 2 Pending Conclusion of Hearing Regarding De Facto Amendment of Operating License and Request for Expedited Consideration (Mar. 10, 2014) (SACE Motion to Stay).

[3] *See* NRC Staff's Answer to Southern Alliance for Clean Energy's Motion to Stay Restart of St. Lucie Unit 2 Pending Conclusion of Hearing Regarding De Facto Amendment of Operating License and Request for Expedited Consideration (Mar. 20, 2014) (Staff Answer); Answer of Florida Power & Light Company Opposing SACE Motion to Stay Restart of St. Lucie Unit 2 (Mar. 20, 2014) (FPL Answer).

[4] Section 50.59 sets forth the circumstances under which a licensee may make changes to the facility as described in its Updated Final Safety Analysis Report (UFSAR), make changes in the procedures described in the UFSAR, and conduct tests or experiments not otherwise described in the UFSAR, without obtaining a license amendment under 10 C.F.R. § 50.90. *See* 10 C.F.R. § 50.59(c)(1).

[5] *See* FPL Answer at 3 & Att. 1, Declaration of Mr. William A. Cross in Support of FPL's Answer Opposing SACE Motion to Stay Restart (Mar. 20, 2014), ¶¶ 4-9; Johnston, Gordon L., Site Vice President, St. Lucie Plant, Letter to NRC, L-2008-148 (June 26, 2008), at 8 (ADAMS Accession No. ML081840111).

[6] *See* Staff Answer at 2; St. Lucie Nuclear Plant — NRC Integrated Inspection Report 05000335/2007005, 05000389/2007005, § 4OA5.3 "Unit 2 Steam Generator Replacement Inspection (IP 50001)" (Feb. 1, 2008) at 27-33 (ADAMS Accession No. ML080350408); Affidavit of Omar R. López-Santiago Concerning SACE's Claims Regarding Staff's Steam Generator Inservice Inspection (Mar. 20, 2014), ¶¶ 10-12 (Staff Affidavit).

generators.[7] FPL's amendment request evaluated steam generator performance relative to the proposed uprate.[8] The Commission published a notice of the license amendment request and an opportunity to request a hearing.[9] No hearing requests or petitions to intervene were submitted.[10] The Staff's approval of the amendment in September 2012 incorporated requirements into FPL's license on the use, inspection, and reporting of inspection results for the steam generators at the higher power.[11]

FPL shut down St. Lucie Unit 2 for a scheduled refueling outage on March 3, 2014. Existing license requirements require FPL to inspect and verify steam generator tube integrity in accordance with its Steam Generator Program during the outage and to submit the inspection results to the NRC.[12] The Staff was scheduled to conduct a baseline inspection, a portion of which covers the steam generators, during the outage.[13]

SACE seeks a hearing on the ground that the NRC should have required a license amendment to permit the 2007 steam generator replacement and, in not

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[7] Anderson, R.L., Site Vice President, St. Lucie Plant, Letter L-2011-021 to NRC (Feb. 25, 2011), at 1 (ADAMS Accession No. ML110730116). The complete license amendment request is available in ADAMS Package ML110730268. Some portions are proprietary and thus not publicly available.

[8] Attachment 5 to Letter L-2011-021, St. Lucie Unit 2 EPU Licensing Report § 2.2.2.5, "Steam Generators and Supports," at 2.2.2-57 to 2.2.2-108 (ADAMS Accession No. ML110730299).

[9] Florida Power & Light Company, St. Lucie Plant, Unit 2 License Amendment Request; Opportunity to Request a Hearing and to Petition for Leave to Intervene, and Commission Order Imposing Procedures for Document Access, 76 Fed. Reg. 54,503 (Sept. 1, 2011).

[10] Staff Answer at 3.

[11] *See* Biweekly Notice: Applications and Amendments to Facility Operating Licenses and Combined Licenses Involving No Significant Hazards Considerations, 77 Fed. Reg. 63,343, 63,354-55 (Oct. 16, 2012).

[12] Staff Answer at 4; Docket No. 50-389, St. Lucie Plant, Unit No. 2, Renewed Facility Operating License No. NPF-16 with Technical Specifications (TS); TS 6.8.4.I.1.a, at 6-15e; TS 6.9.1.2, at 6-20f (ADAMS Accession No. ML052800077). FPL informed the NRC that the current refueling outage (RFO21) inspection includes, among other steam generator inspections, a 100% bobbin probe examination. Katzman, Eric S., FPL, Letter to NRC Document Control Desk (Nov. 26, 2013), Att. at 4 (response to request for additional information regarding steam generator tube inspection) (ADAMS Accession No. ML13338A582).

[13] López-Santiago, O.R., NRC, Letter to M. Nazar, Executive Vice President and Chief Nuclear Officer, FPL, St. Lucie Nuclear Plant, Unit 2 — Notification of Inspection and Request for Information (Feb. 24, 2014), at 1 (ADAMS Accession No. ML14056A110); Staff Answer at 4; Staff Affidavit ¶ 13. Inspections such as this are conducted pursuant to NRC Inspection Procedure 71111.08. Staff Affidavit ¶ 13. *See generally* NRC Inspection Procedure 71111.08, "Inservice Inspection Activities" (Jan. 1, 2012) (ADAMS Accession No. ML11262A023). The inspection findings will be documented in an inspection report, consistent with the Staff's usual process. And as stated by Mr. López-Santiago, any violations associated with inspection findings are addressed in accordance with the NRC's Enforcement Policy and Enforcement Manual and the NRC's Significance Determination Process. Staff Affidavit ¶ 14.

doing so, has implicitly and improperly granted a *de facto* license amendment.[14] SACE seeks a stay of the restart of St. Lucie Unit 2 until after: (1) a 100% inspection of the steam generator tubes by FPL and publication of the results; (2) publication of the results of the inservice inspection the Staff is conducting during the outage; and (3) completion of the adjudicatory proceeding SACE requests.[15]

II. DISCUSSION

We first address the procedural posture of SACE's motion to stay. SACE filed its motion to stay pursuant to 10 C.F.R. § 2.342. This regulation, however, applies only to decisions or actions of a presiding officer or licensing board in a proceeding to which the movant is a party pending the filing and resolution of a petition for review.[16] Here, SACE has neither been admitted as a party to an adjudication relating to St. Lucie nor identified any adjudicatory decision or action that it seeks to have us stay. For that reason alone, we find SACE's motion is procedurally improper.

Even were we to exercise discretion to stay an agency action while the hearing request is pending, SACE has failed to identify any agency action or decision relating to the restart of St. Lucie Unit 2 that it would have us suspend. To the contrary, the thrust of SACE's complaint is that the NRC has not taken sufficient regulatory actions to ensure that St. Lucie is operated safely with the replacement steam generators.[17]

Although we need not, and do not, reach the traditional considerations for granting or denying a stay, we consider as a discretionary matter the question of irreparable injury and observe that SACE has not demonstrated that it will be irreparably harmed unless its motion is granted. As observed by the Staff and FPL, SACE's concerns are connected to the 2007 replacement of the plant's steam generators; the plant, however, has been in operation since that time.[18] SACE asserts that denying the stay motion will allow "a dangerous nuclear reactor to operate" absent the "basic safety analysis that is necessary to ensure it will not pose an undue risk to public health and safety."[19] But SACE has not shown that plant restart will, in and of itself, result in irreparable harm. As we have previously

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[14] SACE Motion to Stay at 4-5.

[15] *Id.* at 1-2.

[16] *See* 10 C.F.R. § 2.342(a); *Union Electric Co.* (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 158 (2011).

[17] SACE Motion to Stay at 6 ("SACE's Contention 2 asserts that changes made by FPL to steam generator design for Unit 2 fail to comply with NRC safety regulations or the NRC's reasonable assurance standard for protecting public health and safety . . .").

[18] *See* Staff Answer at 9; FPL Answer at 8-9.

[19] SACE Motion to Stay at 7.

held, "'Merely raising the specter of a nuclear accident' does not demonstrate irreparable harm."[20]

We therefore deny the motion to stay restart. Our denial of SACE's motion does not address the question whether SACE is entitled to seek a hearing in this matter. FPL and the Staff therefore may file answers to SACE's hearing request by April 28, 2014. SACE may file a reply within 7 days of service of the answers.

III. CONCLUSION

For the reasons discussed above, we deny SACE's stay motion.
IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 1st day of April 2014.

[20] *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237 (2006).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

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Kristine L. Svinicki
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William D. Magwood, IV
William C. Ostendorff

In the Matter of	**Docket Nos. 50-228-LR** **50-228-LT** **50-228-EA**
AEROTEST OPERATIONS, INC. **(Aerotest Radiography and Research Reactor)**	**April 10, 2014**

TRANSFER OF LICENSES

Any discretionary diversion, in a license transfer case, from the Subpart M procedural track will be rare — requiring "extraordinary" circumstances.

CONSOLIDATION OF PROCEEDINGS

NRC regulations contemplate separate hearings on individual proceedings unless they are consolidated.

MEMORANDUM AND ORDER

Today's decision stems from three separate but interrelated actions by the NRC Staff. First, the Staff denied an indirect license transfer application of both Aerotest Operations, Inc. and its proposed transferee, Nuclear Labyrinth, LLC (together, the companies). Second, the Staff denied Aerotest's application to

renew its license to own and operate Aerotest Radiography and Research Reactor (ARRR). And third, the Staff issued a related enforcement order barring the future operation of the ARRR and directing other actions related to decommissioning.

Aerotest and Nuclear Labyrinth seek a consolidated hearing on all three Staff actions. The Staff does not oppose the hearing requests but moves to "sever" the license transfer adjudication from the license renewal adjudication. As discussed below, we decline to consolidate the proceedings, and, inasmuch as the proceedings were not consolidated or otherwise joined to begin with, we deny the Staff's motion. We also grant the companies' request for a hearing on the Staff's denial of their license transfer application, and we hold that our Subpart M procedural rules apply to that proceeding. Regarding that proceeding, we instruct the Chief Administrative Judge to appoint a presiding officer, and direct the Staff to participate as a party. We defer consideration of the companies' hearing demands on the license renewal application and enforcement order pending completion of the license transfer matter. Finally, we impose certain filing requirements on the parties.

I. BACKGROUND

In May 2000, Autoliv ASP, Inc., purchased Aerotest.[1] The purchaser was a wholly owned subsidiary of Autoliv, Inc. (Autoliv), a company incorporated in Delaware with its headquarters in Stockholm, Sweden.[2] In October of that year, the NRC's technical staff informed our Executive Director for Operations that only one-third of Autoliv's stock was held in the United States, close to half was held in Sweden, and most of the remainder in the United Kingdom.[3] These and

[1] *See* Tsukimur, Ray R., Aerotest, Letter to Ledyard B. Marsh, NRC (Apr. 9, 2001), at 1 (ADAMS Accession No. ML011140283); Application for Consent to Indirect Transfer of Control of License (May 30, 2012), at 2 (ADAMS Accession No. ML12180A384) (License Transfer Application), appended as Attachment 1 to Brisighella, Dario, Aerotest, and Slaughter, David M., Nuclear Labyrinth, Letter to Document Control Desk, NRC (May 30, 2012) (ADAMS Accession No. ML12152A233); *see also* Warren, Sandra L., Aerotest, Letter to Director of the Office of Nuclear Reactor Regulation, NRC (Apr. 14, 2000) (ADAMS Accession No. ML003704794) (informing the Staff of the impending purchase).

[2] License Transfer Application at 2. Aerotest Operations, Inc. is wholly owned by OEA Aerospace, Inc., which is wholly owned by OEA, Inc., which is in turn wholly owned by Autoliv ASP, Inc., which is wholly owned by Autoliv, Inc. *Id.*

[3] Matthews, David B., NRR, Memorandum to John W. Craig, EDO (Oct. 17, 2000), at 1 (Matthews Memorandum), appended to Craig, John W., OEDO, Note to Commissioner[s'] Assistants (Oct. 19, 2000) (ADAMS Accession No. ML040430500). As of July 2013, the Staff reported that the majority of Autoliv's stock was still held by non-U.S. citizens and also that the majority of Autoliv, Inc.'s board of directors and executive officers were likewise foreign citizens. *See* Safety Evaluation by the Office *(Continued)*

other facts led the Staff to investigate whether the ownership transfer violated the foreign ownership provisions of section 104d of the Atomic Energy Act of 1954, as amended, (AEA)[4] and 10 C.F.R. § 50.38, our regulation implementing that statutory provision.[5] At that point, Autoliv began a lengthy search for a domestic company that would buy Aerotest.[6]

In 2005, Aerotest filed the license renewal application at issue here.[7] Shortly thereafter, the operating license for the ARRR expired, and the reactor continued to operate under the "timely renewal" provisions of 10 C.F.R. § 2.109.[8] In 2009, the Staff announced its intent to deny the renewal application because of Aerotest's noncompliance with the AEA's foreign ownership provisions.[9] Aerotest continued to negotiate with a series of potential buyers for an additional year.[10]

On October 15, 2010, Aerotest shut down the ARRR and began the process of developing a decommissioning plan for the reactor.[11] But while Aerotest

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of Nuclear Reactor Regulation; Indirect License Transfer of Aerotest Radiography and Research Reactor Due to the Proposed Acquisition of Aerotest Operations, Inc. by Nuclear Labyrinth, LLC; Facility Operating License No. R-98; Docket No. 50-228 (July 24, 2013), at 2 (ADAMS Accession No. ML13129A001) (Safety Evaluation), appended as Enclosure 2 to Leeds, Eric J., NRC, Letter to Michael Anderson, Aerotest, "Aerotest Operations, Inc. — Denial of License Renewal, Denial of License Transfer, and Issuance of Order to Modify License No. R-98 to Prohibit Operation of the Aerotest Radiography and Research Reactor, Facility Operating License No. R-98 (TAC Nos. ME8811 and MC9596)" (July 24, 2013) (Denial Letter), at 2 (ADAMS Accession No. ML13120A598). The letter is included as part of ADAMS package ML13120A593 (Denial Package).

[4] 42 U.S.C. § 2134(d).

[5] *See* Matthews Memorandum at 1-2. At the time, Aerotest failed to submit a license transfer application with the NRC, as required by 10 C.F.R. § 50.80. *Id.*

[6] For a summary of Aerotest's efforts from 2001 to 2009 to find a domestic purchaser, *see* Anderson, Michael S., Aerotest, Letter to Cindy Montgomery, NRC, "Aerotest Operations Inc. — Request for Additional Information Regarding License Renewal Request (TAC No. MD2914)" (Mar. 9, 2009), at 5-7 (unnumbered) (ADAMS Accession No. ML120900629).

[7] License Renewal Application for the Aerotest Radiography and Research Reactor (ARRR), appended to Anderson, Michael S., Aerotest, Letter to NRC Document Control Desk, "Renewal Application for ARRR, License No. R-98" (Feb. 28, 2005) (ADAMS Accession No. ML050660109).

[8] That regulation provides that "if at least 30 days before the expiration of an existing license authorizing any activity of a continuing nature, the licensee files an application for a renewal . . . , the existing license will not be deemed to have expired until the application has been finally determined."

[9] Leeds, Eric J., NRC, Letter to Dario Brisighella, Aerotest, "Aerotest Operations, Inc. — Proposed Denial of Application for Renewal of Facility License No. R-98 (TAC No. MD8177)" (July 9, 2009) (ADAMS Accession No. ML090830578).

[10] *See, e.g.,* Leeds, Eric J., NRC, Letter to Dario Brisighella, Aerotest, "Aerotest Operations, Inc. — U.S. Nuclear Regulatory Commission Response to Request for Extension of Time to Request Hearing on Proposed Denial of License Renewal for Facility Operating License No. R-98 (TAC ME1887)" (Feb. 2, 2010) (ADAMS Accession No. ML100120418) (one of several extensions).

[11] Anderson, Michael S., Aerotest, Letter to Document Control Desk, NRC, "Docket No. 50-228

(Continued)

was seeking bids from decommissioning contractors, it continued to look for a prospective purchaser.[12] In 2012, Aerotest announced that it had found a domestic buyer, Nuclear Labyrinth, to own and operate the ARRR, and on May 30 of that year, Aerotest submitted its current application for a license transfer. According to the license transfer application, Nuclear Labyrinth would purchase 100% of Aerotest from Aerotest's ultimate parent, Autoliv, and upon the closing of the sale, Autoliv would transfer to Nuclear Labyrinth enough funds to operate the facility for approximately 12 months.[13]

On July 24, 2013, the Staff denied Aerotest's and Nuclear Labyrinth's license transfer application and also denied Aerotest's application for the renewal of the ARRR license.[14] The Staff denied the license transfer application on financial assurance grounds and concluded that "neither Aerotest nor Nuclear Labyrinth meets the financial qualification requirements under 10 CFR 50.33(f) because they have not demonstrated that they possess or have reasonable assurance of obtaining the funds necessary to cover estimated operating costs for the period of the license."[15] The Staff likewise determined that the companies had failed to provide reasonable assurance that they had sufficient funds to cover the annual costs for storing spent fuel until the Department of Energy accepts the fuel.[16]

Absent a transfer, the Staff found that the ARRR — as owned by Aerotest — remained under foreign ownership, control, or domination; the Staff therefore denied the license renewal application.[17] The Staff relied on the facts that Autoliv is headquartered in Sweden, that the majority of its board of directors and executive officers are not U.S. citizens, and that the majority of its outstanding

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Aerotest Radiography and Research Reactor License No. R-98" (Jan. 7, 2011) (ADAMS Accession No. ML110180463).

[12] *See, e.g., id.* at 2; Traiforos, Spyros, NRR, Memorandum to Jessie Quichocho, NRR, "Summary of January 18, 2012, Public Meeting with Aerotest Operations, Inc., to Discuss the Status of the Items in the Confirmatory Action Letter No. NRR-2011-001" (Jan. 20, 2012), at 1 (ADAMS Accession No. ML120200203).

[13] License Transfer Application at 3, 8.

[14] *See generally* Denial Package. The Staff also issued a second letter and document package on the same day addressing just the license transfer. *See* Leeds, Eric J., NRC, Letter to David M. Slaughter, Nuclear Labyrinth, "Aerotest Operations, Inc. — Denial of License Transfer Regarding the Aerotest Radiography and Research Reactor, Facility Operating License No. R-98 (TAC No. ME8811)" (dated July 15, 2013, but issued July 24, 2013) (ADAMS Accession No. ML13134A376) (package) (Transfer Denial). The safety evaluation included in this package is identical to that included in the Denial Package, *supra* note 3.

[15] Safety Evaluation at 9.

[16] *Id.* at 10-11. The license transfer denial did not turn on the foreign ownership question, but the Staff nevertheless expressed a concern that Autoliv could, in the future, subject Aerotest and Nuclear Labyrinth to foreign control. *See id.* at 12.

[17] *Id.* at 11 (citing 42 U.S.C. § 2134(d) and 10 C.F.R. § 50.38).

stock is held by non-U.S. citizens.[18] Simultaneous with its denial of both the license transfer and the license renewal applications, the Staff issued to Aerotest an order prohibiting operation of the ARRR and directing other action.[19]

Aerotest and Nuclear Labyrinth have timely filed joint demands for hearings on the two denials and a separate hearing demand on the Order.[20] The Staff does not oppose Aerotest's and Nuclear Labyrinth's demand for a hearing on either the license transfer application or the Order.[21] The Staff likewise does not oppose Aerotest's demand for a hearing on the license renewal application.[22]

II. DISCUSSION

A. Structure of the Proceedings

We begin by considering the parties' assertions that the individual issues requiring resolution should either be consolidated or, conversely, severed. To answer this question, we first identify the procedures that govern resolution of the issues, as this determination is a significant driver of our conclusion that the issues are best considered individually.

1. Applicable Procedural Rules

The Staff requests that the hearing on the license transfer be governed by 10

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[18] Denial Letter at 1-2.

[19] Order Prohibiting Operation of Aerotest Radiography and Research Reactor, 78 Fed. Reg. 46,618 (Aug. 1, 2013) (Order). The Order also was included as Enclosure 3 of the Denial Package.

[20] Joint Demand for Hearing on Denial of License Renewal and Indirect License Transfer Regarding Aerotest Radiography and Research Reactor Facility Operating License No. R-98 (Aug. 13, 2013) (Joint Hearing Demand); Joint Answer to and Demand for Hearing on Order Prohibiting Operation of Aerotest Radiography and Research Reactor Facility Operating License No. R-98 (Aug. 13, 2013) (Joint Answer and Hearing Demand). The Transfer Denial, *supra* note 14, although issued on July 24, was dated July 15. The Staff subsequently clarified that the deadline for Nuclear Labyrinth to request a hearing on the denial was August 13, 2013. Bowman, Gregory T., NRC, Letter to David M. Slaughter, Nuclear Labyrinth, "Clarification of Deadline for Requesting Hearing on the Denial of License Transfer of Aerotest Radiography and Research Reactor, Facility Operating License No. R-98" (Aug. 2, 2013) (ADAMS Accession No. ML13214A343).

[21] NRC Staff Answer to Joint Demand for Hearing on Denial of Indirect License Transfer Regarding Aerotest Radiography and Research Reactor Facility Operating License No. R-98 (Sept. 9, 2013) at 4 (Staff Answer to Joint Demand on License Transfer); NRC Staff Response to Joint Answer to and Demand for Hearing on Order Prohibiting Operation of Aerotest Radiography and Research Reactor — Facility Operating License No. R-98 (Aug. 27, 2013), at 2.

[22] NRC Staff Answer to Joint Demand for Hearing on Denial of License Renewal Regarding Aerotest Radiography and Research Reactor Facility Operating License No. R-98 (Sept. 9, 2013) at 4. But the Staff argues that if Nuclear Labyrinth wishes to participate as a party in the license renewal case, it must file a petition to intervene that conforms to 10 C.F.R. § 2.309. *Id.* As discussed *infra,* we need not reach this question today.

C.F.R. Part 2, Subpart M, and that the hearing on the license renewal application be conducted separately under 10 C.F.R. Part 2, Subpart L.[23] On the other hand, the companies would prefer that these two adjudications, along with the enforcement proceeding, be handled together under Subpart L.[24]

The procedural rules in Subpart L govern most adjudicatory proceedings, while the rules in Subpart M govern, specifically, adjudications on transfer applications.[25] Thus, in a typical license transfer case, we would apply Subpart M's procedural rules as a matter of course. Today's case is somewhat atypical in that it stems not from an intervention petition but rather from a challenge to a Staff decision to deny the application.[26] We have the authority to rule that this license transfer case be adjudicated under Subpart L,[27] and could exercise our discretion to adjudicate the license transfer case under that Subpart. And as the companies point out, doing so here would enable us to apply one set of procedural rules (i.e., those in Subpart L) to all three consolidated proceedings.[28]

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[23] NRC Staff Motion to Sever the Demand for Hearing on Denial of License Renewal from the Demand for Hearing on Indirect License Transfer Regarding Aerotest Radiography and Research Reactor (Aug. 21, 2013) at 2, 4-6 (Motion to Sever). The Staff does not include the hearing on the Order in its motion to sever.

[24] *See* Joint Answer to NRC Staff Motion to Sever the Demand for Hearing on Denial of License Renewal from the Demand for Hearing on Indirect License Transfer Regarding Aerotest Radiography and Research Reactor (Aug. 29, 2013) at 8 ("Applicants . . . would agree to hold the hearing . . . under Subpart L") (Joint Answer to Motion to Sever).

[25] *See* 10 C.F.R. §§ 2.310(a) (regarding Subpart L), 2.310(g) (regarding Subpart M), 2.1200 (Subparts C and L "govern all adjudicatory proceedings conducted under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act, and 10 CFR part 2, except for . . . proceedings for the direct or indirect transfer of control of an NRC license when the transfer requires prior approval of the NRC under the Commission's regulations, governing statutes, or pursuant to a license condition."), 2.1300 (Subpart M, "together with the generally applicable intervention provisions in subpart C of this part, govern all adjudicatory proceedings" on license transfer applications).

[26] This is not to suggest that Subpart M applies *solely* to hearing requests from potential intervenors and not from licensees. Indeed, we find nothing in the relevant regulations, regulatory history, or case law that would support such a conclusion. Our regulation defining the scope of Subpart M proceedings provides that the Subpart governs "*all* adjudicatory proceedings on an application for the . . . transfer of control of an NRC license," without distinction as to how the proceeding commences. 10 C.F.R. § 2.1300 (emphasis added). Similarly, the title of Subpart M indicates — in general terms and without any exceptions — our intent that those regulations apply to "hearings on license transfer applications." And our Statement of Considerations for the 1998 final rule promulgating Subpart M takes the same approach — referring generally to "requests for hearings associated with license transfer applications." Final Rule: "Streamlined Hearing Process for NRC Approval of License Transfers," 63 Fed. Reg. 66,721, 66,721 (Dec. 3, 1998) (Final Rule, Streamlined Hearing Process).

[27] *See, e.g.,* 10 C.F.R. §§ 2.1300 ("This subpart provides the only mechanism for requesting hearings on license transfer requests, unless contrary case[-]specific orders are issued by the Commission."), 2.310(g) ("Proceedings on a [license transfer application] . . . shall be conducted under the procedures of subpart M of this part, unless the Commission determines otherwise in a case-specific order.").

[28] *See* Joint Answer to Motion to Sever at 8.

Notwithstanding our authority to proceed under Subpart L, we agree with the Staff that the license transfer proceeding should be conducted under Subpart M. We justified the creation of the new Subpart M by citing "the need for expeditious decisionmaking . . . for these kinds of transactions"[29] — a justification that logically applies to all license transfer hearing requests, regardless of who files them. Indeed, the types of issues litigated in license transfer cases (e.g., financial assurance, technical qualifications, foreign ownership, and staffing levels[30]) are likely to be similar regardless of whether they are initiated by intervention petitions or by challenges to a Staff action. The streamlined hearing process provided in Subpart M is therefore equally appropriate for adjudications that arise out of a licensee's hearing request and those arising from a potential intervenor's hearing request. We do not view the fact that our review arises out of a licensee's hearing request to warrant departure from the general rule in this case, and we decline to exercise our discretion in the manner that the companies propose.

Further, we have made clear that any discretionary diversion from the usual Subpart M procedural track will be rare — requiring "extraordinary" and "unusual" circumstances.[31] We see nothing in Aerotest's particular case that is out of the ordinary for a license transfer case. Our review of the record indicates that the Staff denied the license transfer application on grounds of operating costs and ability to pay the annual cost for spent fuel storage — typical license transfer issues under 10 C.F.R. § 50.33.[32] These issues are thus neither "extraordinary" nor "unusual."[33]

Finally, as detailed in the next section, we are not convinced that consolidation of the proceedings will necessarily promote a more efficient resolution of the parties' dispute. We therefore find that the potential benefits of consolidation provide insufficient justification for us to apply a different procedural framework

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[29] Final Rule, Streamlined Hearing Process, 63 Fed. Reg. at 66,721.

[30] *See Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 290-91 & nn.10-11 (2000).

[31] Final Rule, Streamlined Hearing Process, 63 Fed. Reg. at 66,723. We have declined all requests to date to provide a non-Subpart M hearing in a license transfer case. *See Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 334-35 (2002); *Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 129-30 (2001); *FitzPatrick,* CLI-00-22, 52 NRC at 290-91; *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 162 (2000); *Niagara Mohawk Power Corp.* (Nine Mile Point Nuclear Station, Units 1 and 2), CLI-99-30, 50 NRC 333, 345 (1999).

[32] *See Nine Mile Point,* CLI-99-30, 50 NRC at 345 ("When promulgating Subpart M, we were well aware that most license transfer issues would be . . . financial in nature."); *see also FitzPatrick,* CLI-00-22, 52 NRC at 290-91 & nn.10-11; *see generally* 10 C.F.R. § 50.33 (general information required for an application).

[33] Final Rule, Streamlined Hearing Process, 63 Fed. Reg. at 66,723.

from the one contemplated by our regulations for the resolution of disputes relating to license transfer.

Given that we find Subpart M appropriate for consideration of the license transfer case here, we turn to whether the proceedings are appropriately handled separately, as the Staff requests, or together, as the companies request. We also consider whether the cases should be adjudicated in sequence or in parallel.

2. Consolidation and Sequencing of the Proceedings

The companies filed a single request for a hearing on both the license transfer and license renewal applications and requested that these two cases, along with the enforcement proceeding, be considered as part of a single proceeding.[34] The companies rely on our conclusion in *Safety Light* that related proceedings may be consolidated, taking into consideration three factors: "the similarity of issues in the proceedings, the commonality of litigants, and the convenience and saving of time or expense."[35] The companies assert that the proceedings involve similar issues and similar litigants, and they further argue that holding multiple hearings here would both contravene our policy favoring adjudicatory efficiency and needlessly burden the litigants and the presiding officers.[36]

We deny the companies' request for consolidation. Our regulations contemplate separate hearings on individual proceedings unless they are consolidated.[37] Separate hearings have been shown to be appropriate for cases governed by different procedural rules.[38] The companies have not shown us why we should depart from this default rule. While we agree that the three proceedings share common

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[34] Joint Hearing Demand; Joint Answer and Hearing Demand; Joint Answer to Motion to Sever at 8. *See generally* Denial Letter at 2 ("In accordance with 10 CFR 2.103(b), you have the right to demand a hearing on the license transfer denial and license renewal denial within 20 days of the date of this letter.").

[35] *Safety Light Corp.* (Bloomsburg Site Decontamination and License Renewal Denials), CLI-92-13, 36 NRC 79, 89 (1992). In *Safety Light,* the Commission deferred to the Board's decision to consolidate an "informal" Subpart L proceeding with a "formal" Subpart G proceeding.

[36] Joint Answer to Motion to Sever at 3-11.

[37] Our rule explicitly empowering presiding officers to consolidate proceedings demonstrates that consolidation is the exception rather than the rule. *See* 10 C.F.R. §§ 2.317(b), 2.319(c); *see also* 10 C.F.R. § 2.402. A litigant asking us to depart from this regulatory approach has the burden of showing that such a departure "will be conducive to the proper dispatch of [the Commission's] business and to the ends of justice and will be conducted in accordance with the other provisions of [Subpart C]." 10 C.F.R. § 2.317(b).

[38] *See FitzPatrick,* CLI-00-22, 52 NRC at 291 ("CAN moves for a consolidated hearing by the Commission, [the Federal Energy Regulatory Commission] and [the New York State Department of Environmental Conservation]. . . . We believe holding a consolidated hearing would be impractical in the particular circumstances of this proceeding, given that each agency would be operating under a different set of procedural rules and governing statutes.").

factual underpinnings, the operative facts are undisputed and need not be resolved at hearing. Both the license transfer and license renewal cases focus instead on whether the Staff appropriately interpreted our regulations and applied them correctly to the undisputed facts common to the two proceedings. The license renewal and license transfer cases also involve different issues: the challenged basis for the Staff's denial in the license renewal case is foreign ownership, control, and domination, while the challenged basis for the Staff's denial of the license transfer application is financial assurance.[39]

Separately, we find that the companies' perspective on adjudicatory efficiency is too narrow. It is by no means assured that consolidation of the proceedings will result in the litigants and our agency expending fewer resources and less time than if they were treated separately. As noted above, the Staff denied the two licensing actions on different grounds (foreign ownership and financial assurance). This difference provides a strong justification for separate adjudications — the litigants and presiding officers can focus on the core issue at hand in each case. This focus should streamline the decisionmaking process in each adjudication and thereby provide the adjudicatory efficiency that the companies seek. Without in any way suggesting how we may eventually resolve the substantive issues regarding foreign ownership and financial assurance, we offer the following two scenarios as examples supporting our conclusion that separate sequential adjudications may be more efficient than a consolidated one.

First, a consolidation of the cases and a simultaneous adjudication of all issues could well yield adjudicatory inefficiencies. By the conclusion of such a consolidated adjudication, the resolution of the license transfer case's financial assurance issues may have rendered moot some (or even all) of the issues in the license renewal and enforcement cases — thereby rendering unnecessary a portion of the parties' and the agency's expenditure of time and resources in the litigation of the latter two cases.[40] The initial, separate adjudication of the license transfer case would, by contrast, preclude such potential waste of time and resources.

Second, the sequential adjudication of the cases may provide adjudicatory efficiencies from an unexpected quarter. If we simultaneously adjudicate the license transfer case and continue our current generic (nonadjudicatory) analysis

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[39] *Cf. Advanced Medical Systems, Inc.* (1020 London Road, Cleveland, Ohio), LBP-98-32, 48 NRC 374, 377-78 (1998) (consolidating proceedings (1) for the renewal of a materials license and (2) contesting the Staff's denial of that renewal in order to, among other things, litigate a common issue only once).

[40] In particular, were we to reverse the Staff's denial of the license transfer application, the new owner would be a U.S. company — a fact that likely would render moot some or all of the questions involved in the license renewal and enforcement cases.

of the foreign ownership issue,[41] then our subsequent consideration of that same issue in the license renewal and enforcement cases may well benefit from our generic analysis and conclusions. This benefit may not be available were we to proceed on those latter two cases prior to the conclusion of our generic analysis.

For these reasons, we will adjudicate the transfer and renewal proceedings separately.[42] We will address first the license transfer case and will hold in abeyance the other two cases pending our resolution of the first proceeding.

B. Procedural Issues Associated with Conduct of Subpart M Proceeding

In view of our conclusions that consolidation is not warranted and that we will consider the license transfer case first, we address several housekeeping matters associated with the Subpart M proceeding.[43]

1. Presiding Officer in the License Transfer Proceeding

We direct the Chief Administrative Judge to appoint a single administrative judge within the next 5 business days to serve as Presiding Officer for this license transfer proceeding for the purposes of compiling the hearing record, ruling on any motions related to developing the factual record while the proceeding is before the Presiding Officer, presiding at any oral hearing, and certifying the compiled record to us.[44] We expect that this certification will resemble the prior certification of the record from the Presiding Officer to the Commission in the *FitzPatrick*

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[41] *See* Staff Requirements — SECY-12-0168 — Calvert Cliffs 3 Nuclear Project, LLC & UniStar Nuclear Operating Services, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Docket No. 52-016-COL, Petition for Review of LBP-12-19 (Mar. 11, 2013) (ADAMS Accession No. ML13070A150).

[42] Because the license transfer and license renewal proceedings are not consolidated, the relief sought in the Staff's Motion to Sever is unnecessary. Thus, even though the effect of our decision is to consider the license renewal and license transfer issues separately, we deny the Staff's motion.

[43] Because we defer our consideration of the license renewal and enforcement proceedings until we have issued a final decision in the license transfer proceeding, we likewise defer our consideration of related issues, including the procedural rules that will govern those two proceedings, whether those proceedings should be consolidated, and the question of Nuclear Labyrinth's party status in the license renewal matter.

[44] Our rules provide that, "ordinarily," the Commission itself will preside over license transfer hearings. 10 C.F.R. § 2.1319(a). But our rules also allow us to designate "one or more Commissioners" or "any other person permitted by law" to preside. *Id.* Where the Commission does not preside, "The Presiding Officer will certify the completed hearing record to the Commission, which may then issue its decision on the hearing or provide that additional testimony be presented." 10 C.F.R. § 2.1320(b)(3); *see also* 10 C.F.R. § 2.1331 ("Upon completion of a hearing, the Commission will issue a written opinion including its decision on the license transfer application and the reasons for the decision.").

license transfer proceeding.[45] If the Presiding Officer has any questions regarding the scope of delegated authorities, we expect the Presiding Officer to immediately certify those questions to the Commission.[46] Until the appointment of a Presiding Officer, the parties should address any written submissions directly to us.

2. The Staff's Party Status

Section 2.1316(b) of our regulations provides that the Staff is not required to be a party to a license transfer adjudication.[47] But here the Staff's denial is directly at issue. We therefore direct the Staff to become a party to the license transfer proceeding pursuant to 10 C.F.R. § 2.1309(a)(7), which provides for the Staff to "participate as a party" in such proceedings if "so . . . directed by the Commission."[48]

3. Schedule for License Transfer Proceeding

Section 2.1308 provides that license transfer hearings are to be oral in nature unless the parties unanimously move for a hearing consisting of written comments.[49] That regulation provides that, within 15 days from an order granting a hearing, each party must indicate what kind of hearing it prefers. Absent a unanimous preference for a "hearing consisting of written comments," the hearing will be an oral one.

Once the nature of the hearing is settled, Subpart M and our Model Milestones set a default schedule for the remainder of the proceeding,[50] subject to modification by the Presiding Officer. We direct the Presiding Officer to certify the hearing record to us within 25 days after the conclusion of the hearing. If the Presiding Officer concludes that unforeseen circumstances justify an expansion of this period, then we direct the Presiding Officer to notify us promptly of the reasons for the delay and also to provide us with an anticipated new schedule.

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[45] *E.g., Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant and Indian Point Nuclear Generating Unit No. 3), Certification of Record to Commission (Apr. 5, 2001) (unpublished) (ADAMS Accession No. ML010950574).

[46] *See* 10 C.F.R. § 2.1320(b)(1) (noting that the "Presiding Officer may certify questions or refer rulings to the Commission for decision").

[47] 10 C.F.R. § 2.1316(b); *see also* Final Rule: "Amendments to Adjudicatory Process Rules and Related Requirements," 77 Fed. Reg. 46,562, 46,580, 46,586 (Aug. 3, 2012) (Section 2.1316 requires the NRC Staff to notify the presiding officer and the parties whether it desires to participate as a party in the proceeding).

[48] This result is also consistent with section 2.1202(b)(1)(i), which provides that the Staff will become a party to cases "involv[ing] an application denied by the NRC staff." 10 C.F.R. § 2.1202(b).

[49] 10 C.F.R. § 2.1308.

[50] 10 C.F.R. Part 2, App. B, § III (Model Milestones for a Hearing on a Transfer of a License Conducted Under 10 C.F.R. Part 2, Subpart M).

Further, we grant the Staff's request that the companies be given the opportunity to provide a statement outlining areas of controversy in the license transfer case.[51] We direct the companies to do so within 15 days.

III. CONCLUSION

For the reasons set forth above, we

(1) *deny* as moot the Staff's Motion to Sever the license transfer and license renewal proceedings, and *deny* the companies' request that we consolidate the three proceedings;

(2) *grant* the companies' unopposed request for a hearing on the denial of the license transfer application;

(3) *defer* consideration of the companies' requests for hearings (and associated issues) on the denial of the license renewal application and the enforcement order;

(4) *direct* that the license transfer proceeding be adjudicated under our Subpart M rules;

(5) *direct* the Chief Administrative Judge to appoint a single administrative judge within the next 5 business days to serve as Presiding Officer in the license transfer proceeding for the purposes outlined in Section II.B.1;

(6) *direct* the Staff to participate as a party to the license transfer proceeding;

(7) *direct* each litigant to state, within the next 15 days, whether it prefers an oral hearing or a hearing consisting of written comments in the license transfer proceeding;

(8) *direct* the companies to file, within the next 15 days, a statement outlining areas of controversy in the license transfer case; and

(9) *direct* the Presiding Officer to certify the hearing record to us within 25 days after the conclusion of the hearing in the license transfer proceeding.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 10th day of April 2014.

[51] Staff Answer to Joint Demand on License Transfer at 4.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Michael M. Gibson, Chairman
Dr. Gary S. Arnold
Dr. Randall J. Charbeneau

In the Matter of **Docket Nos. 52-12-COL**
52-13-COL
(ASLBP No. 09-885-08-COL-BD01)

NUCLEAR INNOVATION NORTH AMERICA LLC
(South Texas Project, Units 3 and 4)

April 10, 2014

In this Order, the Atomic Safety and Licensing Board (Board) determines that the Applicant has carried its burden of demonstrating by a preponderance of the evidence that it is not subject to impermissible foreign ownership, control, or domination and that its revised combined license application does not contravene section 103d of the Atomic Energy Act (AEA) and 10 C.F.R. § 50.38.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP

Section 103d of the AEA states that no license may be issued to any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP

In context with the other provisions of section 104d of the AEA, the foreign control limitation should be given an orientation toward safeguarding the national defense and security.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP

Control or domination must be of such a degree that the will of the licensee is subjugated to the will of the foreign entity, and the foreign entity must have the power to direct the actions of the licensee. And the restriction on foreign ownership, control, or domination should be given an orientation toward safeguarding the national defense and security.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP

When an applicant that is seeking to acquire a 100% interest in the facility is wholly owned by a U.S. company that is wholly owned by a foreign corporation, the applicant will not be eligible for a license.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP

There is no specific threshold above which it would be conclusive that an applicant is controlled by foreign interests through ownership.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP

There is no blanket prohibition on indirect foreign ownership of an applicant or licensee.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP

If an applicant was in fact subject to foreign control or domination, it is reasonable to expect that there would be manifestations of this in the corporate organization and management, and, further, that there would be recognition of such circumstances by those corporate officers who must furnish the Commission with the sworn information prescribed by 10 C.F.R. § 50.33.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP (NEGATION ACTION PLAN)

An applicant with foreign ownership can still be eligible for a license if certain

conditions are imposed, such as requiring that officers and employees of the applicant responsible for special nuclear material must be U.S. citizens.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP (NEGATION ACTION PLAN)

If a license applicant's negation action plan can successfully wall off the foreign entity from influencing the applicant's decisionmaking regarding nuclear safety, security, and reliability concerns, then the AEA's prohibition on foreign control or domination will not stand in the way of the applicant seeking that license.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP (FINAL SAFETY ANALYSIS REPORT)

A negation action plan is part of an applicant's Final Safety Analysis Report and, therefore, is part of the licensing basis of the facility. An applicant, if granted its license, must comply with those commitments — regardless of the fact that they do not take the form of formal license conditions. If an applicant subsequently wished to change those commitments to any significant extent, it would need to file a license amendment request, which could then be challenged by seeking a hearing.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP (NEGATION ACTION PLAN)

While the pertinent language of the AEA is certainly written in present tense, a Board's inquiry does not end with evaluating foreign ownership, control, or domination concerns posed only by the current corporate structure and financing. Although section 103d of the AEA states that an applicant who "is" subject to foreign ownership, control, or domination is ineligible to apply for or obtain a license, once a license is granted, the prohibition on foreign ownership, control, or domination remains. Put another way, the license an applicant seeks encompasses more than merely the present — it extends decades into the future. And that "is" the corporate structure and financing that an application describes for the entire temporal span encompassed by the license it seeks. Concomitantly, an applicant's negation action plan addresses not only how it avoids foreign ownership, control, or domination now, but how it will continue to avoid foreign ownership, control, or domination throughout the entire license period.

AEA § 103d, 10 C.F.R. § 50.38: FOREIGN OWNERSHIP (NEGATION ACTION PLAN)

If a license applicant's NAP can successfully wall off the foreign entity from influencing the applicant's decisionmaking regarding nuclear safety, security, and reliability concerns, then the AEA's prohibition on foreign control or domination will not stand in the way of the applicant seeking that license.

NRC GUIDANCE DOCUMENTS

While a Standard Review Plan lacks the legal force of duly issued regulations, the Commission has written that it is to be given special weight as a guidance document that has been approved by the Commission but is nonbinding guidance.

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THIRD PARTIAL INITIAL DECISION
(Ruling on Contention FC-1)

I. INTRODUCTION

This Partial Initial Decision (PID)[1] concerns the application of Nuclear Innovation North America LLC (NINA) for combined licenses (COLs) under 10 C.F.R. Part 52 for the construction and operation of two new nuclear reactor units — proposed South Texas Project (STP) Units 3 and 4, employing the Advanced Boiling Water Reactor certified design — on the existing South Texas site, located near Bay City, Texas.[2] The South Texas site currently houses two nuclear reactors, STP Units 1 and 2.

We rule on the merits of Contention FC-1. This contention alleges that statutory and regulatory prohibitions on foreign ownership, control, or domination forbid the licensing of proposed STP Units 3 and 4. As admitted by the Board, Contention FC-1 states:

> Applicant, [NINA], has not demonstrated that its STP Units 3 and 4 joint venture with Toshiba, is not owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government contrary to 42 U.S.C. § 2133(d) and 10 C.F.R. § 50.38.[3]

On January 6 through 8, 2014, this Board held an evidentiary hearing in

[1] This is the third PID in this proceeding. The first PID, LBP-11-38, 74 NRC 817 (2011), resolved Contention CL-2, challenging the estimated replacement power costs used in the Applicant's Environmental Report, in favor of the NRC Staff and Applicant. The second PID, LBP-12-5, 75 NRC 227 (2012), resolved Contention DEIS-1-G, challenging the NRC Staff's environmental review regarding the estimated need for power that proposed STP Units 3 and 4 would satisfy, in favor of the NRC Staff.

[2] South Texas Project Nuclear Operating Company; Notice of Receipt and Availability of Application for a Combined License, 72 Fed. Reg. 60,394 (Oct. 24, 2007).

[3] LBP-11-25, 74 NRC 380, 382 (2011). Throughout this proceeding, the NRC Staff and Intervenors have referred to both "Toshiba" and "TANE" as having the power to exercise control over NINA. To be clear, Toshiba is the foreign parent of Toshiba America, Inc., which is the U.S. parent of Toshiba America Nuclear Energy Corporation (TANE). Where appropriate, the Board makes clear that it is "Toshiba, through TANE," that allegedly has the power to exercise control over NINA.

Houston, Texas, on Contention FC-1.[4] After considering all the evidence and legal arguments, the Board concludes that NINA has demonstrated its STP Units 3 and 4 joint venture with Toshiba America Nuclear Energy Corporation (TANE), a wholly owned subsidiary of Toshiba America, Inc., which, in turn, is a wholly owned subsidiary of Toshiba Corporation, is not owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. Thus, the Board rules that NINA has carried its burden on this contention by demonstrating that it is not subject to impermissible foreign ownership, control, or domination and that its revised COL application (COLA) does not contravene section 103d of the Atomic Energy Act (AEA), 42 U.S.C. § 2133(d), or 10 C.F.R. § 50.38.

II. BACKGROUND

On September 20, 2007, NINA's predecessor[5] applied to the Nuclear Regulatory Commission (NRC) for COLs that would permit the construction and operation of proposed STP Units 3 and 4. Following the NRC's publication of a notice of hearing and opportunity to petition for leave to intervene in this matter,[6] Intervenors jointly filed a petition that challenged several aspects of NINA's predecessor's COLA.[7] Intervenors are three public interest organizations: the Sustainable Energy and Economic Development Coalition, the South Texas Association for Responsible Energy, and Public Citizen. This Board was established on May 1, 2009, to adjudicate the STP COL proceeding.[8]

In the ensuing 5 years since Intervenors filed their petition, Intervenors have submitted additional contentions, the parties have submitted various motions and prosecuted appeals, this Board has admitted and rejected a number of contentions, and this Board has held evidentiary hearings on two contentions that were resolved in favor of NINA and the NRC Staff. Accordingly, only Contention FC-1, which is the subject of this PID, remains unresolved, along with Intervenors' motion for leave to file a new "Waste Confidence" contention concerning temporary

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[4] *See* Notice of Hearing (Application for Combined Licenses) (Nov. 6, 2013) (rescheduling evidentiary hearing) (unpublished).

[5] At the outset of this proceeding, the lead applicant for the STP Units 3 and 4 was the STP Nuclear Operating Company (STPNOC). In early 2011, NINA replaced STPNOC as the lead applicant representing a consortium of several applicants. Licensing Board Order (Revising Case Caption) (Feb. 7, 2011) at 1 (unpublished). In this PID we refer to NINA as the lead applicant.

[6] South Texas Project Nuclear Operating Company Application for the South Texas Project Units 3 and 4; Notice of Order, Hearing, and Opportunity to Petition for Leave to Intervene, 74 Fed. Reg. 7934 (Feb. 20, 2009).

[7] Petition for Intervention and Request for Hearing (Apr. 21, 2009).

[8] South Texas Project Nuclear Operating Company; Establishment of Atomic Safety and Licensing Board, 74 Fed. Reg. 22,184, 22,184 (May 12, 2009).

storage and ultimate disposal of nuclear waste at STP Units 3 and 4.[9] With respect to the latter motion, the Commission has directed that any such waste disposal contentions "be held in abeyance pending . . . further order [of the Commission]."[10]

On May 16, 2011, Intervenors submitted Contention FC-1 alleging improper foreign ownership, control, or domination of STP Units 3 and 4.[11] Intervenors argued that "NINA's ownership structure runs afoul of 42 U.S.C. § 2133(d) and 10 C.F.R. § 50.38 that prohibit licensure of applicants owned, controlled, or dominated by foreign interests."[12] NINA's answer, filed on June 10, 2011, opposed the proposed contention.[13] The NRC Staff's answer, also filed on June 10, 2011, did not oppose admission of this proposed contention.[14] Intervenors replied on June 21, 2011.[15]

As the following recital demonstrates, the ownership structure and Negation Action Plans (NAP) adopted by NINA changed and evolved several times during the license application process. On July 8, 2011, NINA notified the Board and the parties it had submitted an update to the COLA. This update included a new Final Safety Analysis Report (FSAR). Appendix 1D of the new FSAR included a Negation Action Plan (NAP) that would have allowed foreign entities to own up to 90% of NINA.[16] A few weeks later, the parties briefed the effect of NINA's

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[9] *See* Intervenors' Motion for Leave to File a New Contention Concerning Temporary Storage and Ultimate Disposal of Nuclear Waste at South Texas Units 3 & 4 (July 9, 2012).

[10] *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 68-69 (2012); *see also* Licensing Board Order (Holding Waste Confidence Contention in Abeyance) (Mar. 1, 2013) (unpublished). The Commission also held that the NRC "will not issue licenses dependent upon the Waste Confidence Decision or the Temporary Storage Rule until the [District of Columbia Circuit's] remand is appropriately addressed." *Calvert Cliffs,* CLI-12-16, 76 NRC at 67. Therefore, NINA cannot be granted a license until after the Commission addresses this waste storage issue.

[11] *See* Intervenors' Motion for Leave to File a New Contention Based on Prohibitions Against Foreign Control (May 16, 2011).

[12] *Id.* at 4.

[13] Nuclear Innovation North America's Answer Opposing New Contention Based on Prohibitions Against Foreign Control (June 10, 2011). NINA opposed FC-1 on the grounds that (1) the proposed contention did not satisfy contention admissibility requirements, and (2) Intervenors failed to challenge the adequacy of NINA's Negation Action Plan (NAP), which purportedly addressed all possible foreign ownership, control, or domination concerns with the project. *Id.*

[14] NRC Staff's Answer to Intervenors' Motion for Leave to File a New Contention Based on Prohibitions Against Foreign Control (June 10, 2011).

[15] Intervenors' Consolidated Reply to Staff and Applicant's Answer to Intervenors' Motion for Leave to File New Contention FC-1 (June 21, 2011).

[16] *See* Letter from J. Matthews, Counsel for NINA, to the Licensing Board, Notification of Filing Related to Proposed Foreign Control Contention (July 8, 2011). NINA transmitted COLA, Revision 6, to the NRC on August 30, 2011. *See also* South Texas Project Units 3 & 4 Combined License Application, Rev. 6, at 1.0-1 to -12, 1.0-17 to -29, 1.0-38, & App. 1D (Aug. 30, 2011) (Ex. STP000045) [hereinafter COLA Rev. 6].

COLA update on the proposed contention.[17] On August 5, 2011, NINA notified the Board and the parties that it had responded to the NRC Staff's request for additional information (RAI) 01-21 concerning foreign ownership, control or domination (FOCD) issues.[18]

On September 30, 2011, the Board admitted Contention FC-1.[19] Thereafter, on November 14, 2011, NINA notified the Board that it had responded to yet another RAI (01-22) regarding FOCD issues. NINA's RAI response also included proposed changes to the negation action plan that NINA had previously included with FSAR Appendix 1D.[20]

On December 13, 2011, following its review of NINA's foreign ownership NAP and NINA's RAI responses, the NRC Staff issued a determination letter to NINA, concluding that:

> The staff has determined that NINA's application does not meet the requirements of 10 C.F.R. § 50.38. The staff has determined that: (1) Revision 6 to NINA's COLA would allow Toshiba to acquire up to 90 percent ownership of NINA, thereby obtaining an 85 percent ownership interest in STP Units 3 and 4; (2) since NRG Energy will not be investing additional capital in the project there is reason to believe that most of the financing going forward will be from Toshiba; (3) Toshiba is a foreign corporation; (4) Toshiba has the power to exercise ownership, control, or domination over NINA; and (5) the Negation Action Plan submitted by NINA does not negate the foreign ownership, control or domination issues discussed above. Until these issues are resolved, the staff is suspending its review of the foreign ownership section of [NINA's] application. If requested, NRC staff will support a public meeting with NINA to discuss the results of its review.[21]

On December 30, 2011, Intervenors moved for summary disposition of FC-

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[17] Nuclear Innovation North America LLC's Brief Regarding Effect of Application Update on Proposed Contention FC-1 (July 29, 2011); NRC Staff's Brief on Applicant's Filing Related to the Foreign Control Contention (July 29, 2011); Intervenors' Supplemental Brief Relating to New Contention FC-1 (July 29, 2011).

[18] *See* Letter from J. Matthews, Counsel for NINA, to the Licensing Board, Notification of Filing Related to Proposed Foreign Control Contention (Aug. 5, 2011); *see also* Letter from Mark McBurnett, Senior Vice President, Oversight & Regulatory Affairs, NINA, to the Licensing Board, Response to RAI 01-21 (Aug. 4, 2011) (Ex. STP000044).

[19] LBP-11-25, 74 NRC at 382.

[20] Letter from J. Matthews, Counsel for NINA, to the Licensing Board, Notification of Filing Related to Contention FC-1 (Nov. 14, 2011); *see also* Letter from Scott Head, Manager Regulatory Affairs, STP Units 3 & 4, to NRC, Response to RAI 01-22 (Nov. 8, 2011) (Ex. STP000046).

[21] Letter from David Matthews, Director, Division of New Reactor Licensing, Office of New Reactors (NRO), NRC, to Mark McBurnett, Vice President Regulatory Affairs, NINA (Dec. 13, 2011) at 1 (Ex. NRC000118).

1.[22] On January 19, 2012, NINA submitted an answer opposing the motion for summary disposition,[23] while the NRC Staff supported the motion.[24] Intervenors replied to the answers on February 3, 2012.[25] On February 7, 2012, the Board rejected the motion, concluding that "genuine issues of material fact remain in dispute regarding whether Applicant, NINA, is owned, controlled, or dominated by a foreign entity."[26]

Prior to the Board's ruling on this motion for summary disposition, on February 1, 2012, NINA submitted COLA Revision 7. This revision included the earlier changes regarding FOCD in COLA Part 1 and FSAR Appendix 1D that NINA had identified in earlier RAI responses.[27] Thereafter, on February 27, 2012, NINA notified the Board of its February 23, 2012 supplemental response to RAI 01-22. This supplemental response both deleted the provision that would have allowed foreign entities to own up to 90% of NINA and promised that TANE will never own more than 10% of NINA without prior NRC approval.[28] On April 18, 2012, the NRC Staff issued additional RAIs to NINA regarding FOCD issues, and on May 18, 2012, NINA notified the Board of its May 17, 2012 response to those RAIs.[29] Subsequently, on September 5, 2012, NINA supplemented this May 17, 2012 response by notifying the NRC Staff of the merger of NRG Energy and GenOn Energy.[30] Thereafter, on September 17, 2012, NINA submitted COLA Revision 8, which included those changes to COLA Part 1 and FSAR Appendix 1D that postdated COLA Revision 7.[31] Subsequently, on January 31, 2013, NINA

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[22] Intervenors' Motion for Summary Disposition of Intervenors' Contention FC-1 (Dec. 30, 2011).

[23] NINA's Answer to Intervenors' Motion for Summary Disposition of Intervenors' Contention FC-1 (Jan. 19, 2012).

[24] NRC Staff's Answer to Intervenors' Motion for Summary Disposition of Contention FC-1 (Jan. 19, 2012).

[25] Intervenors' Reply to Applicant's Answer to Intervenors' Motion for Summary Disposition of Contention FC-1 (Feb. 3, 2012).

[26] Licensing Board Order (Ruling on Intervenors' Motion for Summary Disposition of Contention FC-1) at 7 (Feb. 7, 2012) (unpublished).

[27] Relevant portions of Revision 7 of the COLA are provided as Ex. STP000048. *See* South Texas Project Units 3 & 4 Combined License Application, Rev. 7 (Feb. 1, 2012) (Ex. STP000048).

[28] Letter from Steven Frantz, Counsel for NINA, to Licensing Board, Notification of Filing Related to Contention FC-1 (Feb. 27, 2012); *see also* Letter from Scott Head, Manager Regulatory Affairs, STP Units 3 & 4, to NRC, Supplemental Responses to RAI 01-22 and 01-24 (July 1, 2013) (Ex. STP000049).

[29] Letter from J. Matthews, Counsel for NINA, to Licensing Board, Notification of Filing Related to Contention FC-1 (May 18, 2012); *see also* Letter from Scott Head, Manager Regulatory Affairs, STP Units 3 & 4, to NRC, Response to April 18, 2012 RAI (May 17, 2012) (Ex. STP000050).

[30] Letter from Scott Head, Manager Regulatory Affairs, STP Units 3 & 4, to NRC, Supplemental Information in Support of Request for Additional Information (Sept. 5, 2012) (Ex. STP000051).

[31] Relevant portions of Revision 8 of the COLA are provided as Ex. STP000052.

proposed an update to COLA Part 1 that reflected, *inter alia,* NRG Energy's merger with GenOn Energy.[32]

On April 29, 2013, the NRC Staff issued a second determination letter to NINA, reaffirming the NRC Staff's previous position regarding the FOCD for STP Units 3 and 4.[33] The NRC Staff concluded:

> The staff's supplementary evaluation determined that NRG, by virtue of its diminishing financial position, its cessation of funding NINA, and its own statements to the SEC [(Securities and Exchange Commission)] does not control NINA. This conclusion is not altered by NRG's 90 percent ownership of NINA because the staff has determined that it is ownership without control. The staff further determined that Toshiba, through TANE, has contributed over 50 percent of the total project cost so far; that Toshiba, through TANE, is the sole identified source of funding for NINA going forward; that NINA is indebted to TANE and has no identified source of funds to repay these debts; that without funding from TANE it is not likely that NINA could continue as a going concern; and that as a net result of all of these financial conditions, TANE is in a position to control and dominate NINA.
>
> In its review of actions taken by NINA to negate foreign ownership and control, the staff determined that NINA's NAP is not sufficient. While the NAP will provide a level of U.S. control of day to day operations and decisions, it is insufficient to negate the overwhelming control exercised by Toshiba.
>
> The NRC has previously determined that TANE meets the definition of a foreign entity. Since NINA has been determined to be under TANE's control, and domination, the staff has determined NINA and its wholly owned subsidiaries NINA 3 and NINA 4 are ineligible to receive licenses under Section 103(d) of the Atomic Energy Act and 10 C.F.R. § 50.38.[34]

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[32] Letter from Scott Head, Manager Regulatory Affairs, STP Units 3 & 4, to NRC, Proposed Update to COLA Part 1 Information (Jan. 31, 2013) (Ex. STP000053). On April 17, 2013, NINA submitted Revision 9 of the COLA, but it did not modify the NAP provided in FSAR Appendix 1D. Relevant portions of Revision 9 of the COLA are provided in Ex. STP000054. *See* South Texas Project Units 3 & 4 Combined License Application, Rev. 9, Part 1, at 1.0-1 to -26, 1.0-35 to -36, & App. 1D (Apr. 17, 2013) (Ex. STP000054) [hereinafter COLA Rev. 9].

[33] *See* Letter from David Matthews, Director Division of New Reactor Licensing, NRO, NRC, to Mark McBurnett, Vice President Regulatory Affairs, NINA, LLC (Dec. 13, 2011) (Ex. NRC000103).

[34] Office of Nuclear Reactor Regulation (NRR), NRC, FOCD Evaluation at 24 (Ex. NRC000105). After receiving this second determination, on May 8, 2013, NINA filed an unopposed motion seeking to toll the deadline to submit a new contention based on the NRC Staff's FOCD evaluation. *See* NINA's Unopposed Motion to Toll Deadlines to Submit a New Contention Challenging the Staff's FOCD Evaluation (May 8, 2013) at 4-5. In this motion, NINA disagreed with the NRC Staff's second determination letter and maintained that it should be allowed to file a contention under 10 C.F.R. § 2.309. *Id.* NINA also stated that FC-1 encompasses any dispute NINA would have with the points raised in the NRC Staff's second determination letter. *Id.* However, to preserve NINA's right to file its own contention at a later time, NINA requested that the time for it to file a contention be tolled. *Id.* On

(Continued)

On January 6 through 8, 2014,[35] the Board held an evidentiary hearing in Houston, Texas, on Contention FC-1.[36] The hearing was conducted in accordance with the provisions of Subpart L to 10 C.F.R. Part 2. None of the parties requested an opportunity to conduct cross-examination. At the hearing, the Board admitted the exhibits proffered by the parties,[37] including prefiled testimony of their witnesses.[38] The Board also heard live testimony from several witnesses.[39] After questioning these witnesses regarding the merits of FC-1, the Board afforded the parties an opportunity to suggest additional questions the Board might ask both their own witnesses and opposing witnesses.[40]

Following the evidentiary hearing, the Board adopted certain corrections to the hearing transcript and on January 28, 2014, closed the evidentiary record with respect to Contention FC-1.[41] On February 7, 2014, the parties filed proposed

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May 24, 2013, the Board granted NINA's request to toll the time for NINA to file a contention "until thirty (30) days after a circumstance arises such that Contention FC-1 is dismissed, withdrawn, or otherwise disposed of without a decision on the merits." *See* Licensing Board Order (Granting NINA's Motion to Toll Deadline for Filing of New Contention) (May 24, 2013) (unpublished). Obviously, the issuance of this PID moots this tolling order.

[35] The hearing was originally scheduled to begin on October 16, 2013, but was rescheduled due to the federal government shutdown caused by a lack of congressionally appropriated funds for the NRC and other agencies and departments. *See* Licensing Board Order (Postponing Evidentiary Hearing) (Oct. 7, 2013) (unpublished).

[36] In accordance with 10 C.F.R. § 2.315(a), before the hearing, the Board accepted written limited appearance statements from members of the public in connection with the hearing. 76 Fed. Reg. at 61,401.

[37] Tr. at 2001-02 (Judge Gibson).

[38] For the exhibit numbers used in this PID and reflected in the agency's electronic hearing docket, evidence was described as follows: (1) a three-character party identifier, i.e., STP, NRC, and INT; followed by (2) a six-character evidence identifier — designed to reflect the sequential number of the exhibit and whether it was revised subsequent to its original submission as a prefiled exhibit, e.g., evidentiary exhibit STPR00091 admitted at the January 2014 hearing is the first revised version of prefiled exhibit STP000091; followed by (3) a two-character identifier, here "00" (where there is a mandatory/uncontested portion of a proceeding, the identifier would indicate that the exhibit was utilized in the mandatory/uncontested portion of a proceeding, i.e., MA); followed by (4) the designation BD01, which indicates that this Licensing Board, i.e., BD01, was involved in its identification and admission. For example, the official designation for NINA's' rebuttal testimony of its witness, Mr. McBurnett, on FC-1, is STPR00091-00-BD01. But for simplicity, we will refer to all admitted exhibits by their initial nine-character designation only, e.g., STPR00091.

[39] *See* Tr. at 2007 (Mr. McBurnett for NINA), 2009 (Mr. Collins for NINA), 2009 (Mr. Wood for NINA), 2009 (Ms. Seely for NINA), 2062 (Mr. Sheehan for the Intervenors), 2097 (Ms. Simmons for the NRC Staff).

[40] Pursuant to 10 C.F.R. § 2.1207(a)(3)(iii), the questions proposed by all parties will be publicly released by Order of this Board 30 days after this PID. These questions will be available both on the NRC's Electronic Hearing Docket and on ADAMS.

[41] Licensing Board Order (Adopting Transcript Corrections and Closing Evidentiary Record) (Jan. 28, 2014) (unpublished).

findings of fact and conclusions of law regarding Contention FC-1.[42] Following the Board's direction,[43] NINA proposed license conditions as part of its proposed findings of fact and conclusions of law.[44] On February 18, 2014, the NRC Staff and Intervenors filed responses to these proposed license conditions.[45] NINA filed a response thereto on February 27, 2014.[46]

III. LEGAL STANDARDS

A. Burden and Standard of Proof

An applicant bears the burden of proof in a licensing proceeding.[47] On safety issues, such as Contention FC-1, an applicant has the burden of establishing it is entitled to the applied-for license by a preponderance of the evidence.[48] A preponderance of the evidence "requires the trier of fact to believe that the existence of a fact is more probable than its nonexistence . . . ."[49]

B. FOCD Requirements

The contention at issue, FC-1, arises under the AEA and the NRC's implementing regulations.[50] Section 102a of the AEA requires that licenses for utilization or production facilities for industrial or commercial purposes comply with the

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[42] *See* Nuclear Innovation North America LLC's Proposed Findings of Fact and Conclusions of Law for Contention FC-1 (Feb. 7, 2014); NRC Staff Proposed Findings of Fact and Conclusions of Law on Contention FC-1 in the Form of a Partial Initial Decision (Feb. 7, 2014); Intervenors' Proposed Findings of Fact and Conclusions of Law Concerning Contention FC-1 (Feb. 7, 2014).

[43] *See* Tr. at 2494.

[44] *See* Nuclear Innovation North America LLC's Proposed Findings of Fact and Conclusions of Law for Contention FC-1 (Feb. 7, 2014) at 123-29.

[45] *See* NRC Staff Memorandum in Response to NINA's New License Conditions (Feb. 18, 2014); Intervenors' Memorandum in Response to Applicant's Proposed License Conditions Relating to Foreign Ownership, Control and Domination (Feb. 18, 2014).

[46] *See* Nuclear Innovation North America LLC Response to Filings Opposing Proposed License Conditions for Contention FC-1 (Feb. 27, 2014).

[47] 10 C.F.R. § 2.325.

[48] *Id.*; *see also Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983) (citing *Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-283, 2 NRC 11, 17 (1975)).

[49] *Concrete Pipe & Products of California, Inc. v. Construction Laborers Pension Trust for Southern California,* 508 U.S. 602, 622 (1993) (internal quotation marks and citation omitted).

[50] 42 U.S.C. § 2133(d); 10 C.F.R. § 50.38.

terms of section 103 of the AEA.[51] Section 103d of the AEA states "[n]o license may be issued to . . . any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government."[52]

Moreover, 10 C.F.R. § 52.75, which governs applications for COLs under 10 C.F.R. Part 52, Subpart C, provides that "[a]ny person except one excluded by § 50.38 [the NRC's regulation implementing section 103d of the AEA] of this chapter may file an application for a combined license for a nuclear power facility . . . ." Thus, pursuant to the AEA and 10 C.F.R. § 50.38, the FOCD restrictions apply to COLs issued by the NRC, such as those for STP Units 3 and 4.

The NRC's Standard Review Plan on Foreign Ownership, Control, or Domination

> contains the review procedures used by the staff to evaluate applications for the issuance or transfer of control of a production or utilization facility license in light of the prohibitions in sections 103d and 104d of the Atomic Energy Act and in 10 C.F.R. § 50.38 against issuing such reactor licenses to aliens or entities that the Commission "knows or has reason to believe" are owned, controlled, or dominated by foreign interests.[53]

While a Standard Review Plan lacks the legal force of duly issued regulations, the Commission has written that it is to be given "special weight as a guidance document that has been approved by the Commission . . . [but] is non-binding guidance . . . ."[54]

The NRC's Standard Review Plan on Foreign Ownership, Control, or Domination (SRP) states that an entity is considered to be under foreign ownership, control, or domination "whenever a foreign interest has the 'power,' direct or indirect, whether or not exercised, to direct or decide matters affecting the management or operations of the applicant."[55] The SRP cautions that there is generally

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[51] 42 U.S.C. § 2132(a). Section 103d of the AEA further states that "no license may be issued to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public." *Id.* § 2132(a). However, neither Intervenors nor the NRC Staff have asserted that granting this license poses an inimicality concern, and so we do not address it here.

[52] *Id.* The NRC's implementing regulation largely tracks this provision of the AEA. *See* 10 C.F.R. § 50.38 ("Any . . . corporation, or other entity which the Commission knows or has reason to believe is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.").

[53] Final Standard Review Plan on Foreign Ownership, Control, or Domination, 64 Fed. Reg. 52,355, 52,358 (Sept. 28, 1999) (Ex. NRC000106) [hereinafter FOCD SRP].

[54] *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 338 (2012).

[55] FOCD SRP, 64 Fed. Reg. at 52,358 (Ex. NRC000106).

no specific ownership percentage above which the NRC Staff would conclusively determine that an applicant is *per se* controlled by foreign interests.[56] Rather, the SRP provides that foreign control "must be interpreted in light of all the information that bears on who in the corporate structure exercises control over what issues and what rights may be associated with certain types of shares."[57] The SRP also directs that where the ownership interest is less than 100%, the NRC Staff's primary focus should remain on safeguarding security and the national defense,[58] although the NRC Staff is to consider as well a variety of factors that include:

> (1) the extent of the proposed partial ownership of the reactor; (2) whether the applicant is seeking authority to operate the reactor; (3) whether the applicant has interlocking directors or officers and details concerning the relevant companies; (4) whether the applicant would have any access to restricted data; and (5) details concerning ownership of the foreign parent company.[59]

The Commission has stated that the term "owned, controlled, or dominated" in the AEA refers to relationships in which the will of one party is subjugated to the will of another.[60] The Commission has likewise held that the intent of Congress "was to prohibit such relationships where an alien has the power to direct the actions of the licensee."[61] Furthermore, according to the Commission, the statutory limitation on foreign ownership, control, or domination "should be given an orientation toward safeguarding the national defense and security."[62]

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[56] *Id.* One exception to this practice is found in the decisions of both a Licensing Board and the Commission in *Calvert Cliffs.* In *Calvert Cliffs,* the sole applicant was 100% indirectly owned by a foreign entity. *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-12-19, 76 NRC 184, 187 (2012), *petition for review denied,* CLI-13-4, 77 NRC 101 (2013). There, a 100% foreign ownership formed the basis for the licensing board's grant of summary disposition in favor of the intervenors. *See id.* at 195-201.

[57] FOCD SRP, 64 Fed. Reg. at 52,358 (Ex. NRC000106).

[58] *Id.*

[59] *Id.*

[60] *General Electric Co. and Southwest Atomic Energy Associates,* 3 AEC 99, 101 (1966).

[61] *Id.*

[62] *Id. See also* FOCD SRP 64 Fed. Reg. at 52,357 (Ex. NRC000106) ("The foreign control determination is to be made with an orientation toward the common defense and security."). The SRP further states that "[t]he Commission has stated that in context with the other provisions of Section 104d, the foreign control limitation should be given an orientation toward safeguarding the national defense and security." *Id.* at 52,358 (referring to *Gen. Elec. Co.,* 3 AEC 99).

Under the SRP, even if an applicant is considered to be foreign owned, controlled, or dominated, it is permitted to negate potential foreign ownership, control, or domination by establishing a NAP.[63] However, when "an applicant that is seeking to acquire a 100% interest in the facility is wholly owned by a U.S. company that is wholly owned by a foreign corporation, the applicant will not be eligible for a license."[64] When factors not related to ownership are present, the SRP directs that NAPs provide positive measures to ensure that the foreign interest is effectively denied control or domination.[65]

IV. FACTUAL FINDINGS AND LEGAL CONCLUSIONS

A. Scope of FC-1

Contention FC-1 challenges whether impermissible FOCD exists for STP Units 3 and 4 and, as admitted by the Board, states:

> Applicant, [NINA], has not demonstrated that its STP Units 3 and 4 joint venture with Toshiba, is not owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government contrary to 42 U.S.C. § 2133(d) and 10 C.F.R. § 50.38.[66]

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[63] *Id.* at 52,359.

[64] *Id.* at 52,358. The SRP envisions only one situation in which 100% foreign ownership might be permissible — i.e., where the Commission knows that the foreign owner's stock is "largely" owned by U.S. citizens. *Id.*

[65] *Id.* The SRP includes the following examples of measures that may be sufficient to negate foreign control or domination:

1. Modification or termination of loan agreements, contracts, and other understandings with foreign interests.
2. Diversification or reduction of foreign source income.
3. Demonstration of financial viability independent of foreign interests.
4. Elimination or resolution of problem debt.
5. Assignment of specific oversight duties and responsibilities to board members.
6. Adoption of special board resolutions.

Id. at 52,539.

[66] LBP-11-25, 74 NRC at 382; *see also* Intervenors' Motion for Leave to File a New Contention Based on Prohibitions Against Foreign Control (May 16, 2011) at 1. To be precise, the joint venture is between NRG Energy and TANE. TANE is a wholly owned subsidiary of Toshiba America, Inc., another United States corporation, and Toshiba America, Inc., is a wholly owned subsidiary of Toshiba Corporation, a Japanese corporation. *See* Direct Testimony of Applicant Witness Mark A. McBurnett Regarding Contention FC-1 (July 1, 2013) at 16 (Ex. STP000036) [hereinafter McBurnett Direct Testimony].

B. Evidentiary Record

During the evidentiary hearing on FC-1, NINA presented four witnesses, Mark McBurnett,[67] Jamey Seely,[68] Samuel Collins,[69] and Robert Wood.[70] The NRC Staff presented one witness, Anneliese Simmons.[71] And Intervenors presented one witness, Michael Sheehan.[72] Based on the witnesses' respective education and experience, the Board finds that all witnesses were qualified to testify on FC-1. In addition, all exhibits[73] offered by the parties were admitted.[74]

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[67] *See* McBurnett Direct Testimony (Ex. STP000036); Rebuttal Testimony of Applicant Witness Mark A. McBurnett Regarding Contention FC-1 (July 22, 2013) (Ex. STPR00091) [hereinafter McBurnett Rebuttal Testimony]; Mark A. McBurnett Resume (Ex. STP000039).

[68] *See* Direct Testimony of Applicant Witness Jamey S. Seely Regarding Contention FC-1 (July 1, 2013) (Ex. STP000038) [hereinafter Seely Direct Testimony]; Jamey S. Seely Resume (Ex. STP-000042).

[69] *See* Direct Testimony of Applicant Witnesses Samuel J. Collins and Robert S. Wood Regarding Contention FC-1 (July 1, 2013) (Ex. STP000037) [hereinafter Collins and Wood Direct Testimony]; Rebuttal Testimony of Applicant Witnesses Samuel J. Collins and Robert S. Wood Regarding Contention FC-1 (July 22, 2013) (Ex. STPR00092) [hereinafter Collins and Wood Rebuttal Testimony]; Samuel J. Collins Resume (Ex. STP000040).

[70] *See* Collins and Wood Direct Testimony (Ex. STP000037); Collins and Wood Rebuttal Testimony (Ex. STPR00092); Robert S. Wood Resume (Ex. STP000041).

[71] *See* Prefiled Direct Testimony of Anneliese Simmons on Contention FC-1 (July 1, 2013) (Ex. NRCR00101) [hereinafter Simmons Direct Testimony]; Prefiled Rebuttal Testimony of Anneliese Simmons on Contention FC-1 (July 22, 2013) (Ex. NRCR00158) [hereinafter Simmons Rebuttal Testimony]; Anneliese Simmons Resume (Ex. NRC000102).

[72] *See* Prefiled Direct Testimony of Michael F. Sheehan, Ph.D. on Behalf of Intervenors Sustainable Energy and Economic Development Coalition (SEED), Susan Dancer, the South Texas Association for Responsible Energy, Public Citizen, Daniel A. Hickl and Bill Wagner Regarding Contention FC-1 (July 2, 2014) (Ex. INT000056) [hereinafter Sheehan Direct Testimony]; Prefiled Rebuttal Testimony of Michael F. Sheehan, Ph.D. on Behalf of Intervenors Sustainable Energy and Economic Development Coalition (SEED), Susan Dancer, the South Texas Association for Responsible Energy, Public Citizen, Daniel A. Hickl and Bill Wagner Regarding Contention FC-1 (July 22, 2014) (Ex. INT000065) [hereinafter Sheehan Rebuttal Testimony]; Michael Sheehan Resume (Ex. INT000057).

[73] In support of its position on FC-1, NINA offered Exhibits STP000036 through STP000082 and STP000085 through STP000091; the NRC Staff offered Exhibits NRC000101 through NRC000108, NRC000111 through NRC000115, NRC000118, NRC000120, NRC000121, NRC000126, NRC-000127, NRC000129 through NRC000137, NRC000140 through NRC000150, and NRC000153 through NRC000170; and Intervenors offered Exhibits INT000056 through INT000065. Exhibits STP000091 and STP000092 were revised and renumbered as STPR00091 and STPR00092. Also, Exhibits NRC000101 and NRC000158 were revised and renumbered as NRCR00101 and NRCR00102.

[74] Tr. at 2001, 2002, 2003.

C. Legal Analysis and Findings

1. Corporate Ownership of STP Units 3 and 4

a. Recitation of Evidence[75]

The license NINA seeks would afford authority to different entities at different stages of the licensing, construction, possession, use, and operation of STP Units 3 and 4.

NINA witness Mr. McBurnett testified that NINA is the lead applicant seeking the license on behalf of all other prospective licensees.[76] As such, the revised COLA for STP Units 3 and 4 that is at issue here was submitted by NINA on behalf of itself, the STP Nuclear Operating Company (STPNOC),[77] NINA Texas 3 LLC (NINA 3),[78] NINA Texas 4 LLC (NINA 4),[79] and the City of San Antonio, Texas, acting by and through the City Public Service Board (CPS Energy),[80] for the construction and operation of STP Units 3 and 4.[81]

Mr. McBurnett testified that STP Unit 3 will be directly owned by NINA 3 and CPS Energy, and STP Unit 4 will be directly owned by NINA 4 and CPS Energy.[82] According to Mr. McBurnett, CPS Energy owns approximately 7.6% of both units, while NINA 3 will own 92.4% of STP Unit 3 and NINA 4 will own 92.4% of STP Unit 4.[83] Both NINA 3 and NINA 4, Mr. McBurnett testified, are wholly owned subsidiaries of NINA Investments LLC, which itself is a wholly

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[75] In this proceeding, the positions of the NRC Staff and Intervenors are closely aligned. To avoid citing to both the NRC Staff's and Intervenors' witness' testimony for the same point, we instead cite to the NRC Staff's testimony when these parties are in agreement, and only refer to that of Intervenors when its position is different from that of the NRC Staff's.

[76] McBurnett Direct Testimony at 15 (Ex. STP000036).

[77] Mr. McBurnett testified that STPNOC, a Texas nonprofit corporation, is controlled by NRG Energy, the City of San Antonio, and the City of Austin. *Id.* at 18. He further testified that STPNOC is responsible for the licensing, operation, maintenance, modification, decontamination, and decommissioning of STP Units 1 and 2, and will have the same responsibilities for STP Units 3 and 4 after responsibility under each license is transitioned to STPNOC from NINA. *Id.* Moreover, Mr. McBurnett testified the revised COLA requests that the NRC license STPNOC to "possess, use, and operate" STP Units 3 and 4. *Id.*

[78] NINA 3 and NINA 4 will be owner-licensees for STP Units 3 and 4. *Id.* The revised COLA requests that the NRC license NINA 3 and NINA 4 to "possess" and "own" their shares of STP Units 3 and 4, respectively. *Id.* NINA 3 and NINA 4 are single, member-managed limited liability companies. *Id.*

[79] *See supra* note 78.

[80] CPS Energy is a Texas municipal utility and an independent Board of the City of San Antonio. McBurnett Direct Testimony at 18 (Ex. STP000036). According to Mr. McBurnett, the revised COLA requests the NRC to license CPS Energy to "possess" and "own" its share of STP Units 3 and 4. *Id.*

[81] COLA Rev. 6 at 1.0-1 (Ex. STP000045).

[82] McBurnett Direct Testimony at 15 (Ex. STP000036).

[83] *Id.*

owned subsidiary of NINA Investments Holdings LLC,[84] which, in turn, is a wholly owned subsidiary of NINA.[85] Therefore, according to Mr. McBurnett, NINA, through its wholly owned subsidiaries, owns 100% of NINA 3 and NINA 4.[86] Mr. McBurnett testified that NINA, NINA 3, NINA 4, NINA Investments LLC, and NINA Investments Holdings LLC are United States entities.[87]

Mr. McBurnett also testified that NINA is the license applicant with overall responsibility for the revised COLA, including design and quality assurance activities conducted prior to issuance of the requested licenses.[88] Currently, according to Mr. McBurnett, NINA is owned by NRG Energy, a United States corporation, and TANE, also a United States corporation, in proportions of approximately 90% and 10%,[89] respectively.[90] Mr. McBurnett testified that NRG Energy's 90% ownership is through its wholly owned subsidiary, Texas Genco Holdings, Inc., a Texas Corporation.[91] It is undisputed that TANE is a wholly owned subsidiary of Toshiba America, Inc., another United States corporation,[92] and that Toshiba America, Inc., is a wholly owned subsidiary of Toshiba Corporation, a Japanese corporation.[93]

b. Legal Analysis and Findings

The Board concludes that Toshiba's indirect foreign ownership of NINA does not, in and of itself, indicate that NINA is subject to FOCD. While the "Commission has not determined a specific threshold above which it would be conclusive

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[84] *Id.*

[85] *Id.*

[86] *Id.* at 15-16.

[87] *Id.* at 16. All five are limited liability companies organized under the laws of the State of Delaware. *Id.*

[88] *Id.*

[89] In 2008, Toshiba entered into agreements with NRG Energy to invest up to $300 million in NINA in return initially for 12% ownership, with NRG Energy owning the remaining 88%. *See* South Texas Project Units 3 & 4 Combined License Application, Rev. 7 at 1.0-5 (Feb. 1, 2012) (Ex. STP000048). According to the testimony of Mr. McBurnett, these ownership interests are subject to change based upon ongoing capital contributions by the members. *See* McBurnett Direct Testimony at 16 (Ex. STP000036). For simplicity, we will refer to NRG Energy's and TANE's ownership as 90% and 10%, respectively.

[90] *Id.*

[91] *Id.* Mr. McBurnett testified that NRG Energy is incorporated in the State of Delaware, and is publicly owned and traded on the New York Stock Exchange. *Id.*

[92] *Id.*

[93] *Id.* Neither Mr. Sheehan for the Intervenors nor Ms. Simmons for the NRC Staff disputed Mr. McBurnett's characterization of the ownership of STP Units 3 and 4. *See* Simmons Direct Testimony at 12-15 (Ex. NRCR00101); Sheehan Direct Testimony at 3-6 (Ex. INT000056).

that an applicant is controlled by foreign interests through ownership,"[94] it has approved projects with similar foreign ownership percentages.

For example, in the case of Seabrook and Millstone 3, the NRC approved a license transfer from a minority owner to a foreign company in which the minority owner became a wholly owned subsidiary of the foreign company. Specifically, in that example, the NRC approved license transfer applications arising out of the British National Grid's acquisition of the New England Electric System, which owned New England Power Company (NEP), a minority owner of 9.9%.[95] British National Grid prepared a negation action plan that created a Nuclear Committee of the Board of Directors, which was composed of three United States citizens (a majority of whom were independent directors) with responsibility to act for NEP in all matters related to the facilities.[96] In approving the license transfer, the NRC found that the committee was "effectively designed to have primary authority over nuclear issues of NEP such that foreign interests will not be able to control NEP," despite the fact that the resulting total foreign ownership was 9.9%.[97]

Likewise, the NRC approved a license transfer application arising out of a proposal from ScottishPower, PLC (a British Company), to become the sole owner of PacifiCorp, a 2.5% minority owner of the Trojan Nuclear Plant.[98] The NRC approved a license transfer using the standards developed in the SRP, with specific emphasis on reserving to United States citizens all decisions involving protection of the public health and safety and common defense and security of

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[94] *See* FOCD SRP, 64 Fed. Reg. at 52,358 (Ex. NRC000106). It is worth noting that during development of the SRP, the NRC Staff proposed that no more than 50% foreign ownership should be allowed, but the Commission rejected this approach, declining to set such a limit. *See* Commission Voting Record, SECY-98-246, Standard Review Plan Regarding Foreign Ownership, Control, or Domination of Applicants for Reactor Licenses (Feb. 17, 1999) (Ex. STP000081).

[95] *See* In the Matter of North Atlantic Energy Service Corporation, et al. (Seabrook Station, Unit 1); Order Approving Application Regarding Merger of New England Electric System and the National Grid Group PLC, 64 Fed. Reg. 71,832 (Dec. 22, 1999) (Ex. STP000085); Northeast Nuclear Energy Company, et al. (Millstone Nuclear Power Station, Unit 3); Order Approving Application Regarding Merger of New England Electric System and the National Grid Group PLC, 64 Fed. Reg. 72,367 (Dec. 27, 1999) (Ex. STP000086). To be precise, the NRC approved 100% foreign ownership of a company owning indirectly 9.9% of Seabrook and 12.2% of Millstone 3. *Id.*

[96] NRC, Safety Evaluation by NRR, Proposed Merger of New England Electric System and the National Grid Group PLC, Seabrook Station, Unit 1, at 8 (Dec. 10, 1999) (Ex. STP000088).

[97] *Id.*

[98] *See* NRC, Safety Evaluation by NRR, Proposed Merger of PacifiCorp and ScottishPower PLC, Trojan Nuclear Plant, at 5 (Nov. 10, 1999) (Ex. STP000077).

the United States.[99] Notably, however, in the Trojan example, non-United States citizens could take part in numerous non-safety-related business decisions.[100]

These cases make clear there is no blanket prohibition on indirect foreign ownership of an applicant or licensee.[101] Instead, as the SRP makes clear, ownership "must be interpreted in light of all the information that bears on who in the corporate structure exercises control over what issues and what rights may be associated with certain types of shares."[102] Accordingly, the Board concludes that the 10% indirect foreign ownership by Toshiba, through TANE, does not, in and of itself, indicate that NINA's ownership structure contravenes the AEA's prohibition of foreign ownership, control, or domination. We evaluate below whether this factor, in conjunction with other factors, indicates that NINA is subject to foreign ownership, control, or domination.

2. Corporate Governance of STP Units 3 and 4

a. Recitation of Evidence

As previously indicated, NINA is the lead applicant seeking the license on behalf of all other prospective licensees.[103] Accordingly, we turn to NINA's governance provisions to determine their effect on decisions regarding nuclear safety, security, or reliability. The parties largely agree about how NINA's governance is structured and how decisions are made. Their disagreement lies in how NINA's governance and decisionmaking authority impacts the FOCD determination.

For NINA, Mr. McBurnett testified that NINA is governed by a Board of Managers (NINA Board).[104] He also testified that NRG Energy and TANE each appoint one Board Manager.[105] According to Mr. McBurnett, each Board Manager

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[99] *Id.*

[100] There, non-United States citizens could take part in decisions relating to: (1) the right to decide to sell, lease, or otherwise dispose of PacifiCorp's interest in the facility; and (2) the right to take any action which is ordered by the NRC or any agency or court of competent jurisdiction. *Id.* As discussed *infra* Section IV.C.2.a, non-United States citizens may not take part in such decisions under NINA's NAP.

[101] Ms. Simmons for the NRC Staff agreed that these two cases involved greater foreign ownership than is the case with NINA, but argued that "[u]nlike NINA, [the precedents involved] shared financial participation by the U.S. and foreign entity" and thus no financial control by the foreign entity. Simmons Rebuttal Testimony at 21-22 (Ex. NRCR00158). Ms. Simmons' concerns regarding financial control are addressed in Sections IV.C.3.a and IV.C.3.c, below.

[102] *See* FOCD SRP, 64 Fed. Reg. at 52,358 (Ex. NRC000106).

[103] McBurnett Direct Testimony at 15 (Ex. STP000036).

[104] *Id.* at 30.

[105] *Id.* Mr. McBurnett testified that "Board Manager" is sometimes referred to as "director." *Id.*

votes in proportion to that Manager's respective ownership share.[106] Therefore, according to Mr. McBurnett, the NRG Energy member of the NINA Board casts 90% of the votes of the NINA Board while the TANE member casts 10% of the votes for the NINA Board.[107]

According to NINA's revised COLA, the Chairman of the NINA Board is selected by a vote of the NINA Board.[108] NINA's witness, Ms. Seely, testified that the NRG Energy member of the NINA Board appointed the Chairman of the NINA Board, who is and must be a United States citizen in accordance with NINA's NAP.[109]

According to the Third Amended and Restated Operating Agreement of Nuclear Innovation North America LLC (NINA Operating Agreement), NRG Energy, as majority owner, has the right to nominate the CEO of NINA.[110] Mr. McBurnett testified that the CEO is NINA's top officer to whom all other officers report.[111] Mr. McBurnett further testified that, because the NRG Energy Board member holds 90% of the votes, the NRG Energy Board member not only selects NINA's CEO and Chief Nuclear Officer (CNO),[112] but those officers cannot be removed without the approval of the NRG Energy Board member.[113] The NINA Operating Agreement gives TANE, the minority owner, the right to nominate the Chief Financial Officer (CFO) of NINA.[114]

Additionally, under the terms of its NAP, NINA has committed to establish a Security Committee of the NINA Board,[115] whose structure and functions are detailed in NINA's revised COLA.[116] Mr. Collins testified on behalf of NINA that

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[106] *Id.*

[107] *Id.* As with ownership percentages, for simplicity, we refer to NRG Energy's and TANE's voting percentages as 90% and 10%, respectively.

[108] COLA Rev. 9 at 1D-5 (Ex. STP000054).

[109] Seely Direct Testimony at 18 (Ex. STP000038); COLA Rev. 9 at 1D-5 (Ex. STP000054).

[110] Third Amended and Restated Operating Agreement of Nuclear Innovation North America LLC (May 8, 2009) at 21 (Ex. STP000043) [hereinafter NINA Operating Agreement]. The NINA Operating Agreement states that other officers are appointed by the Board, and Board decisions regarding its selection of officers are governed by majority vote. *Id.*

[111] McBurnett Direct Testimony at 12 (Ex. STP000036).

[112] According to NINA's revised COLA, the CNO ensures control and oversight over nuclear safety issues through the NINA Quality Assurance Program and Safeguards Information (SGI) Program. COLA Rev. 9 at 1D-12 (Ex. STP000054).

[113] McBurnett Direct Testimony at 32 (STP000036). After selection by the NINA Board, both the CEO and CNO must be approved by the Security Committee. COLA Rev. 9 at 1D-11 (Ex. STP000054).

[114] NINA Operating Agreement at 21 (Ex. STP000043).

[115] COLA Rev. 9 at 1D-2 to -11 (Ex. STP000054). NINA's proposed Security Committee is discussed in greater detail in Section IV.C.3.b, below, in connection to NINA's NAP.

[116] *Id.*

the Security Committee will be established before pouring safety-related concrete for STP Units 3 and 4, and it will have exclusive authority to make the corporate decisions for NINA regarding nuclear safety, security, or reliability matters.[117] He further testified that the Security Committee will be composed entirely of United States citizens, a majority of whom will be independent outside members, and it will have exclusive authority over all matters required to be under nonforeign control.[118]

While not disputing Mr. McBurnett's description of NINA's governance, Ms. Simmons for the NRC Staff testified that NINA's governance provisions contribute to her concern that NINA is subject to FOCD. Ms. Simmons testified that TANE's membership on the NINA Board and TANE's power to appoint the CFO give Toshiba, through TANE, significant participation in and influence over the operations of NINA.[119] According to Ms. Simmons, directors "are in a position to influence the agenda, discussions, and decisions of the Board and advocate for their position."[120] She further opined that board members are "privy to private information not available to other parties"[121] and this makes the CFO more important with regard to NINA because TANE appoints the CFO and this gives TANE financial control over NINA.[122] Ms. Simmons conceded that while earlier revisions of the COLA indicated that the CFO position had been filled, the current version (beginning with revision 8) indicates that the CFO position is unoccupied.[123] Nevertheless, Ms. Simmons opined that foreign control can exist even where the power to control management positions has not been exercised.[124] And, according to Ms. Simmons, it is TANE's ability to appoint a CFO that leads to its control over NINA — which would enable Toshiba, as the parent of TANE's parent, to exercise foreign control of NINA.[125]

In addition to challenging NINA's corporate governance structure as it relates to FOCD, the NRC Staff deemed additional provisions of the NINA Operating Agreement to be inadequate with respect to FOCD. According to the NINA Operating Agreement, most matters are decided by a majority vote, with each

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[117] Collins and Wood Direct Testimony at 20 (Ex. STP000037); *see also* COLA Rev. 9 at 1D-2 (Ex. STP000054).

[118] Collins and Wood Direct Testimony at 21 (Ex. STP000037); *see also* COLA Rev. 9 at 1D-2 (Ex. STP000054).

[119] Simmons Direct Testimony at 35 (Ex. NRCR00101).

[120] *Id.*

[121] *Id.*

[122] Simmons Rebuttal Testimony at 26 (Ex. NRCR00158). Ms. Simmons' allegation that TANE has financial control of NINA is addressed in Section IV.C.3.a, below.

[123] Simmons Direct Testimony at 23 (Ex. NRCR00101).

[124] *Id.*

[125] *Id.*

NINA Board member having the percentage of the votes attributable to the ownership percentage of the investor that appointed that member.[126] Mr. McBurnett testified that because of this majority vote requirement, the NRG Energy member would decide most matters.[127] The NINA Operating Agreement identifies a limited number of matters that require a supermajority vote of two-thirds.[128] For example, the NINA Operating Agreement provides for a supermajority vote on decisions relating to debt, the sale of NINA assets, any initial public offering of NINA's equity, employee compensation matters, and adoption of annual financial statements and accounting methods.[129] According to Mr. McBurnett, the NRG Energy member also decides these matters because the NRG Energy member has a supermajority voting percentage of 90%.[130] Neither the NRC Staff expert, Ms. Simmons, nor Intervenors' expert, Mr. Sheehan, disputes Mr. McBurnett's characterization of voting under the NINA Operating Agreement.[131]

The NINA Operating Agreement does provide for a limited number of matters that require unanimous Board consent,[132] i.e., an affirmative vote of both the NRG Energy member and the TANE member would be required for these matters.[133] According to Mr. McBurnett:

> [t]hese minority owner consent rights are designed to protect the business interests of the minority member by assuring that the majority owner cannot change the agreed upon type of business, change the agreement, dissolve or liquidate the business (*e.g.,* enter bankruptcy) or enter into business transactions with affiliates that might dilute the value of the minority owner interests in the company. They also assure that the majority owner cannot change the rights of each investor to appoint a representative Board member, the rights and obligations of the NINA members, or the rights of the Board to approve items as described in Section 5.1(d).[134]

Additionally, the NINA Operating Agreement prohibits NINA from undertaking two specific actions unless the TANE member's approval is first obtained.[135] These prohibited actions are: (1) extending an interest in NINA to a Toshiba competitor; and (2) the distribution of surplus cash to the investors, with certain

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[126] NINA Operating Agreement at 18-19 (Ex. STP000043).

[127] McBurnett Direct Testimony at 31 (Ex. STP000036).

[128] NINA Operating Agreement at 18-19 (Ex. STP000043).

[129] *Id.*

[130] McBurnett Direct Testimony at 31 (Ex. STP000036).

[131] Simmons Direct Testimony at 33-34 (Ex. NRCR00101).

[132] NINA Operating Agreement at 19-20 (Ex. STP000043).

[133] Simmons Direct Testimony at 6-7 (Ex. NRCR00101); McBurnett Direct Testimony at 31 (Ex. STP000036).

[134] McBurnett Direct Testimony at 31 (Ex. STP000036).

[135] NINA Operating Agreement at 20 (Ex. STP000043).

conditions.[136] Mr. McBurnett testified that, separately from the NINA Operating Agreement, and as part of its own internal operating process, TANE management has the right to approve a budget for any remaining loans that TANE may extend to NINA.[137]

In the opinion of Ms. Simmons, this "veto power," or "negative control,"[138] gives Toshiba, through TANE, effective control over the project because decisions related to these matters require TANE's approval.[139] Ms. Simmons opined that these provisions can allow a minority owner like TANE to exercise "negative control" by blocking actions proposed by the majority.[140] Ms. Simmons further opined that the NINA Operating Agreement, among other things, restricts NINA's ability to obtain additional indebtedness because it must first obtain the unanimous consent of the NINA Board.[141] According to Ms. Simmons, the restrictions on indebtedness in the NINA Operating Agreement, coupled with the restrictions on indebtedness in the TANE Credit Agreement,[142] would allow Toshiba, through TANE, to block NINA from reducing its level of control over NINA.[143]

NINA's witness, Mr. McBurnett, disagreed and asserted that the provisions related to unanimous consent do not pertain to nuclear safety, security, or reliability.[144] In Mr. McBurnett's view, these provisions relate to business decisions having no nuclear safety, security, or reliability consequences.[145]

But, it is Ms. Simmons' opinion that these provisions enhance TANE's, and hence Toshiba's, control of NINA through its financing to such an extent that NRG Energy's voting rights cannot sufficiently negate TANE's, and hence Toshiba's,

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[136] *Id.* A third prohibited action, the adoption of the annual budget or operating plans of the company, expired in 2011. McBurnett Direct Testimony at 32 (Ex. STP000036).

[137] *Id.*

[138] Ms. Simmons testified that when an operating agreement stipulates that all business decisions require a unanimous vote of the ownership, the minority foreign owner can control via its veto power. Simmons Direct Testimony at 6, 34 (Ex. NRCR00101). According to Ms. Simmons, this is commonly known as "negative control." *Id.*

[139] *Id.* at 6-7, 29, 33-35, 41.

[140] *Id.* at 35.

[141] *Id.*

[142] 2010 Amended and Restated TANE Credit Agreement (Nov. 29, 2010) (Ex. NRC000132). The TANE Credit Agreement is an agreement between NINA and TANE whereby TANE lends to NINA in order for NINA to pay for services rendered under the Engineering, Procurement, and Construction (EPC) contract. *Id.*

[143] Simmons Direct Testimony at 35 (Ex. NRCR00101). Although Ms. Simmons conceded that the provision regarding adoption of the annual budget expired in 2011, she asserted that TANE management has reserved the right to approve a budget for TANE's remaining loans to NINA. *Id.* (citing Letter from Scott Head, Manager Regulatory Affairs, STP Units 3 & 4, to NRC, Response to RAI Letter dated April 18, 2012 (May 17, 2012) (Ex. STP000050)).

[144] McBurnett Direct Testimony at 32 (Ex. STP000036).

[145] *Id.*

control.[146] She opined that, while voting rights on their face suggest that NRG Energy controls the NINA Board, and thereby NINA's business operations, NRG Energy's own statements to the SEC (discussed in detail below) contradict such control.[147]

b. Legal Analysis and Findings

All parties largely agree as to how NINA's governance is structured and how NINA's decisions are made. Their only disagreement concerns how NINA's governance and decisionmaking authority impacts the FOCD determination.

The Board concludes that NINA's corporate governance does not, in and of itself, indicate that NINA is subject to foreign ownership, control, or domination. We also find by a preponderance of the evidence that the NRG Energy member of the NINA Board controls the NINA Board by having both 90% of the votes on most decisions and exclusive control of all decisions involving nuclear safety, security, and reliability. The Chairman of NINA's Board must be a United States citizen, and the selection of the Chairman is controlled by the NRG Energy member. The CEO has ultimate authority on decisions affecting nuclear safety, security, or reliability, and the CEO is appointed by the NRG Energy member and must be a United States citizen.[148] These provisions support the conclusion that NINA's corporate governance does not present FOCD concerns, given that similar, and perhaps even less restrictive, governance provisions have been approved by the NRC Staff in the past.

For example, in 1999, AmerGen Energy Company applied for a transfer of Illinois Power Company's license for the Clinton Reactor. Although British Energy, a foreign entity, owned 50% of AmerGen, the NRC approved the license transfer application, based in large measure on governance provisions that required the United States owner to have the ultimate decisionmaking authority on the AmerGen management committee for all matters affecting nuclear security and safety.[149] In particular, the United States Chairman on the AmerGen management committee (which consisted of three United States members and three foreign

[146] Simmons Direct Testimony at 36 (Ex. NRCR00101).

[147] *Id.* These statements are addressed in detail in Section IV.C.3.a, below.

[148] It should be noted that NINA's CEO retains ultimate authority on decisions affecting nuclear safety, security, or reliability until the establishment of the Security Committee, which is to control all decisions affecting nuclear safety, security, or reliability. NINA's Security Committee, discussed below in Section IV(C)(3)(b), is restricted solely to United States citizen members.

[149] *See* NRC, Safety Evaluation for the Proposed Transfer of Clinton Power Station Operating License from Illinois Power Company to AmerGen Energy Company, LLC (Nov. 24, 1999) (Ex. NRC000153).

members) had the deciding vote on key governance matters, including matters of nuclear safety and security.[150]

Likewise, in 2009, Constellation Energy Nuclear Group, LLC (CENG), a holding company of a fleet of five operating nuclear power plants, proposed to transfer a 49.99% interest in the Calvert Cliffs Nuclear Power Plant to EDF, Inc. Although EDF, Inc., is a United States subsidiary of a French utility,[151] the NRC approved the transfer at least in part because of the controlling governance provisions.[152] Similar to AmerGen, CENG's governance provisions conferred on the Chairman of the CENG Board of Directors, who was required to be a United States citizen, the deciding vote on matters relating to "safety, security, and reliability."[153]

In common with these AmerGen and CENG examples, NINA's corporate governance provisions delegate authority of issues involving nuclear matters to United States citizens. In fact, NINA has gone one step further, requiring that its Security Committee be comprised entirely of United States citizens, of whom a majority must be independent, disinterested personnel.[154] Thus, control over decisions related to nuclear safety, security, or reliability[155] is vested in NINA's CEO and the Security Committee of the NINA Board, all of whom must be United States citizens. This structure is more restrictive than either the AmerGen example (three U.S. members and three foreign members) or the CENG example (only chairman must be U.S. citizen).

Additionally, we find that, while TANE is accorded veto power or negative control over some financial or business decisions, those powers do not extend to matters involving nuclear safety, security, or reliability. TANE's minority owner consent rights protect its business interests as a minority member by assuring that the majority owner: (1) cannot change the agreed-upon type of business, change the agreement, or dissolve or liquidate the business (e.g., enter bankruptcy); (2) cannot enter into business transactions with affiliates that might dilute the value of

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[150] *See id.* at 12.

[151] *See* NRC, Revised Safety Evaluation by NRR Regarding the Direct and Indirect Transfers of Control of Renewed Facility Operating Licenses Due to the Proposed Corporate Restructuring for Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2; Calvert Cliffs Independent Spent Fuel Storage Installation; Nine Mile Point Nuclear Station, Unit Nos. 1 and 2; and R.E. Ginna Nuclear Power Plant § 8.0 (Oct. 30, 2009) (Ex. NRC000154).

[152] *Id.*

[153] *Id.* at 27.

[154] *See* COLA Rev. 9 at 1D-8 (Ex. STP000054). A complete list of issues assigned to U.S. control is provided in NINA's NAP. *Id.* at 1D-7 to -8.

[155] As stated above, according to the Commission, the statutory limitation on foreign ownership, control, or domination "should be given an orientation toward safeguarding the national defense and security." *Gen. Elec. Co.,* 3 AEC at 101. *See also* FOCD SRP, 64 Fed. Reg. at 52,357 (Ex. NRC000106).

the minority owner interests in the company; (3) cannot change the rights of each investor to appoint a representative Board member; and (4) cannot change the rights and obligations of the NINA members, or the rights of the Board to approve certain items described in section 5.1(d) of the NINA Operating Agreement.[156] These negative controls pertain in no way to nuclear safety, security, or reliability, and do not provide TANE with sufficient control to pose an FOCD concern. These provisions also are typical of provisions in prior licensing matters where there was foreign involvement acceptable to the NRC.

For these reasons, we find by a preponderance of the evidence that NINA's corporate governance, in and of itself, does not indicate that NINA is subject to foreign ownership, control, or domination. Accordingly, we conclude that NINA's corporate governance provisions do not contravene the AEA's prohibition of foreign ownership, control, or domination.

3. Financial Control of STP Units 3 and 4 and NINA's Negation Action Plan

a. Recitation of Evidence Regarding Financial Control of STP Units 3 and 4

Ms. Simmons testified for the NRC Staff that, through TANE, Toshiba has contributed more than 50% of the total project cost to date, and that its economic interests in NINA are greater than NRG Energy's.[157] Ms. Simmons excluded from consideration NRG Energy's past noncash equity contributions for two separate reasons: (1) NRG Energy's SEC filings did not recognize them;[158] and (2) because all of NRG Energy's contributions, including its cash contributions, were made in the past, in her opinion such past contributions by NRG Energy do not alter the fact that NINA is currently economically dependent upon TANE.[159]

Based largely on this financing by Toshiba, through TANE, Ms. Simmons opined that "by the end of 2011, [Toshiba, through] TANE exercised control

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[156] Additionally, the Board is not persuaded by Ms. Simmons' assertion that TANE's right to approve a budget for the remaining loans to NINA supports the NRC Staff's determination that NINA is subject to impermissible financial control. Simmons Direct Testimony at 35 (Ex. NRCR00101). To be clear, it was agreed that TANE would approve the budget only for loans provided by TANE XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX. McBurnett Direct Testimony at 74 (Ex. STP000036). And Mr. McBurnett testified that "[a]lthough TANE as the lender has the ability to set the amount it will loan to NINA, it has no control over how NINA spends it. Instead, that control rests with the CEO." *Id.* So, when placed in context, this lends little support to the NRC Staff's position.

[157] Simmons Direct Testimony at 19, 49 (Ex. NRCR00101).

[158] Simmons Rebuttal Testimony at 5-6 (Ex. NRCR00158).

[159] *Id.* at 2.

of NINA."[160] According to Ms. Simmons, the first significant event indicating that Toshiba, through TANE, had obtained control of NINA was NRG Energy's announcement in a press release in April 2011 that it was "significantly reducing its participation in STP Units 3 and 4 . . . ."[161] Following this announcement, Ms. Simmons testified, the NINA Board made "several significant changes regarding the financing, personnel and operations of NINA."[162]

> First, regarding financial matters, Toshiba, [through TANE,] would prepare licensing budgets and would fund nuclear licensing work and EPC [engineering, procurement and construction] costs until August 2011. . . . Toshiba was also granted the option to convert all newly funded debt into equity. Second, regarding personnel, three of the six NRG U.S. citizen officers were removed and the CEO was instructed to terminate all remaining NINA employees. Third, regarding operations, it was decided that NRG would fund NINA's New York lease termination and Toshiba [through TANE] would fund the Bay City, Texas office.[163]

In May 2011, according to Ms. Simmons, NRG Energy's SEC filings indicated that it would deconsolidate (i.e., remove) NINA from its financial statements.[164] As evidence of the significance of this deconsolidation, Ms. Simmons pointed to NRG Energy's letter to the SEC in which NRG Energy described multiple financial and operational factors contributing to its decision to deconsolidate NRG Energy.[165] Concerning this letter, Ms. Simmons testified:

> NRG's statements to the SEC indicated that Toshiba [through TANE] controls funding for NRC licensing and construction costs, controls licensing activities, and may convert its debt to equity in NINA (thereby increasing its ownership interest in

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[160] Simmons Direct Testimony at 26 (Ex. NRCR00101). Ms. Simmons conceded that NINA was not foreign-controlled in the past when its financing came from United States sources, but maintained that NINA is now foreign-controlled. *Id.* at 49.

[161] *Id.* at 26 (citing News Release, *NRG Energy, Inc. Provides Greater Clarity on the South Texas Nuclear Development Project (STP 3&4)* (Apr. 19, 2011) (Ex. STP000078)).

[162] *Id.*

[163] *Id.* at 26-27 (internal citation omitted).

[164] *Id.* at 27 (citing NRG Energy, Inc., Form Q-10, Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (May 5, 2011) (Ex. NRC000129)). NRG Energy's SEC filing states that "NRG ceased to have a controlling financial interest in NINA at the end of the first quarter of 2011. Consequently, NRG deconsolidated NINA as of March 31, 2011, in accordance with ASC-810, *Consolidation,* or ASC 810." NRG Energy, Inc., Form Q-10, Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (May 5, 2011) at 12 (Ex. NRC000129) (emphasis in original).

[165] Simmons Direct Testimony at 28 (Ex. NRCR00101) (citing Letter from Kirkland B. Andrews, Executive Vice President and CFO, NRG Energy, to Andrew D. Mew, Securities and Exchange Commission, Regarding NRG Energy, Inc. Form 10-K for the fiscal year ended December 31, 2011 (June 14, 2012) (Ex. NRC000121)).

> NINA). NINA's management was also removed and its office relocated following the decision to shift control to [TANE, and consequently to its indirect foreign owner,] Toshiba. These statements led the Staff to conclude that Toshiba [through TANE] exercises nearly complete control over NINA.[166]

Based on these statements to the SEC, Ms. Simmons testified that "[t]he Staff concluded that NRG[ ] . . . ceded control to [TANE, and consequently to its indirect foreign owner,] Toshiba in 2011."[167] She opined that "[a]lthough NRG legally owns 90% of the equity in NINA, ownership is clearly not the only means of control, consistent with NRG's own statements."[168] Ms. Simmons further opined that "[i]n situations involving revolving credit agreements, a creditor has control over a debtor's cash-flow, and the threat of limiting or ceasing cash-flow is significant enough that debtors may find themselves seeking the approval of the creditor in basic business decisions to avoid such a situation."[169] She maintained that "control over cash flow is the means by which [TANE, and consequently its indirect foreign owner,] Toshiba controls NINA."[170] According to Ms. Simmons, "Toshiba[, through TANE] exercises control over NINA via financing, and through the terms and conditions it has negotiated through the TANE Credit Agreement. Toshiba[, through TANE] also controls strategic decision making over NINA. Based on these facts, the Staff has determined that Toshiba[, through TANE] ultimately controls NINA."[171]

In sum, Ms. Simmons testified that what is "primarily" of concern to the NRC Staff is "that current financing [by Toshiba, through TANE,] is being provided in significantly great[er] amounts as opposed to what's being provided by NRG [Energy] specifically to advance the project for NRC license activities."[172]

NINA's witness, Mr. McBurnett, disputed Ms. Simmons' testimony regarding Toshiba's financial control of NINA, testifying that because TANE's financial and other involvement in the project will change during the life of the project,[173] TANE's foreign owner, Toshiba, cannot control the project. To illustrate this

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[166] *Id.* at 29.

[167] *Id.* at 30.

[168] *Id.* Ms. Simmons testified that according to the SRP, control may be established and exercised via debt, contractual, or financial arrangements. *Id.* (citing FOCD SRP, 64 Fed. Reg. at 52,359 (Ex. NRC000106)).

[169] *Id.*

[170] *Id.* at 31.

[171] *Id.*

[172] Tr. at 2455 (Ms. Simmons for the NRC Staff).

[173] McBurnett Direct Testimony at 13-15, 51 (Ex. STP000036).

point, NINA's witnesses divided the project into four phases: licensing; post-licensing/preconstruction; construction; and operation.[174]

During the licensing phase, Mr. McBurnett testified that NRG Energy has provided approximately 60% of the investments (cash and noncash equity) for the project, and that through TANE, Toshiba has provided approximately 25%, with the remainder having been provided by CPS Energy and Shaw.[175] According to Mr. McBurnett, when considering only the contributions to NINA, NRG Energy supplied approximately 90% of the equity contributions and Toshiba, through TANE, supplied approximately 10% of the equity contributions.[176] He further testified that approximately 25% of the funding for NINA has come from loans, primarily from Toshiba, through TANE.[177] Overall, Mr. McBurnett opined NRG Energy has supplied almost 70% and Toshiba, through TANE, has supplied almost 30% of the contributions to NINA.[178]

Additionally, NINA's witnesses disputed Ms. Simmons' characterization of NRG Energy's involvement with NINA following the April 2011 press release. Ms. Seely testified that when NRG Energy made its decision in April 2011 to cease further funding of NINA, NRG Energy committed to provide up to $20 million to fund wind down expenses.[179] According to Mr. McBurnett, the balance of the $20 million is available to provide continued support for NINA's corporate existence.[180]

Mr. McBurnett testified that, in addition to this financial contribution, NRG Energy has continued to support NINA's corporate existence.[181] He testified that, following the April 2011 press release, NRG Energy stated that it "will cooperate

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[174] *Id.* at 13-15, 50-61; *see also* Collins and Wood Direct Testimony at 39 (Ex. STP000037).

[175] McBurnett Direct Testimony at 9 (Ex. STP000036). CPS Energy is one of the owners of STP Units 3 and 4 and Shaw is a construction contractor. *Id.* Mr. McBurnett testified that Shaw has provided loans to NINA. *Id.* at 37.

[176] *Id.* at 9.

[177] *Id.* at 37.

[178] *Id.* The remaining contributions, according to Mr. McBurnett, came from Shaw. *Id.*

[179] Seely Direct Testimony at 11 (Ex. STP000038). According to Mr. McBurnett, NINA has used about XXXXXXX of this amount, which NRG Energy has contributed in the form of capital. McBurnett Direct Testimony at 38 (Ex. STP000036).

[180] Tr. at 2029-30 (Mr. McBurnett for NINA).

[181] McBurnett Direct Testimony at 69 (Ex. STP000036). XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX *Id.* (citing Minutes of Meeting of the NINA Board at 4 (Apr. 12, 2012) (Ex. STP000059)).

with and support its current partners and any prospective future partners in attempting to develop STP Units 3 and 4."[182]

Finally, Mr. McBurnett testified that even if Toshiba, through TANE, is currently NINA's only source of funds, those "loans from April 2011 through issuance of the COLs (the Licensing Phase) represent less than 2% of the total funding for the pre-COL portion of the project . . . ."[183] According to Mr. McBurnett, under the draft term sheet for NINA's conditional DOE loan guarantee the loans from Toshiba, through TANE, will be extinguished before construction begins as part of Project Finance.[184]

Regarding the post-licensing/preconstruction phase, Mr. McBurnett testified that successful closing of Project Finance would be a precondition to commencing licensed construction activities.[185] Regarding the construction phase, according to Mr. McBurnett, NINA will obtain loans for approximately 75% to 80% of the total construction costs using Project Finance, and as part of Project Finance, the current loan balances from credit extended by Toshiba, through TANE, would be extinguished.[186] Lastly, Mr. McBurnett testified that, with regard to funding during the operations phase, STPNOC will have control over operations for STP Units 3 and 4, as well as control over the funds to cover operating costs, which will come from the sale of electricity.[187]

Ms. Simmons took issue with NINA witnesses' testimony regarding construction financing. First, she maintained that NINA's commitment to Project Finance is speculative and that NINA has provided no evidence of potential investors.[188] Second, she asserted that, since 2011, virtually all financial support has come from Toshiba, through TANE, with no indication that any funding will come from any other investor.[189]

Taking the position that the AEA and 10 C.F.R. Part 50 "indicate that the FOCD determination is based on the current facts and circumstances . . . ,"[190] Ms.

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[182] *Id.* at 38 (quoting Press Release, NRG Energy, *NRG Energy, Inc. Provides Greater Clarity on the South Texas Nuclear Development Project* (STP 3&4) at 1 (Apr. 19, 2011) (Ex. STP000078)).

[183] *Id.* at 69.

[184] *Id.*

[185] *Id.* at 55.

[186] *Id.* at 10. Mr. McBurnett testified that these loans would primarily come from the United States government, e.g., from the U.S. Federal Finance Bank with a loan placed through the Department of Energy Loan Guarantee Program. *Id.*

[187] *Id.* at 61.

[188] Simmons Rebuttal Testimony at 11 (Ex. NRCR00158); Simmons Direct Testimony at 45 (Ex. NRCR00101).

[189] Simmons Direct Testimony at 20, 23 (Ex. NRCR00101).

[190] *Id.* at 45. Ms. Simmons highlighted 10 C.F.R. § 50.38 and AEA § 103d's use of present tense. *Id.*

Simmons opined that NINA's proposal regarding future funding is speculative and does not impact the NRC Staff's FOCD determination.[191]

b. Recitation of Evidence Regarding NINA's Negation Action Plan

To mitigate this potential for financial control by Toshiba, through TANE, NINA submitted a NAP as part of its COLA. NINA's NAP includes the following requirements:

(1) The Chairman of the Board, and anyone acting for the Chairman, will be a United States citizen.
(2) The CEO, anyone acting for the CEO, and the CNO of NINA will be United States citizens.
(3) The CEO and CNO each will execute a certificate that acknowledges a special duty to the United States Government to protect against and negate the potential for any FOCD of NINA.
(4) Before pouring safety-related concrete for STP Units 3 and 4, a Security Committee of the NINA Board will be established that will have exclusive authority to make the corporate decisions for NINA regarding nuclear safety, security, or reliability matters. The Security Committee will be composed entirely of United States citizens.
(5) Before pouring safety-related concrete for STP Units 3 and 4, NINA will establish a Nuclear Advisory Committee (NAC) to monitor compliance with FOCD restrictions.
(6) In the event that any FOCD may be exercised with the potential to disrupt United States control over nuclear safety, security, or reliability issues, the NAP requires NINA's CEO to take one or more of the following actions: (1) raising the issue with the foreign persons involved and resolving the matter to the CEO's satisfaction; (2) consulting with the NAC to obtain advice regarding whether United States control is required and, if so, to fashion appropriate options for resolving the matter consistent with the requirements of the United States Government; or (3) referring the matter for resolution by the Security Committee.
(7) The CNO exercises United States control and oversight of nuclear safety issues through control of the NINA Quality Assurance Program and Safeguards Information Program.
(8) The NAP provides that any person involved in the licensing, design, construction, or operation of STP Units 3 and 4 may raise any potential FOCD issues in the very same manner in which a safety concern typically may be raised at a nuclear facility (e.g., by raising issues through supervisors or managers, documenting

[191] *Id.*

issues in the Corrective Action Program, submitting issues in the Employee Concerns Program, or raising issues with the NRC).[192]

Both Mr. Collins and Mr. Wood for NINA opined that NINA's NAP effectively mitigates any potential foreign financial control.[193] With Mr. McBurnett, they asserted that, in addition to satisfying the provisions of the SRP, NINA's NAP imposes additional controls to ensure that, by the time of construction, the ultimate decisionmaking authority within NINA for matters related to nuclear safety, security, or reliability will be vested in the hands of the Security Committee of the Board.[194] Mr. McBurnett, Mr. Collins, and Mr. Wood also testified that this Security Committee will be composed entirely of United States citizens, a majority of whom will be independent outside members.[195]

Mr. Collins and Mr. Wood further testified that, prior to pouring safety-related concrete, NINA will establish its Nuclear Advisory Committee (NAC), to be composed of only United States citizens, and that the NAC will monitor STP Units 3 and 4 for compliance with FOCD restrictions.[196] According to Mr. Collins and Mr. Wood, the NAC is to advise and to make recommendations to the NINA Board regarding any measures needed to ensure NINA's FOCD compliance.[197]

Ms. Simmons agreed that the NAP includes "two key components: the Security Committee and the . . . NAC."[198] She also conceded that the NAP is to "assure that at least 50% of the funding for any licensed construction activity is funded from U.S. sources whether through loans or through equity" to address the NRC Staff's FOCD concerns.[199]

Nevertheless, Ms. Simmons testified that the NRC Staff found these measures insufficient to negate the foreign entity's ability to exert control, both direct and indirect, over NINA. Ms. Simmons opined there were several reasons for this:

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[192] COLA Rev. 9 at 1D-5, 1D-10, 1D-13 (Ex. STP000054); *see also* McBurnett Direct Testimony at 44-48 (Ex. STP000036).

[193] Collins and Wood Direct Testimony at 9 (Ex. STP000037).

[194] McBurnett Direct Testimony at 44-48 (Ex. STP000036); *see also* Collins and Wood Testimony at 21 (Ex. STP000037).

[195] McBurnett Direct Testimony at 44-48 (Ex. STP000036); *see also* Collins and Wood Testimony at 21 (Ex. STP000037).

[196] Collins and Wood Testimony at 27 (Ex. NRCR00101).

[197] *Id.* at 28.

[198] Simmons Direct Testimony at 43 (Ex. NRCR00101). Ms. Simmons did not dispute the description of Security Committee and the NAC in the testimony of Mr. Collins and Mr. Wood. *See id.* at 43-44. In Ms. Simmons' opinion, however, these provisions are insufficient because they do "not address control via financing." *Id.* at 44.

[199] *Id.* (quoting COLA Rev. 9 § 1D.2(d) (Ex. STP000054)). Ms. Simmons testified that the SRP "states that diversification or reduction of foreign source income is a negation measure that may be sufficient to negate foreign control, or domination." *Id.*

> First, the applicant proposes a 10 percent ownership restriction on TANE. Ownership alone, however, is not indicative of control . . . . In this case, the ability of Toshiba [through TANE] to direct and decide the affairs of NINA far exceeds its ownership percentage position. [Toshiba, through] TANE has contributed more than 50 percent of NINA's funding to date and is currently the sole financer. Further, [Toshiba, through] TANE has the right to convert all future debt into NINA equity. [Toshiba, through] TANE currently possesses contractual rights to increase its equity in (and therefore control of) NINA. Although the applicant stated that no additional ownership would be permitted absent NRC approval, NINA does not specify how it would block [Toshiba's, through] TANE's apparently unilateral contractual right . . . to convert its debt to equity. Thus, the Staff finds that the 10 percent ownership "restriction" does not reflect the underlying financial and contractual relationships between NINA and [Toshiba, through] TANE.[200]

Ms. Simmons further opined that the AEA and 10 C.F.R. Part 50 "indicate that the FOCD determination is based on the current facts and circumstances during the license review process."[201] Ms. Simmons pointed to AEA Section 103d and 10 C.F.R. § 50.38 as prohibiting the issuance of a license "to an alien or any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government."[202]

Ms. Simmons also opined that NINA's claim it would obtain at least 50% United States funding for licensed construction activities is both prospective and speculative, particularly in light of the fact that NINA provided no proof it currently had obtained additional or alternative financing for the project.[203] Ms. Simmons also noted that, with the exception of Toshiba, through TANE, all investors in STP Units 3 and 4 either have withdrawn from the project or have significantly reduced their financial participation in the project. She further testified that NINA has yet to identify any additional investors.[204] Ms. Simmons viewed these as fatal deficiencies in NINA's NAP.[205] She testified it was for

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[200] *Id.* at 44-45.

[201] *Id.* at 45. Ms. Simmons highlighted 10 C.F.R. § 50.38 and AEA Section 103d's use of present tense. *Id.*

[202] *Id.* (citing 42 U.S.C. § 2133(d) (emphasis added by the NRC Staff)). Title 10 C.F.R. § 50.38 states:

> Any person who is a citizen, national, or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe *is* owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.

10 C.F.R. § 50.38 (emphasis added to reflect NRC Staff's position).

[203] Simmons Direct Testimony at 45 (Ex. NRCR00101).

[204] *Id.*

[205] *Id.*

this reason that, after reviewing the "actions taken by NINA to negate foreign ownership and control, the Staff determined that NINA's NAP is not sufficient. While the NAP will provide a level of U.S. control of day to day operations and decisions, it is insufficient to negate the overwhelming control exercised by Toshiba[, through TANE]."[206]

c. Legal Analysis and Findings

The Board finds by a preponderance of evidence that Toshiba, through TANE, lacks financial control of NINA and concludes that there is no impermissible FOCD of NINA based on current funding of the project.

Initially, we note our agreement with Ms. Simmons that there is no factual support for NINA's claim that NRG Energy's past contributions to NINA indicate its current control over NINA. NINA presented no evidence that past contributions necessarily have an impact on current control and domination of NINA. While the Board declines to accept the NRC Staff's position that past contributions are not relevant to the FOCD analysis,[207] such contributions in this instance have, at most, a minimal impact on a FOCD analysis.

At the same time, however, the Board is not persuaded by the NRC Staff's and Intervenors' argument that TANE controls the decisions of NINA's Board through its funding of NINA. Ms. Simmons stated during the hearing that what is "central" to the NRC Staff's conclusion that TANE controls NINA is "that current financing is being provided in significantly great[er] amounts as opposed to what's being provided by NRG [Energy] specifically to advance the project for NRC license activities."[208] During the hearing, we referred to this position as the "Golden Rule" — i.e., he who has the gold, makes the rule. Despite the NRC Staff's concerns, there is no record evidence of any instance where NINA has sought approval from Toshiba or TANE for strategic decisions in order to avoid threats of Toshiba or TANE withholding further loans. Instead, such alleged control is entirely speculative.

The evidence presented by the NRC Staff and Intervenors regarding Toshiba's and TANE's alleged financial control relates to the financing, personnel, and operations of NINA. The Staff's claim regarding Toshiba's and TANE's control of financial matters is that, following the April 2011 NINA Board meeting, Toshiba, through TANE, (1) had the authority to prepare licensing budgets; (2) agreed to fund nuclear licensing work and costs until August 2011; and (3) was granted the option to convert all newly funded debt into equity.

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[206] *Id.* at 50.

[207] Simmons Rebuttal Testimony at 2 (Ex. NRCR00158).

[208] Tr. at 2455 (Ms. Simmons for the NRC Staff).

The Board is not persuaded that this evidence supports the NRC Staff's claims. During the April 2011 NINA Board meeting, it was agreed that the TANE member would prepare a budget for licensing work through August 1, 2011, and present it to the NINA Board for approval.[209] However, under the terms of the NINA Operating Agreement, that power expired in June 2011.[210] Ms. Simmons asserts that TANE has retained the right to approve a budget for its remaining loans to NINA, but when placed in context, this lends scant support to the NRC Staff's and Intervenors' position that Toshiba, through TANE, controls NINA.[211] As Mr. McBurnett testified, TANE's budget approval power in this regard was actually quite narrow. NINA and TANE agreed that TANE would be empowered to approve the budget for loans provided by TANE XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX, but that power did not extend further.[212] Mr. McBurnett testified that "[a]lthough TANE as the lender has the ability to set the amount it will loan to NINA, it has no control over how NINA spends it. Instead, that control rests with the [NINA] CEO."[213] Mr. McBurnett's testimony in this regard was not disputed by either the NRC Staff or Intervenors. Thus, TANE's fleeting ability to prepare, but not direct spending for, a budget (that, not insignificantly would have required approval by the NINA Board member) has little bearing on our effort to analyze any current or future FOCD. Regarding the option of Toshiba, through TANE, to convert all newly funded debt into equity, even were such conversion to occur, TANE's and consequently, Toshiba's ownership share is currently restricted to no more than 10% of NINA. Of equal importance, either increasing this foreign ownership of NINA to greater than 10% or increasing any foreign ownership of NINA by 5% or more would require NRC consent.[214] Thus, Toshiba, through TANE, could not convert any significant portion of its debt to equity without NRC's prior consent.

Regarding personnel, the undisputed[215] evidence indicates that three of the

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[209] At that same meeting, it was agreed that NINA would remain in control of its operations. Minutes of Meeting of the NINA Board at 15 (Apr. 5, 2011) (Ex. STP000058).

[210] NINA Operating Agreement at 20 (Ex. STP000043).

[211] Simmons Direct Testimony at 35 (Ex. NRCR00101).

[212] McBurnett Direct Testimony at 74 (Ex. STP000036).

[213] *Id.*

[214] TANE's ownership would be subject to NINA's NAP and commitments in the revised COLA, which restrict TANE's ownership share to no more than 10% of NINA and require NRC consent, under 10 C.F.R. § 50.80, for any change in NINA's ownership of 5% or more (or a determination by NRC that such consent is not necessary). NINA's NAP is discussed in detail in Sections IV.C.3.b and IV.C.3.c, below.

[215] Neither the NRC Staff nor Intervenors disputed NINA's testimony regarding the office closure, the termination of officers, the nature of the work done by those terminated officers, the nationality of their replacements and the control exercised by the NRG Energy Board member of NINA's new management team.

six NRG Energy United States citizen officers were removed and the CEO was instructed to terminate all remaining NINA employees.[216] This reduction in force was approved by the NRG Energy Board member.[217] Significantly, the terminated NINA officers, who had been based in NINA's New York office,[218] were responsible for development and financing activities, but not for licensing activities.[219] The decision to terminate those officers was a consequence of the NRG Energy decision to cease funding, design work, and engineering work on the project, and as a result, the NINA personnel in question were not needed.[220] Moreover, no foreign individuals were appointed to replace the officers or personnel who were removed.[221] Thus, the actions reflected a reduction in force, not a transfer of control to personnel of TANE and, consequently, its indirect foreign owner, Toshiba. Moreover, the NRG Energy Board member has retained control over the activities of the NINA management team that remains in place.[222]

Regarding operations, the undisputed evidence indicates that NRG Energy would fund NINA's New York lease termination and Toshiba, through TANE, would fund the Texas office.[223] NINA's headquarters were relocated from New York to the then-existing NINA offices in Texas.[224] But neither the NRC Staff nor Intervenors provided any evidence as to how these operational changes would facilitate increased control of NINA by Toshiba, through TANE.

If the NRC Staff's and Intervenors' allegations were accurate and NINA was in fact subject to TANE's direction, "we think it reasonable to expect that there would be manifestations of this in the corporate organization and management; and, further, that there would be recognition of such circumstances by those corporate officers who must furnish the Commission with the sworn information prescribed by [10 C.F.R. §] 50.33."[225] However, NINA's CEO, Mr. McBurnett, testified that he "do[esn't] see how [Toshiba's or TANE's control] manifests itself in any of [his] governance, in any of [his] daily activities."[226] In the absence of any particular examples where Toshiba, through TANE, has exercised control, and in

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[216] *See* Simmons Direct Testimony at 26-27 (Ex. NRCR00101).

[217] McBurnett Rebuttal Testimony at 30 (Ex. STPR00091).

[218] *Id.*

[219] *Id.*

[220] *Id.*

[221] *Id.*

[222] *Id.* at 31.

[223] *Id.*

[224] *Id.*

[225] *Commonwealth Edison Co.* (Zion Station, Units 1 and 2), 4 AEC 231, 233 (1969). Even assuming there could be FOCD without such manifestations, as the NRC Staff believes, there is no impermissible FOCD here.

[226] Tr. at 2395 (Mr. McBurnett for NINA).

the absence of any corporate or contractual methods by which Toshiba, through TANE, could exercise control over a decision related to nuclear safety, security, or reliability, we find it difficult to understand how the NRC Staff "knows or has reason to believe"[227] that NINA is controlled or dominated by Toshiba or by TANE within the meaning of the AEA § 103d or 10 C.F.R. § 50.38.

Moreover, were we to accept the NRC Staff's and Intervenors' "Golden Rule" argument, then it would be difficult for a licensee to obtain any significant amount of funding from a foreign entity, a circumstance that would be contrary to the NRC Staff's own SRP, which explicitly states that more than 50% funding can come from a foreign source.[228] Accordingly, the Board finds that current funding of STP Units 3 and 4 does not contravene the AEA's prohibition on foreign ownership, control, or domination.

Having determined that NINA is not currently subject to impermissible FOCD due to current financing, we turn to the possibility of impermissible future FOCD, which is addressed in NINA's NAP. As discussed below, NINA's NAP contains attributes that are either consistent with or more restrictive than NAPs previously approved by the NRC. For the reasons discussed below, the Board concludes that NINA's NAP is sufficient to negate any potential FOCD.

When, as here, the NRC Staff determines that an applicant is subject to impermissible FOCD, the NRC Staff's SRP requires it to consider whether additional actions are necessary to "negate" the FOCD,[229] and promptly thereafter to advise an applicant of such measures and request that the applicant submit a NAP.[230] The SRP further states that "[w]hen factors not related to ownership are present, the [negation action] plan shall provide positive measures that assure that the foreign interest can be effectively denied control or domination."[231] An applicant with foreign ownership can still be eligible for a license "if certain conditions are imposed, such as requiring that officers and employees of the applicant responsible for special nuclear material must be U.S. citizens."[232] Of particular significance here, the SRP also states that a foreign entity may provide more than 50% of the funding for a project.[233]

The Board finds that NINA's NAP is consistent with NAPs previously approved by the NRC. For example, NINA has proposed a 10% ownership restriction on TANE (and hence on Toshiba), which is smaller than similar restrictions on

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[227] 42 U.S.C. § 2133(d).

[228] FOCD SRP, 64 Fed. Reg. at 52,358 (Ex. NRC000106).

[229] *Id.* at 52,359.

[230] *Id.*

[231] *Id.*

[232] *Id.* at 52,358.

[233] *Id.*

foreign ownership the NRC has approved.[234] And, as stated above, any increase in Toshiba's, through TANE's, ownership above 10% would require NRC consent.[235] Additionally, unlike AmerGen and CENG,[236] NINA's NAP states that NINA would not have licensed operating authority for the reactor units.[237] Instead, STPNOC — which, unlike NINA, is a wholly domestic entity — would have sole operating authority for STP Units 3 and 4.[238] Likewise, the NRC Staff has previously approved measures that are substantially similar to the major provisions in NINA's NAP, i.e., (1) NINA's NAP allows a foreign CFO;[239] (2) NINA's NAP provides for the execution of Certificates of Special Duty to the United States government (something the NRC required only once before);[240] (3) NINA's NAP includes a NAC that is tasked with assessing FOCD compliance (another provision the NRC has required in only one other instance);[241] and (4)

[234] *See* Revised Safety Evaluation by NRR Regarding the Direct and Indirect Transfers of Control of Renewed Facility Operating Licenses Due to the Proposed Corporate Restructuring for Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2; Calvert Cliffs Independent Spent Fuel Storage Installation; Nine Mile Point Nuclear Station, Unit Nos. 1 and 2; and R.E. Ginna Nuclear Power Plant § 8.0 (Oct. 30, 2009) (Ex. NRC000154); *see also* Safety Evaluation for the Proposed Transfer of Clinton Power Station Operating License from Illinois Power Company to AmerGen Energy Company, LLC, § 5.0 (Nov. 24, 1999) (Ex. NRC000153).

[235] TANE's ownership would be subject to NINA's NAP and commitments in the revised COLA, which restrict TANE's ownership share to no more than 10% of NINA and require NRC consent, under 10 C.F.R. § 50.80, for any change in NINA's ownership of 5% or more (or a determination by NRC that such consent is not necessary). NINA's NAP is discussed in detail in Sections IV.C.3.b and IV.C.3.c, below.

[236] *See* Revised Safety Evaluation by NRR Regarding the Direct and Indirect Transfers of Control of Renewed Facility Operating Licenses Due to the Proposed Corporate Restructuring for Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2; Calvert Cliffs Independent Spent Fuel Storage Installation; Nine Mile Point Nuclear Station, Unit Nos. 1 and 2; and R.E. Ginna Nuclear Power Plant § 8.0 (Oct. 30, 2009) (Ex. NRC000154); *see also* Safety Evaluation for the Proposed Transfer of Clinton Power Station Operating License from Illinois Power Company to AmerGen Energy Company, LLC, § 5.0 (Nov. 24, 1999) (Ex. NRC000153).

[237] McBurnett Rebuttal Testimony at 4 (Ex. STPR00091).

[238] *Id.*

[239] This is consistent with other projects that either did not include restrictions or explicitly allowed for a foreign CFO (CENG) or even a foreign president (AmerGen).

[240] The Maine Yankee FOCD determination apparently was the only other instance where this has been required.

[241] CENG established an independent NAC that was composed of United States citizens who were not officers, directors, or employees of CENG. The role of the NAC was to serve CENG in a nonvoting advisory capacity to provide transparency to the NRC and other United States governmental authorities regarding foreign ownership and control of nuclear operations.

NINA's NAP includes a formal delegation of corporate authority to a Security Committee.[242]

Ms. Simmons even agreed that NINA's NAP includes all of the elements necessary for a sufficient NAP, were it not for her conviction that, through TANE, Toshiba has financial control of NINA. As stated by Ms. Simmons:

> The governance and structure requirements of their proposed Negation Action Plan are certainly consistent with previous FOCD determinations. They certainly are very broad. They certainly would be very effective. And in any situation where we didn't have financial control this would be a sufficient Negation Action Plan in, certainly, any of the cases I've reviewed and in any case that I can imagine where there would [not] be financial control.[243]

Thus, absent these concerns regarding possible foreign financial control of NINA, the NRC Staff agrees that NINA's NAP is sufficient to negate any potential FOCD.

Particularly compelling for the majority are two separate aspects of NINA's commitments, as set forth in its NAP: (1) a Security Committee and (2) a Nuclear Advisory Committee. Both are to be established before pouring safety-related concrete and both are to be composed entirely of United States citizens.[244] The Security Committee is invested with exclusive authority to make all corporate decisions for NINA regarding nuclear safety, security, and reliability matters, while the Nuclear Advisory Committee is responsible for monitoring STP Units 3 and 4 for compliance with FOCD restrictions, as well as for advising, and making recommendations to, the NINA Board regarding any measures needed to ensure NINA's FOCD compliance.[245]

In our estimation, these measures, taken together, ensure that NINA's financial obligations to TANE, and hence to Toshiba, cannot intrude on NINA's nuclear safety, security, and reliability obligations — matters which the Commission has stated are of particular concern under the AEA.[246]

The concurring opinion criticizes the majority for relying on NINA's NAP in finding there to be no FOCD here. But, we are not presented with the situation faced by the Board in *Calvert Cliffs*[247] — where the foreign entity proposed to own

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[242] The Security Committee structure is similar to the "Nuclear Committee" used by NEP to control its licensed interests in Seabrook and Millstone 3, and by PacifiCorp to control its licensed interest in Trojan.

[243] Tr. at 2135 (Ms. Simmons for the NRC Staff).

[244] COLA Rev. 9 at 1D-1 (Ex. STP000054).

[245] *Id.* at 1D-5, 1D-6.

[246] *Gen. Elec. Co.,* 3 AEC at 101. *See also* FOCD SRP, 64 Fed. Reg. at 52,357 (Ex. NRC000106).

[247] *See Calvert Cliffs,* LBP-12-19, 76 NRC at 187.

100% of the entire facility — and hence, where a NAP was of no consequence. As we have already found,[248] Toshiba, through TANE, does not own sufficient equity in NINA that we can characterize NINA as foreign-owned.

Instead, what we face here is an inquiry, not into "ownership," but rather into the other two operative words in the prohibition of AEA § 103d: "control or domination."[249] Unfortunately, 10 C.F.R. § 50.38, which is the NRC's regulation implementing AEA § 103d, adds little to our understanding of the meaning of these two words. Likewise, there is scant case law interpreting these two words.[250] Nor is there anything to aid our evaluation in either the legislative history of AEA § 103d[251] or the promulgation[252] of 10 C.F.R. § 50.38. Similarly, *Black's Law Dictionary* affords no clear answers in how we might establish a bright line between control or domination, on the one hand, and their absence, on the other.[253]

For this reason, even though the NRC's Standard Review Plan on FOCD[254] lacks the binding legal effect of a statute or regulation, it nevertheless must serve as our lodestar.[255] One of the creatures of that Standard Review Plan is the NAP — the mechanism the Standard Review Plan establishes to enable applicants to mitigate potential FOCD concerns involving not foreign ownership, but foreign control or domination.[256] If a license applicant's NAP can successfully wall off the foreign entity from influencing the applicant's decisionmaking regarding nuclear safety, security, and reliability concerns, then the AEA's prohibition on foreign control or domination will not stand in the way of the applicant seeking that license.

And so, in order to analyze whether Toshiba, through TANE, controls or dominates — or will control or dominate — NINA, the NAP occupies a central

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[248] *See* Section IV.C.1, above.

[249] 42 U.S.C. § 2132(d). As we observed *supra* note 51, another portion of section 103d of the AEA further states that "no license may be issued to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public." *Id.* However, neither Intervenors nor the NRC Staff have asserted that granting this license poses an inimicality concern, and so we need not address it here.

[250] As stated above, according to the Commission, control or domination must be of such a degree that the will of the licensee is "subjugated" to the will of the foreign entity, and the foreign entity must have "the power to direct the actions of the licensee." *Gen. Elec. Co.,* 3 AEC at 101. And, as stated above, the restriction "should be given an orientation toward safeguarding the national defense and security." *Id.*

[251] Legislative History of the Atomic Energy Act of 1954, at 1698, 1881, 1961-62, 2098, 2239.

[252] 21 Fed. Reg. 355 (Jan. 19, 1956). *See also Gen. Elec. Co.,* 3 AEC at 101.

[253] *See Black's Law Dictionary* 329 (9th ed. 2009).

[254] FOCD SRP, 64 Fed. Reg. at 52,358 (Ex. NRC000106).

[255] *Seabrook,* CLI-12-5, 75 NRC at 338.

[256] FOCD SRP, 64 Fed. Reg. at 52,359 (Ex. NRC000106).

role. Certainly the concurring opinion is correct that a NAP "is not defined or recognized in any law or regulation," that "there are no legal requirements for a NAP," and that there is "no legally binding definition of a NAP." But we disagree with the concurring opinion insofar as it suggests that a NAP lacks legal significance. NINA's NAP is part of its FSAR and, therefore, is "part of the licensing basis of the facility."[257] NINA, "if granted its license, must comply with those commitments — regardless of the fact that they do not take the form of formal license conditions."[258] Indeed, NINA concedes as much.[259] If NINA subsequently "wished to change those commitments to any significant extent, it would need to file a license amendment request, which . . . could then [be] challenge[d] by seeking a hearing."[260] Most importantly for our inquiry here, NINA's NAP describes how it will avoid the Golden Rule by effectively mitigating any potential foreign control or domination that would contravene section 103d of the Atomic Energy Act.

We also dispute the concurrence's conclusion that

> [w]e have made the determination that there is not currently improper FOCD. This is sufficient to satisfy the conditions for issuance of a license. I would leave it up to Staff expertise to determine the adequacy of the NAP to assure that FOCD issues do not arise in the future.

While the pertinent language of the AEA is certainly written in present tense, our inquiry does not end with evaluating FOCD concerns posed only by the current corporate structure and financing. Although AEA § 103d states that an applicant who "is" subject to FOCD is ineligible to apply for or obtain a license, once a license is granted, the prohibition on FOCD remains. Put another way, the license that NINA seeks encompasses more than merely the present — it extends decades into the future. And that "is" the corporate structure and financing that NINA's COLA describes for the entire temporal span encompassed by the license it seeks. Concomitantly, NINA's NAP addresses not only how it avoids FOCD now, but how it will continue to avoid FOCD throughout the entire license period.

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[257] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-03-8, 58 NRC 11, 21 (2003).

[258] *Id. See also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-9, 53 NRC 232, 235-36 (2001) (ruling that not all license commitments must be converted into license conditions in order to be enforceable, and declining to impose a license condition requiring the licensee to follow its NRC-approved emergency plan).

[259] COLA Rev. 9 at 1D-3 (Ex. STP000054). And, as stated by NINA, "any proposed change that would result in a decrease in the effectiveness of this Plan will not be implemented without the prior approval of the NRC." *Id.*

[260] *Private Fuel Storage,* CLI-03-8, 58 NRC at 21.

It is the majority's view that this makes the NAP critical to NINA's compliance with section 103d of the Atomic Energy Act. To be clear, however, while we find NINA's NAP to be sufficient to negate potential FOCD issues arising now or during the licensing period, this should not be read to deprive the NRC Staff from using its expertise to require additional restrictions — in NINA's NAP or in any license that is ultimately issued — that it deems necessary or otherwise warranted.[261]

For these reasons, the Board finds no evidentiary support for the position of the NRC Staff and Intervenors that Toshiba, through TANE, has financial control of NINA. Moreover, given the NRC Staff's concession that NINA's NAP would be effective in situations where financial control did not exist, we find by a preponderance of the evidence that NINA's NAP sufficiently negates any potential FOCD concerns. Accordingly, we conclude both that the current funding of NINA does not contravene the AEA's prohibition of foreign ownership, control, or domination and that NINA's NAP negates any potential FOCD concerns that would contravene that prohibition.

4. NINA's Proposed License Conditions

a. Recitation of Evidence

As part of its revised COLA, NINA proposed a license condition related to financing of construction.[262] Ms. Simmons for the NRC Staff expressed her concern that this proposed license condition allowed for the possibility of new

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[261] For example, during trial, NINA's CEO, Mr. McBurnett testified that it will not proceed with the post-licensing phase for STP Units 3 and 4 unless and until it obtains project financing from a wholly nonforeign source. At that point in time, the loans from Toshiba, through TANE, would have to be extinguished before construction begins as part of Project Finance — likely backed by a conditional Department of Energy loan guarantee. McBurnett Direct Testimony at 10-11 (Ex. STP000036); *see also* Letter from S. Head, NINA, to NRC Document Control Desk, "Additional Information Concerning Financial Qualifications," Attach. 3, at 11 (Oct. 5, 2011) (Ex. STP000066). Moreover, in post-trial pleadings, NINA has offered to accept license conditions that would memorialize these commitments. *See* Nuclear Innovation North America LLC's Proposed Findings of Fact and Conclusions of Law for Contention FC-1 at 123-26 (Feb. 7, 2014). *See also* COLA Rev. 9 at 1D-2 (Ex. STP000054). Although we have concluded there is no FOCD here, and hence that such license conditions are not needed to mitigate potential FOCD (see discussion *infra* Section IV.C.3.c), we have been presented with no reason why the NRC Staff could not require NINA to amend its NAP to include these substantial commitments, or to impose such conditions in the license, or both.

[262] COLA Rev. 9 at 1.0-13, 1D-16 (Ex. STP000054). This proposed license condition is reproduced in its entirety in Appendix A to this decision.

investors.[263] Ms. Simmons opined that such a condition was not ministerial,[264] because it would require the NRC to assess whether the new investors were foreign controlled.[265] Additionally, Ms. Simmons took issue with the prospective nature of this proposed license condition.[266]

At the request of the Board,[267] NINA also included additional proposed license conditions within its proposed findings of fact and conclusions of law.[268] Those proposed license conditions were divided into two parts. First, the Applicant proposed license conditions that are specific to its application and so modified its proposed license condition in the revised COLA in an attempt to resolve some of the concerns that NRC Staff expressed during trial.[269] Second, the Applicant proposed license conditions that are based upon typical FOCD conditions contained in license transfer proceedings, revised to reflect the responsibilities of NINA during construction and STPNOC during operation.[270]

The NRC Staff opposes NINA's proposed license conditions because they "formalize existing proposals that are ineffective at negating FOCD"[271] and because they "implement and maintain an already ineffective (NAP)."[272] Additionally, the NRC Staff argues that NINA's proposed license conditions represent "financial proposals that are unsupported by, or contradict, the record."[273] Furthermore, the NRC Staff argues that one proposed license condition is directed at STPNOC, the proposed operator of STP Units 3 and 4, which "the Staff has already concluded . . . is not subject to FOCD, and [so] a negation action measure directed at STPNOC does not negate FOCD of NINA in its role as the lead applicant . . . ."[274]

Intervenors' argue that NINA's proposed license conditions are not supported

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[263] Tr. at 2213-18, 2519-21, 2524-25 (Ms. Simmons for the NRC Staff).

[264] The requirement that a license condition be ministerial in nature will be discussed in Section IV.C.4.b, below.

[265] *Id.* at 2213-18, 2519-21, 2524-25 (Ms. Simmons for the NRC Staff).

[266] *Id.* at 2516-18, 2543-45 (Ms. Simmons for the NRC Staff).

[267] *Id.* at 2494 (Judge Gibson).

[268] *See* Nuclear Innovation North America LLC's Proposed Findings of Fact and Conclusions of Law for Contention FC-1 at 123-26 (Feb. 7, 2014). These proposed license conditions are reproduced in their entirety in Appendix A to this decision.

[269] *See id.* at 124-25.

[270] *See id.* at 126.

[271] NRC Staff Memorandum in Response to NINA's New License Conditions (Feb. 18, 2014) at 2.

[272] *Id.* at 3.

[273] *Id.* at 7-8.

[274] *Id.* at 1-2.

by the law,[275] fail to address the alleged financial control of NINA,[276] and wrongly presume the adequacy of its proposed NAP.[277]

b. Legal Analysis and Findings

As the Commission has made clear, "license conditions can be an acceptable method for providing reasonable assurance of financial qualifications . . . ."[278] To be an acceptable method, a proposed license condition must be "ministerial" and by its very nature "require" and be readily susceptible to post-licensing verification such that the NRC Staff is not deferring its safety finding through the use of the license condition.[279] The NRC often utilizes license conditions when approving license transfers.[280]

Having determined that NINA is not subject to impermissible FOCD and that its NAP is sufficient to negate potential FOCD, the Board declines to determine whether NINA's proposed license conditions are ministerial in nature and require post-licensing verification. For the same reason, the Board declines to decide the appropriateness of NINA's proposed license conditions, and leaves to the NRC Staff any decision as to the inclusion of NINA's proposed license conditions in any COLs it issues for STP Units 3 and 4.

D. Summary of Findings of Fact and Conclusions of Law

The Board has considered the testimony and evidence presented by the parties on Contention FC-1. Based upon a review of the entire record in this proceeding and the proposed findings of fact and conclusions of law submitted by the parties, and based upon the factual and legal analyses set forth above, which are supported

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[275] Intervenors' Memorandum in Response to Applicant's Proposed License Conditions Relating to Foreign Ownership, Control and Domination (Feb. 18, 2014) at 8.

[276] *Id.* at 6-7.

[277] *Id.* at 4-5.

[278] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 29 (2000).

[279] *Id.* at 33.

[280] *See, e.g., Illinois Power Co.* (Clinton Power Station), Commission Order (Order Approving Transfer of License and Conforming Amendment) at 3-4 (Nov. 24, 1999) (unpublished) (Ex. STP000073); *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), Commission Order (Order Approving Transfer of License & Conforming Amendment) at 3-4 (June 6, 2000) (unpublished) (Ex. STP000074); *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), Commission Order (Order Approving Transfer of License and Conforming Amendment) at 5-6 (July 7, 2000) (unpublished) (Ex. STP000075); *Maine Yankee Atomic Power Co.* (Maine Yankee Atomic Power Station) Commission Order (Confirmatory Order Modifying License) at 4-5 (June 4, 2012) (unpublished) (Ex. NRC000164).

by reliable, probative, and substantial evidence in the record, the Board has decided all matters in controversy concerning this contention and makes the following findings of fact and conclusions of law. NINA has carried its burden of demonstrating by a preponderance of the evidence that it is not subject to impermissible FOCD and that its revised COLA does not contravene section 103d of the AEA and 10 C.F.R. § 50.38. The evidence confirms NINA's claims that it is not subject to impermissible FOCD. As explained above, we find that NINA has demonstrated that its corporate ownership and governance provisions indicate that Toshiba, through TANE, is not in a position to control or dominate decisions related to nuclear safety, security, or reliability and that Toshiba, through TANE, lacks financial control over NINA. Moreover, to the extent there are potential FOCD issues, NINA's NAP sufficiently negates any potential FOCD concerns that would contravene the AEA's prohibition of foreign ownership, control, or domination. Contention FC-1 is therefore resolved in favor of NINA.

Pursuant to 10 C.F.R. § 2.1210, it is, this 10th day of April 2014, ORDERED, that:

A. Intervenors' Contention FC-1 is resolved on the merits in favor of NINA.

B. In accordance with 10 C.F.R. § 2.341(c)(1), this Partial Initial Decision will constitute a final decision of the Commission 120 days from the date of issuance (or the first agency business day following that date if it is a Saturday, Sunday, or federal holiday, *see* 10 C.F.R. § 2.306(a)), unless a petition for review is filed in accordance with 10 C.F.R. § 2.1212, or the Commission directs otherwise. Any party wishing to file a petition for review on the grounds specified in 10 C.F.R. § 2.341(b)(4) must do so within twenty-five (25) days after service of this Partial Initial Decision. Any petition for review shall conform to the requirements of 10 C.F.R. § 2.341(b)(2)-(3).

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Michael M. Gibson, Chairman
ADMINISTRATIVE JUDGE

Randall J. Charbeneau
ADMINISTRATIVE JUDGE

Gary S. Arnold*
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 10, 2014

*Concurring in the result only. My concurring opinion follows.

Concurring Opinion of Judge Arnold

I agree with the principal finding of this order, that NINA does not have inappropriate FOCD issues, and I agree with how this finding was arrived at. I also agree with the majority of this Board in that the NAP has no obvious inadequacy. However I do not believe that the Board should give unqualified approval of the NAP expressed as a finding of this order. This is for three reasons: this finding is beyond the scope of this proceeding, this finding is not required to dispose of the instant issue, and the NAP was not properly evaluated by the Board.

The NAP is not defined or recognized in any law or regulation. It is addressed in neither the Atomic Energy Act nor the *Code of Federal Regulations.* There are no legal requirements for a NAP. There is no legally binding definition of a NAP. It exists only as a concept in a guidance document. Certainly when foreign entities are entangled with ownership and financing of a nuclear power plant, some means should be used to assure it does not lead to improper FOCD in the future. But I have seen nothing that defines the NAP as the legally required means of doing this. This Board exists to determine whether the revised COLA meets the legal requirements concerning foreign ownership, control, and domination as defined in the Atomic Energy Act and 10 C.F.R. Part 50. To find that the NAP meets its legal requirements is nonsense when there are no such legal requirements. Furthermore, review of the contention as initially posed by Intervenors reveals that not only do Intervenors not challenge the NAP, but they do not even mention it.[281] I believe that a legal finding concerning the NAP is beyond the scope of this proceeding.

A finding on the NAP is not needed in this order. As testified by Ms. Simmons when she pointed to AEA § 103d and 10 C.F.R. § 50.38 as prohibiting the issuance of a license "to an alien or any corporation or other entity if the Commission knows or has reason to believe it *is* owned, controlled or dominated by an alien, a foreign corporation, or a foreign government,"[282] the FOCD determination is based on current conditions, not hypothetical future conditions. This is different from the NAP, which is primarily to ensure that FOCD issues do not arise in the future. We have made the determination that there is not currently improper FOCD. This is sufficient to satisfy the conditions for issuance of a license. I would leave it up to Staff expertise to determine the adequacy of the NAP to assure that FOCD issues do not arise in the future.

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[281] *See* Intervenors' Motion for Leave to File a New Contention Based on Prohibitions Against Foreign Control (May 16, 2011). Intervenors have not subsequently modified their contention.

[282] Simmons Direct Testimony at 45 (Ex. NRCR00101) (citing 42 U.S.C. § 2133(d) (emphasis added by the NRC Staff)).

My final reason for opposing a legal finding concerning the NAP is that I do not believe that the Board has properly and rigorously evaluated the NAP. To do this properly, a full list of potential FOCD issues must be compared to the NAP to evaluate whether or not the NAP has provisions to negate each and every potential future issue. Although we have determined that the NAP is adequate to negate some potential future issues, our evaluation has not been sufficiently rigorous to guarantee that all possible future issues are excluded by the NAP. Alternatively, if we could find a precedent, where the same exact FOCD concerns existed in a COLA, we might be able to use a prior Staff evaluation to conclude that the current NAP is adequate. We have not done this either. Thus any legal finding concerning the adequacy of the NAP is not sufficiently supported by the record.

I do, however, believe that the NAP likely meets its intended purpose of avoiding the potential for future FOCD issues. It achieves this by establishing an administrative framework within which important safety issues are decided solely by United States citizens, and by assuring domestic funding of construction. But my opinion is based on the Staff's review of the NAP, not on that of the Board. Ms. Simmons testified regarding the NAP, "in any situation where we didn't have financial control this would be a sufficient Negation Action Plan."[283] But the Board has found that there is no financial control. Hence Ms. Simmons' statement indicates that the Staff's extensive evaluation implies that the NAP is adequate to address future potential FOCD issues.

Rather than make a legal finding that the NAP is adequate, I would prefer that this order merely note that in the absence of financial control, the Staff's review indicates the adequacy of the plan.

I would also prefer that this order did not address the topic of license conditions unless their consideration is essential for our decision. In this case, such a discussion is not necessary to achieve the purpose of the order. The discussion contains information of which all parties are aware and that are documented elsewhere. Rather than state anything beneficial concerning the proposed license conditions, our order merely punts, stating that we will leave it up to Staff to decide the appropriateness of proposed license conditions. The primary effect of this dictum is to increase the length of the order, an effect that I consider undesirable.

In summary, I agree with this order except as noted in my concurring opinion above.

[283] Tr. at 2135 (Ms. Simmons for the NRC Staff).

APPENDIX A
(Proposed License Conditions)

As part of its revised COLA, NINA proposed a license condition related to financing of construction.[284] That proposed license condition is as follows:

> Excepting only construction otherwise authorized by an exemption granted by the NRC, construction pursuant to this license shall not commence before funding is fully committed at a Financial Closing with Lenders in connection with a Project Finance for STP 3&4. At least 30 days prior to the Financial Closing, the Licensee shall make available for NRC inspection, draft copies of documents to be executed at the Financial Closing of the Project Finance that demonstrate the following:
>
> 1. The United States Department of Energy, or other agency of the United States Government, will either loan the funding for or guarantee loans for at least 50% of the construction funding to be provided through loans;
>
> 2. The Lenders' Independent Engineer has provided an updated estimate of the Total Project Costs;
>
> 3. Funding totaling not less than the amount of Total Project Costs estimated by the Lenders' Independent Engineer shall have been funded or will be made available through: (1) equity either funded or committed by a Qualified Investor; and/or (2) loans committed by a government institution of the United States and/or one or more Qualified Financial Institution; and
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> 4. In order to provide financial support during operations, provisions are made in the Financial Closing for the following to be maintained upon initial plant operation: (1) a debt service Reserve in amount not less than one year's worth debt service payments (*e.g.,* initially more than $600 million); and (2) a revolving credit facility of at least $100 million for operating and maintenance expenses, with a requirement that a zero balance be maintained at least once per year.
>
> For purposes of the foregoing, a Qualified Investor must have a senior, unsecured and unenhanced credit rating of BBB- or higher by Moody's and Baa3 or better by Standard & Poor's (S&P), or a rating meeting other comparable international standards, and a Qualified Financial Institution must have a senior, unsecured and unenhanced credit rating of A2 or higher by Moody's and A or better by Standard & Poor's (S&P), or a rating meeting other comparable international standards.[285]

At the request of the Board,[286] NINA also included within its proposed findings

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[284] COLA Rev. 9 at 1.0-13, 1D-16 (Ex. STP000054).

[285] *Id.* at 1.0-13.

[286] *Id.* at 2494 (Judge Gibson).

of fact and conclusions of law additional proposed license conditions.[287] NINA's proposed license conditions are as follows:

a) Any proposed change to the Negation Action Plan in Appendix 1D of the FSAR that would result in a decrease in the effectiveness of this Plan shall not be implemented without the prior approval of the NRC.

b) NINA shall not issue any additional voting equity interest to TANE, if this would result in TANE's total interest exceeding 10% of the NINA voting equity interests, except upon obtaining the prior written consent of the NRC's Director, Office of Nuclear Reactor Regulation or Director, Office of New Reactors.

c) NINA shall obtain the prior written consent of the NRC's Director, Office of Nuclear Reactor Regulation or Director, Office of New Reactors before implementing any proposed transfer of 5% or more of the voting equity interests in NINA from any existing owner of such interests to a new owner. If any such transfer involves a direct or indirect transfer of control of the licenses held by NINA within the meaning of 10 C.F.R. § 50.80, the applicable hearing procedures of 10 C.F.R. Part 2, Subpart M shall apply to such approval.

d) Commencement of licensed construction activity at the Facility (excluding any exempted activity) is not authorized until the following shall have occurred, or NINA has obtained NRC approval of a license amendment pursuant to 10 C.F.R. § 50.92 for alternative financing of construction costs:

    i. All amounts due and owing pursuant to the TANE Credit Facility shall have been paid.

    ii. Financing for the construction costs of the Facility shall have been provided through a loan from the United States Federal Finance Bank (FFB) following closing of a project finance pursuant to terms approved and agreed upon by the FFB and the United States Department of Energy's Loan Guarantee Program Office.

    iii. Any required equity contributions for construction costs shall have been provided by the voting equity owners of NINA in proportion to their voting equity interests in NINA.

e) The proposed "Fourth Amended and Restated Operating Agreement of Nuclear Innovation North America LLC" shall be executed and enter into force within 60 days after issuance of the NRC licenses.

[287] *See* Nuclear Innovation North America LLC's Proposed Findings of Fact and Conclusions of Law for Contention FC-1 at 123-26 (Feb. 7, 2014).

f) The Fourth Amended and Restated Operating Agreement of Nuclear Innovation North America LLC may not be modified in any material respect concerning decision-making authority of the Security Committee as defined therein without the prior written consent of the Director, Office of Nuclear Reactor Regulation or the Director, Office of New Reactors.

g) Members of NINA's Board with more than 50% of the voting interests shall be appointed by nonforeign owners and shall be U.S. citizens.

h) The NINA Chief Executive Officer (CEO), NINA Chief Nuclear Officer (CNO) (if someone other than the CEO), and Chairman of the NINA Board shall be U.S. citizens. Subject to the authority of the Security Committee, the CEO and CNO shall have the responsibility and exclusive authority to ensure, and shall ensure, that the business and activities of NINA with respect to the NRC licenses are at all times, conducted in a manner consistent with the protection of the public health and safety and common defense and security of the United States, as set forth in Title 10 of the Code of Federal Regulations and the Combined License.

i) The STPNOC Chief Executive Officer (CEO) shall be a U.S. citizen at all times. Following the finding that the acceptance criteria are met under 10 C.F.R. § 52.103(g) or allowing operation during an interim period under the combined license under 10 C.F.R. § 52.103(c), these individuals shall have the responsibility and exclusive authority to ensure, and shall ensure, that the business and activities of STPNOC with respect to the NRC licenses are at all times conducted in a manner consistent with the protection of the public health and safety and common defense and security of the United States, as set forth in Title 10 of the Code of Federal Regulations and the Combined License, including the Technical Specifications.[288]

[288] *See id.*

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Paul S. Ryerson, Chairman
Alex S. Karlin
Dr. Jeffrey D.E. Jeffries

In the Matter of **Docket Nos. 50-237-EA**
50-249-EA
(ASLBP No. 14-930-01-EA-BD01)

EXELON GENERATION
COMPANY, LLC
(Dresden Nuclear Power Station,
Units 2 and 3) **April 17, 2014**

In this Memorandum and Order, the Atomic Safety and Licensing Board (Board) determines that petitioner failed to establish standing under 10 C.F.R. § 2.309(d) and failed to proffer an admissible contention under 10 C.F.R. § 2.309(f)(1), denies its petition to intervene and request for hearing, and terminates the proceeding before the Board.

RULES OF PRACTICE: INTERVENTION PETITION (PLEADING REQUIREMENTS)

To intervene as a party in an adjudicatory proceeding concerning an NRC enforcement order, a petitioner must (1) establish it has standing; and (2) proffer at least one admissible contention.

RULES OF PRACTICE: ENFORCEMENT ACTIONS (PLEADING REQUIREMENTS)

Unlike demands for a hearing by the subject of an enforcement order, which are automatic without regard to satisfying 10 C.F.R. § 2.309, both the Commission and other licensing boards have consistently required third parties seeking intervention with respect to an enforcement order to meet the 10 C.F.R. § 2.309 criteria, and have not considered such requests to be automatic.

RULES OF PRACTICE: ENFORCEMENT ACTIONS

Although on its face the language of 10 C.F.R. § 2.202(a)(3) might be ambiguous, its regulatory history makes clear that the Commission did not intend to relieve third-party individuals who are not the subject of an enforcement order (but who nonetheless seek a hearing on the order) from satisfying the requirements for a petition for intervention set forth in 10 C.F.R. § 2.309.

RULES OF PRACTICE: ENFORCEMENT ACTIONS (SCOPE OF PUBLIC PARTICIPATION)

Generally, a nonparty petitioner may not challenge a confirmatory order embodying a settlement if the order improves the safety situation over what it was in the absence of the order.

RULES OF PRACTICE: ENFORCEMENT ACTIONS

The critical inquiry in a proceeding involving any confirmatory order is whether the order somehow diminishes the licensee's health and safety conditions.

RULES OF PRACTICE: ENFORCEMENT ACTIONS

Settlements of NRC enforcement actions are favored. If employees do not assert a plausible adverse effect on safety or the environment, they may not initiate an NRC adjudicatory proceeding to void the decision of their company's management to settle an enforcement action.

RULES OF PRACTICE: DISCRETIONARY INTERVENTION

Discretionary intervention may be considered only when at least one requestor/petitioner has established standing and at least one admissible contention has been admitted so that a hearing will be held.

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY PRESUMPTION)

The NRC's proximity presumption to establish standing has no application in an enforcement proceeding such as this. The presumption is limited to reactor licensing proceedings and to other cases where there is an obvious potential of offsite radiological consequences.

MEMORANDUM AND ORDER
(Denying Petition to Intervene and Request for Hearing)

Before the Board is a petition to intervene and request for hearing submitted by Local Union 15, International Brotherhood of Electrical Workers, AFL-CIO (Local 15).[1] The petition requires that we address this question: When may a nonparticipant challenge the settlement of an NRC enforcement action before an Atomic Safety and Licensing Board?

Our dissenting colleague reads the right to a hearing under section 189a(1)(A) of the Atomic Energy Act[2] broadly. Consistent with the Commission's guidance and regulations, a majority of the Board reads the Act more narrowly.

Generally, a nonparty petitioner may not challenge a confirmatory order embodying a settlement if the order "improves the safety situation over what it was in the absence of the order."[3] Nonetheless, as the Commission has recognized, the NRC's notice of opportunity for hearing on a confirmatory order provides the public a "safety valve" because "conceivably" the order might "remove a restriction upon a licensee or otherwise have the effect of *worsening* the safety situation."[4] As the Commission has also recognized, however, such situations should be rare, as the intended purpose of all confirmatory orders is to enhance, rather than diminish, public safety. Therefore, the Commission has stated, "[i]n practicality it is unlikely that petitioners will often obtain hearings on confirmatory enforcement orders."[5] Indeed, in half a century of proceedings before Atomic Safety and Licensing Boards, it appears no union has ever established standing to challenge a confirmatory order, and only one other has tried.[6]

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[1] *See* Petition to Intervene and Request for Hearing (Dec. 12, 2013) [hereinafter Petition].

[2] 42 U.S.C. § 2239(a)(1)(A).

[3] *Alaska Department of Transportation and Public Facilities,* CLI-04-26, 60 NRC 399, 406 (2004).

[4] *Id.* at 406 n.28 (emphasis added).

[5] *Id.*

[6] The licensing board in that case rejected the union's claim to standing, but the appeal board (under the rules then in effect) permitted discretionary intervention. *See Consumers Power Co.* (Palisades

(Continued)

Against this backdrop, Local 15 asks the Board to set aside an October 28, 2013 Confirmatory Order (Confirmatory Order) that arose from the settlement of an enforcement dispute between the owner of the Dresden Nuclear Power Station (Exelon Generation Company (Exelon)) and the NRC Staff. Local 15 represents certain of Exelon's employees but was not a party to the settlement. Asserting that "those employees have been entirely excluded from the process of developing the settlement agreement between Exelon and the NRC,"[7] Local 15 claims that the Confirmatory Order (1) imposes new obligations on Exelon employees without sufficient justification; (2) imposes obligations that are "intrusive and ill-defined"; and (3) "improperly endorses and confirms" Exelon's failure to bargain with Local 15 concerning these new obligations, allegedly in violation of the National Labor Relations Act.[8] If the Confirmatory Order is rescinded, it contends, settlement discussions should commence anew, this time with the "essential" participation of Local 15.[9]

Local 15 did *not* timely allege — nor, in the Board's opinion, can Local 15 credibly claim — that the Confirmatory Order renders operation of Exelon's Dresden Nuclear Power Station less safe. Nor does Local 15 claim that, in any other way, the Confirmatory Order adversely affects compliance with the laws the NRC is charged with enforcing. In such circumstances, the Commission's decisions and sound public policy indicate that a nonparty such as Local 15 is not entitled to a hearing before an Atomic Safety and Licensing Board. Because Local 15 has not established standing to intervene, and also because it has failed to proffer a contention that is suitable for an evidentiary hearing before this Board, we deny its petition.

Many commitments by corporations have consequences for their employees. To clarify: The Board does not rule that, by reason of being employed by Exelon, any individual loses the right to request an NRC hearing on a safety or environmental issue. Rather, we conclude that, not having adequately pled any such concern, an employee cannot seek a hearing on other consequences that flow from Exelon's decision to settle an NRC enforcement action. If they do not assert a plausible adverse effect on safety or the environment, dissatisfied employees may not initiate an NRC adjudicatory proceeding to void the decisions of their company's management.

Nuclear Plant), LBP-81-26, 14 NRC 247 (1981), *rev'd on other grounds,* ALAB-670, 15 NRC 493 (1982). Subsequently, the Commission vacated both decisions, ruling that they should not be cited as precedent. CLI-82-18, 16 NRC 50 (1982).

[7] Reply of Local Union No. 15, International Brotherhood of Electrical Workers, AFL-CIO to NRC Staff and Exelon Answers Opposing Local 15's Petition to Intervene and Request for Hearing (Feb. 14, 2014) at 4 [hereinafter Local 15 Reply].

[8] Petition at 7, 15, 19.

[9] Local 15 Reply at 10.

I. BACKGROUND

The underlying facts are not in dispute.

On June 6, 2012, the NRC's Office of Investigations Region III field office initiated an investigation to determine whether a senior reactor operator at the Dresden facility planned to commit a violent crime (robbing an armored car) and whether other employees knew of the plan but failed to report it.[10] Based on its investigation, the NRC Staff concluded that several employees failed to fulfill the requirements of Exelon's behavioral observation program, as required by 10 C.F.R. § 73.56(f).[11]

Accordingly, on July 3, 2013, the Staff notified Exelon of the apparent violation.[12] Before making a final enforcement decision, however, the Staff provided Exelon the opportunity to request alternative dispute resolution.[13] This is a voluntary and informal process, arranged through Cornell University's Institute on Conflict Resolution, in which a trained neutral mediator with no decisionmaking authority assists the parties in reaching a mutually agreeable resolution.[14] Exelon agreed to attend such a session, which took place on September 18, 2013.[15] Thereafter, the NRC Staff reached a settlement agreement with Exelon and memorialized the terms in the Confirmatory Order, which Exelon agreed would apply to its entire fleet of operating reactors.[16]

As part of the settlement agreement, the NRC credited Exelon for actions it took unilaterally following the incident with respect to its behavioral observation program.[17] Additionally, Exelon volunteered to further revise its behavioral ob-

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[10] Letter from G. Shear, Director, Division of Reactor Safety, to M. Pacilio, Exelon, Dresden Nuclear Power Station, Units 2 and 3; Report Nos. 05000237/2013407; 05000249/2013407 (DRS) and Results of Investigation Report No. 3-2012-020 (July 3, 2013) at 5 (ADAMS Accession No. ML13184A232).

[11] *Id.* at 2.

[12] *See id.*

[13] *Id.*

[14] *Id.* at 3.

[15] *See* Letter from S. Orth, Enforcement/Investigations Office, NRC, to M. Pacilio, Exelon, Alternative Dispute Resolution Session on September 18, 2013 (Sept. 9, 2013) (ADAMS Accession No. ML13253A196).

[16] In the Matter of Exelon Generation Company, LLC; Dresden Nuclear Power Station Confirmatory Order Modifying License, 78 Fed. Reg. 66,965 (Nov. 7, 2013) [hereinafter Confirmatory Order].

[17] As acknowledged in the Confirmatory Order, Exelon stated it had already (1) revised its behavioral observation program procedure to indicate that the program includes an expectation to report offsite illegal activity; (2) conducted a fleet-wide briefing of the issue and the expectation to report unusual behavior observed either on or offsite; (3) trained Dresden facility personnel on the changes to the procedure and the expectations for reporting aberrant offsite activities; (4) verified that Dresden facility personnel understood these requirements and guidance; and (5) revised its general employee training program used at other Exelon reactor facilities, to include guidance on reporting offsite aberrant activities. *Id.* at 66,965.

servation program within 90 days to provide additional guidance and training on what types of offsite activities or information should be reported.[18] Exelon also volunteered to (1) conduct an effectiveness assessment of these revised procedures within 18 months; (2) present the facts and lessons learned from the underlying events at an industry forum within 90 days; and (3) notify the NRC as actions are completed.[19] In exchange, the NRC agreed not to issue a notice of violation or civil penalty and not to take any further enforcement action in the matter.[20]

In proposing the changes to its behavioral observation program that were incorporated in the Confirmatory Order, Exelon took the initiative. As Local 15 states: "It is important to note that the changes to Exelon's behavioral observation program recited by the Order were not imposed upon Exelon by the NRC."[21] Rather, as Local 15 notes, many of the changes had already been implemented by Exelon independently. Moreover, it is "likely," the union suggests, that the rest were proposed by Exelon itself in what Local 15 calls "a gambit on Exelon's part to placate the NRC and avoid fines or other sanctions."[22] Local 15 charges that Exelon "could have involved the Union in the process of developing a response to the NRC investigation but chose not to do so."[23] Although it acknowledges that the Confirmatory Order "is nominally directed to the licensee," and that Exelon "bears the burden of revising its Behavioral Observation Program . . . consistent with the terms of the order," Local 15 asserts that it is actually Exelon's employees "who are directly and adversely affected."[24]

On December 4, 2013, Local 15 filed an ongoing unfair labor practice charge with Region 13 of the National Labor Relations Board, alleging that Exelon's failure to involve the union was a violation of its and its members' statutorily and contractually protected bargaining rights.[25] On December 12, 2013 — after the NRC denied its request for a 90-day extension of the time in which to respond to the NRC's notice of opportunity for hearing[26] — Local 15 also filed the instant

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[18] *Id.*

[19] *Id.* at 66,965-66.

[20] *Id.* at 66,966.

[21] Petition at 20.

[22] *Id.*

[23] *Id.*

[24] Local 15 Reply at 3.

[25] *See Exelon Generation Co., L.L.C.,* NLRB Case No. 13-CA-118294. On March 5, 2014, Local 15 filed a new and related charge that has been docketed by Region 13 as Case 13-CA-123795.

[26] *See* Confirmatory Order, 78 Fed. Reg. at 66,965; Letter from R. Skolnick to R. Zimmerman (Nov. 22, 2013); Memorandum from A. Vietti-Cook, Secretary, Nuclear Regulatory Commission, to E. R. Hawkens, Chief Administrative Judge, Atomic Safety and Licensing Board Panel, Request for Hearing in the Matter of Exelon Generation Company, LLC, Dresden Nuclear Power Station, Docket Nos. 50-237-EA and 50-249-EA, Confirmatory Order Modifying License (Dec. 13, 2013) (ADAMS Accession No. ML13347B340).

hearing request with the NRC. It submits three contentions and asks the NRC to rescind the Confirmatory Order. Exelon and the NRC Staff oppose.[27]

Exelon has moved to strike part of Local 15's reply, in which, for the first time, Local 15 attempts to argue that the Confirmatory Order could actually have an adverse effect on safety at the Dresden Nuclear Power Plant.[28] For the reasons set forth below, the Board grants Exelon's motion to strike.

II. ANALYSIS

To intervene as a party, Local 15 must (1) establish it has standing; and (2) proffer at least one admissible contention.[29] Somewhat belatedly, Local 15 contends that, under 10 C.F.R. § 2.202(a)(3), it may demand a hearing without complying with these requirements.[30] It is incorrect.

Although on its face the language of 10 C.F.R. § 2.202(a)(3)[31] might be ambiguous, its regulatory history makes clear that the Commission did not intend to relieve third-party individuals who are not the subject of an enforcement order (but who nonetheless seek a hearing on the order) from satisfying the requirements for a petition for intervention set forth in 10 C.F.R. § 2.309. These requirements include satisfying both the standing criteria in section 2.309(d) and the contention admissibility criteria in section 2.309(f). Unlike demands for a hearing by the subject of an enforcement order, which are automatic without

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[27] Exelon's Answer Opposing the Petition to Intervene and Hearing Request Filed by Local Union No. 15, International Brotherhood of Electrical Workers, AFL-CIO (Jan. 24, 2014); NRC Staff Answer to Petition to Intervene and Request for Hearing (Jan. 24, 2014). Local 15 filed a timely reply on February 14, 2014, and all parties submitted responses to the Board's written questions on February 28, 2014. *See* Local 15 Reply; *see also* Memorandum of Local 15, International Brotherhood of Electrical Workers, AFL-CIO Responding to Atomic Safety and Licensing Board Questions for Oral Argument (Feb. 28, 2014); Exelon's Memorandum Responding to the Questions in the Board's February 5, 2014 Order (Feb. 28, 2014); NRC Staff Memorandum in Response to Board Order Concerning Instructions for Oral Argument (Feb. 28, 2014). The Board heard oral argument in Morris, Illinois, on March 6, 2014.

[28] Exelon's Motion to Strike (Mar. 13, 2014); Local 15, International Brotherhood of Electrical Workers, AFL-CIO's Response in Opposition to Exelon's Motion to Strike (Mar. 20, 2014).

[29] 10 C.F.R. § 2.309(a).

[30] Memorandum of Local 15, International Brotherhood of Electrical Workers, AFL-CIO Responding to Atomic Safety and Licensing Board Questions for Oral Argument (Feb. 28, 2014) at 1-2.

[31] Section 2.202(a)(3) provides that, upon issuance of an enforcement order, the NRC must:

> [i]nform the licensee or any other person adversely affected by the order of his or her right, within twenty (20) days of the date of the order, or such other time as may be specified in the order, to demand a hearing on all or part of the order, except in a case where the licensee or other person has consented in writing to the order . . . .

regard to satisfying 10 C.F.R. § 2.309,[32] both the Commission and other licensing boards have consistently required third parties seeking intervention with respect to an enforcement order to meet the 10 C.F.R. § 2.309 criteria, and have not considered such requests to be automatic.

Prior to 1991,[33] the 10 C.F.R. Part 2 regulations limited the NRC's ability to issue orders to unlicensed persons.[34] The purpose of the 1991 amendments was, in relevant part, to revise these regulations "to include persons not licensed by the Commission but who are otherwise subject to the Commission's jurisdiction" and to identify which types of Commission orders include hearing rights.[35] Nearly all of the discussion in the Statement of Considerations for the 1991 amendments concerns the NRC's new procedures to issue orders upon unlicensed persons subject to the Commission's jurisdiction. It does not inform the question relevant to *Palisades* and to the instant proceeding — namely, what hearing rights are afforded under section 2.202(a)(3) to "other person[s] adversely affected by the order" but who are not the subject of the order.

There is, however, one passage in the Statement of Considerations where such third-party hearing rights are discussed in the context of the availability of third-party hearing rights when the subject of the order consents to its issuance:

> Section 2.202 provides that if the licensee or other person to whom an order is issued consents to its issuance, or the order confirms actions agreed to by the licensee or such other person, that consent or agreement constitutes a waiver by the licensee or such other person of a right to a hearing and any associated rights. . . . Whether or not the licensee or other person consents to an order, *other persons adversely affected by an order* issued under § 2.202 to modify, suspend or revoke a license will be offered an *opportunity for a hearing consistent with current practice and the authority of the Commission to define the scope of the proceeding on an enforcement order.*[36]

As reflected in the *Palisades* decisions, the "current practice" of the Commission at the time of the 1991 amendments was to treat third-party requests for a hearing on an enforcement order as a petition for intervention under the Commission's

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[32] *See Andrew Siemaszko,* CLI-06-16, 63 NRC 708, 714 n.3 (2006) (stating that 10 C.F.R. § 2.202 provides for an "automatic grant of such hearing requests").

[33] *See* Revisions to Procedures to Issue Orders; Deliberate Misconduct by Unlicensed Persons, 56 Fed. Reg. 40,664 (Aug. 15, 1991).

[34] *See* 10 C.F.R. §§ 2.202, 2.204 (1990) (providing Commission procedure for issuing an "Order to show cause" and "Order for modification of license," respectively, but only upon a "licensee").

[35] 56 Fed. Reg. at 40,664. These 1991 amendments also served to put licensed and unlicensed persons on notice that they may be subject to an enforcement action for deliberate misconduct or deliberately providing incomplete or inaccurate information to the agency. *Id.* at 40,665.

[36] *Id.* at 40,678 (emphasis added) (citing *Bellotti v. NRC,* 725 F.2d 1380 (D.C. Cir. 1983)).

generally applicable rules.[37] The Commission continued this practice after the more extensive 1991 amendments.[38] Additionally, after the 2004 amendments to Part 2,[39] which created Subpart C and codified the current 2.309(d) standing criteria and 2.309(f) contention admissibility criteria, both the Commission and other licensing boards have continued to treat third-party requests for a hearing on an enforcement order as traditional petitions for intervention under Subpart C.[40]

A. Standing

An organization such as Local 15 may seek to establish standing in its own right or representational standing on behalf of one or more members. Local 15 claims both. In the alternative, it asks to be granted discretionary intervention.

1. Representational Standing

To establish representational standing, Local 15 must (1) show that the interests it seeks to protect are germane to its own purposes; (2) identify, by name and address, at least one member who qualifies for standing in his or her own right; (3) show that it is authorized by that member to request a hearing on his or

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[37] *See Palisades,* LBP-81-26, 14 NRC at 249 (subjecting a third-party union's request for a hearing to the requirements of 10 C.F.R. § 2.714, the then-equivalent to the current 10 C.F.R. § 2.309); *see also Public Service Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), CLI-80-10, 11 NRC 438 (1980) (examining a third-party request for hearing on an enforcement order under the generally applicable rules governing intervention, i.e., standing and discretionary intervention standards).

[38] *See, e.g., Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64 (1994) (affirming LBP-94-5 and LBP-94-8, which granted "intervention" to a third party seeking a hearing on an enforcement order on the basis of generally applicable standing and contention admissibility requirements).

[39] Final Rule: "Changes to Adjudicatory Process," 69 Fed. Reg. 2182 (Jan. 14, 2004).

[40] *See, e.g., Andrew Siemaszko,* CLI-06-16, 63 NRC at 724 (reversing the Board's grant of discretionary intervention to a third-party petitioner challenging an enforcement order, directing the Board on remand to consider whether the petitioner satisfied contention admissibility requirements); *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), CLI-04-23, 60 NRC 154, 157-58 (2004) (citing sections 2.309(d) and (f) as the relevant legal standards when evaluating a third-party petition for hearing on a confirmatory order); *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), LBP-08-14, 68 NRC 279, 290-92 (2008) (denying a third-party request for a hearing on a confirmatory order, in part, because the petitioner failed to establish standing or raise an admissible contention under section 2.309(f)); *Nuclear Fuel Services, Inc.* (Special Nuclear Facility), LBP-07-16, 66 NRC 277, 284-85 (2007) (citing to section 2.309 standing and contention admissibility criteria as the relevant legal standards for evaluating third-party requests for hearing on a confirmatory order); *Alaska Department of Transportation and Public Facilities,* LBP-04-16, 60 NRC 99 (applying section 2.309 criteria when evaluating a third-party request for hearing on a confirmatory order), *rev'd on other grounds,* CLI-04-26, 60 NRC 399 (2004).

her behalf; and (4) show that neither the claim asserted nor the relief requested requires that member's participation in the proceeding in an individual capacity.[41] As to whether the individual member qualifies for standing, that member must have suffered or might suffer a concrete and particularized injury that is (1) fairly traceable to the challenged action; (2) likely redressable by a favorable decision;[42] and (3) arguably within the zone of interests protected by the governing statute — here, the Atomic Energy Act.[43] Moreover, the zone of interests requirement is applied more rigorously when the petitioner is not the direct subject of the challenged regulatory action.[44]

Local 15's principal factual support for its claim to representational standing (as well as for all its contentions) is the affidavit of a union member and Exelon employee, Dennis Specha, who duly authorizes Local 15 to represent his interests.[45] Mr. Specha asserts three claims. First, he is concerned that the terms of the Confirmatory Order impose very broad and insufficiently specific reporting obligations.[46] He therefore fears that, "[i]n light of this vagueness," he might "inadvertently violate Exelon's procedure and be subjected to discipline and/or revocation of access."[47] He does not allege, however, that the imposition of new reporting obligations somehow makes the Dresden facility less safe or that he fears being disciplined by the NRC directly. Second, Mr. Specha believes that his rights as a bargaining unit member and Chief Steward have been violated by reason of Exelon's failure to bargain with Local 15 concerning terms and conditions of his employment and by the NRC's having "approved of that conduct and affirmed it in the Confirmatory Order."[48] Third, Mr. Specha asserts that, "[a]s an individual living approximately 28 miles from the Dresden Station," he has "a

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[41] *Consumers Energy Co.* (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007) (citations omitted).

[42] *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

[43] *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989); *see also* 10 C.F.R. § 2.309(d).

[44] *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 12 (1998) ("Where the plaintiff is not itself the subject of the contested regulatory action, the [zone of interests] test denies a right of review if the plaintiff's interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot be assumed that Congress intended to permit the suit.") (quoting *Clarke v. Securities Industry Association,* 479 U.S. 388, 399 (1987)).

[45] *See* Petition, Attach. 1, Aff. of Dennis Specha.

[46] *Id.* ¶ 10.

[47] *Id.* Our dissenting colleague suggests that, for failing to report the behavior of another Exelon employee, Mr. Specha might also be banished by the NRC from working anywhere in the nuclear industry; fined up to $100,000; and prosecuted criminally. Dissent at p. 345. Regardless of whether those concerns are realistic, Mr. Specha does not allege them.

[48] Petition, Attach. 1, Aff. of Dennis Specha ¶ 11.

particular interest in the continued safe operations of the plant."[49] He asserts that the changes resulting from the Confirmatory Order "are not reasonably related to the safe operations of the plant," but, again, he does not claim that those changes actually make the plant less safe.[50]

None of Mr. Specha's three concerns gives rise to an interest that is arguably within the zone of interests protected by the Atomic Energy Act.[51] Therefore, he lacks standing, and his concerns cannot support Local 15's claim to representational standing.

a. Vagueness Claim

In the circumstances of this case, concerns that have nothing to do with safety do not give rise to standing. Indeed, the Commission instructs us that even a concern that does involve safety will not support standing if the petitioner seeks merely a "better" settlement: that is, one that promises greater improvements to safety than the settlement that was actually negotiated.[52] Standing to challenge a confirmatory order exists only when a petitioner credibly alleges that a settlement somehow actually *reduces* safety.[53] Not surprisingly, the Commission expects that such cases will be rare.[54]

The critical inquiry in a proceeding involving any confirmatory order, therefore, is whether the order somehow diminishes the licensee's health and safety conditions. If it does not, no hearing is appropriate. Thus, Mr. Specha's concern that new requirements imposed by the Confirmatory Order might be more clearly drafted — absent a proper allegation of an adverse effect on safety — do not give rise to standing in this proceeding.

It is in this context that we must address Exelon's motion to strike one argument from Local 15's reply. In its reply, Local 15 claims, for the first time, that the Confirmatory Order "has the cumulative effect of rendering Exelon's operations less safe than they were before."[55] Local 15 did not make this claim in its initial petition.

In its petition, Local 15 asserted that it has a generalized interest in the safety of

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[49] *Id.* ¶ 12.

[50] *Id.*

[51] Indeed, somewhat defensively, Local 15 emphasizes in its alternative request for discretionary intervention that, for discretionary intervention, "[i]t is irrelevant that the Union's economic interest may not fall within the 'zone of interests' protected by the AEA." Petition at 13.

[52] *Alaska Dept. of Transp.,* CLI-04-26, 60 NRC at 406.

[53] *Id.* at 406 n.28.

[54] *Id.*

[55] Local 15 Reply at 9.

the Dresden facility,[56] challenged whether the Confirmatory Order is necessary for safety,[57] and contended that the Confirmatory Order must be "carefully tailored to address the legitimate concerns for public health and safety."[58] But it did not claim, implicitly or explicitly — much less with specificity — that the Confirmatory Order made the Dresden Nuclear Power Plant less safe.

The purpose of a reply is narrow. It is to give a petitioner an opportunity to address arguments in the opposing parties' answers.[59] A reply may not be used to introduce new arguments. As the Commission has stated: "It is well established in NRC proceedings that a reply cannot expand the scope of the arguments set forth in the original hearing request."[60]

We therefore grant Exelon's motion to strike. Moreover, even if we were to consider Local 15's belated assertion that the Confirmatory Order might actually reduce safety at the Dresden facility, we would find its argument neither plausible nor credible.

Initially, Local 15's concerns clearly resided elsewhere. Its petition claimed only that the changes to Exelon's behavioral observation program required by the Confirmatory Order were not necessary for safety (not that they detracted from it); that the changes allegedly put employees at risk of being disciplined for failing to report behavior they might not understand they were required to report; and that the Confirmatory Order "condoned" the very same alleged violations of the National Labor Relations Act that Local 15 is litigating before the National Labor Relations Board.

Neither Mr. Specha's affidavit nor any other facts submitted by Local 15 support a claim of an adverse impact on plant safety. Apart from Local 15's having been alerted by the answers to its petition that the absence of a safety claim might be fatal to its standing case,[61] there is no explanation for the union's 180-degree change in course. While Local 15 claims in its reply that the Confirmatory Order creates an adverse effect on safety, its initial petition asserted essentially the opposite: that the Confirmatory Order contains new *additional* safety-related requirements "without genuine basis or need."[62] Initially Local 15 argued that the

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[56] Petition at 8, 17.

[57] *Id.* at 15.

[58] *Id.* at 18.

[59] *Nuclear Management Co., LLC* (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006).

[60] *Id.* (citation omitted).

[61] *See* Exelon's Answer Opposing the Petition to Intervene and Hearing Request Filed by Local Union No. 15, International Brotherhood of Electrical Workers, AFL-CIO (Jan. 24, 2014) at 16; NRC Staff Answer to Petition to Intervene and Request for Hearing (Jan. 24, 2014) at 12; *see also* Tr. at 37 (Local 15's counsel acknowledged that, in responding to Exelon's and the NRC Staff's answers, "we realized we needed to sharpen" a safety argument because "[w]e did not do a very good job of connecting the dots . . . in the initial petition").

[62] Petition at 18.

Confirmatory Order reflected regulatory overkill — namely, that Exelon and the NRC should not "use a bulldozer to kill an ant"[63] — not that the Confirmatory Order detracted from safety.

We find unpersuasive Local 15's counsel's speculation — articulated for the first time at oral argument[64] — that the required changes to Exelon's behavioral observation program, which were intended to clarify when reporting is necessary under section 73.56(f), might somehow have just the opposite effect: that is, to discourage employees from reporting incidents that bear upon another employee's trustworthiness and reliability. Yet counsel's speculation at oral argument is the only "support" for the otherwise unexplained claim in Local 15's reply of a lessening in facility safety. Therefore, we would decline to credit Local 15's belated safety claim even if we did not strike it. In the absence of a plausible dispute as to whether the alleged vagueness in the requirements imposed by the Confirmatory Order adversely affects nuclear safety, Mr. Specha's vagueness allegations do not support standing to request a hearing before an Atomic Safety and Licensing Board.

b. National Labor Relations Act Claim

Even more clearly, Mr. Specha's concerns about possible violations of the National Labor Relations Act do not establish standing here, as those concerns are more appropriately addressed in the proceeding that Local 15 has already initiated before the National Labor Relations Board. Any right that Local 15 might have to bargain over the terms of employment is not governed by the Atomic Energy Act or otherwise within the scope of the NRC's authority. Indeed, as the Supreme Court has held, such labor-related disputes are within "the exclusive competence of the NLRB."[65]

c. Proximity Presumption Claim

Finally, although the NRC employs a proximity presumption to establish standing in certain types of cases, the presumption has no application in an enforcement proceeding such as this. The presumption is based on the finding "that persons living within the roughly 50-mile radius of the facility face a

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[63] *Id.*

[64] Tr. at 13; *see also id.* at 37 (Local 15's counsel acknowledged that, even when the union first asserted an explicit safety claim in its reply, "we didn't go into detail on that point").

[65] *San Diego Building Trades Council v. Garmon,* 359 U.S. 236, 245 (1959); *see also Laborers Health & Welfare Trust Fund v. Advanced Lightweight Concrete Co.,* 484 U.S. 539 (1988) (holding that NLRB is the agency equipped to handle alleged violations of the National Labor Relations Act, including collective bargaining disputes).

realistic threat of harm if a release from the facility of radioactive material were to occur."[66] Thus, the presumption is limited to reactor licensing proceedings and to other cases where there is "an obvious potential of offsite [radiological] consequences."[67] Otherwise, "[a]bsent an 'obvious' potential for harm, it is a petitioner's burden to show how harm will or may occur."[68] Mr. Specha makes no such attempt.

2. Organizational Standing

Local 15's claim to organizational standing is no more persuasive. Local 15's own organizational interests — independent of its role in representing Mr. Specha's interests — appear, if anything, to be even less focused on concerns that might fall within the zone of interests protected by the Atomic Energy Act. Insofar as Local 15 is concerned about alleged unfair labor practices (of which it has already complained to the National Labor Relations Board), as explained above, such matters do not fall within the jurisdiction of the NRC. And even insofar as Local 15 might also be concerned about the dilemma in which its members find themselves in attempting to comply with allegedly vague standards of conduct, its concerns seem less direct than those of the affected members themselves, such as Mr. Specha, who might personally face discipline or termination. Local 15's interests surely are no stronger than those of Mr. Specha, whose concerns we have already determined to be insufficient to confer standing under the Atomic Energy Act in the circumstances presented.[69]

B. Discretionary Intervention

If it does not qualify for standing under 10 C.F.R. § 2.309(a), Local 15 asks to be permitted discretionary intervention pursuant to 10 C.F.R. § 2.309(e). But Local 15 clearly cannot be granted discretionary intervention, which may be considered only "when at least one requestor/petitioner has established standing and at least

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[66] *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 917 (2009).

[67] *Northern States Power Co.* (Prairie Island Nuclear Generating Plant Independent Spent Fuel Storage Installation), LBP-12-24, 76 NRC 503, 507-08 (2012) (citing *U.S. Department of Energy* (Plutonium Export License), CLI-04-17, 59 NRC 357, 364-65 (2004)).

[68] *Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 260 (2008).

[69] *See, e.g., id.* at 266 (rejecting union's organizational standing argument in an indirect license transfer proceeding initiated before the Commission because it was "merely the Local's 'representational standing' argument dressed up in different clothes.").

one admissible contention has been admitted so that a hearing will be held."[70] As there is no other petitioner or intervenor in this proceeding, discretionary intervention is not possible.

C. Settlements

In addition to these established reasons for denying Local 15 standing or discretionary intervention, sound public policy directs the same result. This case arises from the settlement of an earlier dispute concerning the Dresden facility. With the assistance of a trained mediator, Exelon and the NRC Staff negotiated the terms of the Confirmatory Order that resolved their differences and avoided the need for a contested evidentiary hearing.

Such settlements are, of course, favored: "It is axiomatic that the Commission, like other adjudicatory bodies, looks with favor upon settlements."[71] The NRC has long preferred concentrating its resources "on actual field inspections and related scientific and engineering work, as opposed to the conduct of legal proceedings."[72]

Accordingly, the Commission has recognized that too freely allowing third parties to contest enforcement settlements at hearings would undercut the NRC's policy favoring enforcement settlements.[73] Such settlements may become illusory if licensees consent to confirmatory orders and are nonetheless subjected to formal proceedings, possibly leading to different or more severe enforcement actions.[74]

When the subject of an enforcement action, such as Exelon, negotiates with the NRC, the Agency reasonably expects that it can deliver on its promises. To be sure, others may also be impacted in various ways by the settlement of an enforcement proceeding. A stone thrown in the ocean may cause ripples that extend very far. But "[t]he general tendency of the law," when deciding which consequences give rise to actionable rights, "is not to go beyond the first step."[75]

If the NRC were to allow third parties with no demonstrated interest in its core concerns — nuclear safety and the environment — to routinely initiate evidentiary

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[70] 10 C.F.R. § 2.309(e); *see also* 69 Fed. Reg. at 2189 ("The Commission is codifying the six criteria for discretionary intervention which were first articulated in *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 617 (1976). . . . Discretionary intervention, however, will not be allowed unless at least one other petitioner has established standing and at least one admissible contention.").

[71] *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-97-13, 46 NRC 195, 205 (1997) (citing *Rockwell International Corp.* (Rocketdyne Division), CLI-90-5, 31 NRC 337, 340 (1990)); *Statement of Policy on Conduct of Licensing Proceedings,* CLI-81-8, 13 NRC 452, 456 (1981). *See also* 10 C.F.R. § 2.338.

[72] *Marble Hill,* CLI-80-10, 11 NRC at 441.

[73] *See Alaska Dep't of Transp.,* CLI-04-26, 60 NRC at 408.

[74] *See id.* (citing *Marble Hill,* CLI-80-10, 11 NRC at 441).

[75] *Southern Pacific Co. v. Darnell-Taenzer Lumber Co.,* 245 U.S. 531, 533 (1918) (Holmes, J.).

hearings to contest settlements, as a practical matter the Agency would have to invite all such parties to the negotiating table. Otherwise, any one of such indirectly affected entities and individuals — various unions, union and non-union employees, contractors, and perhaps even suppliers and others[76] — might defeat the goal of avoiding a full evidentiary hearing by demanding such a hearing to assert its own parochial interests following a settlement between the NRC and the named party. Indeed, Local 15 claims its participation to be "essential" to further negotiations if this Board were to rescind the Confirmatory Order.[77] Such complicated multiparty negotiations would no doubt hinder, not enhance, the prospects for promptly and efficiently concluding enforcement actions when the subject is willing to settle on terms that protect the public's interest in nuclear safety and the environment.

It seems especially unwise to expand standing to initiate an NRC adjudicatory proceeding when, as here, the petitioner has other ways to assert its claims. Local 15 has already invoked the jurisdiction of the National Labor Relations Board by filing an unfair labor practice charge. Should its charge be upheld, or should other new circumstances warrant changes in the Confirmatory Order, the Order itself contains a procedure for seeking modification for good cause.[78] Moreover, if an individual employee such as Mr. Specha were in fact threatened with discipline or termination on the basis of the standards he contends are too vague, he would be entitled to a hearing in accordance with Local 15's collective bargaining agreement.[79] Although Local 15 contends that these other approaches might be less effective than voiding the Confirmatory Order, it is not without alternative avenues of redress.

For all of these reasons, Local 15 has failed to establish standing to intervene in this proceeding, and its petition must therefore be denied.

D. Contentions

Although we conclude that Local 15's petition must be denied for failure to establish standing, we also determine that Local 15 has failed to submit an admissible contention. While the defects in Local 15's three proffered contentions echo many of the difficulties with its attempts to establish standing, they constitute a separate and independent ground for denying its petition. We address each briefly.

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[76] At oral argument, counsel for Local 15 acknowledged that, consistent with the union's claim to standing, in some circumstances a company that supplied guard services to a nuclear facility might also be entitled to a hearing before an Atomic Safety and Licensing Board. *See* Tr. at 42.

[77] Petition at 10.

[78] Confirmatory Order, 78 Fed. Reg. at 66,967.

[79] Tr. at 49.

Contention 1 states:

> The Confirmatory Order should not be sustained because, without sufficient justification in the record, it imposes obligations on the off-duty employees of Exelon not otherwise required by the NRC in Title 10 of the Code of Federal Regulations, Part 73, Sections 56(f)(1)-(3) to observe and report the offsite, off-duty conduct of fellow employees.[80]

In any enforcement action — and especially in one that has been settled to the NRC's satisfaction without creating a formal record — the NRC's choice of sanctions is "quintessentially a matter of the Commission's sound discretion."[81] It is well within the NRC's discretion to impose specific requirements that clarify or go beyond those already established by regulations, such as 10 C.F.R. § 73.56.[82]

Other than its own subjective opinion, Local 15 proffers no legal or factual basis on which the Board could conclude that the terms of the Confirmatory Order exceed the broad scope of the NRC's discretion under the Atomic Energy Act. Whether Local 15 considers the terms of the Confirmatory Order warranted or unwarranted is irrelevant if they fall within the Agency's authority to impose. Contention 1 is not admissible because it fails to provide sufficient information to show that a genuine dispute exists on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi).

Contention 2 states:

> The Confirmatory Order should not be sustained because it imposes on the employees of Exelon Generation behavioral observation and reporting obligations that are vague, over-broad and not carefully tailored to address the NRC's stated health and safety concerns and improperly delegates to Exelon the discretion to interpret and implement NRC standards concerning behavioral observation without the input of Local 15, the public or the NRC.[83]

Local 15 cites no statute or regulation that is violated by reason of the NRC's alleged failure to "narrowly tailor" its efforts to enhance reporting of criminal activity or other indications of untrustworthy behavior by individuals who have

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[80] Petition at 2.

[81] *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 312-13 (1994), *aff'd,* 61 F.3d 903 (6th Cir. 1995).

[82] *See* 10 C.F.R. § 2.202(a) ("The Commission may institute a proceeding to modify, suspend, or revoke a license or to take such other action as may be proper . . . .").

[83] Petition at 2.

been allowed unescorted access into nuclear facilities. On the contrary, the sanction to impose is within the Agency's discretion.[84]

Moreover, without the need for an evidentiary hearing, this Board is quite capable of concluding — and so finds — that, if anything, the terms endorsed in the Confirmatory Order provide more specificity than the applicable NRC regulation itself — which rather broadly requires reporting of "any questionable behavior patterns or activities."[85] The parties disagree on the nature of the requirements imposed by the Confirmatory Order. Local 15 calls them "sweeping changes" that "expand greatly" the reporting obligations of Exelon employees.[86] Exelon and the NRC Staff maintain that the changes are not material and, essentially, merely clarify and make more explicit existing regulatory requirements.[87] Exelon and the Staff are closer to the mark.

Specifically, Mr. Specha asserts that "it is unclear exactly what type and scope of 'unusual', 'aberrant', and/or 'illegal' conduct I will be expected to report."[88] But, unlike the NRC's own regulation, which does not more specifically describe the "questionable" behavior Mr. Specha must report, Exelon's most recent behavioral observation program contains an explicit definition of "aberrant behavior"[89] and lists more than twenty representative examples of the kinds of behavior that would be reportable as questionable, unusual, aberrant, or criminal.[90] Local 15 proffers no facts upon which this Board could reasonably conclude other than that the Confirmatory Order has resulted in clarification — not obfuscation — of the kinds of behaviors that Exelon employees must report.

Finally, contrary to the charge of improper delegation to Exelon, in fact the NRC's regulations permit licensees to develop their own individual access authorization programs, provided they satisfy 10 C.F.R. § 73.56.[91] The access authorization rule therefore leaves individual decisionmaking authority related to unescorted access to each licensee's discretion.[92]

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[84] *Alaska Dep't of Transp.,* CLI-04-26, 60 NRC at 407; *Advanced Med. Sys.,* CLI-94-6, 39 NRC at 312-13.

[85] 10 C.F.R. § 73.56(f)(3).

[86] Petition at 16.

[87] *See* Exelon's Answer Opposing the Petition to Intervene and Hearing Request Filed by Local Union No. 15, International Brotherhood of Electrical Workers, AFL-CIO (Jan. 24, 2014) at 2; NRC Staff Answer to Petition to Intervene and Request for Hearing (Jan. 24, 2014) at 18.

[88] Petition, Attach. 1, Aff. of Dennis Specha ¶ 10.

[89] *See* Local 15 Reply, Exh. 3 at 1.

[90] *See id.* at 7-9.

[91] *See* Final Rule: "Access Authorization Program for Nuclear Power Plants," 56 Fed. Reg. 18,997, 18,998 (Apr. 25, 1991) (stating that the access authorization rule requires licensees to establish and maintain their own programs, which must include background investigations, psychological assessments, and behavioral observation).

[92] *See* 10 C.F.R. § 73.56(a)(4).

In the absence of any demonstration by Local 15 that either the NRC or Exelon has abused or exceeded its lawful discretion with respect to nuclear safety programs, Contention 2 is not admissible because it fails to provide sufficient information to show that a genuine dispute exists on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi).

Contention 3 states:

> The Confirmatory Order should not be sustained because it improperly endorses and confirms unlawful actions undertaken by Exelon Generation in derogation of its duty to bargain with Local 15 about the employees' terms and conditions of employment and in violation of the legally protected rights of Local 15 and its members.[93]

Whether the Confirmatory Order "improperly endorses and confirms" Exelon's alleged failure to bargain with Local 15 is outside the scope of this proceeding. The NRC's authorizing statute is the Atomic Energy Act. As Local 15 candidly admits, "Exelon's actions in this regard may not conflict with its obligations pursuant to the AEA and NRC regulations."[94]

That Contention 3 fails to implicate a statute or regulation that pertains to the NRC is dispositive of Local 15's request for a hearing before an Atomic Safety and Licensing Board. The NRC does not initiate evidentiary hearings to address labor disputes between its licensees and their employees. Rather, the appropriate forum for such disputes is the National Labor Relations Board — before which Local 15 has already submitted a claim.

Contention 3 is not admissible because it raises an issue that (1) is not within the scope of this proceeding (in contravention of 10 C.F.R. § 2.309(f)(1)(iii)); (2) is not material to the findings the NRC must make to support the action that is involved in this proceeding (in contravention of 10 C.F.R. § 2.309(f)(1)(iv)); and (3) does not raise a genuine dispute on a material issue of law or fact (in violation of 10 C.F.R. § 2.309(f)(1)(vi)).

III. ORDER

For the foregoing reasons:

A. Exelon's motion to strike part of Local 15's reply is *granted.*

B. Local 15's petition to intervene and request for hearing is *denied.*

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[93] Petition at 2.

[94] *Id.* at 19-20.

The proceeding before this Board is therefore terminated. In accordance with 10 C.F.R. § 2.311, any appeal to the Commission from this Memorandum and Order must be taken within twenty-five (25) days after it is served.

It is so ORDERED.

FOR THE ATOMIC SAFETY
AND LICENSING BOARD

Paul S. Ryerson, Chairman
ADMINISTRATIVE JUDGE

Dr. Jeffrey D.E. Jeffries
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 17, 2014

Dissent by Judge Karlin

I dissent.

The following questions are presented in this case:

1. If NRC issues an order that is based on alleged violations by individual workers, that *de facto* targets individual workers and their behavior, and that imposes new burdens and liabilities on individual workers, then do those workers (as represented by their union) have a right to a hearing under section 189a(1)(A) of the Atomic Energy Act (AEA)?

2. If a Licensee consents to such an order, does that extinguish the workers' right to a hearing?

3. If NRC violates 10 C.F.R. § 2.202(a)(3) by failing to inform "any other person adversely affected by the order of his or her . . . right to demand a hearing" is a petitioner allowed to remedy such issues in its reply?

4. If NRC issues an order that requires workers to report any "unusual," "illegal," or "aberrant" observed behavior or "credible information" concerning their co-workers, regardless of whether they are onsite or offsite, on duty or off duty, then does the order exceed NRC's authority under 10 C.F.R. § 73.56(f), which uses none of those terms and which only requires the reporting of behaviors that have a nexus to the nuclear-related health and safety of the public and common defense and security?

The Confirmatory Order (Order) that NRC issued in this case, and the request for hearing filed by 1500 workers at Exelon, raise all of these issues. It is clear to me that these workers, represented herein by Local Union No. 15, International Brotherhood of Electrical Workers (Local 15), have a right to a hearing.

INTRODUCTION

This bizarre saga starts with a crime spree by two Exelon employees — Messrs Buhrman and Brittain. NRC trusted these two individuals by licensing them to be Senior Reactor Operators (SROs). Exelon entrusted them with the operation of a major nuclear power reactor, the Dresden Nuclear Power Station. Meanwhile, these gentlemen conspired to rob an armored truck, hijacked an automobile, and were caught, convicted, and imprisoned.

Much bad publicity resulted from these shenanigans and NRC knew it had to

"do something."[1] NRC took enforcement action and ordered that these individuals should never work in the nuclear industry again.[2] So far so good.[3]

In addition, NRC issued an enforcement order against Exelon — the Order which is the subject of this case. In the Order, NRC and Exelon agreed that the easiest way to "do something" was to blame and burden someone else — the thousands of people working throughout Exelon's entire fleet of 10 plants and 17 nuclear reactors. Tr. at 73.

In response, 1500 of these workers, represented by Mr. Specha and Local 15, challenged the Order and requested a hearing. The Majority denies these workers their right to obtain a hearing under 10 C.F.R. § 2.202(a)(3), and rejects their hearing request under 10 C.F.R. § 2.309, despite the fact that the Order directly affects them.

The Majority's primary rationale is that the workers are "nonparticipants" who are out to spoil the deal between NRC and Exelon. According to the Majority, these workers are "third parties" who have no standing because they have only "economic" interests, e.g., they are merely concerned about losing their jobs, being blacklisted from working in the nuclear industry, and/or being the subject of NRC civil or criminal enforcement action if they fail to comply with the Order. The Majority asserts that such interests are not within the "zone of interests" of the AEA, and thus that we are powerless to grant these workers a hearing.

The Majority's secondary rationale is that the safety concerns raised by Local 15 (e.g., that the Order may *lessen* safety by confusing employees as to what is reportable, and thus causing underreporting of genuine issues or overreporting of irrelevant matters),[4] cannot be considered because (a) these concerns are not credible, and (b) they were raised too late.

I disagree.

My analysis is divided into several sections:

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[1] NRC Form 757, Non-Concurrence by V. Patricia Lougheed, NRC Senior Enforcement Coordinator (June 11, 2013) (ADAMS Accession No. ML13239A225) ("I feel that the NRC is proposing to issue an escalated violation to the licensee only so that it can say that it is "doing something" and that's not the reason to issue violations. It appears the NRC is deviating from standard only because of the publicity of the case.").

[2] *Michael J. Buhrman* Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately) (Oct. 28, 2013); *Landon E. Brittain* Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately) (Oct. 28, 2013).

[3] In issuing these orders, however, NRC admits that it never informed Messrs Buhrman and Brittain of their right to demand a hearing, as is required by 10 C.F.R. § 2.202(a)(3). Tr. at 116-19. This point is discussed in Section VIII, below.

[4] Reply of Local Union No. 15, International Brotherhood of Electrical Workers, AFL-CIO to NRC Staff and Exelon Answers Opposing Local 15's Petition to Intervene and Request for Hearing (Feb. 14, 2014) at 2, 9 [Reply].

- *Section I* reviews 10 C.F.R. § 2.202(a)(3) and concludes that Local 15 has the right to a hearing under that regulation. (See page 341.)
- *Section II* reviews 10 C.F.R. § 2.309(d) and concludes that Local 15 satisfies NRC's standing requirements. This includes standing based on the workers' "economic," due process, and safety interests. (See page 349.)
- *Section III* reviews the *Bellotti* Doctrine and concludes that Local 15 clears the *Bellotti* hurdle.[5] (See page 357.)
- *Section IV* reviews the issue of "safety" and concludes that it has been fairly raised and should be considered. (See page 359.)
- *Section V* reviews 10 C.F.R. § 2.309(f)(1) and concludes that Contentions 1 and 2 meet NRC's contention admissibility requirements. (See page 362.)
- *Section VI* rejects the notion that allowing Local 15 its day in court would violate NRC's policy of encouraging settlements. (See page 367.)
- *Section VII* discusses why the pending National Labor Relations Board (NLRB) proceeding cannot give Local 15 the relief it seeks here, i.e., rescission of the NRC order. (See page 369.)
- *Section VIII* reviews the Order and concludes that it violated 10 C.F.R. § 2.202(a)(3) and was misleading. (See page 371.)

My conclusion (see page 372) summarizes the numerous barriers to public participation in NRC's adjudicatory process, and finds that the Exelon workers, as represented by Local 15, have met them all.

I. LOCAL 15 HAS A RIGHT TO A HEARING UNDER 10 C.F.R. § 2.202(a)(3)

A. "Person Adversely Affected" by an Enforcement Order Has a Legal Right to Demand a Hearing Under 10 C.F.R. § 2.202(a)(3) and Need Not Comply with 10 C.F.R. § 2.309

The AEA states that the "Commission shall grant a hearing upon the request of any person whose interest may be affected." 42 U.S.C. § 2239(a)(1)(A). With

[5] *Boston Edison Co.* (Pilgrim Nuclear Power Station), CLI-82-16, 16 NRC 44 (1982) (restricting the limits of a hearing to solely "whether, on the basis of matters set forth in the Order, the Order should be sustained"). *Bellotti v. NRC,* 725 F.2d 1380, 1381 (D.C. Cir. 1983) affirmed the Commission's authority to set the scope of its own hearings.

regard to enforcement orders, NRC regulations state that the order must "inform the licensee *or any other person adversely affected by the order* of his or her *right . . . to demand a hearing*." 10 C.F.R. § 2.202(a)(3) (emphasis added).

The NRC Staff concedes that 10 C.F.R. § 2.202(a)(3) provides for an *automatic* grant of a hearing request, and that a person covered by 10 C.F.R. § 2.202(a)(3) does not need to show standing under 10 C.F.R. § 2.309(d), and does not need to comply with the criteria of 10 C.F.R. § 2.309(f)(1).[6]

The Staff has acknowledged this point before.[7] The Staff bases this concession on *Andrew Siemaszko,* CLI-06-16, 63 NRC 708, 714 n.3 (2006), where the Commission stated that when a hearing is demanded by a person covered under 10 C.F.R. § 2.202, the grant of the hearing is "automatic." Staff Response at 3 n.8.

Just last week the NRC Staff agreed to, and the Commission implicitly blessed, the automatic right of a nonlicensee, with a purely economic interest, to demand a hearing under 10 C.F.R. § 2.202(a)(3) without showing standing or proffering an admissible contention. In *Aerotest Operations, Inc.* (Aerotest Radiography and Research Reactor), CLI-14-5, 79 NRC 254 (2014), the NRC Staff issued an order prohibiting Aerotest, the licensee, from operating its research reactor.[8] Nuclear Labyrinth, a company hoping to purchase and operate Aerotest's reactor, together with Aerotest, filed a demand for a hearing under 10 C.F.R. § 2.202.[9] The demand did not attempt to show how Nuclear Labyrinth had standing. The demand contained no discussion of Nuclear Labyrinth's injury-in-fact, causation, redressibility, zone of interests, safety interests, or economic interests. Nuclear Labyrinth did not "request" a hearing under 10 C.F.R. § 2.309. It demanded one. Nuclear Labyrinth made no attempt to articulate admissible contentions.

Despite all of these points, and in stark contrast to the instant case, the Staff did not oppose Nuclear Labyrinth's demand for a hearing.[10] Although Nuclear Labyrinth was neither the licensee nor the target of the enforcement order, the Staff took the position that Nuclear Labyrinth's "interest in owning and operating"

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[6] NRC Staff Memorandum in Response to Board Order Concerning Instructions for Oral Argument (Feb. 28, 2014) at 3 [Staff Response] ("[D]emands for a hearing by the subject of an enforcement order . . . are automatic without regard to satisfaction of 10 C.F.R. § 2.309.").

[7] "Staff counsel expressly conceded at oral argument, [that] one demanding a hearing on a challenge to an enforcement order need not comply with the section 2.309(f)(1) requirements." *Charlissa C. Smith* (Denial of Senior Reactor Operator License), LBP-13-3, 77 NRC 82, 91 (2013).

[8] Order Prohibiting Operation of Aerotest Radiography and Research Reactor, 78 Fed. Reg. 46,618, 46,619-20 (Aug. 1, 2013).

[9] Joint Answer to and Demand for Hearing on Order Prohibiting Operation of Aerotest Radiography and Research Reactor Facility Operating License No. R-98 (Aug. 13, 2013) (ADAMS Accession No. ML13226A412) at 14.

[10] NRC Staff Response to Joint Answer to and Demand for Hearing on Order Prohibiting Operation of Aerotest Radiography and Research Reactor Facility Operating License No. R-98 (Aug. 27, 2013) (ADAMS Accession No. ML13239A225) at 2.

Aerotest's research reactor was sufficient to give it a right to demand a hearing under 10 C.F.R. § 2.202(a)(3). *Id.* at 2. The Staff never suggested that Nuclear Labyrinth needed to show the elements of standing under 10 C.F.R. § 2.309(d) or to file contentions that met the criteria of 10 C.F.R. § 2.309(f).

More importantly, the Commission implicitly agreed. The Commission specifically noted that "the Staff d[id] not oppose . . . Nuclear Labyrinth's demand for a hearing on . . . the Order." *Aerotest,* CLI-14-5, 79 NRC at 258. And although the Commission questioned Nuclear Labyrinth's standing to challenge the denial of Aerotest's license transfer, the Commission did not question Nuclear Labyrinth's right to demand a hearing on the enforcement order.[11]

The Commission reached the correct result in *Aerotest.* The 1500 workers who seek to challenge NRC's order in *Dresden* deserve the same.

B. Exelon Workers, as Represented by Local 15, Have a Right to Demand a Hearing Because They Are "Persons Adversely Affected by the Order" Within the Meaning of 10 C.F.R. § 2.202(a)(3)

Given that 10 C.F.R. § 2.202(a)(3) grants a covered person the "automatic" right to a hearing (without the need to comply with 10 C.F.R. § 2.309(d) or (f)), a key question is whether the Exelon workers qualify for this status, i.e., whether they are "adversely affected by the order" within the meaning of 10 C.F.R. § 2.202(a)(3). Clearly, they are.

1. The Exelon Workers Are, in Fact, "Adversely Affected by the Order"

The Order in this case is based on alleged violations by *individual workers* and NRC admits that the Order is "tailored . . . to address the *individual* failures of Exelon employees."[12] The Order *de facto* targets the workers, and its purpose is to change the behavior of the individual workers. Although Exelon is the only person named in the Order, its primary effect is to impose new and more stringent responsibilities and liabilities on individual workers. Under the new regime imposed by the Order, the individual employees of Exelon must change their behavior and will bear the brunt of the Order. This reality is demonstrated by several factors.

First, as NRC acknowledges, the Order is based on alleged *violations by*

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[11] "Because we defer our consideration of the license renewal and enforcement proceedings until we have issued a final decision in the license transfer proceeding, we likewise defer our consideration of related issues, including . . . the question of Nuclear Labyrinth's *party status in the license renewal matter.*" *Id.* at 263 n.43 (emphasis added).

[12] NRC Staff Answer to Petition to Intervene and Request for Hearing (Jan. 24, 2014) at 14 (emphasis added) [Staff Answer].

individuals (not by Exelon). Tr. at 55. The Order recites four (and only four) "apparent violations" and each of them entails the failure of a specific individual to file a report.[13] NRC acknowledges that the Order contains no allegation that Exelon committed any violation. Tr. at 66.

Second, the Nonconcurrence by the NRC Senior Enforcement Coordinator, Ms. V. Patricia Lougheed, eloquently reveals that the behavior of individual Exelon workers, not Exelon, was the cause and *de facto* target of enforcement action:

> I also recognize that the NRC normally holds the licensee responsible for acts of its employees. . . . [However,] there were no facts to indicate that the licensee, other than the three individuals mentioned, had any way to know of the planned crime without one of the three individuals coming forward. . . .
>
> 10 CFR 73.56(f) is written as an individual responsibility and not a licensee responsibility. The licensee had a program in place and trained on that program. However, no program can stop people from planning or committing crimes. Furthermore, people planning on committing a crime are not likely to tell their employers they are about to commit a crime. Therefore, no matter what the licensee does, it cannot prevent someone such as the wrongdoer or his alleged accomplice. . . .
>
> Since the NRC is departing from its normal precedent, I feel that the NRC is proposing to issue an escalated violation to the licensee only so that it can say that it is "doing something" and that's not the reason to issue violations. It appears the NRC is deviating from standard only because of the publicity of the case. That is not a good precedent.[14]

Third, the Order is founded on a regulation that imposes *duties and liabilities on individuals.* The regulation states: "Individuals who are subject to an access authorization program under this section shall at a minimum, report any concerns arising from behavioral observation." 10 C.F.R. § 73.56(f)(3). Under the law, individuals must report, and they are individually liable if they fail to do so. The regulation focuses on the individual.

Fourth, if an individual worker fails to comply with additional reporting obligations imposed by the Order, then *Exelon can discipline or terminate that individual.* Every worker is at risk. Every worker's job is on the line if he or

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[13] Examples of the violations alleged in the Order include (1) "an EO, who had unescorted access to the Dresden Station, failed to report concerns to a supervisor regarding an observed change in behavior of two individuals," and (2) "A SRO, who had unescorted access to the Dresden Station, failed to report." Dresden Nuclear Power Station Confirmatory Order Modifying License, 78 Fed. Reg. 66,965, 66,965 (Nov. 7, 2013).

[14] NRC Form 757, Non-Concurrence by V. Patricia Lougheed, NRC Senior Enforcement Coordinator (June 11, 2013) (ADAMS Accession No. ML13329A531).

she fails to understand and comply with the enhanced behavioral observation and reporting program mandated by the Order.

Fifth, if an individual worker fails to comply with the additional reporting obligations imposed by the Order, then *NRC can take enforcement action against that individual.* Again, individuals, not Exelon, are at risk. NRC can issue an order suspending the individual from working anywhere in the nuclear industry. 10 C.F.R. § 73.80. NRC can order the individual to pay civil penalties of up to $100,000. *Id.* NRC can take criminal enforcement action against the individual. 10 C.F.R. § 73.81.

Sixth, the NRC Staff admits that the Order was based on violations by individuals and that changing the behavior of individual workers was the primary purpose of the Order:

> [T]he Staff *tailored* the Confirmatory Order to address the *individual failures of Exelon employees* to report questionable behavior patterns or activities as required by NRC regulations and Exelon's behavioral observation program. . . . [T]he apparent violation alleged that Exelon *employees failed to report* behaviors of an SRO that involved the planning of a violent crime.[15]

The Staff acknowledges that the Order addresses the behavior of individual workers. "[T]he Confirmatory Order memorializes a settlement agreement reached with Exelon *to address individual failures to report.*" Staff Answer at 15.

The Order in this case is not like the typical enforcement order, wherein NRC orders a corporation to modify and improve a corporate program, or to conduct additional analysis or testing of a system, structure, or component. In contrast, this Order is based on, and specifically targets, the behavior of individual workers, and puts them in direct, personal jeopardy if they fail to comply.

In sum, Mr. Specha and his co-workers in Local 15 are the *de facto* targets of the Order[16] and are "other person[s] adversely affected by the order" within the meaning of 10 C.F.R. § 2.202(a)(3).

2. "No Change Therefore No Adverse Impact" Argument Is Unavailing

Exelon and the Staff argue that the Order changes nothing and therefore cannot adversely affect anyone.[17] Meanwhile, Local 15 argues that the Order contains

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[15] NRC Staff Answer to Petition to Intervene and Request for Hearing (Jan. 24, 2014) at 14 (emphasis added) [Staff Answer].

[16] As the *de facto* targets of the enforcement order, they also have automatic standing under 10 C.F.R. § 2.309(d)(3).

[17] Exelon's Answer Opposing the Petition to Intervene and Hearing Request Filed by Local Union No. 15, International Brotherhood of Electrical Workers, AFL-CIO (Jan. 24, 2014) at 10 [Exelon Answer]; Staff Answer at 8.

new reporting obligations (e.g., the duty to report any "unusual" or "illegal" behavior of a co-worker, whether or not the behavior has any nexus to nuclear safety) that adversely affect Exelon workers. Petition to Intervene and Request for Hearing (Dec. 12, 2013) at 5 [Petition].

I reject the "no change" argument for three reasons. First, if the Order changed nothing, then it is a vacuous exercise. There was no need to issue it, and there should be no objection to revoking it.

Second, at this preliminary stage of the proceeding it appears plausible that the Order indeed imposes new or additional legal requirements (on the workers) that seem to be a "change" from the pre-existing legal requirements. For example, under the Order, NRC now requires that workers report any observed "illegal," "unusual," or "aberrant" behavior by their co-workers. These seem to be new legal requirements, because none of these words appear in 10 C.F.R. § 73.56(f). In addition, NRC's Order does not state that any such illegal, unusual, or aberrant behavior must have a *nexus* to "public health and safety or the common defense and security" in order to be reportable.[18] The Order is not even limited to the reporting of "observed" behavior (ostensibly the core concept of the 10 C.F.R. § 73.56(f) "behavioral *observation* program"), but mandates that workers also must report any other "credible information" they may have concerning their co-workers. 78 Fed. Reg. 66,965, 66,965 (Nov. 7, 2013). There appears to be no duty to report "credible information" in 10 C.F.R. § 73.56(f).[19]

Third, whether the Order actually changes the legal obligations imposed on the workers (and whether the changes are legally supportable and valid) constitutes the "merits" of this case. The merits are to be decided later. At this juncture we can only decide whether the request for hearing should be granted.

3. Adverse Economic Impacts Qualify as Adverse Effects Within the Meaning of 10 C.F.R. § 2.202(a)(3)

The NRC Staff and Exelon assert that Local 15 is raising purely economic concerns (e.g., workers are worried about losing their jobs) and that such economic interests do not qualify as adverse effects within the meaning of 10 C.F.R. § 2.202(a)(3). They assert that a person must raise a safety concern in order to be entitled to demand a hearing under this regulation.

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[18] 10 C.F.R. § 73.56(f)(2). The Staff acknowledges that, in order to be reportable under 10 C.F.R. § 73.56(f)(3), "the observed conduct [must have] a nexus to public health and safety or the common defense and security." Staff Answer at 8. The Order, however, does not say that. It seems to require individuals to report *any* observed behavior that is deemed illegal, unusual, or aberrant, with no requirement of a nexus to public health, safety, common defense, or security.

[19] Staff acknowledges that the "credible information" language is not contained in any regulation. Tr. at 89.

This argument flies in the face of the fact that licensees and other targets of NRC enforcement orders regularly challenge enforcement orders on purely economic grounds. For example, licensees regularly challenge enforcement orders on the ground that the proposed penalty is too high. A purely economic interest. Likewise, a licensee has a right to challenge an enforcement order on the ground that its requirements are too burdensome (e.g., too expensive). Indeed, the NRC Staff acknowledges that if NRC had issued the instant Order to Exelon unilaterally, then Exelon would have a right to a hearing on the same contention (Contention 2) raised by Local 15. Tr. at 100-01.

In addition, if an order blacklists a worker by name, he has the right to demand a hearing under 10 C.F.R. § 2.202(a)(3), even though he may motivated by purely economic concerns (e.g., staying employed).[20]

If a licensee or blacklisted worker can use "economic" reasons to demand a hearing under 10 C.F.R. § 2.202(a)(3), then so can the unnamed workers represented by Local 15. The regulation grants equal rights to the "licensee" and to "any other person adversely affected by the order." Both have a right to demand a hearing.

C. The Phrase "Person Adversely Affected by the Order" in 10 C.F.R. § 2.202(a)(3) Does Not Mean "Person Who Is the Subject of the Order" or "Person Named in the Order"

The NRC Staff takes the position that the phrase "*other person adversely affected* by the order" in 10 C.F.R. § 2.202(a)(3) does not mean what it says. First, the Staff argues that "other person adversely affected by the order" means the "*subject of the order.*" Staff Response at 3 (emphasis added). The Staff says that the "subject" of the order is entitled to demand a hearing, but that a "third party" has no such right and instead must satisfy the standing and contention admissibility criteria of 10 C.F.R. § 2.309(d) and (f). *Id.*

But the Staff's new phrase — "subject of the order" — does not appear anywhere in 10 C.F.R. § 2.202. Nor can the Staff cite any Commission decision which holds, or even states, that the phrase "other person adversely affected by the order" means "person who is subject to the order." There is no such case.

Nor does the Staff even know what the phrase "subject of the order" means. The Staff contradicts itself. At one point, the Staff argues that the right to demand a hearing under 10 C.F.R. § 2.202(a)(3) only applies to persons actually *named in the order.* Tr. at 128-29. At another point the Staff acknowledges the opposite

[20] *See David Geisen,* LBP-09-24, 70 NRC 676 (2009); *Andrew Siemaszko,* LBP-09-11, 70 NRC 151 (2009).

— that a person does *not need to be named* in an enforcement action in order to have a right to demand a hearing under 10 C.F.R. § 2.202(a)(3).[21]

More importantly, the Staff's interpretation does not comport with the plain language of the regulation. "The plain language of the enacted text is the best indicator of intent."[22] Here, 10 C.F.R. § 2.202(a)(3) plainly states that any person "adversely affected" has a right to a hearing. It does not limit that right only to a person "subject to the order."

The structure of 10 C.F.R. § 2.202 confirms this interpretation. The regulation expressly distinguishes between the "*person to whom the Commission has issued an order*" and "any other *person adversely affected by the order*." The former must file an answer to the Order,[23] and may move to set aside the immediate effectiveness of an order.[24]

In contrast, 10 C.F.R. § 2.202(a)(3), states that a "licensee or any other person adversely affected," has the right to demand a hearing. A demand for hearing is different than an answer. The person named in the Order must file an answer. The right to demand a hearing is broader. This is what the regulation says, and it is entirely logical.

The point is clear: NRC knew how to say "person to whom the order is issued" because it used that exact phrase in 10 C.F.R. § 2.202(b) and (c)(2). But NRC, quite obviously, did NOT use that phrase in 10 C.F.R. § 2.202(a)(3).[25]

The importance of the phrase "any other person adversely affected" is underscored by the fact that it was intentionally added in 1991. Until that time, the regulation only stated that the *licensee* had the right to demand a hearing on an enforcement order. 10 C.F.R. § 2.202(a)(3) (1991). In 1991, NRC amended the regulation to state that the "licensee or any other person adversely affected" have

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[21] Tr. at 126-27 ("that actually is something that the NRC does regularly, traditional enforcement such as through our post-Fukushima Orders that applies to all licensees" while adding that such persons, even though not named in the orders have a right to demand a hearing).

[22] *Nixon v. United States,* 506 U.S. 224, 232 (1993); *see also U.S. Department of Energy* (High-Level Waste Repository), CLI-06-5, 63 NRC 143, 154 (2006) ("The interpretation of a regulation, like the interpretation of a statute, begins with the language and structure of the provision itself.") (internal quotation omitted).

[23] *See* 10 C.F.R. § 2.202(a)(2), (b) ("A licensee or other person to whom the Commission has issued an order under this section must respond to the order by filing a written answer.")

[24] *See* 10 C.F.R. § 2.202(c) ("The licensee or other person to whom the Commission has issued an immediately effective order may . . . move the presiding officer to set aside the immediate effectiveness of the order.").

[25] The Staff's suggestion that the 10 C.F.R. § 2.202(a)(3) phrase "person adversely affected by the order" should be construed to mean "person who is the subject of the order" or "person named in the order" fails for the same reason.

a right to demand a hearing.[26] This was a purposeful and significant expansion of the universe of persons entitled to demand a right to a hearing.

The Staff and Exelon point to the 1991 statement of consideration concerning "waivers," in an attempt to equate the phrase "other person adversely affected by the order" with the phrase "person named in the order." Staff Response at 4. This is unconvincing. The statement of consideration specifies:

> Section *2.202 provides that if the licensee or other person to whom an order is issued* consents to its issuance . . . that consent or agreement constitutes a waiver by the licensee or such other person of a right to a hearing. . . . Whether or not the licensee or other person consents to an order, other persons adversely affected by an order issued under § 2.202 . . . will be offered an opportunity for a hearing consistent with current practice and the authority of the Commission to define the scope of the proceeding on an enforcement order. See *Bellotti v. NRC,* 725 F.2d 1380 (D.C. Cir. 1983).

56 Fed. Reg. at 40,678 (emphasis added).

First, contrary to what the statement of considerations says, *section 2.202(a)(3) does NOT use the phrase "other person to whom an order is issued.*" Thus, to the extent it is referring to 10 C.F.R. § 2.202(a)(3), the statement of considerations is incorrect. Second, the statement of considerations is focusing on the distinction between persons who consent to the order (whether it is the licensee or the "other person adversely affected by the order") and other persons, who may have the opportunity to request a hearing. Here, as shown above, the workers represented by Local 15 are the *de facto* targets of the order who are directly and adversely impacted. They are not mere strangers or "third parties" who have wandered in from left field. Third, the statement of considerations cites and focuses on *Bellotti.* I discuss the *Bellotti* decision below. For the moment, I merely note that even the NRC Staff acknowledges that Local 15 "cleared the *Bellotti* hurdle." Tr. at 112.

In summary, the 1500 Exelon workers represented by Local 15 are "adversely affected" by the Order within the meaning of 10 C.F.R. § 2.202(a)(3) and thus have an *automatic* right to demand a hearing and need not comply with 10 C.F.R. § 2.309(d) and (f).

II. LOCAL 15 MEETS NRC'S NORMAL STANDING REQUIREMENTS

Assuming *arguendo* that Local 15 and the Exelon workers do not have a right

[26] Revisions to Procedures to Issue Orders; Deliberate Misconduct by Unlicensed Persons, 56 Fed. Reg. 40,664, 40,684 (Aug. 15, 1991).

to demand a hearing under 10 C.F.R. § 2.202(a)(3), their request for a hearing also satisfies the requirements of 10 C.F.R. § 2.309. In this section, I analyze the "normal" standing requirements of 10 C.F.R. § 2.309(d). In Section V, I analyze the contention admissibility requirements of 10 C.F.R. § 2.309(f).

A. The Interests of Local 15 Satisfy the Plain Language of 10 C.F.R. § 2.309(d)

As relevant here, 10 C.F.R. § 2.309(d)(1) requires that the request for hearing state (i) the name and identity of the requestor; (ii) the nature of the requestor's right to be a party to the proceeding; and (iii) "the nature and extent of the requestor's/petitioner's *property, financial,* or other interests in the proceeding." 10 C.F.R. § 2.309(d)(1)(i)-(iii) (emphasis added). The petition by Local 15 complies with this regulation because the workers are concerned about potential job losses, blacklisting, and monetary penalties that they could suffer if they fail to comply with the Order, i.e., "property" and "financial" interests.

B. Local 15 Satisfies Judicial/Constitutional Standing[27]

Another barrier to the NRC adjudicatory process was added in 1976. In addition to the standing requirements of 10 C.F.R. § 2.309(d) [then 10 C.F.R. § 2.714(d)], the Commission ruled that "in determining whether a petitioner for intervention in NRC domestic licensing proceedings has alleged an "interest [which] may be affected by the proceeding" within the meaning of section 189a of the Atomic Energy Act . . . contemporaneous judicial concepts of standing should be used." *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976).

The "judicial concepts of standing" derive from Article III of the U.S. Constitution which limits the jurisdiction and power of the federal courts to "cases and controversies." U.S. Const. Art. III. "The doctrine of standing . . . reflect[s] this fundamental [constitutional] limitation." *Summers v. Earth Island Institute,* 555 U.S. 488, 493 (2009). Article III does not apply to NRC.

The constitutional "judicial concept" of standing requires that a petitioner allege three things: (1) injury-in-fact; (2) a causal connection; and (3) redressability.

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[27] "It is a commonplace that standing encompasses two components: constitutional and prudential. For constitutional standing, a plaintiff must allege personal injury fairly traceable to the defendant's allegedly unlawful conduct and likely to be redressed by the requested relief. For prudential standing, a plaintiff usually must show, in addition, that 'the interest sought to be protected by the complainant is arguably within the zone of interests to be protected or regulated by the statute . . . in question.'" *Hazardous Waste Treatment Council v. Environmental Protection Agency,* 861 F.2d 277, 281-82 (D.C. Cir 1988) (internal cites omitted).

> [T]he irreducible constitutional minimum of standing contains three elements. First, the plaintiff must have suffered an "injury-in-fact" — an invasion of a legally protected interest which is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical. Second, there must be a causal connection between the injury and the conduct complained of — the injury has to be fairly traceable to the challenged action of the defendant . . . Third, it must be likely as opposed to merely speculative, that the injury will be redressed by a favorable decision.

Lujan v. Defenders of Wildlife, 504 U.S. 555, 560-61 (1992) (internal cites omitted).

Local 15's petition meets these requirements. First, it alleges that the Order imposes new burdens, risks, and potential liabilities directly on individual workers, thus meeting the injury-in-fact test. In addition, *increased risk,* e.g., the increased risk of termination, blacklisting, and/or prosecution resulting from the Order, by itself, constitutes an injury-in-fact.[28] Second, the alleged increased burdens, risks, and potential liabilities are a direct result of, and thus "fairly traceable" to the Order. Third, the alleged increased burdens, risks, and potential liabilities imposed on the individual workers are likely to be redressed by a favorable decision, i.e., the revocation of the Order.[29]

C. Local 15 Meets the Prudential "Zone of Interests" Test

In addition to the standing requirements of 10 C.F.R. § 2.309(d) and the constitutional standing requirements of Article III of the Constitution, the Commissioners sometimes also impose the prudential "zone of interests" test to persons requesting a hearing.

Exelon and the Staff argue that Local 15 possesses no interests in this case which fall within the "zone of interests" of the AEA. Exelon Answer at 9, 16-21;

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[28] *Massachusetts v. Environmental Protection Agency,* 549 U.S. 497, 520-23 (2007) (finding that the risk of future harm as an injury is both "actual" and "imminent"); *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.,* 528 U.S. 167, 183-85 (2000) (concluding that an injury-in-fact can result when the risk of encountering environmental harms prevents a plaintiff from taking an action); *Natural Resources Defense Council, Inc. v. Environmental Protection Agency,* 464 F.3d 1, 6 (D.C. Cir. 2006) ("[W]e have recognized that increases in risk can at times be 'injuries in fact' sufficient to confer standing.").

[29] Local 15 informed us that it filed an unfair labor practice complaint with the NLRB alleging that Exelon failed to bargain with Local 15 regarding the changes to Exelon's behavioral observation program. Petition at 6. Exelon argues that the changes to the behavioral observation program are mandated by NRC and thus that Exelon is not required to bargain over them under the NLRA. Exelon Answer at 22. Even if the NLRB finds Exelon guilty of an unfair labor practice, so long as NRC's Order remains in place, the behavioral observation program will remain mandatory and the NLRB cannot redress the problem. Local 15's complaint can only be redressed if the Order is revoked by NRC. *See* Section VII herein.

Staff Answer at 7-8. Both claim that Local 15 asserts economic/property injuries, and that such injuries fall outside the zone of interests protected by the AEA. Exelon Answer at 18; Staff Answer at 7.

It is true that the Commission often finds that an economic interest "generally is not sufficient to afford standing in Commission licensing proceedings regarding health and safety."[30] But the reality of NRC's cases is more complicated than that, because petitioners with "economic" interests are sometimes allowed to be heard.

In two recent cases, intervenors were granted standing based on purely economic interests. In 2009 the Nuclear Energy Institute (NEI) was granted standing in a case "based on its members' economic interest."[31] The Board acknowledged that "economic interests are sometimes insufficient to establish standing," but found that in this case NEI's members had a "claim to be the real parties in interest" in the controversy being litigated. *Id.* at 431-32. Similarly, Local 15's members are the real parties in interest here, where Exelon and NRC reached an agreement concerning the behavioral and reporting duties of Exelon's employees. In 2010 the National Association of Regulatory Utility Commissioners (NARUC) sought intervention based on injuries which would "increase the costs to regulated utilities."[32] The Board granted NARUC standing, finding that "these economic harms constitute its members' injury-in-fact." *Id.* The Board neither imposed nor discussed an artificially narrow zone of interests barrier.

Since Boards and the Commission do grant intervenors standing based on their economic interests, something more must be going on when intervenors with only economic interests are denied standing. One type of litigant found repeatedly to present economic interests "not cognizable in an NRC license transfer proceeding" is a utility ratepayer.[33] Looking beyond the term "economic" in the ratepayer cases reveals the reason they are denied standing — injuries suffered by ratepayers are not particularized or distinct to the extent required to support standing, but are instead generalized and shared by a large class.[34] Taxpayer standing is commonly

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[30] *Ohio Edison Co.* (Perry Nuclear Power Plant, Unit 1), LBP-91-38, 34 NRC 229, 249 n.61 (1991); *see also Public Service Co. of New Hampshire* (Seabrook Station, Unit 2), CLI-84-6, 19 NRC 975, 978 (1984).

[31] *U.S. Department of Energy* (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 431 (2009), *modified,* CLI-09-14, 69 NRC 580 (2009) (reversing some contention rulings, standing rulings unaffected).

[32] *U.S. Department of Energy* (High-Level Waste Repository), LBP-10-11, 71 NRC 609, 637 (2010).

[33] *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 345 (2002).

[34] *Envirocare of Utah, Inc.* (Byproduct Waste Disposal), LBP-92-8, 35 NRC 167, 174 (1992). *See also Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), ALAB-342, 4 NRC 98, 107 (1976) ("Whether the 'zone of interests' test has been satisfied does not depend, however, upon how concrete or speculative the threat of injury may be.") (superceded by statute).

seen in a similar light by the federal courts.[35] A denial of standing based on ratepayer status thus more appropriately falls under the injury-in-fact prong of judicial standing, and not the zone of interests prong.

The Majority finds that Local 15 lacks standing to challenge the Order because it fails to allege an injury to its members that falls within the zone of interests protected by the AEA, which the Majority believes to be limited to plant safety. The Majority states that "[s]tanding to challenge a confirmatory order exists only when a petitioner credibly alleges that a settlement somehow actually *reduces* safety." Majority at 12. The Majority claims that its resolution of the standing issue is supported by Supreme Court decisions that it interprets to require the zone of interests test to be "applied more rigorously when the petitioner is not the direct subject of the challenged regulatory action," and by dicta in the Commission's *Alaska DOT* decision. Majority at 10.

Alaska DOT is readily distinguishable from this case, in which the claim is not that NRC has insufficiently regulated someone else, but that the petitioner's members will be subjected to unlawful agency regulation as the result of the challenged Order. Contrary to the Majority's assertions, the zone of interests test as applied in federal court does not bar the petitioner's claims.

The Commission is not necessarily required to decide standing issues in the same manner as federal courts. But, in applying standing requirements, which include the zone of interests test, the Commission has instructed licensing boards that they should be guided by decisions of the Supreme Court and other federal courts."

> In assessing whether a petitioner has standing, we have long applied contemporaneous "'judicial concepts of standing.'" This is true with respect to the requirement for a "'concrete and particularized injury that is fairly traceable to the challenged action and is likely to be redressed by a favorable decision,'" where the injury is "'to an interest arguably within the zone of interests protected by the governing statute.'"

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009). Moreover, the Commission's summary of the zone of interests test in *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 12 (1998) (quoted by the Majority at 10 n.44) is taken directly from the Supreme Court's decision in *Clarke v. Securities Industry Ass'n,* 479 U.S. 388, 399 (1987). This is a further indication that the Commission intends that we look to federal law in applying the zone of interests test. If, contrary to the general rule that boards are to apply judicially recognized concepts of standing, the Commission intends boards to apply a version of the

[35] *Hein v. Freedom from Religion Foundation,* 551 U.S. 587, 599 (2007) ("We have consistently held that [taxpayer] interest is too generalized and attenuated to support Article III standing.").

zone of interests test that is more demanding than the requirements imposed by the Supreme Court, the Commission would have made that clear in its rulings. I see no indication that the Commission has done so.

Had the Majority correctly applied contemporaneous judicial concepts of standing, it would have found that Local 15's claims are not barred by the zone of interests test. In fact, the zone of interests test would not even apply to Local 15's claims had they been filed in federal court. The Administrative Procedure Act (APA) provides that "[a] person suffering legal wrong because of agency action, *or* adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof." 5 U.S.C. § 702 (emphasis added). Thus, there are two routes to judicial review under the APA: the petitioner may either allege that it will suffer legal wrong because of the agency action; or, alternatively, that it is adversely affected or aggrieved by agency action within the meaning of a relevant statute. The zone of interests test applies only to the latter type of claim. *Lujan v. National Wildlife Federation,* 497 U.S. 871, 883 (1990) ("to be 'adversely affected or aggrieved . . . within the meaning' of a statute, the plaintiff must establish that the injury he complains of (his aggrievement, or the adverse effect upon him) falls within the 'zone of interests' sought to be protected by the statutory provision whose violation forms the legal basis for his complaint.") (quoting *Clarke,* 479 U.S. at 396-97). Local 15, however, alleges agency conduct that amounts to a legal wrong: that NRC is allegedly imposing unlawful requirements upon Local 15's members through the Order. Because such a claim is sufficient to establish Local 15's right to judicial review under the APA, Local 15 would not need to show that its members "are adversely affected or aggrieved by agency action within the meaning of a relevant statute." 5 U.S.C. § 702. Were the law otherwise, an agency could freely impose unlawful requirements upon anyone who could not satisfy the zone of interests test, an obviously absurd result.

The Commission's summary of the zone of interests test in *Quivira Mining,* CLI-98-11, 48 NRC at 12 (quoting *Clarke,* 479 U.S. at 399) (emphasis added), states that "[w]here the plaintiff is *not* itself the subject of the contested regulatory action, the [zone of interests] test denies a right of review if the plaintiff's interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot be assumed that Congress intended to permit the suit." This formulation is entirely consistent with that in the preceding paragraph. When the petitioner *is* the subject of the disputed agency action and challenges the legality of that action, as Local 15 does here, the zone of interests test does not apply.

I do not see how it can be seriously disputed that Local 15's members are the subject of the contested regulatory action. The Staff's regulatory action was in response to actions of some of Local 15's members, it was intended to impose additional requirements on the members, the members must comply with those requirements once they are imposed by Exelon, and NRC itself may enforce the

requirements through civil and criminal enforcement action against the members. That is sufficient to demonstrate that the members are the subject of the contested regulatory action. It should make no difference that the Staff's means of imposing the requirements on Local 15's members is through the Order issued to Exelon. To rule otherwise is to exalt the form of the agency's action over its substance.

Furthermore, even assuming *arguendo* that the zone of interests test does apply to Local 15's workers' claims, the claims satisfy the test. The Majority states that under Commission and Supreme Court rulings the test "is applied more rigorously when the petitioner is not the direct subject of the challenged regulatory action." Majority at 10. The Commission's decision in *Quivira Mining Co.,* which the Majority cites for this claim, contains no such statement. Rather, as previously noted, the Commission merely quoted the Supreme Court's summary of the zone of interests test from *Clarke,* 479 U.S. at 399. And the decision in *Clarke* goes on, in the very next sentence, to state that "the test is *not* meant to be especially demanding; in particular, there need be no indication of congressional purpose to benefit the would-be plaintiff." *Id.* (emphasis added). *See also Howard R.L. Cook & Tommy Shaw Foundation ex rel. Black Employees. of the Library of Congress, Inc. v. Billington,* 737 F.3d 767, 771 (D.C. Cir. 2013) ("The zone of interests requirement poses a low bar."). The Supreme Court only finds potential litigants outside the zone of interests of a statute when Congress' intent to actually exclude that litigant is clear.[36]

The Majority commits the even more fundamental error of focusing on the overall purpose of the AEA rather than on the correct question: whether the plaintiff's grievance "arguably fall[s] within the zone of interests protected *or regulated* by the statutory provision . . . invoked in the suit." *Bennett v. Spear,* 520 U.S. 154, 162 (1997) (emphasis added). *Bennett* was a challenge to a biological opinion issued by the Fish and Wildlife Service under the Endangered Species Act of 1973 (ESA). The question was whether the petitioners, who had competing economic and other interests in a project, had standing to seek judicial review of the biological opinion under the citizen-suit provision of the ESA and the APA. The Ninth Circuit concluded that the zone of interests test was not satisfied because the petitioners were neither directly regulated by the ESA nor sought to vindicate its overarching purpose of species preservation. That conclusion, the Supreme Court held, was error.

Whether a plaintiff's interest is "arguably . . . protected . . . by the statute" within

[36] In *National Credit Union Administration v. First National Bank & Trust Co.,* 522 U.S. 479, 489 (1998), the Court found that prior cases "establish that we should not inquire whether there has been a congressional intent to benefit the would-be plaintiff." Instead, standing is refused only when congressional intent specifically precludes the party or issue from obtaining judicial review. *Block v. Community Nutrition Institute,* 467 U.S. 340, 348 (1984).

> the meaning of the zone-of-interests test is to be determined not by reference to the overall purpose of the Act in question (here, species preservation), but by reference to the particular provision of law upon which the plaintiff relies. *It is difficult to understand how the Ninth Circuit could have failed to see this from our cases.*

Bennett, 520 U.S. at 175-76 (emphasis added).

The Court then examined the specific statutory requirement at issue, concluding that, although it did not expressly provide for protection of economic interests, the zone of interests test was easily satisfied:

> The obvious purpose of the requirement that each agency "use the best scientific and commercial data available" is to ensure that the ESA not be implemented haphazardly, on the basis of speculation or surmise. While this no doubt serves to advance the ESA's overall goal of species preservation, we think it readily apparent that another objective (if not indeed the primary one) is to avoid needless economic dislocation produced by agency officials zealously but unintelligently pursuing their environmental objectives . . . . Petitioners' claim that they are victims of such a mistake is plainly within the zone of interests that the provision protects.

Id. at 176-77.

Similarly, Local 15's first contention alleges errors by the Staff in the implementation of 10 C.F.R. § 73.56(f)(1)-(3) that fall within the zone of interests protected *or regulated* by those provisions. According to Local 15, the Order requires Exelon to impose obligations on Local 15's members in excess of those authorized by 10 C.F.R. § 73.56(f)(1)-(3). To be sure, the most obvious objective of those regulations is to provide for the protection of public health and safety. But they also protect the interests of nuclear power plant employees by specifying the requirements that are necessary to achieve those objectives and by implying that further restrictions on employees are not necessary. Thus, like the multiple interests protected by the ESA provision at issue in *Bennett,* NRC regulations both protect public health and safety and protect employees against the imposition of requirements that are in excess of those necessary to achieve that objective. If, as Local 15 alleges, the Order imposes requirements beyond those authorized in the regulations, the agency has acted contrary to provisions of 10 C.F.R. § 73.56(f)(1)-(3) that protect employees against unnecessary or excessive restrictions on their conduct. That is sufficient to show that Local 15's first contention falls within the zone of interests protected or regulated by subsections 10 C.F.R. § 73.56(f)(1)-(3), even assuming the zone of interests test applies.

Local 15 therefore satisfies all of the requirements imposed by contemporaneous judicial concepts of standing. It has shown (1) an injury to its members resulting from the allegedly unlawful Order and redressable by a favorable order of the Board; and (2) that, even assuming the zone of interests test applies, the 1500 workers represented by Local 15 are "regulated" by the Order and their

interest in preventing excessive restrictions on their conduct falls within the zone of interests protected or regulated by 10 C.F.R. § 73.56(f). I fail to see where the Majority has demonstrated that for cases such as this the Commission intends a Board to ignore contemporaneous judicial concepts of standing and instead impose an alternative and more restrictive concept of standing. Instead, the Majority relies on the *Alaska DOT*/*Bellotti* line of cases, which concern the redressability aspect of standing and the scope of the proceeding, not the zone of interests test. The inapplicability of *Bellotti* is discussed in Section III.

III. THE REQUEST FOR HEARING SATISFIES BELLOTTI

Bellotti v. NRC, 725 F.2d 1380 (D.C. Cir. 1983) is an important case which addresses both standing (redressability) and contention admissibility (scope) in the context of an NRC enforcement order. As even the NRC Staff acknowledges, the petition by Local 15 satisfies *Bellotti.* Tr. at 112 (Local 15 has "cleared the *Bellotti* hurdle").

In *Bellotti,* the Attorney General of the Commonwealth of Massachusetts, Mr. Francis X. Bellotti, challenged an enforcement order that NRC had issued to the licensee of the Pilgrim Nuclear Power Station located in Plymouth, Massachusetts. Mr. Bellotti did not oppose the issuance of the enforcement order. *Bellotti,* 725 F.2d at 1382. Instead, he wanted the order to be strengthened and to be harsher. *Pilgrim,* CLI-82-16, 16 NRC at 46. NRC denied Mr. Bellotti's petition for a hearing, and the United States Court of Appeals for the District of Columbia affirmed.

The rationale of the Court of Appeals in *Bellotti* was as follows. When NRC issued the enforcement order against the Pilgrim Plant, the order stated that if someone wanted to challenge it, the *scope* of the "proceeding" would be limited to whether "the Order should *be sustained.*" *Pilgrim,* CLI-82-16, 16 NRC at 45-46. The Commission denied Bellotti's hearing request because he was *not* asserting that the enforcement order should *not be sustained,* but instead wanted it to be toughened and enhanced. *Id.* Thus, the hearing request was not within the "scope" of the proceeding. *Id.* Likewise, the Commission ruled that Mr. Bellotti was not an "affected person" and did not have standing, because his injury could not be redressed by the Board. *Id.* The Court of Appeals for the District of Columbia affirmed the Commission's decision, holding that NRC has the authority to define the scope of its proceedings, and that "the Attorney General would be an affected person only if he opposed issuance of the Order, which he does not." *Bellotti,* 725 F.2d at 1382.

Subsequently, the Commission summarized its *Bellotti* doctrine as follows:

> For the third time this year we address the question whether petitioners may obtain

> licensing board hearing to challenge NRC Staff enforcement orders as *too weak or otherwise insufficient.* The answer, under a longstanding Commission policy upheld in *Bellotti v. NRC,* is no. The only issue in an NRC enforcement proceeding is whether the order should be sustained. Boards are not to consider whether such orders need *strengthening.*

Alaska Department of Transportation and Public Facilities, CLI-04-26, 60 NRC 399, 404 (2004) (emphasis added) (*Alaska DOT*).[37]

The Commission has consistently used *Bellotti* to deny any challenge to an enforcement order that argues that an enforcement order is too weak or needs strengthening.

The *Bellotti* doctrine involves both standing and contention admissibility. "For an enforcement order, the threshold question — related to both standing and admissibility of contentions — is whether the hearing request is within the scope of the proceeding as outlined in the order." *Alaska DOT,* CLI-04-26, 60 NRC at 405. If the petitioner files a contention that requests a remedy that is beyond the scope of the proceeding, then the *contention is not admissible* because it violates 10 C.F.R. § 2.309(f)(1)(iii). Likewise, if the remedy sought by the petitioner is that the Board should mandate that the enforcement order be strengthened, then the petitioner *lacks judicial standing,* because, given the limited scope of the proceeding, the Board has no power to grant such relief, i.e., redress the petitioner's complaint. *Alaska DOT,* CLI-04-26, 60 NRC at 404.

Turning to the instant case, there is no doubt that Local 15 passes the *Bellotti* test because it is asking that the Order be revoked. Petition at 8. The Order states that if a hearing is requested "the issue to be considered at such hearing shall be whether this Confirmatory Order should be sustained." 78 Fed. Reg. at 66,967. Each of the three contentions meets this criterion because they each assert that "[t]he Confirmatory Order *should not be sustained.*" Petition at 2 (emphasis added). Local 15 does not ask for the Order to be strengthened. It asks for the Order to be revoked, thus satisfying the "scope" requirement of 10 C.F.R. § 2.309(f)(1)(iii). Likewise, Local 15 satisfies the redressability element of judicial standing.

No holding in any of the Commission's subsequent decisions under the *Bellotti* doctrine undermines the validity of Local 15's *standing* or the *within-scope* nature of its contentions.

To the contrary, Local 15 and the Exelon workers it represents will bear the brunt of the new behavioral observation measures and individual liabilities

[37] In *Alaska DOT,* the Commission denied a petition from a Mr. Farmer, because he sought to strengthen the order, i.e., "sought to replace or supplement the order with civil penalties and enforcement actions against individual managers." *Alaska DOT,* CLI-04-26, 60 NRC at 403.

imposed by the terms of the Order and they are asking that the Order be revoked entirely.

IV. THE ISSUE OF SAFETY HAS BEEN FAIRLY RAISED AND SHOULD BE CONSIDERED

The Majority seizes on a morsel of *dicta* in *Alaska DOT* to rule that no one can challenge an enforcement order so long as the order, in any way, "improves the safety situation over what it was in the absence of the order." Majority at p. 321 (quoting *Alaska DOT,* CLI-04-26, 60 NRC at 406). In addition, the Majority rules that Local 15's safety arguments — that the flaws in the Order have "the cumulative effect of rendering Exelon's operations *less safe* than they were before" the order (Reply at 9) — are not credible and are too late. Majority at p. 329.

I disagree.

A. The Majority's Reliance on Alaska DOT Dicta Is Misplaced

The Majority seizes on one brief passage in *Alaska DOT* to deny Local 15's hearing request. "A petitioner like Farmer is not adversely affected by a Confirmatory Order that improves the safety situation over what it was in the absence of the order." *Alaska DOT,* CLI-04-26, 60 NRC at 408.

That passage is not a legitimate basis for denying a hearing to Local 15.

First, Local 15 is not "a petitioner like Farmer." Local 15 *opposes* the corrective measures in the Order and is petitioning to have it revoked. In contrast, Mr. Farmer *approved* of the corrective measures imposed in the order and petitioned to have it *strengthened.*[38] Mr. Farmer was not adversely affected by the order, because he agreed that its remedial actions were warranted. Local 15 and the workers are adversely affected, because they disagree with the remedial actions in the Order and want it revoked.

Second, since the 1500 individual workers represented by Local 15 are the *de facto* targets (albeit unnamed) of the enforcement order they are not "like Farmer." The target of an order is not limited to safety challenges and can challenge it on any ground (e.g., the penalty is too large).

Third, the *Alaska DOT* statement is not binding on this Board because it was *dicta,* i.e., it addresses an ancillary matter which was not necessary to the *Alaska*

[38] "This is really a request to impose either different or additional enforcement measures — in contravention of Commission doctrine in enforcement actions, as approved in *Bellotti.*" *Alaska DOT,* 60 NRC at 405.

DOT decision. In *Alaska DOT,* the Commission never contemplated the situation presented in this case.[39]

Fourth, the Majority's position would insulate *all* confirmatory orders from *any* challenge. All enforcement orders "improve the safety situation" at least to some degree. But according to the Majority, so long as the Order contains one scintilla of safety improvement, it is immune from any challenge. The Majority acknowledges that, under its interpretation, challenges to confirmatory orders will be "rare." The Majority is too modest. Under its interpretation, such challenges will be impossible.[40] This is because every enforcement order will, in at least some small way, improve safety or security.

Finally, if the Majority's position is correct, then the Order in this case, and all NRC confirmatory orders, mislead the public. They all state that a "person adversely affected by the order may request a hearing," whereas, in fact, no one could ever meet the Majority's "safety" criterion and thus no such hearing request could ever be granted.

B. Local 15 Has Raised Legitimate Safety Concerns Which Should Be Heard

Assuming *arguendo* that Local 15's challenge to the Order must be based on safety concerns, Local 15 meets this standard.

As an initial matter, Local 15's Petition is based, in part, on safety concerns. Local 15 argues that "ambiguities and inconsistencies [in the Order] rendered employee compliance far more uncertain." Petition at 5. Local 15 states that it is "deeply concerned with the safety of Dresden Station and other nuclear plant personnel as well as the general public." Petition at 17. It argues that "the breadth,

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[39] As the Commissioners undoubtedly realize, one of the most fundamental precepts of law is that the "*holding*" of a higher tribunal is binding on a lower tribunal, *but "dicta" is not.* "*Dicta*" is defined as a "court's opinion which go[es] beyond the facts before court and therefore are individual views of author of opinion and not binding in subsequent cases as legal precedent." *Black's Law Dictionary* 454 (6th ed. 1990). *Holdings* are binding, because they address the central issues of a case — *issues that must be decided and that were the direct focus of thorough briefing by the litigants.* Meanwhile, *dicta* deals with ancillary matters, which probably were not tightly litigated or briefed (and thus where the tribunal did not get the benefit of such focused briefing). As Chief Justice Marshall explained, *dicta* "ought not to control the judgment in a subsequent suit when the very point is presented for decision. The reason of this maxim is obvious. The question actually before the Court is investigated with care, and considered in its full extent. Other principles which may serve to illustrate it, are considered in their relation to the case decided, but their possible bearing on all other cases is seldom completely investigated." *Cohens v. State of Virginia,* 19 U.S. 264, 399-400 (1821).

[40] *See, e.g., Bellotti,* 725 F.2d at 1386 (Wright, dissenting) ("Under the Commission's reasoning, where a licensed and operating plant has been found unsafe, where the Commission has ordered some remedial amendment, and where the licensee has accepted that amendment, there is no public interest in the proceeding.").

vagueness and ambiguity of the observation and reporting obligations [in the Order] casts a wide and indiscriminate net that simply is not carefully tailored to address . . . legitimate concerns for public health and safety." Petition at 18.

Contention 2 asserts that the Order imposes reporting obligations that are vague, overbroad, and not limited or cabined by 10 C.F.R. § 73.56(f) and that these flaws will confuse the people who are trying to comply with the Order. These allegations are quite plausible and could be addressed in an evidentiary hearing. The Order goes beyond the provisions of 10 C.F.R. § 73.56(f), putting NRC on record (for the first time) as imposing reporting requirements on any "illegal," "unusual," or "aberrant" behavior, as well as requiring the reporting of other "credible information." None of these terms are contained in 10 C.F.R. § 73.56(f), and none of them are defined in the Order. The Order does not even require that illegal, unusual, or aberrant behavior or credible information have any nexus to nuclear safety or security.

It requires no leap of logic to recognize that, if, as Local 15 asserts, an Order is so vague and ambiguous that people do not know how to comply with it, then it will undermine compliance and thereby undermine safety and security.

The Majority points to the fact that the first place where Local 15 expressly asserted that the Order makes Exelon's operations "less safe" was in its Reply. Reply at 9. The Majority believes this was a fatal mistake.

I disagree.

First, the Commission has held that an intervenor is *entitled to cure deficiencies with regard to standing when it files its reply.*[41] Even if Local 15's petition regarding safety was not clear, Local 15 responded to the arguments in the Staff's answer, and clarified its safety concerns in its reply. The "less safe" argument underpins Local 15's standing because it helps explain why Local 15 and the workers at the Exelon facilities will be "adversely affected" by the Order. Local 15 was entitled to cure this (supposed defect) in its reply.

Second, hearing requests are to be construed in favor of the petitioner on issues of standing. "To evaluate a petitioner's standing, we construe the petition in favor of the petitioner."[42] In contrast, the Majority discounts Local 15's safety concern, asserting that Local 15 cannot "credibly claim" that the Order could render Exelon's operations less safe. Majority at 3. I strongly disagree. As I have discussed above, the Order contains many undefined terms that are not found in

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[41] *South Carolina Electric & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 7 (reversing a Board for refusing to allow an intervenor to cure its standing in its reply); *PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 139-40 ("Mr. Epstein had the opportunity to cure on reply the defects in his initial petition.").

[42] *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

10 C.F.R. § 73.56(f) and that could plausibly lead to confusion and to a lowering of safety and security.[43]

Third, Local 15's "less safe" argument articulated in the Reply does not modify or change any of the contentions. Section 2.309(f) concerns the admissibility of contentions, not the admissibility of bases. Where the focus of the contention is unchanged, there is no problem. In this case the contentions are unchanged and the focus of what would be litigated in the evidentiary hearing remains exactly as before.

Fourth, even with regard to contention admissibility (rather than standing) it would be permissible for the Board to accept and consider the "less safe" rationale to support Contentions 1 and 2. The Commission has specifically stated that a Board is "free to decide this issue [contention admissibility] on a theory different from those argued by the litigants, but only if it explained the specific basis of its ruling and gave the litigants a chance to present arguments (and, where appropriate, evidence) regarding the Board's new theory."[44] This makes sense. The reason for generally refusing to allow an intervenor to raise entirely new contentions in its reply is that it might unfairly surprise the Applicant and the NRC Staff who generally do not have a right to "reply to the reply." This problem is obviated if — as here — the applicant and NRC Staff were given the "chance to present arguments" concerning the Intervenor's "less safe" concerns.

In sum, there is no valid reason to deny a hearing to Local 15 and the Exelon workers it represents. They have raised legitimate and serious safety concerns and fairness dictates that they should at least have an opportunity to be heard on the merits of their concerns.[45]

V. CONTENTIONS 1 AND 2 SATISFY THE ADMISSIBILITY REQUIREMENTS OF 10 C.F.R. § 2.309(f)

Assuming *arguendo* that Local 15 does not have an "automatic" right to a

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[43] The key issue is *what is required by law,* not what is specified in Exelon's ever-changing behavioral observation program. *If it is required by law, then NRC may legally enforce it.* The legal requirements are 10 C.F.R. § 73.56(f) and now, NRC's Order. Therefore it is crucial to know what the Order (i.e., NRC) requires, and whether it exceeds the ambit of 10 C.F.R. § 73.56(f). The contents of Exelon's behavioral observation program (at any given moment) cannot substitute for the duty of the NRC Staff, when it issued the instant Order, to be reasonably clear as to what is required of workers who are trying to comply with their *legal* obligation to report on their co-workers under 10 C.F.R. § 73.56(f).

[44] *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), CLI-09-3, 69 NRC 68, 73 n.24 (emphasis omitted).

[45] And since the Order has already gone into effect, granting Local 15 a hearing would not delay or obstruct any activities by Exelon or the NRC Staff.

hearing under 10 C.F.R. § 2.202(a)(3), and must file contentions that meet the admissibility criteria of 10 C.F.R. § 2.309(f)(1), I conclude that Contentions 1 and 2 are admissible.

A. Contention 1

Contention 1 asserts, in pertinent part, that the "Confirmatory Order should not be sustained because, without sufficient justification in the record, it imposes obligations on the off-duty employees of Exelon not otherwise required by [10 C.F.R. §§] 56(f)(1)-(3)." Petition at 15.

A quick review demonstrates that Contention 1 satisfies each of the six admissibility criteria of 10 C.F.R. § 2.309(f)(1)(i)-(vi), as follows. Contention 1 complies with 10 C.F.R. § 2.309(f)(1)(i) because it provides a "specific statement of the issue of law or fact to be raised or controverted." The issue is straightforward — does the Order contain sufficient justification in the record to justify the Order and the remedial actions it imposes on Exelon and the Exelon workers?

Contention 1 also satisfies 10 C.F.R. § 2.309(f)(1)(ii) because it "provide[s] a brief explanation of the basis [i.e., rationale] for the contention." The regulations require that an order "allege the *violations* with which the licensee . . . is charged . . . *or other facts deemed to be sufficient ground* for the proposed action." 10 C.F.R. § 2.202(a)(1) (emphasis added). Does the Order allege any violations by Exelon? Does the Order allege "facts deemed to be sufficient ground for the proposed action?" The "basis" of Contention 1 is that the Order is defective because it fails to provide "sufficient justification in the record" for the burdens it imposes.[46]

As to the third criterion, Contention 1 alleges that the Order "should not be sustained," and is thus clearly within the "scope of the proceeding" as required by 10 C.F.R. § 2.309(f)(1)(iii). NRC Staff admits this point (Local 15 has "cleared the Bellotti hurdle." Tr. at 112).

For the same reason, the issue presented in Contention 1 (whether the Order contains sufficient justification under 10 C.F.R. § 2.202(a)(1)) raises a "material" issue, and thus satisfies 10 C.F.R. § 2.309(f)(1)(iv).

The fifth regulatory criterion states that a petition must "provide a concise statement of the alleged facts . . . which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely." 10 C.F.R. § 2.309(f)(1)(v).

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[46] Petition at 15. Where an enforcement order directly targets two entities, the fact that one of them (Exelon) consents to the order does not relieve NRC of the duty to comply with 10 C.F.R. § 2.202(a)(1) vis-à-vis the other (i.e., the workers).

As an initial matter, to the extent that Contention 1 raises an issue of law, it is exempt from 10 C.F.R. § 2.309(f)(1)(v). In the matter of *U.S. Department of Energy* (High-Level Waste Repository), CLI-09-14, 69 NRC 580, the Commission held:

> [O]ur rules permit contentions that raise issues of law as well as contentions that raise issues of fact. . . . [R]equiring a petitioner to allege "facts" under 10 C.F.R. § 2.309(f)(1)(v) or to provide an affidavit that sets out the "factual and/or technical bases" . . . in support of a *legal* contention — as opposed to a *factual* contention — is not necessary.

Id. at 590.

Contention 1 is a legal contention, at least in part, because it asserts that the Order does not contain sufficient justification to warrant the actions that NRC has mandated.

To the extent that Contention 1 may raise factual issues, it satisfies 10 C.F.R. § 2.309(f)(1)(v) because the Petition states the underlying facts (e.g., the crime spree by the two SROs), attaches Exelon's behavioral observation program, and alleges:

> Local 15 is aware of no evidence that the SROs' and EO's failure to report these events was caused by any insufficiency in Exelon's existing access authorization program or its behavioral observation component, as embodied in Exelon Procedure SY-AA-103-513, nor does any such statement appear in the Confirmatory Order. Local 15 is aware of no evidence that any other Exelon employees have failed to report "behaviors or activities that may constitute an unreasonable risk to the health and safety of the public and common defense and security, including a potential threat to commit radiological sabotage" or concerns arising from behavioral observation. There simply is no evidence in the record to support a conclusion that the three employees' failure to report the plot to rob an armored car was anything other than an isolated incident and no evidence to support a conclusion that their conduct was attributable to any deficiency in Exelon's behavioral observation program. Nor is there any evidence that the measures Exelon has reportedly already taken, or has agreed to take in the future — measures which are affirmed by the Confirmatory Order — are likely to reduce the likelihood of occurrence of similar events in the future.

Petition at 17.

Sixth, Contention 1 satisfies 10 C.F.R. § 2.309(f)(1)(vi) because it provides "sufficient information to show that a genuine dispute exists . . . on a material issue of law or fact." The "genuine issues" include whether the Order was justified at all, *i.e.,* was there any violation by Exelon at all (do violations by criminal conspirator employees automatically constitute a violation by the employer?) and

whether the record contains sufficient information to justify the remedial actions imposed on the workers by the Order.

While I need not, and do not, address the "merits" of Contention 1, I conclude that it satisfies the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(i)-(vi).

B. Contention 2

Contention 2 asserts, in pertinent part:

> The Confirmatory Order should not be sustained because it imposes on the employees of Exelon behavioral observation and reporting requirements that are vague, over-broad and not carefully tailored to address the NRC's stated health and safety concerns and improperly delegates to Exelon the discretion to interpret and implement NRC standards concerning behavioral observation without the input of Local 15, the public or the NRC.

Petition at 18.

Contention 2 provides a "specific statement of the issue of law or fact to be raised or controverted," as required by 10 C.F.R. § 2.309(f)(1)(i). It raises several issues, including whether the Order imposes reporting obligations on the workers that are "over-broad," e.g., that exceed NRC's authority under 10 C.F.R. § 73.56(f)(3). The Order requires the reporting of any "illegal," "unusual," or "aberrant" conduct, but none of these terms are defined. Petition at 18. Nor are they found in 10 C.F.R. § 73.56(f). Local 15 complains the order requires the reporting of behavior without regard to whether it has any nexus to public health and safety or the common defense and security.[47] Petition at 18; Tr. at 12. Another example is that the Order is not limited to "observed behavior," but also requires workers to report about any "credible information" concerning their co-workers. Petition at 5. The Petition satisfies 10 C.F.R. § 2.309(f)(1)(i).

The "basis" for Contention 2 is explained in its "because" clause. Local 15 asserts that the Order should be revoked "because it imposes on the employees . . . reporting obligations that are vague, over-broad and not carefully tailored to address the NRC's stated health and safety concerns and improperly delegates to Exelon the discretion to interpret and implement NRC standards." Petition at 18. Without addressing the merits of the claims, Local 15 certainly has provided the "basis" (i.e., legal rationale) for Contention 2 and has satisfied 10 C.F.R. § 2.309(f)(1)(ii).

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[47] NRC Staff acknowledges that 10 C.F.R. § 73.56(f) only requires the reporting of "observed conduct [with] a nexus to public health and safety or the common defense and security." NRC Answer at 8.

The Order specifies that the scope of any challenge to the Order "shall be whether this Confirmatory Order should be sustained." 78 Fed. Reg. at 66,967. Contention 2 asserts that the Order "should not be sustained" and thus is within the scope of this proceeding as required by 10 C.F.R. § 2.309(f)(1)(iii).

Likewise, Contention 2 raises "material" issues — whether the Order exceeds NRC's authority, whether it is so vague that it will undermine compliance and leave workers exposed to inappropriate liabilities and burdened — and satisfies 10 C.F.R. § 2.309(f)(1)(iv).

Turning to 10 C.F.R. § 2.309(f)(1)(v), Contention 2 clearly qualifies as a "legal contention." Local 15 is asserting, *inter alia,* that the Order exceeds NRC's authority and that NRC has improperly delegated to Exelon the ability to determine what constitutes compliance with the law (i.e., what must be reported under the Order). As a legal contention, Contention 2 does not need to comply with 10 C.F.R. § 2.309(f)(1)(v). *U.S. Dep't of Energy,* CLI-09-14, 69 NRC at 590.

In any event, Contention 2 is supported by a "concise statement of the alleged facts" that is sufficient to support Local 15's request for a hearing. The affidavit of Mr. Dennis Specha states, in pertinent part:

> I am very concerned about the adverse impact of the NRC's Confirmatory Order on my own employment. The changes announced in the Confirmatory Order result in very broad observation and reporting obligations. Further, it is unclear exactly what type and scope of "unusual," "aberrant," and/or "illegal" conduct I will be expected to report. In light of this vagueness I am concerned that I could inadvertently violate Exelon's Procedure and be subjected to discipline and/or revocation of access.

Petition, Exh. 1, Aff. of Dennis Specha (Dec. 11, 2013) ¶ 10.

The Petition argues that the Order "will likely have introduced into the reporting requirements numerous ambiguities and inconsistencies and rendered employee compliance far more uncertain." Petition at 5. Contention 2 satisfies 10 C.F.R. § 2.309(f)(1)(v).

Contention 2 provides "sufficient information to show that a genuine dispute exists . . . on a material issue of law or fact" and satisfies 10 C.F.R. § 2.309(f)(1)(vi). There is a genuine dispute on various material issues, e.g., whether the Order is over-broad and exceeds NRC's legal authority (legal issue), whether it is too vague and thereby undermines compliance (factual issue), and whether it unnecessarily exposes workers to new burdens and liabilities (factual issue).

In sum, Contention 2 meets the admissibility criteria of 10 C.F.R. § 2.309(f)(1)(i)-(vi).

C. Contention 3

Contention 3 asserts:

> The Confirmatory Order should not be sustained because it improperly endorses and confirms unlawful actions undertaken by Exelon Generation in derogation of its duty to bargain with Local 15 about the employees' terms and conditions of employment and in violation of the legally protected rights of Local 15 and its members.

Petition at 2.

In contrast to Contentions 1 and 2, which raise issues as to whether the Order violates the AEA or NRC regulations such as 10 C.F.R. § 2.202(a)(1) [Contention 1] or 10 C.F.R. § 73.56(f) [Contention 2], Contention 3 raises issues that are outside of our expertise or jurisdiction. It is for the NLRB, not the ASLBP, to decide whether the changes to the behavioral observation program constituted "terms and conditions of employment" under the National Labor Relations Act (NLRA). It is for the NLRB, not the ASLBP, to decide whether Exelon has a "duty to bargain with Local 15" about these changes. It is for the NLRB to decide whether the fact that these changes have now been incorporated and legally imposed by an Order from NRC exonerates Exelon from any unfair labor practice charge under the NLRA. See Section VII, below.

Contention 3 is not admissible under 10 C.F.R. § 2.309(f)(1)(iii) and (iv) because it raises issues that are outside of the scope of NRC expertise and jurisdiction. On this issue, I agree with the Majority.

VI. WHEN A SETTLEMENT DIRECTLY IMPOSES ADVERSE IMPACTS ON A THIRD PERSON, THAT PERSON HAS A RIGHT TO BE HEARD

The Majority argues that if we grant a hearing to Local 15 and the Exelon workers, this will undermine NRC's ability to settle enforcement actions and violate NRC's policy of encouraging settlements. The Majority refers to a statement by the Commission in *Alaska DOT*:

> [T]o allow third parties to contest enforcement settlements at hearings would undercut our salutary policy favoring enforcement settlements. Such a policy would be thwarted if licensees which consented to enforcement actions were routinely subjected to formal proceedings, possibly leading to more severe or different enforcement actions.

Alaska DOT, CLI-04-26, 60 NRC at 408-09 (internal quote omitted).

Certainly NRC has a policy of encouraging settlements; *see* 10 C.F.R. §§ 2.203, 2.338(a). The policy is salutary. But when a settlement between NRC and a licensee directly imposes significant burdens and liabilities on individual workers, they have a right to be heard.

First, the above-quoted statement from *Alaska DOT* is *dicta.* See *Alaska DOT,* CLI-04-26, 60 NRC at 408 ("Our holding that Farmer does not have standing is dispositive of this case."); *id.* at 409 ("[W]e need not decide this issue.").

Second, *Alaska DOT* is inapposite because it was a pure *Bellotti* case and even the Staff agrees that Local 15 "clears the *Bellotti* hurdle." Tr. at 112.

Third, the dire consequences contemplated in the above-quoted passage in *Alaska DOT* (the specter that intervention might lead to "more severe or different enforcement actions [against the licensee]," *Alaska DOT,* CLI-04-26, 60 NRC at 409) cannot arise in this case. This is because Local 15 is asking that the enforcement order be revoked. If Local 15 is successful, Exelon will be released from complying with NRC's enforcement order.

Fourth, as discussed above, although Exelon is the only party expressly named in the Order, individual Exelon workers are also, *de facto,* the targets of this enforcement order. NRC acknowledges that the Order was specifically "tailored" to modify the behavior of individual employees. Staff Answer at 14. Individual workers will be personally liable to NRC if they fail to comply with the reporting obligations established in the Order. These workers have a due process right to protect their liberty and property, as they are affected by this Order.

It is axiomatic that "parties who choose to resolve litigation through settlement may not dispose of the claims of a third party, and *a fortiori* may not impose duties or obligations on a third party, without that party's agreement." *Local No. 93, International Association of Firefighters v. Cleveland,* 478 U.S. 501, 529 (1986).

Fifth, NRC's policy of encouraging settlements specifically recognizes that settlements are not inviolate. "The presiding officer or Commission may order the adjudication of the issues that the presiding officer or Commission finds is required in the public interest to dispose of the proceeding." 10 C.F.R. § 2.338(i). Likewise "the presiding officer . . . may order such adjudication of the issues as he may deem to be required in the public interest." 10 C.F.R. § 2.203. The fact that NRC has settled an enforcement action with a licensee does not mean that other persons directly and adversely affected by it cannot be heard.

Finally, the Majority reasons that, if we grant Local 15 a hearing on its challenges to the Order, then it is tantamount to ordering NRC and Exelon to allow Local 15 to participate in the settlement negotiations.[48] The Majority implies

[48] During oral argument, counsel for Local 15 was pushed to acknowledge that the union would also like to be included in the discussions concerning Exelon's modifications to its behavioral observation program. *See* Tr. at 216-17. After extracting this point, the Majority raises the specter that, if Local *(Continued)*

that such a ruling would open the floodgates by allowing strangers, bystanders, and other interlopers to enter the ADR room and to kibitz about the settlement of every enforcement action.

I disagree. The only relief that Local 15 is seeking is that the Order "not be sustained." Petition at 3. Local 15 might "like" to be consulted and involved in the negotiation of a confirmatory order concerning revisions to Exelon's behavioral observation program, Tr. at 216-17, but Local 15 is not asking us to issue such an order. Perhaps the NLRA even says that *Exelon* must bargain with Local 15 on such matters — but this is not our issue.[49] Even if Local 15 asked us to order the Staff to bring them into the settlement negotiations (which they do not), we could not grant it.[50] Local 15 has merely asked that the Order be revoked. Petition at 8. This we could do.

VII. NLRB CANNOT GRANT THE REQUESTED RELIEF — REVOCATION OF THE ORDER

The Majority dismisses Local 15's request for a hearing, telling the workers to look, instead, to the NLRB for the relief they request. With regard to Contention 3 — which asserts that Exelon's actions constituted an "unfair labor practice" in violation of the NLRA — I agree. This Board has no NLRA expertise or jurisdiction. With regard to the other two contentions, however, I disagree.

Contentions 1 and 2 raise *issues* (e.g., whether the Order fails to adhere to 10 C.F.R. § 73.56(f)) and seek *relief* (that NRC's Order be revoked) that *can only be granted by NRC.*

The Majority puts Local 15 in a Catch-22, thereby denying the workers any effective relief. On the one hand, the Majority says — go away — we are powerless to help you. Take your complaints to the NLRB. On the other hand, Exelon says the NLRB is powerless to modify the Order because it is a legally

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15 is allowed to challenge this Order, then NRC would never be able to settle an enforcement case because every Tom, Dick, or Harry would now be entitled to second-guess NRC, and settlement negotiations would entail "complicated multiparty negotiations [that] would no doubt hinder, not enhance, the prospects for promptly and efficiently concluding enforcement actions when the *subject* is willing to settle." Majority at p. 334 (emphasis added). Baloney. First, although Local 15 might "like" to be included in the negotiations, the Petition does not ask for such relief. The petition merely asks that the Order be revoked. That is relief that this Board, and only this Board, can grant. Second, the workers represented by Local 15 are the *de facto* target of the Order. The sanctity of settlements notwithstanding, when two persons settle a "dispute" by foisting substantial new burdens and liabilities on another person, that person has a due process right to be heard.

[49] Exelon clearly does NOT represent the workers on this issue, and NRC cannot assume that it does.

[50] *Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 74 (2004).

binding edict of the NRC.[51] Voila! NRC and Exelon negotiate a private deal that imposes significant new burdens and liabilities on individual workers, but the workers have no right to even be heard.[52]

Finally, the Majority suggests that a worker such as Mr. Specha should wait until NRC files charges against him for violating the new reporting obligations imposed by the Order or until Exelon terminates him and then, at that point "he would be entitled to a hearing in accordance with Local 15's collective bargaining agreement." Majority at p. 334. I disagree. A person does not need to wait until he is charged with a crime and "in the dock" before he can challenge an Order that imposes new burdens and liabilities on him.[53] Here, it appears that the workers are immediately and adversely impacted — they must immediately increase their surveillance of, and reporting on, their co-workers. Failure to report under the Order, i.e., failure to report something that Exelon or NRC later decide was "unusual," or "illegal," subjects the workers to being blacklisted, fined, and/or imprisoned by the NRC. NRC and Exelon say — "Trust Us." We will be reasonable. We do not really mean (as the Order flatly says) that you must report all "unusual" or "illegal" behavior of your co-workers. Tr. at 53 (Exelon), 77-79 (NRC Staff). Just report the ones we want you to report.[54]

"Trust Us" will not do. When the police power of the federal government is deployed to order a person to perform certain actions, under pain of losing his or her livelihood, liberty, and/or property, then that person has a right to challenge

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[51] Exelon argues that the Order "establishes what the NRC determined was acceptable and *necessary* to ensure that the public health and safety are reasonably assured. The NRC determined that public health and safety *require* that Exelon's commitments be confirmed by this Confirmatory Order." Exelon Answer at 38 (internal quotes and cites omitted). Exelon concludes that "an employer is excused from the duty to bargain over that which it is legally compelled to do." *Id.* Catch-22: NRC should defer to NLRB and NLRB must defer to NRC.

[52] The Majority suggests that, if the NLRB rules that Exelon violated the NLRA, then *Local 15 can always come back and ask NRC to modify the Order.* "Should [Local 15's unfair labor practice] charge be upheld, . . . the Order itself contains a procedure for seeking modification for good cause." Majority at p. 334. Another Catch-22. First, only Exelon is entitled to seek a modification of the Order. Local 15 has no such power. Second, even if Local 15 filed such a request, the Majority would be confronted with the identical question — do the workers and Local 15 have standing to seek modification of the Order? Presumably the Majority would be consistent and, again, deny Local 15's request on the ground that the workers are mere "nonparticipants" to the Order.

[53] *See Sackett v. Environmental Protection Agency,* 132 S. Ct. 1367 (2012).

[54] For example, in its Order, NRC stated that workers must report *any "illegal"* activity by their co-workers. The Order is legally enforceable, and the NRC sets the minimum or "floor" requirements. Tr. at 77, 92. Meanwhile, Exelon's behavioral observation program says that workers *do not need to report minor illegal activities.* Obviously Exelon does not have the authority to change the Order or to exonerate workers from complying with its requirements.

the order, and have a hearing to determine what the order means and whether it comports with the law.[55]

VIII. THE ORDER VIOLATED 10 C.F.R. § 2.202(a)(3) AND MISLED LOCAL 15[56]

NRC's Order in this case violated 10 C.F.R. § 2.202(a)(3). Nothing in the Order or the *Federal Register* notice informed *anyone* of their "right to demand a hearing" as *required* by 10 C.F.R. § 2.202(a)(3) (the order "will . . . [i]nform the licensee or any other person adversely affected by the order of his or her right . . . to demand a hearing").

The right to "demand a hearing" under 10 C.F.R. § 2.202 is manifestly different from the opportunity to "request a hearing" under 10 C.F.R. § 2.309. The Staff's attempt to equate these two phrases was demolished in a recent case involving identical language:

> [F]or the Staff's argument to apply, the Board would have to conclude that a hearing "demand" filed as of right under section 2.103(b)(2) is a "hearing request" under section 2.309(f)(1).
>
> The Board declines to adopt such an interpretation because it would conflict with the ordinary meaning of the English language: manifestly "demand" and "request" are not synonyms and therefore cannot be given, as the Staff would have it, the same meaning and effect. A person authorized to make a "demand" is generally understood to have a right to the matter that is the subject of the demand. Thus, 10 C.F.R. § 2.202(a)(3) and (c), which, like section 2.103(b)(2), authorize a "demand" for a hearing, are understood to confer a right to a hearing. One authorized to make a "request," by contrast, is merely given permission to ask for something, not to demand it. The usual rule of regulatory interpretation is that "different language is intended to mean different things," and thus a demand for a hearing is not to be treated as a mere request for a hearing.

Charlissa C. Smith (Denial of Senior Reactor Operator License), LBP-13-3, 77 NRC 82, 90 (2013) (citations omitted).

Orders issued by the NRC Enforcement Office consistently fail to "inform . . . any other person adversely affected by the order of his or her . . . right to demand a hearing" and thus fail to comply with 10 C.F.R. § 2.202(a)(3). For example, my search of the *Federal Register* reveals that none of the hundreds of enforcement orders that NRC has published during the last 10 years even mention the "right to

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[55] *See Sackett v. EPA,* 132 S. Ct. 1367.

[56] *See Fort Stewart Schools v. Federal Labor Relations Authority,* 495 U.S. 641, 654 ("It is a familiar rule of administrative law that an agency must abide by its own regulations.").

demand a hearing," except one.[57] The NRC Enforcement Policy and Enforcement Manual (over 400 pages) conveniently omit any reference to the legal requirement that NRC orders must inform the adversely affected persons of their "right to demand a hearing." The Order to Exelon did not contain this phrase. Even NRC's enforcement orders to Mr. Buhrman and Mr. Brittain never mentioned their "right to demand a hearing." The Staff's practice of ignoring 10 C.F.R. § 2.202(a)(3) has continued until recently.[58]

The failure of the instant Order to inform the licensee or "other person adversely affected" of their right to demand a hearing confused and misled Local 15.[59]

IX. CONCLUSION — CUMULATIVE EFFECTS

Over the years the NRC has created numerous barriers to entry into the adjudicatory process. Many of them are evident in this case. None of them are legally necessary.[60] These barriers include:

1. *Administrative Standing*: Imposing the legally unnecessary requirements of 10 C.F.R. § 2.309(d).
2. *Judicial Concepts of Standing*: The addition of the Constitutional tests of injury-in-fact, causation, and redressability.[61]
3. *Additional Prudential Tests*: The imposition of the (prudential) "zone of interests" test.[62]

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[57] In the Matter of MC Squared, Inc., Tampa, FL; Order Imposing Civil Monetary Penalty, 72 Fed. Reg. 69,714 (Dec. 10, 2007).

[58] *See* In the Matter of South Carolina Electric & Gas Company, Virgil C. Summer; Nuclear Station Independent Spent Fuel Storage Installation Order Modifying License (Effective Immediately), 79 Fed. Reg. 6652 (Feb. 4, 2014).

[59] "We initially took at face value the order's directive that in order to be granted a hearing we would have to establish standing and proffer at least one admissible contention pursuant to Rule 2.309." Tr. at 16-17.

[60] In fact, the Purpose section of the AEA, § 3(d), specifically provides for creating "a program to encourage widespread participation" in order to achieve the policies set forth in the AEA. How the various barriers have affected the public's ability to participate in NRC proceedings was outlined last year by a frequent counsel for intervenors before boards. *See* Letter from Diane Curran to NRC Commissioners (Feb. 26, 2013) (ADAMS Accession No. ML13057A987).

[61] *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009) ("[W]e are not strictly bound by judicial standing doctrines . . . . [but] we have long applied contemporaneous 'judicial concepts of standing.'").

[62] The Commission, in determining standing, asks whether "an interest arguably within the zone of interests protected by the governing statute" has been injured. *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993).

4. *Eliminating Discretionary Intervention*: The elimination of discretionary intervention unless some other person has established standing (and, even in such cases, only allowing discretionary intervention in very "extraordinary" situations).[63]

5. *Bellotti Doctrine*: Establishing the *Bellotti* doctrine, whereby the scope of an enforcement proceeding is defined so narrowly that virtually no one (except the target of the order) can be granted a hearing.[64]

6. *Misleading Notices to the Public*: Allowing the Staff to issue orders that consistently fail to inform adversely affected persons of their right to demand a hearing and that violate 10 C.F.R. § 2.202(a)(3).[65]

7. *Premature Adjudication*: Requiring petitions to be filed 60 days after the application is docketed. At this point the licensing process has barely started, making it much more difficult for a public interest group to formulate an admissible challenge.[66]

8. *Get It Right the First Time or Be Forever Barred*: Prohibiting an intervenor from curing technical defects in its Reply, for fear that 27 extra days would excessively "delay" the licensing proceeding (which usually takes an additional 3 to 5 years).[67]

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[63] *Andrew Siemaszko,* CLI-06-16, 63 NRC 708, 716 (2006) (vacating discretionary intervention). *See also* 69 Fed. Reg. 2182, 2201 (Jan. 14, 2004).

[64] *Pilgrim,* CLI-82-16, 16 NRC 44 (restricting the limits of a hearing to solely "whether, on the basis of matters set forth in the Order, the Order should be sustained"). *Bellotti v. NRC,* 725 F.2d 1380, 1381 (D.C. Cir. 1983) reaffirmed the Commission's authority to set the scope of its own hearings.

[65] *See* Section VIII, *supra.*

[66] "The early commencement of licensing hearings . . . wastes the time and resources of all parties on premature and unproductive litigation." Letter from Diane Curran to NRC Commissioners at 9 (Feb. 26, 2013) (ADAMS Accession No. ML13057A987); *cf.* 40 C.F.R. § 124.19 (administrative challenges to EPA permits are to be filed 30 days *after* EPA's final permit decision).

[67] The Commission has "stressed" that because of NRC's "increasing adjudicatory docket" it is "paramount" that Petitioners satisfy the contention admissibility requirements in the petition ("at the outset") and not 27 days later in their reply.

> As the Commission has *stressed,* our contention admissibility and timeliness requirements *demand a level of discipline* and preparedness on the part of petitioners, who must examine the publicly available material and set forth their claims and the support for their claims *at the outset.* The Petitioners' reply brief should be narrowly focused on the legal or logical arguments presented in the applicant/licensee or NRC staff answer . . . . As we *face an increasing adjudicatory docket,* the need for parties to adhere to our pleading standards and for the Board to enforce those standards are paramount. There simply would be no end to NRC licensing proceedings if petitioners could disregard our timeliness requirements.

Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 224-25 (2004) (internal quotes and cites omitted) (emphasis added).

9. *Imposing "Reopener" Requirements Even Though the Evidentiary Record Has Never Been "Opened"*: If a petition is rejected or dismissed at the docketing stage (before the evidentiary record has ever been "opened"), then subsequent petitions, in addition to meeting all of the other requirements, must also show that the evidentiary record should be "reopened" under 10 C.F.R. § 2.326.[68]

10. *Asymmetrical Interlocutory Appeals*: Allowing the Staff and Licensee to file interlocutory appeals on the *admission* of a contention, while prohibiting Intervenors from filing such appeals on the *denial* of a contention (unless ALL contentions have been denied).[69]

11. *Strictly Construed*: Mandating that the six contention admissibility requirements of 10 C.F.R. § 2.309(f) be strictly construed against the intervenors.[70]

12. *NRC Staff Participation Opposing All Requests for Evidentiary Hearings*: When a "person whose interest may be affected" under AEA § 189(a)(1)(A) requests a hearing, the *NRC Director* handing the licensing process *always opposes the request for a hearing.* This is usually unnecessary and unproductive, because the well-represented Applicant always opposes the hearing request.[71]

None of the forgoing barriers are *required* by law. These are self-imposed limitations. Even when they are subject to judicial review, the courts do not pass judgment on the wisdom of these barriers. At most, a court will examine a specific barrier, in isolation, and generally conclude that it is *not illegal.*[72]

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[68] The "rule governing motions to reopen sets a high standard." *Virginia Electric and Power Co.* (North Anna Power Station, Unit 3), CLI-12-14, 75 NRC 692, 700 (2012).

[69] "The right to interlocutory appeal . . . is fundamentally asymmetrical." *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC 51, 147 n.89 (2009). The current appeal procedure was established by 37 Fed. Reg. 28,710, 28,711 (Dec. 29, 1972). In 2013, NRC issued an advance notice of proposed rulemaking to change these interlocutory appeal rules which it later withdrew because it "believe[d] that there is not significant public interest in a rule change at this time." Potential Changes to Interlocutory Appeals Process for Adjudicatory Decisions, 78 Fed. Reg. 66,660, 66,660 (Nov. 6, 2013).

[70] The Commission describes the contention admissibility rules as 'strict by design." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-08-17, 68 NRC 231, 233 (2008); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118 (2006); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808 (2005); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001).

[71] *U.S. Dep't of Energy* (High-Level Waste Repository), CAB-02, Tr. at 352-55 (Apr. 1, 2009).

[72] *See Bellotti v. NRC,* 725 F.2d at 1381.

As *Chevron* teaches — the Commissioners have the legal authority to modify, remove, or adjust any of these barriers.[73] Indeed, the entire point of *Chevron* was to allow administrative agencies to change their mind.

Over the decades, brick by brick, the cumulative effect has been to create an exclusionary fortress against the conduct of adjudicatory hearings. NRC imposes standing requirements more stringent than ANY other administrative agency in the federal government.[74] Indeed, NRC sometimes imposes standing requirements MORE stringent than those imposed in federal court.[75] The NRC case law on standing comprises many thousands of pages. Tens of millions of dollars of litigation costs have been devoted to standing — an issue that most federal agencies ignore or take for granted. Meanwhile, an evidentiary hearing on the merits of a contention usually takes a single day.

During the last 10 years there have only been thirteen cases in which an intervenor actually obtained a Subpart L adjudicatory hearing.[76] Barely one hearing per year. Rather than increasing, as was predicted in 2004,[77] the NRC's adjudicatory docket has substantially decreased.

In this regard, I note that the NRC has recently initiated a "Cumulative Effects of Regulation" (CER) program that requires the NRC Staff "to develop and implement outreach tools that will allow NRC to consider more completely the

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[73] "An initial agency interpretation is not instantly carved in stone. On the contrary, the agency . . . must consider varying interpretations and the wisdom of its policy on a continuing basis." *Chevron v. Natural Resources Defense Council, Inc.,* 467 U.S. 837, 863-64 (1984).

[74] One commenter has cited NRC's "50-mile proximity presumption" as an example of NRC's great liberality in the arena of standing. David A. Repka & Tyson R. Smith, *Proximity, Presumptions, and Public Participation: Reforming Standing at the Nuclear Regulatory Commission,* 62 Admin. L. Rev. 583, 590 (2010). I disagree. Given that NRC's safety regulations cover a 50-mile planning area, 10 C.F.R. § 50.47(c)(2), it would be contradictory for NRC to deny standing to persons within that area.

[75] *Envirocare of Utah v. NRC,* 194 F.3d 72, 74 (D.C. Cir. 1999) (wherein NRC raised the bizarre argument that it would be legally permissible for NRC to "refuse to grant a hearing to persons who would satisfy the criteria for judicial standing and refuse to allow them to intervene in administrative proceedings").

[76] The NRC webpage states that the agency conducts over 1,000 public meetings annually. 2013-14 Information Digest, http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/v25/facts-at-a-glance.pdf (last visited Apr. 14, 2014). But most of these were merely public "comment" sessions. Except for the three Subpart L evidentiary hearings held in 2013, few (if any) of NRC's 1000 meetings afforded members of the public the opportunity to have an impartial adjudicator force the NRC Staff or a Licensee/Applicant to do something that they did not want to do.

[77] *See Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-25, 60 NRC 223, 224-25 (2004).

overall impacts of multiple rules, orders, generic communications, advisories, and other regulatory actions *on licensees.*"[78] Excellent.

Perhaps the CER program should also consider the cumulative effects of the NRC regulations and CLI decisions *on members of the public,* seeking to have their objections heard in an adjudicatory hearing under AEA § 189(a).

As a judge on the ASLBP it is my duty to apply the law, the regulations, and the holdings of the decisions of the Commission to the facts of the case before me. I do my best to discharge this duty.

In this case, my duty requires me to say that the request for hearing by the 1500 workers at Exelon represented by Local 15 should be granted. The Majority's decision is *not* required by any law, regulation, or holding of the Commission.

The Exelon workers have raised legitimate contentions (1) that they will be adversely affected by the Staff's Confirmatory Order and (2) that the Order is legally deficient. These workers deserve a hearing on those issues.

[78] *See* 79 Fed. Reg. 13,685, 13,686 (Mar. 11, 2014) (citing SECY-11-0032 (Oct. 11, 2011) (ADAMS Accession No. ML112840466)) ("Consideration of the Cumulative Effects of Regulation in the Rulemaking Process"); SECY-12-0137 (Oct. 5, 2012) (ADAMS Accession No. ML12223A162) ("Implementation of the Cumulative Effects of Regulation Process Changes") and the Staff Requirements Memorandum to SECY-12-0137 (ADAMS Accession No. ML13071A635).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Dr. Richard F. Cole
Dr. Mark O. Barnett

In the Matter of **Docket No. 40-9075-MLA**
(ASLBP No. 10-898-02-MLA-BD01)

POWERTECH USA, INC.
(Dewey-Burdock In Situ Uranium Recovery Facility)

April 28, 2014

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; ADMISSIBILITY)

To be admissible, a new or amended contention must satisfy the substantive contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1).

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; ADMISSIBILITY)

A new or amended contention related to portions of the FSEIS that differ from the DSEIS must be timely filed under section 2.309(c) and must meet the contention admissibility standards of section 2.309(f)(1) to be admitted.

RULES OF PRACTICE: CONTENTIONS (FILED AFTER INITIAL DEADLINE)

If a party submits a proposed contention after the initial filing deadline announced in the applicable *Federal Register* notice for submitting a hearing

petition, it must not only meet the contention admissibility standards of section 2.309(f)(1), but must also satisfy the timeliness requirements of section 2.309(c) or section 2.307(a).

RULES OF PRACTICE: CONTENTIONS (FILED AFTER INITIAL DEADLINE STANDARD)

If the reason a motion to admit a new or amended contention was filed after the initial deadline does not relate to the substance of the filing itself, the standard contained in 10 C.F.R. § 2.307(a) applies in determining whether the motion can be considered timely. Section 2.307(a) provides that a filing deadline "may be extended or shortened either by the Commission or the presiding officer for good cause, or by stipulation approved by the Commission or the presiding officer." Good cause exists when 10 C.F.R. § 2.309(c)(1)(i)-(iii) is fulfilled.

RULES OF PRACTICE: CONTENTIONS (MIGRATION TENET)

Admitted contentions challenging NRC Staff's DSEIS may function as challenges to portions of the FSEIS when the information is sufficiently similar. If the FSEIS analysis or discussion is *in pari materia* with the DSEIS analysis or discussion, a party need not file a new or amended contention; the previously admitted contention will simply be viewed as applying to the relevant portion of the FSEIS. Parties need not file additional statements with the Board concerning contentions which migrate to the FSEIS.

RULES OF PRACTICE: CONTENTIONS (PREVIOUSLY ADMITTED)

An admitted contention remains an admitted contention until it is adjudicated by the Board or eliminated prior to the hearing by the filing of a dispositive motion. To remove an admitted contention from the proceeding, a party must file, and a Board must grant, a motion for summary disposition in conformance with 10 C.F.R. § 2.1205.

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF OMISSION; CONTENTION OF ADEQUACY)

There are two primary types of contentions — contentions of omission and contentions of adequacy. "A contention of omission is one that alleges an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues

have been discussed in the application." *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 200 n.53 (2011). Based on its language, a contention can be characterized as a contention of omission, a contention of adequacy, or both.

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF OMISSION)

A contention of omission which has been admitted may be rendered moot by subsequent license-related documents filed by the NRC Staff that address the alleged omission.

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF ADEQUACY)

In the case of an admitted contention that challenges the adequacy of an environmental document, the inclusion of additional information in a subsequent environmental document may or may not moot the contention.

MEMORANDUM AND ORDER
(Ruling on Proposed Contentions Related to the Final Supplemental Environmental Impact Statement)

I. INTRODUCTION

This proceeding challenges the application of Powertech (USA), Inc. (Powertech) to construct and operate an in-situ leach uranium recovery (ISR) facility in Custer and Fall River Counties, South Dakota.[1] On August 5, 2010, the Board in the above-captioned matter ruled on two petitions to intervene and requests for hearing,[2] and admitted the Oglala Sioux Tribe and Consolidated Intervenors[3] as intervenors. The Board also admitted seven contentions proposed by the Oglala Sioux Tribe and the Consolidated Intervenors.[4] These contentions related to cultural resources (Consolidated Intervenors' Contention K and Oglala Sioux Tribe's Contention 1), baseline groundwater conditions (Consolidated Intervenors' Con-

[1] LBP-10-16, 72 NRC 361, 375-78 (2010).

[2] *Id.* at 375.

[3] Although originally designated Consolidated Petitioners, we now refer to Susan Henderson, Dayton Hyde, and Aligning for Responsible Mining as the Consolidated Intervenors.

[4] LBP-10-16, 72 NRC at 443-44.

tention D and Oglala Sioux Tribe's Contention 2), hydrogeology (Consolidated Intervenors' Contention E/J and Oglala Sioux Tribe's Contention 3), and groundwater consumption (Oglala Sioux Tribe's Contention 4).[5] The Board rejected contentions challenging, among other issues, Powertech's discussion of its plans for disposal of 11e(2) byproduct material and the analysis of actions connected to the Dewey-Burdock Project.[6]

On November 15, 2012, the Nuclear Regulatory Commission Staff (NRC Staff) issued its Draft Supplemental Environmental Impact Statement (DSEIS) prepared pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332, and the agency's implementing regulations, 10 C.F.R. Part 51.[7] On January 25, 2013, both the Oglala Sioux Tribe and the Consolidated Intervenors filed proposed contentions relating to the DSEIS.[8] The Board held that, under the migration tenet, a number of the proposed contentions in response to the DSEIS were *in para materia* with previously admitted contentions.[9] These contentions were combined and reworded by the Board and substituted for the original admitted contentions.[10] The Board also admitted three new contentions proposed in response to the DSEIS (Oglala Sioux Tribe's Contentions 6, 9, and 14).[11] The Board rejected Oglala Sioux Tribe's proposed Contentions 5, 7, 8, 10, 11, 12, and 13 and Consolidated Intervenors' proposed Contention D.[12]

On January 29, 2014, the NRC Staff issued the Final Supplemental Environmental Impact Statement (FSEIS).[13] On March 17, 2014, both the Oglala

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[5] *Id.*

[6] *Id.* at 432-35.

[7] Letter from Patricia Jehle, Counsel for NRC Staff, to Administrative Judges Froehlich, Cole, and Barnett (Nov. 15, 2012) (ADAMS Accession No. ML12320A623); *see also* Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, Draft Report, NUREG-1910 (Supp. 4 Nov. 2012) (ADAMS Accession No. ML12312A040) [hereinafter DSEIS].

[8] *See* List of Contentions of the Oglala Sioux Tribe Based on the [DSEIS] (Jan. 25, 2013) [hereinafter Oglala Sioux Tribe's Proposed Contentions]; Consolidated Intervenors' New Contentions Based on DSEIS (Jan. 25, 2013) [hereinafter Consolidated Intervenors' Proposed DSEIS Contentions].

[9] LBP-13-9, 78 NRC 37, 113-15 (2013).

[10] *Contention 1A* merged previously admitted Oglala Sioux Tribe Contention 1 (OST-1) and Consolidated Intervenors Contention K (CI-K) with migrated Oglala Sioux Tribe Contention 1 regarding the DSEIS (OST DSEIS-1) and Consolidated Intervenors Contention A regarding the DSEIS (CI DSEIS-A); *Contention 1B* merged previously admitted OST-1 with migrated OST DSEIS-1; *Contention 2* merged previously admitted OST-2 and CI-D with migrated OST DSEIS-2 and CI DSEIS-B; *Contention 3* merged previously admitted OST-3 and CI-E (as merged with CI-J), with migrated CI DSEIS-C and OST DSEIS-3; *Contention 4* merged previously admitted OST-4 with migrated OST DSEIS-4. *See id.* at 112-13.

[11] *Id.* at 114.

[12] *Id.*

[13] Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Milling *(Continued)*

Sioux Tribe and the Consolidated Intervenors filed "Statements of Contentions" with proposed contentions relating to the FSEIS.[14] The Oglala Sioux Tribe filed ten contentions and the Consolidated Intervenors filed five contentions. On April 4, 2014, Powertech and the NRC Staff filed answers opposing the proposed contentions.[15] Powertech argues the Intervenors have not proffered any new or amended contentions.[16] With the exception of Contention 2 (Baseline Groundwater Conditions), the NRC Staff urges the Board to "dismiss the Intervenors' previously admitted contentions and reject the Tribe's new contentions."[17] On April 11, 2014, the Oglala Sioux Tribe and the Consolidated Intervenors filed replies to the NRC Staff and Powertech answers.[18]

Meanwhile, on April 8, 2014, the NRC Staff issued NRC Source Materials License No. SUA-1600 to Powertech.[19] The license allows Powertech to possess and use source and byproduct material in connection with the Dewey-Burdock Project.[20]

II. LEGAL STANDARDS

A. New and Amended Contentions

To be admissible, a new or amended contention must satisfy the substantive

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Facilities, Final Report, NUREG-1910 (Supp. 4 Jan. 2014) (ADAMS Accession Nos. ML14024A477 (Chapters 1-5) and ML14024A478 (Chapters 6-11 and Appendices)) [hereinafter FSEIS].

[14] Statement of Contentions of the Oglala Sioux Tribe Following Issuance of [FSEIS] (Mar. 17, 2014) [hereinafter OST Statement]; Consolidated Intervenors' Statement of Contentions (Mar. 17, 2014) [hereinafter CI Statement].

[15] Applicant Powertech (USA) Inc's Response to Consolidated Petitioners' Request for Admission of New or Amended Contentions on NUREG-1910, Supplement 4 (April 4, 2014) [hereinafter Powertech Response]; NRC Staff's Answer to Contentions on [FSEIS] (April 4, 2014) [hereinafter NRC Staff Answer].

[16] Powertech Response at 1.

[17] NRC Staff Answer at 35.

[18] Reply of the Oglala Sioux Tribe Regarding Contentions Following Issuance of [FSEIS] (Apr. 11, 2014); Consolidated Intervenors' Consolidated Reply to Applicant and NRC Staff Answers to Contentions on [FSEIS] (Apr. 11, 2014).

[19] Materials License, NRC Form 374 (Apr. 8, 2014) (ADAMS Accession No. ML14043A392). *See also* ADAMS Accession Package Number ML14043A052, which includes the license transmittal letter, the license, and the Final Safety Evaluation Report. The NRC Staff also issued its Record of Decision for the Dewey-Burdock Uranium In-Situ Recovery (ISR) Project at ADAMS Accession No. ML14066A466. The Final Programmatic Agreement was executed April 7, 2014, and is available in ADAMS Accession Package No. ML14066A344.

[20] Intervenors have filed for a stay of this license under 10 C.F.R. § 2.1213. The Board will rule on these motions in a future order.

contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1). Namely, the contention must:

> (i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
>
> (ii) Provide a brief explanation of the basis for the contention;
>
> (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
>
> (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
>
> (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue . . . ; [and]
>
> (vi) . . . [P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.[21]

A failure to meet any of these criteria renders the contention inadmissible.

Additionally, pursuant to 10 C.F.R. § 2.309(c),[22] if a party submits a proposed contention after the initial filing deadline announced in the applicable *Federal Register* notice for submitting a hearing petition, it "will not be entertained absent a determination by the presiding officer that a participant has demonstrated good cause."[23] Good cause exists when:

> (i) [t]he information upon which the filing is based was not previously available;
>
> (ii) [t]he information upon which the filing is based is materially different from information previously available; and
>
> (iii) [t]he filing has been submitted in a timely fashion based on the availability of the subsequent information.[24]

If the reason a motion to admit a new or amended contention was filed after the initial deadline does not relate to the substance of the filing itself, the standard contained in 10 C.F.R. § 2.307(a) applies in determining whether the motion can be considered timely. Section 2.307(a) provides that a filing deadline "may be extended or shortened either by the Commission or the presiding officer for good cause, or by stipulation approved by the Commission or the presiding officer."

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[21] 10 C.F.R. § 2.309(f)(1).

[22] The current section 2.309(c) was promulgated on August 3, 2012. Soon after this date, the Board determined that the standards set forth in the now-current section 2.309(c) would apply to new or amended contentions. Licensing Board Order (Second Prehearing Conference Call Summary and Supplemental Initial Scheduling Order) (Oct. 16, 2012) at 4 (unpublished).

[23] 10 C.F.R. § 2.309(c).

[24] 10 C.F.R. § 2.309(c)(i)-(iii).

Good cause in this section is not explicitly defined.[25] Therefore, to be admissible at this stage, a contention must not only meet contention admissibility standards of section 2.309(f)(1), but must also satisfy the timeliness requirements of section 2.309(c) or section 2.307(a).[26]

B. Migration Tenet

As this Board explained when it admitted new contentions challenging the DSEIS, "[a]dmitted contentions challenging an applicant's Environmental Report (ER) may, in appropriate circumstances, function as challenges to similar portions of the Staff's Environmental Impact Statement."[27] This "migration tenet" also applies when the information in the FSEIS is sufficiently similar to the information in the DSEIS.[28] In this circumstance, a party need not file a new or amended contention; the previously admitted contention will simply be viewed as applying to the relevant portion of the FSEIS.[29] This is appropriate, however, only when the FSEIS analysis or discussion at issue is essentially *in para materia* with the DSEIS analysis or discussion that is the focus of the contention.[30]

Alternatively, if attempting to raise a new issue based on new information in the FSEIS, an intervenor must file a new contention. This would be necessary, for example, if the information in the FSEIS is sufficiently different from the information in the DSEIS that supported the original contention's admission.[31] A new or amended contention related to portions of the FSEIS that differ from the

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[25] 77 Fed. Reg. 46,562, 46,571 (Aug. 3, 2012) ("The NRC notes that 'good cause' in § 2.307 does not share the same definition that is used for 'good cause' in final § 2.309(c) . . . ."). The *Federal Register* notice provides as examples health issues or an unexpected weather event as reasons that might constitute good cause for purposes of requesting an extension under section 2.307.

[26] The Board issued a scheduling order on February 20, 2014, which set a deadline of March 17, 2014 for any new or amended contentions arising from the publication of the FSEIS. Memorandum (Summarizing the February 12, 2014 Teleconference) (Feb. 20, 2014) at 6 (unpublished).

[27] LBP-13-9, 78 NRC at 46 (citing *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-23, 54 NRC 163, 172 n.3 (2001)); *see also Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 84 (1998).

[28] *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-1, 73 NRC 19, 26 (2011); *accord Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 63-64 (2008).

[29] *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), LBP-12-23, 76 NRC 445, 470-71 (2012) ("The Board may construe an admitted contention contesting the ER as a challenge to a subsequently issued DEIS or FEIS without the necessity for Intervenors to file a new or amended contention.").

[30] LBP-13-9, 78 NRC at 47.

[31] *Vogtle ESP,* LBP-08-2, 67 NRC at 63-64.

DSEIS must be timely filed under section 2.309(c) and must meet the contention admissibility standards of section 2.309(f)(1) to be admitted.[32]

In this case, perhaps out of an abundance of caution, the Intervenors repleaded their previously admitted contentions. This was an unnecessary action by the Intervenors and led the NRC Staff and Powertech to rehash the objections raised when the contentions were first proffered. These answers, to the extent they attempt to reargue the admissibility of previously admitted contentions, are also unnecessary. An admitted contention remains an admitted contention until it is adjudicated by the Board or eliminated prior to the hearing by the filing of a dispositive motion. To remove an admitted contention from the proceeding a party must file, and a Board must grant, a motion for summary disposition in conformance with 10 C.F.R. § 2.1205.

C. Contentions of Omission or Adequacy

There are two primary types of contentions — contentions of omission and contentions of adequacy.[33] "A contention of omission is one that alleges an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues have been discussed in the application."[34] Based on its language, a contention can be characterized as a contention of omission, a contention of adequacy, or both.[35]

A contention of omission which has been admitted may be rendered moot by subsequent license-related documents filed by the NRC Staff that address the

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[32] LBP-13-9, 78 NRC at 47 (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382 (2002) ("While a contention contesting an applicant's environmental report generally may be viewed as a challenge to the NRC Staff's subsequent draft EIS, *new* claims must be raised in a new or amended contention.")); *Vogtle ESP,* LBP-08-2, 67 NRC at 64 (explaining that, if the portion of the ER that an admitted contention challenges is not sufficiently similar to the DEIS, "an intervenor attempting to litigate an issue based on expressed concerns about the DEIS may need to amend the admitted contention or, if the information in the DEIS is sufficiently different from that in the ER that supported the contention's admission, submit a new contention").

[33] *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 200 (2011); *see, e.g., Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 442 (2011) (discussing whether a contention should properly be characterized as a contention of omission or a contention of adequacy and the ramifications of such a designation with regard to contention admissibility).

[34] *Turkey Point,* LBP-11-6, 73 NRC at 200 n.53; *accord McGuire/Catawba,* CLI-02-28, 56 NRC at 382-83 ("There is, in short, a difference between contentions that merely allege an 'omission' of information and those that challenge substantively and specifically how particular information has been discussed in a license application.").

[35] *McGuire/Catawba,* CLI-02-28, 56 NRC at 383 n.45; *see also Turkey Point,* LBP-11-6, 73 NRC at 199-200.

alleged omission.[36] In this circumstance, the applicant or the NRC Staff may file a motion for summary disposition or a motion to dismiss. If the motion is granted, then the party that filed the original contention of omission must file a new or amended contention if it wishes to challenge the adequacy or sufficiency of the NRC Staff's treatment of the relevant issue.[37] That new or amended contention must be timely filed and must meet the contention admissibility standards. Generalized grievances with the sufficiency of the NRC Staff's analysis or the adequacy of included documentation are not enough to raise a proposed contention to the level of admissibility.[38]

In the case of an admitted contention that challenges the adequacy of an environmental document, the inclusion of additional information in a subsequent environmental document may or may not moot the contention. If a party believes the admitted contention is mooted by the inclusion of additional information, that party may file a motion for summary disposition pursuant 10 C.F.R. § 2.1205. On the other hand, if an intervenor merely cites to additional information in the subsequent environmental document and states these are additional reasons for the intervenors' belief that the environmental document is inadequate, the contention will migrate. If intervenors make reference to new material in the FSEIS but do not address the six elements of 10 C.F.R. § 2.309(f)(1), such references to new material do not give rise to either a new or amended contention.

III. DISCUSSION

A. Contention 1A

"Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources."[39]

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[36] *McGuire/Catawba,* CLI-02-28, 56 NRC at 383 ("Where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant or considered by the Staff in a draft EIS, the contention is moot.").

[37] *Id.*

[38] *PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-10, 66 NRC 1, 23 (2007); *Shieldalloy Metallurgical Corp.* (Amendment Request for Decommissioning of the Newfield, New Jersey Facility), LBP-07-5, 65 NRC 341, 352 (2007) ("'[T]he contention rule is strict by design' and does 'not permit the filing of a vague, unparticularized contention, unsupported by affidavit, expert, or documentary support.'" (footnotes omitted)); *PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 303-04 (2007).

[39] OST Statement at 5.

1. Party Positions

The Oglala Sioux Tribe claims that the protection of historical and cultural resources has been inadequately addressed in the FSEIS in the same way it was inadequately addressed in the application and DSEIS stages.[40] Consolidated Intervenors also claim the FSEIS fails to properly analyze or comply with applicable legal requirements in the same way as the DSEIS.[41] In response, the NRC Staff argues that the FSEIS contains considerable new information relevant to this contention.[42] The NRC Staff also suggests that this contention should be dismissed or rejected by the Board.[43] Powertech ignores the migration tenet. It insists that in order to remain at issue in the case, Contention 1A must identify new information in the FSEIS which did not appear in the DSEIS, and that Intervenors have failed to do so.[44]

2. Board Ruling

With the issuance of the FSEIS, the concerns regarding the protection of historical and cultural resources have migrated because this previously admitted contention challenging the DSEIS now challenges the same information in the FSEIS. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. The NRC Staff's attempt to dismiss this contention also fails.[45] A motion for summary disposition must be filed, with support, in order to dismiss a previously admitted contention.

Contention 1A, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

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[40] *Id.* at 6.

[41] CI Statement at 6.

[42] NRC Staff Answer at 13.

[43] *Id.* at 1, 16, 35.

[44] Powertech Response at 8.

[45] If the NRC Staff sought to dismiss the contention on the ground that the FSEIS cured the alleged defects in the DSEIS, then the NRC Staff could have filed a motion for summary disposition or a motion to dismiss. The NRC Staff did not do so. At this point, the deadline for filing motions for summary disposition has passed. In any event, if the NRC Staff asserts that the FSEIS cured the alleged defects in the DSEIS, then the NRC Staff can make this argument in its initial or rebuttal filings associated with the imminent evidentiary hearing.

B. Contention 1B

"Failure to Involve or Consult All Interested Tribes as Required by Federal Law."[46]

1. Party Positions

Both the Oglala Sioux Tribe and Consolidated Intervenors allege tribal exclusion throughout the entire application/licensing process. Based on their claim that the FSEIS has been completed without "the requisite level of Tribal participation," they maintain that the content of this contention migrates to the most current Staff review document.[47] The NRC Staff opposes migration, citing progress made in consultation since November 2012.[48] Powertech states that Intervenors' arguments fall short of what is needed to admit a contention, and that there is no new or materially different information in the FSEIS.[49]

2. Board Ruling

With the issuance of the FSEIS, the concerns regarding a failure to involve or consult with Tribes have migrated because this previously admitted contention now appears in relation to information in the FSEIS. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. The NRC Staff's attempt to dismiss this contention also fails. A motion for summary disposition must be filed, with support, in order to dismiss a previously admitted contention.

As previously admitted, Contention 1B remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

C. Contention 2

"Failure to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality."[50]

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[46] OST Statement at 9.

[47] *Id.* at 13; CI Statement at 19.

[48] NRC Staff Answer at 16.

[49] Powertech Response at 11.

[50] OST Statement at 14.

1. Party Positions

The intervenors argue that baseline conditions are mandated by statute and regulation, and that the FSEIS is inadequate because, in common with the ER and the DSEIS, it fails to include a proper analysis of the required baselines with respect to groundwater quality.[51] The NRC Staff does not oppose migration of this contention.[52] Powertech, however, cites examples where text was added in the FSEIS in order to oppose migration of the contention.[53] Neither the NRC Staff nor Powertech moved for summary disposition of the environmental portions of this admitted contention.[54]

2. Board Ruling

The migration tenet applies and this issue migrates from a criticism of baseline groundwater determinations in the Powertech ER to a criticism of baseline groundwater determinations in the NRC Staff's FSEIS. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. The addition of new text to an FSEIS does not necessarily prevent a contention from migrating, especially when it is a contention of adequacy.[55] As long as the underlying issue or concern involved in the admitted contention remains (whether or not there are additional passages on the subject in the FSEIS), the contention migrates. Despite the addition of new materials in the FSEIS, Intervenors' concern over the adequacy of these materials has not been resolved.

Except for changing DSEIS to FSEIS, Contention 2, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

D. Contention 3

"Failure to Include an Adequate Hydrogeological Analysis to Assess Potential Impacts to Groundwater."[56]

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[51] *Id.*; CI Statement at 20; Oglala Sioux Tribe's Proposed Contentions at 10-11.

[52] NRC Staff Answer at 18.

[53] Powertech Response at 12.

[54] The NRC Staff filed a timely motion for summary disposition of the *safety* portions of Contention 2 on April 11, 2014. *See* NRC Staff's Motion for Summary Disposition of Safety Contentions 2 and 3 (Apr. 11, 2014). Answers to that motion were due on or before April 25, 2014. The Board will decide all motions for summary disposition in a separate order.

[55] LBP-13-9, 78 NRC at 54 (previously indicating that this contention is a contention of adequacy).

[56] OST Statement at 16.

1. Party Positions

Intervenors claim that "the FSEIS fails to provide sufficient information regarding the hydrologic and geological setting of the area."[57] The NRC Staff asserts that the inclusion of a new Powertech report in the FSEIS comprises significant new information that should not allow the contention to migrate to the FSEIS.[58] Powertech asserts that its application contains sufficient data, and that in its opinion, Contention 3 "should be excluded."[59] Neither the NRC Staff nor Powertech has moved for summary disposition of the environmental portions of this admitted contention.[60]

2. Board Ruling

The Consolidated Intervenors and the Oglala Sioux Tribe present the same concern that was raised regarding Powertech's ER (and that was admitted as a contention) here, as a concern regarding the FSEIS. Thus, it is not necessary to propose a new or amended contention because, as the Board has explained, if the "new" contention raises the same concern admitted at the initial stage of the proceeding, its admissibility need not be relitigated and redecided at each step of the NEPA process, namely the issuances of the DSEIS and the FSEIS.[61] This contention is not new; it is merely the continuation of a previously admitted contention. To the extent the Intervenors have concerns with the adequacy of the hydrogeologic analysis necessary to show adequate confinement and potential impacts to groundwater, this is already an issue set for hearing. Contention 3 is a contention of adequacy, as the Board previously indicated,[62] and despite the inclusion of new data in the FSEIS, Intervenors' concern over the adequacy of the environmental review has not been resolved.

Except for changing DSEIS to FSEIS, Contention 3, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

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[57] *Id.*; CI Statement at 22.

[58] NRC Staff Answer at 19.

[59] Powertech Response at 15-16.

[60] The NRC Staff filed a timely motion for summary disposition of the *safety* portions of Contention 3 on April 11, 2014. *See* NRC Staff's Motion for Summary Disposition of Safety Contentions 2 and 3 (Apr. 11, 2014). Answers to that motion were due on or before April 25, 2014. The Board will decide all motions for summary disposition in a separate order.

[61] LBP-13-9, 78 NRC at 46-47.

[62] *Id.* at 58.

E. Contention 4

"Failure to Adequately Analyze Ground Water Quantity Impacts."[63]

1. Party Positions

The Intervenors contend that the FSEIS fails to provide adequate analysis of groundwater impacts of the project.[64] The NRC Staff opposes migration on the ground that the FSEIS contains substantial new relevant information which did not appear in previous ER documents.[65] Powertech posits that Contention 4 must be viewed as a new contention, and "rejected as showing no new or materially different information."[66]

2. Board Ruling

The Intervenors present the same concern that was raised by the Oglala Sioux Tribe in the initial pleading stage (and that was admitted as a contention) as a concern regarding the FSEIS. It is, therefore, unnecessary to raise a new or amended contention. To the extent the "new" contention raises the same concern admitted at the initial stage of the proceeding, it need not be repeated to remain a viable contention. Accordingly, the Oglala Sioux Tribe's concern with the adequacy of the analysis of groundwater quantity impacts is already an issue set for hearing. The addition of new text to an FSEIS does not necessarily prevent a contention from migrating, especially when it is a contention of adequacy.[67] Despite the addition of new materials in the FSEIS, Intervenors' concern over the adequacy of these materials has not been resolved. The NRC Staff's attempt to dismiss this contention fails. A motion for summary disposition must be filed, with support, in order to dismiss a previously admitted contention.[68]

Except for changing DSEIS to FSEIS, Contention 4, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

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[63] OST Statement at 19.

[64] *Id.* at 19; CI Statement at 25.

[65] NRC Staff Answer at 21.

[66] Powertech Response at 17.

[67] LBP-13-9, 78 NRC at 54 (previously indicating that this contention is a contention of adequacy).

[68] *Supra* note 45.

F. Contention 6

"Failure to Adequately Describe or Analyze Proposed Mitigation Measures."[69]

1. Party Positions

In Contention 6, the Oglala Sioux Tribe claims that the FSEIS violates 10 C.F.R. §§ 51.10, 51.70, and 51.71, and NEPA and implementing regulations and "fail[s] to include the required discussion of mitigation measures."[70] The Oglala Sioux Tribe also insists that NEPA requires the FSEIS to include and discuss means to mitigate adverse environmental impacts, but that the FSEIS does not evaluate the effectiveness of any of the mitigation measures it proposes.[71] Similar to its complaints about the DSEIS, the Oglala Sioux Tribe contends that the FSEIS "mitigation measure discussion consists of a multi-page chart which simply lists a series of proposed mitigation measure [sic], with no elaboration or other analysis of how the operator expects to accomplish these items, or the expected effectiveness/limitations of each measure, as required by NEPA."[72]

The NRC Staff opposes migration of this contention because the Staff claims the FSEIS identifies new mitigation measures and has additional discussions on previously identified mitigation measures.[73] Powertech also contends that significant new information in the FSEIS should result in the Board rejecting Contention 6.[74]

2. Board Ruling

Concerns regarding a failure to adequately describe or analyze proposed mitigation measures have migrated because this previously admitted contention now appears in relation to information in the FSEIS. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. The NRC Staff's attempt to dismiss this contention also fails. A motion for summary disposition must be filed, with support, in order to dismiss a previously admitted contention.[75]

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[69] OST Statement at 21.
[70] *Id.*
[71] *Id.* at 21-22.
[72] *Id.* at 25.
[73] NRC Staff Answer at 23.
[74] Powertech Response at 18-19.
[75] *Supra* note 45.

Except for changing DSEIS to FSEIS, Contention 6, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

G. Contention 9

"Failure to Consider Connected Actions."[76]

1. Party Positions

The Oglala Sioux Tribe contends that the same issues surrounding the NRC's failure to consider connected actions in the DSEIS continue in the FSEIS, and that no significant new information is provided.[77] The Oglala Sioux Tribe contends that "[l]ike the DSEIS, the FSEIS repeatedly relies upon EPA analyses to require appropriate mitigation measures to lessen impacts, and uses those permitting processes to simply defer analysis of impacts to EPA."[78] The NRC Staff claims that the migration tenet does not apply because updates have been made to the FSEIS analysis and because the "FSEIS's discussion of environmental impacts is not "essentially the same" as that in the DSEIS."[79] Powertech states that "contention 9 should not be admitted due the [sic] fact that NRC Staff has thoroughly addressed the use of Class III and V wells at the proposed Dewey-Burdock ISR site."[80] Powertech also contends that the "[T]ribe also does not attempt to show how the FSEIS differs from the impact analyses offered by Powertech in previously submitted documents or by NRC Staff in the DSEIS."[81]

2. Board Ruling

The Oglala Sioux Tribe asserts that NEPA requires the agency to include an analysis of actions "connected" to the project under review as well as an evaluation of the "cumulative impact" of permits and other authorizations from other federal and state agencies.[82] The NRC Staff maintains that the FSEIS's discussion of environmental impacts is not "essentially the same" as that in the DSEIS. The Staff asserts it has "updated its analysis in Chapter 4 of the SEIS, the

[76] OST Statement at 26.
[77] *Id.*
[78] *Id.* at 27.
[79] NRC Staff Answer at 25.
[80] Powertech Response at 19.
[81] *Id.* at 19-20.
[82] OST Statement at 26-27.

chapter where the Staff specifically discusses the impacts of the Dewey-Burdock Project.[83] Nonetheless, this contention now migrates because the concern or issue raised and admitted has not changed from the DSEIS to the FSEIS.

The factual question remains as to whether or not the FSEIS adequately addresses the impacts of other licensing actions. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. If the Staff believed its updates to Chapter 4 fully address and resolve the question as to the adequacy of the analysis of connected actions, it should have filed a motion for summary disposition, with support, in order to dismiss a previously admitted contention.[84] Otherwise, the contention remains in the case and proceeds on to the hearing.[85] Powertech's request for the Board to reject Contention 9 similarly fails given that Contention 9 has already been admitted and is now migrating to encompass the FSEIS.

Except for changing DSEIS to FSEIS, Contention 9, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

H. Contention 14 and FSEIS Contention 1

"Whether an Appropriate Consultation Was Conducted Pursuant to the Endangered Species Act and Implementing Regulations."[86]

"Whether the DSEIS's Impact Analyses Relevant to the Greater Sage Grouse, the Whooping Crane and the Black-Footed Ferret Are Sufficient."[87]

"Failure to Adequately Review Impacts on Wildlife and Fails to Comply with Migratory Bird Treaty Act and Bald and Golden Eagle" (sic).[88]

1. Party Positions

The Oglala Sioux Tribe alleges that "the FSEIS violates 10 C.F.R. §§ 51.10, 51.70, 51.71, the National Environmental Policy Act and implementing regulation failing to conduct the required "hard look" analysis of impacts of the proposed mine on species of birds and bats receiving special protection by the Bald and

[83] NRC Staff Answer at 25.

[84] *Supra* note 45.

[85] While the Board rejected a contention concerning the consideration of Cumulative Impacts, a contention concerning the consideration of Connected Actions was admitted. LBP-13-9, 78 NRC at 78-79, 85-86.

[86] *Id.* at 101.

[87] *Id.*

[88] OST Statement at 29.

Golden Eagle Protection Act (Eagle Protection Act) (16 U.S.C. § 668-668c) and Migratory Bird Treaty Act (MBTA), 16 U.S.C. § 703-711."[89] The Oglala Sioux Tribe further alleges that NRC Staff correspondence presented for the first time in the FSEIS regarding Endangered Species Act (ESA) consultation duties confirms that MBTA and Eagle Protection Act consultation with U.S. Fish and Wildlife Service (U.S. FWS) has not taken place, even though U.S. FWS alerted NRC Staff to these consultation requirements during correspondence regarding ESA requirements.[90] The Oglala Sioux Tribe argues the "NRC Staff completed the NEPA process without the procedural and substantive protections afforded these species by NEPA, MBTA, and the Eagle Protection Act."[91]

Regarding Contention 14A, the NRC Staff maintains that the FSEIS contains information showing U.S. FWS concurrence with the Staff's finding and that as a result, Contention 14A should not migrate.[92] For Contention 14B the NRC Staff asserts that additional information provided in the FSEIS on the greater sage grouse, whooping crane, and the black-footed ferret prevents migration of this contention.[93] The NRC Staff also opposes admission of new FSEIS Contention 1 for lack of supporting information.[94]

Powertech states that all of the issues in Contention 14 and FSEIS Contention 1 are dealt with in its mitigation plan, and that the Oglala Sioux Tribe draws inaccurate and improper conclusions on the effect of the various species protection acts.[95]

2. Board Ruling

Previously admitted Contentions 14A and 14B migrate to the FSEIS. In LBP-13-9 the Board found portions of Contention 14 were admissible as to the completion of the section 7 consultation process and the adequacy of the NRC Staff's impact analyses relevant to three named species.[96] The Board admitted as Contention 14A — Whether an appropriate consultation was conducted pursuant to the ESA and implementing regulations; and admitted as Contention 14B — Whether the DSEIS's impact analyses relevant to the Greater Sage Grouse, the Whooping Crane, and the Black-Footed Ferret are sufficient. The Board noted specifically that Powertech and the NRC Staff may respond to this contention

[89] *Id.* at 29-30.
[90] *Id.* at 33 citing FSEIS at A-157.
[91] *Id.* at 33.
[92] NRC Staff Answer at 28.
[93] *Id.* at 29.
[94] *Id.* at 30-31.
[95] Powertech Response at 20-21.
[96] LBP-13-9, 78 NRC at 98-101.

with an appropriate motion for summary disposition if documentation or other information exists that would moot the reformulated Contention 14.[97] The Board also previously noted that each contention is a contention of adequacy.[98] As a result, as long as Intervenors' concerns over the adequacy of the FSEIS remain, whether or not it contains new information, the contention may migrate.

The NRC Staff's argument that Contention 14A does not migrate to the FSEIS and its observation that the Tribe provides no new basis for keeping this contention in the hearing is rejected.[99] The NRC Staff has it backwards — there is no necessity to file anything to keep an admitted contention in the proceeding. There is only an opportunity to move for summary disposition if new evidence is presented which moots an admitted contention.[100] Neither the NRC Staff nor Powertech has filed a motion for summary disposition as to Contention 14A or Contention 14B. Contention 14A and Contention 14B migrate because the underlying issue and concern raised in response to the DSEIS remains, and because a motion for summary disposition has not been filed.

Except for changing DSEIS to FSEIS, Contention 14A and Contention 14B, as previously admitted, remain unchanged and will be adjudicated in the evidentiary hearing. For convenience, they appear in Appendix A to this Order.

To the extent FSEIS Contention 1 was submitted by the Oglala Sioux Tribe to expand Contention 14 or to the extent it proposes a new or amended contention, the attempt fails. The Oglala Sioux Tribe has filed nothing materially different from what has already been admitted as to Contentions 14A and 14B, nor has it supported its proposed FSEIS Contention 1 with alleged facts or expert opinion, required by section 2.309(f)(1)(iii). Insofar as the Oglala Sioux Tribe is making additional claims related to the MBTA, the Board finds it has not provided a sufficient explanation of its concern nor has it provided a concise statement of the alleged facts supporting its position, as required by 10 C.F.R. § 2.309(f)(1)(ii) and (v). This Board has previously rejected these arguments as a basis for a contention concerning the MBTA and the BGEPA.[101]

Although the Oglala Sioux Tribe again claims that the MBTA and BGEPA require the NRC to consult with U.S. FWS, the Oglala Sioux Tribe cites only to the

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[97] *Id.* at 101 n.449.

[98] *Id.* at 98, 101.

[99] NRC Staff Answer at 28.

[100] A motion for summary disposition must contend that there are facts on which "there is no genuine issue to be heard." 10 C.F.R. § 2.710(a). Such facts must necessarily have come to light since LBP-13-9, 78 NRC 37 was issued and the Board found that all admitted contentions contained a 10 C.F.R. § 2.309(f)(1)(iv) "genuine dispute" on a material fact. *See generally Nuclear Innovation North America LLC* (South Texas Project, Units 3 and 4), LBP-12-5, 75 NRC 227, 248 (2012) ("Applicant had an opportunity to move for summary disposition of the contention based on the FEIS's new analyses mooting the contention. It did not do so.").

[101] LBP-13-9, 78 NRC at 101.

statutes themselves, which contain no such requirement. Section 2.309(f)(1)(vi) requires a petitioner to provide a citation to the section of law or regulation which sets forth the requirement alleged to be violated. The Oglala Sioux Tribe's contention does not do so, and thus, lacks a legal basis.

I. FSEIS Contention 2

"Inadequate Analysis of Direct, Indirect, and Cumulative Impacts of Disposal of Solid 11e2 Byproduct Material or the Reasonable Alternatives to Transportation and Disposal at the White Mesa Facility."[102]

1. Party Positions

The Oglala Sioux Tribe proposes a new contention based on what it claims is new information in the FSEIS that the waste disposal site for the project has been selected without a review of alternatives.[103] The NRC Staff argues that the Oglala Sioux Tribe has not supplied material new information since the DSEIS listed the White Mesa site as a possible site, and the proposed contention does not meet the requirements for a new contention.[104] Powertech states that no new information exists to support a new contention, as the waste disposal site chosen in the FSEIS was also selected in the DSEIS.[105]

2. Board Ruling

In FSEIS Contention 2 the Oglala Sioux Tribe argues that the FSEIS violates NEPA because it does not include a reviewable plan for disposal of byproduct material resulting from ISR operations. This contention has twice been rejected by this Board, once as a challenge to the Powertech ER,[106] and once as a challenge to the DSEIS.[107]

As the NRC Staff correctly notes, given that the Board rejected the contention originally, the migration tenet does not apply and the Oglala Sioux Tribe must meet the requirements applicable to new contentions.[108] Among these requirements, the

[102] OST Statement at 33.
[103] *Id.* at 33-34.
[104] NRC Staff Answer at 32-33.
[105] Powertech Response at 22.
[106] LBP-10-16, 72 NRC at 432-35.
[107] LBP-13-9, 78 NRC at 69-72.
[108] NRC Staff Answer at 32.

contention must be based on information materially different than the information previously available.[109]

A petitioner must demonstrate that the proposed contention is based on new or materially or significantly different information. Here, the Oglala Sioux Tribe does not identify any information that differs materially from the information available when the DSEIS was issued. The possible use of the White Mesa site in Utah for disposal of solid byproduct material appears in the DSEIS.[110] The change in White Mesa's designation from a possible disposal site to the site Powertech assumes it will use is not materially different information.[111] The Oglala Sioux Tribe does not even attempt to make this showing, as its argument does not identify where the FSEIS differs in any way from either Powertech's initial license application or subsequently filed documents identified by NRC Staff in monthly hearing file updates. Thus, the Oglala Sioux Tribe's arguments do not support admitting the proposed contention, and do not comply with 10 C.F.R. § 2.309(c)(2)(ii).

Further, the Oglala Sioux Tribe fails to challenge relevant sections of the environmental analysis. Although the Oglala Sioux Tribe makes general reference to the Generic Environmental Impact Statement (GEIS),[112] it does not challenge specific sections addressing waste disposal.[113] The Oglala Sioux Tribe also fails to challenge comment responses where the NRC Staff provides information relevant to this contention.[114]

Finally, the Board notes that Powertech's March 19, 2014 Draft License, License Conditions 9.9 and 12.6, requires Powertech to have an 11e(2) byproduct material disposal contract in place prior to the commencement of operations. This Board has already found that 10 C.F.R. § 40.31(h) applies to uranium mills, and not to ISR facilities.[115] Thus, the Oglala Sioux Tribe's allegation that 10 C.F.R. § 40.31(h) and 10 C.F.R. Part 40, Appendix A, Criterion 1 require further analysis of this issue will, again, not be admitted. Because the Tribe fails to meet the requirements for a new contention, the Board must reject FSEIS Contention 2.

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[109] 10 C.F.R. § 2.309(c)(1)(ii).

[110] DSEIS at 4-196–4-212.

[111] *Compare* DSEIS at p. 3-105 *with* FSEIS at p. 3-116.

[112] OST Statement at 38.

[113] GEIS §§ 4.2.12, 4.3.12, 4.4.12.

[114] FSEIS, Appendix E, § E5.29.2.

[115] LBP-10-16, 72 NRC 434.

J. FSEIS Contention 3

"Failure to Provide NEPA Comment Opportunity for Impacts Associated with Air Emissions."[116]

1. Party Positions

The Oglala Sioux Tribe contends that significant new information on impacts from air emissions was provided in the FSEIS, but no opportunity was provided for the Tribe or the public to comment on the data and analysis.[117] The Oglala Sioux Tribe alleges this is a contention of omission and inadequate NEPA analysis.[118] The NRC Staff responds that the FSEIS only needs to be circulated for comment if the air emission impacts data were significantly different from impacts already studied, and that the Oglala Sioux Tribe did not make a claim that the new data met this standard.[119] Powertech claims that an ambient air quality emission protocol was created in July 2013, and that the Oglala Sioux Tribe did not comment at this stage of the process.[120] Powertech also claims that the air quality effects have shown smaller potential impacts than the conclusions reached in the DSEIS.[121]

2. Board Ruling

The new air emissions data do not point to any impacts materially different from those identified in the DSEIS. In the DSEIS the NRC Staff anticipated that Powertech would update its air emissions data.[122] The NRC Staff used a bounding analysis in the DSEIS to assess impacts from air emissions.[123] The emissions data presented in the FSEIS fall within the NRC Staff's bounding analysis.[124] As the Staff explains in its comment response on page E-165 of the FSEIS:

The updated information considered when developing the final SEIS does not significantly change the Staff's analysis of air impacts as presented in the draft SEIS. To the contrary, as described in final SEIS Table C-19, the draft analysis bounds the final NRC analysis. Peak year, construction phase, and cumulative

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[116] OST Statement at 39.

[117] *Id.*

[118] *Id.*

[119] NRC Staff Answer at 34.

[120] Powertech Response at 23-24.

[121] *Id.* at 24.

[122] NRC Staff Answer at 34 n.57.

[123] FSEIS at C-26 ("The draft SEIS presented a conservative or bounding analysis relative to the final SEIS.").

[124] FSEIS at C-26, Table C-18.

impact magnitudes in the draft and final SEISs were the same (i.e., SMALL to MODERATE). For the operations, aquifer restoration, and decommissioning phases, the draft SEIS impact magnitude of SMALL to MODERATE was reduced to SMALL in the final SEIS.

In other words, rather than presenting a "seriously different picture of the environmental impact of the proposed project,"[125] the updated air emissions data confirmed the Staff's assessment of the Dewey-Burdock Project's impact.[126]

In sum, the Oglala Sioux Tribe fails to show the FSEIS's air emissions data represent new or materially different information required for admitting a new contention. The Oglala Sioux Tribe has not met the standard required by 10 C.F.R. § 2.309(f)(1)(iv), (v), or (vi).

K. Consolidated Intervenors' Contentions

1. Position of the Consolidated Intervenors

The Consolidated Intervenors' Statement of Contentions addresses previously admitted Contentions 1A, 1B, 2, 3, and 4.[127] Consolidated Intervenors note that "none of the issues identified in the DSEIS Contentions have been addressed in the FSEIS . . . ."[128] Consolidated Intervenors further "contend that the FSEIS discussion of each of the already-admitted contentions is *in para materia* with the analysis from the DSEIS."[129] In an abundance of caution the Consolidated Intervenors incorporate by reference the detailed discussion of contentions in the [Oglala Sioux] Tribe's Statement of Contentions dated March 17, 2014.[130]

2. Board Ruling

The Board has already addressed the substance of each of the Consolidated Intervenors' statements of contentions, *supra.* Nothing in the statements of contentions filed by either the Oglala Sioux Tribe or the Consolidated Intervenors expands the previously admitted contentions. Each of the contentions admitted by LBP-13-9 migrates as an issue in the upcoming August 2014 adjudication. The only modification to the previously admitted contentions is that the contentions are now criticisms of the FSEIS instead of the DSEIS.

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[125] *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuqerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999).

[126] FSEIS at C-26, Table C-18.

[127] CI Statement at 6, 14, 20, 22, 25.

[128] *Id.* at 2.

[129] *Id.* at 5.

[130] *Id.*

The scope of that adjudication may, however, be narrowed by the grant of a motion for summary disposition. Such motions for summary disposition were filed on April 11, 2014[131] and will be addressed by the Board in a separate order.

Table of Admitted Contentions
Dewey-Burdock In-Situ Recovery Facility

Topic[132]	Oglala Sioux Original — 2010	Oglala Sioux DSEIS — 2013	Consolidated Intervenors Original — 2010	Consolidated Intervenors DSEIS — 2013	Admitted for Adjuducation
Historical & cultural resources	1	1	K	A	1A
Failure to consult	1	1	—	—	1B
Groundwater quality	2	2	D	B	2
Hydrogeological information	3	3	E and J	C	3
Groundwater quantity impacts	4	4	F*	D*	4
Mitigation measures	—	6	—	—	6
Connected actions	—	9	—	—	9
Consultation on Endangered Species Act	—	14	—	—	14A
Sufficiency of impact analyses	—	14	—	—	14B

*Contentions rejected by the Board

[131] NRC Staff's Motion for Summary Disposition on Safety Contentions 2 and 3 (Apr. 11, 2014); Oglala Sioux Tribe's Motion for Summary Disposition National Environmental Policy Act Contentions 1A and 6 — Mitigation Measures (Apr. 11, 2014).

[132] The statement of the admitted contention going forward is contained in the Board's Order, *infra,* and in Appendix A to this Order.

IV. BOARD ORDER

A. The Board finds the following previously admitted contentions *migrate* and now refer to the FSEIS instead of the DSEIS:

Contention 1A: Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources.

Contention 1B: Failure to Involve or Consult All Interested Tribes as Required by Federal Law.

Contention 2: The FSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality.

Contention 3: The FSEIS Fails to Include Adequate Hydrogeological Information to Demonstrate Ability to Contain Fluid Migration and Assess Potential Impacts to Groundwater.

Contention 4: The FSEIS Fails to Adequately Analyze Ground Water Quantity Impacts.

Contention 6: The FSEIS Fails to Adequately Describe or Analyze Proposed Mitigation Measures.

Contention 9: The FSEIS Fails to Consider Connected Actions.

Contention 14A: Whether an appropriate consultation was conducted pursuant to the Endangered Species Act and implementing regulations.

Contention 14B: Whether the FSEIS's impact analyses relevant to the greater sage grouse, the whooping crane, and the black-footed ferret are sufficient.

B. The NRC Staff's conclusion that "the Board should dismiss the Intervenors' previously admitted contentions"[133] is *denied.*

C. The Board finds *inadmissible* the Oglala Sioux Tribe's Contentions FSEIS 1, FSEIS 2, FSEIS 3 for failure to meet 10 C.F.R. § 2.309(f)(1) and/or § 2.309(c).

D. No specific section of the Commission's regulations, including 10 C.F.R. § 2.311, permits appeals from an order ruling on the admission of new or amended contentions. Nonetheless, interlocutory review of decisions and actions of a presiding officer may be available pursuant to section 2.341(f)(2) of the Commission's regulations.

[133] NRC Staff Answer at 35.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

William J. Froehlich, Chairman
ADMINISTRATIVE JUDGE

Richard F. Cole
ADMINISTRATIVE JUDGE

Mark O. Barnett
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 28, 2014

APPENDIX A

Contention 1A: Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources.

Contention 1B: Failure to Involve or Consult All Interested Tribes as Required by Federal Law.

Contention 2: The FSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality.

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Contention 14B: Whether the FSEIS's impact analyses relevant to the greater sage grouse, the whooping crane, and the black-footed ferret are sufficient.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Michael M. Gibson, Chairman
Dr. Gary S. Arnold
Nicholas G. Trikouros

In the Matter of **Docket No. 72-10-ISFSI-2**
(ASLBP No. 12-922-01-ISFSI-MLR-BD01)

NORTHERN STATES POWER COMPANY
(Prairie Island Nuclear Generating Plant Independent Spent Fuel Storage Installation)

April 30, 2014

This proceeding concerns the application of Northern States Power Company for renewal of the operating license for its 10 C.F.R. Part 72 license to operate an Independent Spent Fuel Storage Installation (ISFSI) at the Prairie Island Nuclear Generating Plant in Red Wing, Minnesota. The Prairie Island Indian Community (PIIC) moved to admit three new and amended contentions challenging the Nuclear Regulatory Commission's Draft Environmental Assessment (EA). The Board held in abeyance amended Contention 1, in whole, and amended Contention 2, in part. It also admitted amended Contention 2, in part, and a renewed and amended Contention 3, in part.

CONTENTIONS (WASTE CONFIDENCE RULE)

In light of the vacatur of the Waste Confidence Decision and Temporary Storage Rule in *New York v. NRC,* 681 F.3d 471 (D.C. Cir. 2012), NRC's rules require that the EA must consider the impact of long-term storage at the Prairie

Island ISFSI. Contentions concerning the failure of the EA to do so must be held in abeyance pursuant to the Commission's direction in *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63 (2012).

ENVIRONMENTAL ASSESSMENT: CUMULATIVE IMPACT ANALYSIS

Under regulations promulgated by the Council on Environmental Quality (CEQ), "cumulative impact" is defined as the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7.

ENVIRONMENTAL ASSESSMENT: CUMULATIVE IMPACT ANALYSIS

The failure to include all connected actions within the scope of the proposed action is generally referred to as "segmentation." "'Segmentation' or 'piecemealing' occurs when an action is divided into component parts, each involving action with less significant environmental effects. *Town of Huntington v. Marsh,* 859 F.2d 1134, 1142 (2d Cir. 1988). "Segmentation is to be avoided in order to 'insure that interrelated projects[,] the overall effect of which is environmentally significant, not be fractionalized into smaller, less significant actions.'" *Id.*

ENVIRONMENTAL ASSESSMENT: CUMULATIVE IMPACT ANALYSIS

If actions are "reasonably foreseeable future actions" within the meaning of 40 C.F.R. § 1508.7, the CEQ regulations require that they be included in a cumulative impact analysis. *See Kern v. U.S. Bureau of Land Management,* 284 F.3d 1062, 1079 (9th Cir. 2002).

ENVIRONMENTAL ASSESSMENT: CUMULATIVE IMPACT ANALYSIS

The NRC has acknowledged that a cumulative impact analysis is required for actions covered by CEQ regulation 40 C.F.R. § 1508.7 — that is, reasonably foreseeable future actions — without suggesting that the test for connected actions in CEQ regulation 40 C.F.R. § 1508.25 must also be satisfied. *See Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-10-5, 71

NRC 90, 102 n.60 (2010); *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, NM 87313), CLI-06-29, 64 NRC 417, 422 & n.23 (2006).

ENVIRONMENTAL ASSESSMENT: CUMULATIVE IMPACT ANALYSIS

Under 40 C.F.R. §§ 1508.25, separate actions are "connected" if they cannot or will not proceed unless other actions are taken previously or simultaneously, as well as when they are interdependent parts of a larger action and depend on the larger action for their justification. *See* 40 C.F.R. § 1508.25(a)(1)(ii).

LICENSE RENEWAL: TERRORIST ATTACKS

The Commission has ruled that only those NRC-regulated facilities located within the Ninth Circuit's jurisdictional boundaries are required to conduct environmental analyses of possible terrorist acts. *See Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 476-77 (2010).

INDIAN TRIBES: FEDERAL TRUST RESPONSIBILITY

The federal government bears a trust responsibility to the Tribe, and the NRC, as a federal agency, owes a fiduciary duty to the Tribe and its members. *See, e.g., Seminole Nation v. United States,* 316 U.S. 286, 296-97 (1942).

RULES OF PRACTICE: MOTION TO STRIKE

A motion to strike may be granted where a pleading or other submission contains information that is irrelevant. *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-05-20, 62 NRC 187, 228 (2005) (citing Power Authority of the State of New York (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-01-14, 53 NRC 488, 514 (2001)).

MEMORANDUM AND ORDER
(Ruling on Motion to Admit New and Amended Contentions)

The Prairie Island Indian Community (PIIC) has moved to admit three new and amended contentions[1] challenging the Nuclear Regulatory Commission's

[1] [PIIC] Motion to Admit New and Amended Contentions After Issuance of NRC's Draft Environmental Assessment (Dec. 12, 2013) [hereinafter PIIC's Motion to Admit].

Draft Environmental Assessment (EA).[2] The Applicant, Northern States Power Company (Northern States), and the Nuclear Regulatory Commission (NRC) Staff each oppose the admission of PIIC's proffered contentions, as set forth in their answers to PIIC's motion, filed on January 13, 2014.[3] PIIC filed its reply on January 23, 2014.[4] On January 28, 2014, Northern States moved to strike portions of PIIC's Reply.[5] PIIC responded to Northern States' motion to strike on February 4, 2014.[6] The NRC Staff did not respond to Northern States' motion to strike.

In this Memorandum and Order, we hold in abeyance amended Contention 1, in whole, and amended Contention 2, in part. We also admit amended Contention 2, in part, and a renewed and amended Contention 3, in part.

Additionally, we deny Northern States' motion to strike portions of PIIC's reply.

I. BRIEF PROCEDURAL BACKGROUND

This proceeding arises from Northern States' application for license renewal,[7]

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[2] Draft Environmental Assessment for the Proposed Renewal of U.S. Nuclear Regulatory Commission License No. SNM-2506 for the Prairie Island [ISFSI] (Nov. 2013) (ADAMS Accession No. ML13205A120) [hereinafter Draft EA].

[3] [Northern States'] Answer Opposing [PIIC's] Motion to Admit New and Amended Contentions (Jan. 13, 2014) [hereinafter Northern States' Answer]; NRC Staff Response to [PIIC's] Motion to Admit New and Amended Contentions After Issuance of NRC's Draft Environmental Assessment (Jan. 13, 2014) [hereinafter NRC Staff's Answer]; *see also* Erratum to [NRC Staff's Answer] (Jan. 14, 2014).

[4] [PIIC's] Reply on Motion to Admit New and Amended Contentions (Jan. 23, 2014) [hereinafter PIIC's Reply].

[5] [Northern States'] Motion to Strike Portions of [PIIC's] Reply (Jan. 28, 2014) [hereinafter Motion to Strike].

[6] [PIIC's] Response to [Northern States'] Motion to Strike Portions of PIIC's Reply (Feb. 4, 2014) [hereinafter Response to Motion to Strike].

[7] *See* Letter from Mark A. Schimmel, Site Vice President, Prairie Island Nuclear Generating Plant (PINGP), Northern States Power Company–Minnesota, to Director, Division of Spent Fuel Storage and Transportation, Office of Nuclear Material Safety and Safeguards, NRC, Prairie Island [ISFSI] License Renewal Application (Oct. 20, 2011) (ADAMS Accession No. ML11304A068).

Northern States supplemented its application on February 29, 2012. *See* Letter from Mark A. Schimmel, Site Vice President, [PINGP], Northern States Power Company–Minnesota, to Director, Division of Spent Fuel Storage and Transportation, Office of Nuclear Material Safety and Safeguards, NRC, Responses to Requests for Supplemental Information — Prairie Island [ISFSI] License Renewal Application (TAC No. L24592) (Feb. 29, 2012) (ADAMS Accession No. ML12065A073).

Northern States supplemented its application a second time on April 26, 2012. *See* Letter from Mark A. Schimmel, Site Vice President, [PINGP], Northern States Power Company–Minnesota, to Director,

(Continued)

seeking a 40-year extension of its license to operate the Prairie Island Independent Spent Fuel Storage Installation (ISFSI), and to store as many as forty-eight casks of spent fuel generated at the Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2.[8]

The PINGP site is located within the city limits of Red Wing in Goodhue County, Minnesota,[9] and is adjacent to the PIIC Trust lands. The Prairie Island ISFSI itself is located within 548 meters (1,798 ft) of the PIIC Trust lands (*see* Figure 1).[10]

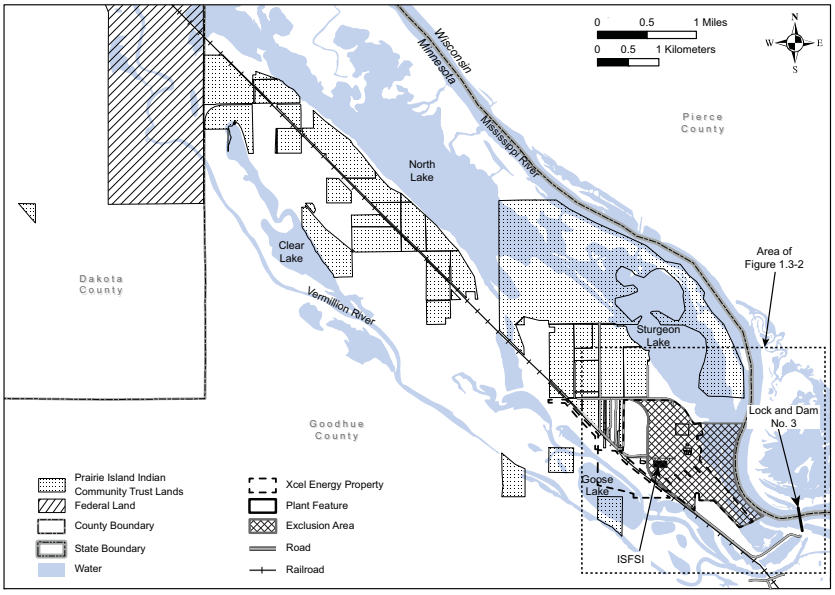

Figure 1. Prairie Island General Site Drawing[11]

Division of Spent Fuel Storage and Transportation, Office of Nuclear Material Safety and Safeguards, NRC, Responses to Observations — Prairie Island [ISFSI] — License Renewal Application (TAC No. L24592) (Apr. 26, 2012) (ADAMS Accession No. ML121170406).

[8] *See* Draft EA at 1-2 ("[T]he PI ISFSI is licensed to store spent fuel in up to 48 casks (a total of up to 1920 spent fuel assemblies) on two seismically qualified concrete pads. Currently there are 29 [transnuclear-40] casks (NSPM, 2011a) and 6 [transnuclear 40-high thermal] casks onsite.").

[9] *Id.*

[10] *Id.*

[11] *Id.* at 1-4. This figure is labeled as "Figure 1.3-2. Prairie Island General Site Drawing (NMC, 2008; PIIC, 2013a; USCB, 2012)" in the Draft EA. *See id.*

On June 25, 2012, the NRC published in the *Federal Register* a notice of opportunity for hearing on Northern States' license renewal application.[12] On August 24, 2012, PIIC timely filed a petition to intervene containing seven contentions.[13]

On December 20, 2012, the Board granted PIIC's petition to intervene, admitted three contentions and held in abeyance a fourth contention, as well as parts of two of the admitted contentions.[14]

On November 19, 2013, the NRC published in the *Federal Register* a notice of its draft EA, as well as of its draft finding of no significant impact.[15]

On December 12, 2013, PIIC filed the instant motion to admit and amend contentions based on the NRC's Draft EA.[16]

II. STANDARDS GOVERNING CONTENTION ADMISSIBILITY

A. General Requirements for Contentions

Contentions must meet the admissibility criteria set forth in 10 C.F.R. § 2.309(f)(1), which requires each contention to: (1) provide a specific statement of the issue of law or fact to be raised; (2) provide a brief explanation of the basis for the contention; (3) demonstrate that the issue raised in the contention is within the scope of the proceeding; (4) demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the licensing action; (5) provide a concise statement of the alleged facts or expert opinions in support of the petitioner's position on the issue and on which the petitioner intends to rely at hearing; and (6) provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact, with reference to specific disputed portions of the application.[17] A failure to meet any of these criteria renders the contention inadmissible.

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[12] *See* 77 Fed. Reg. 37,937 (June 25, 2012).

[13] [PIIC's] Request for Hearing and Petition to Intervene in License Renewal Proceeding for the Prairie Island Independent Spent Fuel Storage Installation (Aug. 24, 2012) [hereinafter Original PIIC Petition].

[14] *See* LBP-12-24, 76 NRC 503, 530 (2012) ("We further admit Contentions 2, 4, and 6, as narrowed herein, and hold in abeyance Contention 1, as well as those portions of Contentions 2 and 4 that implicate the [Waste Confidence Decision] and the [Temporary Storage Rule].").

[15] *See* 78 Fed. Reg. 69,460 (Nov. 19, 2013); *see also generally* Draft EA.

[16] *See generally* PIIC's Motion to Admit.

[17] 10 C.F.R. § 2.309(f)(1)(i)-(vi).

B. Additional Requirements for New and Amended Contentions

Once the deadline for filing petitions to intervene has passed, a party may file new or amended contentions based on material information that has subsequently become available. To be admissible, such contentions must not only meet the general contention admissibility requirements of 10 C.F.R. § 2.309(f)(1), but must also meet three additional requirements set out in 10 C.F.R. § 2.309(c)(1). Section 2.309(c)(1) requires each new or amended contention: (i) to be based upon information that was not previously available; (ii) to be based upon information that is materially different from previously available information; and (iii) to be submitted in a timely fashion based on the availability of the subsequent information.[18]

III. PIIC'S MOTION TO ADMIT NEW AND AMENDED CONTENTIONS

A. Contention 1: The Draft Environmental Assessment Improperly Minimizes Waste Storage Impacts

PIIC's initial Contention 1[19] was largely based on *New York v. NRC,* 681 F.3d 471 (D.C. Cir. 2012), which invalidated both the NRC's Waste Confidence Decision Update (Waste Confidence Decision)[20] and the NRC's final rule regarding Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation (Temporary Storage Rule).[21]

On August 7, 2012, the Commission concluded that "as an exercise of our inherent supervisory authority over adjudications, we direct that these [Waste Confidence] contentions — and any related contentions that may be filed in the near term — be held in abeyance pending our further order."[22] The Commission also provided that "[s]hould we determine at a future time that case-specific challenges are appropriate for consideration, our normal procedural rules will apply."[23]

In our December 20, 2012 Order, we declined to admit PIIC's initial Contention 1 alleging Northern States' Environmental Report (ER) failed to address the

[18] *Id.* § 2.309(c)(1)(i)-(iii).

[19] *See* Original PIIC Petition at 23-26.

[20] 75 Fed. Reg. 81,037 (Dec. 23, 2010).

[21] 75 Fed. Reg. 81,032 (Dec. 23, 2010).

[22] *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 68-69 (2012).

[23] *Id.* at 69 n.11.

environmental impact of long-term storage; instead, we held the contention in abeyance in accordance with the Commission's directive.[24]

In its initial Contention 1, PIIC asserted that, because the Waste Confidence Decision and the Temporary Storage Rule have been vacated, the ER must consider the impacts of long-term storage at the Prairie Island ISFSI.[25] In its amended Contention 1, PIIC argues that, for this same reason, the draft EA must consider the impacts of long-term storage at the Prairie Island ISFSI.[26]

Nevertheless, all three parties agree that PIIC's amended Contention 1 should be held in abeyance, in accordance with the Commission's Waste Confidence directive, until such time as the Commission orders otherwise.[27] We agree. Accordingly, pursuant to the Commission's direction, PIIC's amended Contention 1 must be held in abeyance at this time.

B. Contention 2: The Draft Environmental Assessment Does Not Adequately Address Cumulative Impacts on Related Projects on the PIIC, Its Members, and Its Land

In its initial Contention 2, PIIC argued that Northern States' ER had not provided an analysis of the cumulative impacts associated with relicensing the Prairie Island ISFSI.[28] We admitted a portion of PIIC's initial Contention 2, and held in abeyance the portions implicating the Waste Confidence Decision and the Temporary Storage Rule.[29]

In the instant motion, PIIC moves to amend its initial contention by alleging that the draft EA does not adequately address three types of cumulative impacts:

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[24] There, we indicated:

> In light of the vacatur of the WCD and TSR in *New York v. NRC,* NRC's rules require the ER to consider the reasonably foreseeable impacts of permanent storage, which Northern States' ER clearly fails to do. We agree with the Staff, however, that Contention 1 must be held in abeyance pursuant to the Commission's direction in CLI-12-16.

LBP-12-24, 76 NRC at 510-11.

[25] *See* Original PIIC Petition at 23-26.

[26] *See* PIIC's Motion to Admit at 2-3.

[27] *See* PIIC's Reply at 1; NRC Staff's Answer at 4-5; Northern States' Answer at 4. Northern States also argues that the "migration tenet" applies to PIIC's amended Contention 1 because PIIC's initial Contention 1 challenged the ER's absence of an evaluation of the environmental impacts of long-term storage and the draft EA does not substantively address long-term storage issues. *See* Northern States' Answer at 4. Thus, Northern States contends that amended Contention 1 does no more than assert the same omission in the EA that was alleged in the ER and is already covered by initial Contention 1. *See id.* Because all parties agree the contention should be held in abeyance, we need not reach this migration tenet argument.

[28] *See* Original PIIC Petition at 26-36.

[29] *See* LBP-12-24, 76 NRC at 511-18.

(1) those resulting from long-term waste storage; (2) those resulting from the potential inability to transport high-burnup (HBU) fuel offsite; and (3) those affecting cultural and historic resources as a result of the reasonably foreseeable expansion of the Prairie Island ISFSI.[30]

As explained below, we hold in abeyance the long-term waste storage and high-burnup fuel portions of Contention 2, and admit the cultural and historic resources portion of Contention 2.

1. Cumulative Impacts of Long-Term Waste Storage

All three parties agree that any ruling by this Board on whether the draft EA fails to address the cumulative impacts of long-term waste storage should be held in abeyance for the same reasons we set forth in holding in abeyance PIIC's initial Contention 2.[31]

We agree. Any consideration of the cumulative impacts of the long-term storage portion of Contention 2 must be held in abeyance in accordance with the Commission's Waste Confidence directive.

2. High-Burnup (HBU) Fuel

PIIC also argues that the draft EA fails to analyze the cumulative environmental impacts of not transporting HBU fuel from the Prairie Island ISFSI, particularly insofar as the increased volume of HBU waste will adversely affect the PINGP community.[32] PIIC contends it is reasonably foreseeable that HBU fuel might have to remain onsite in the ISFSI indefinitely, and so this contention is admissible because the proposed Waste Confidence rule focuses on the availability of future storage and disposal options, rather than on the practical difficulties of transporting the fuel from the reactor site.[33] For these reasons, PIIC maintains that the potential site-specific environmental impacts of HBU fuel remaining onsite indefinitely must be analyzed now in the draft EA.[34]

While the NRC Staff agrees that additional data are needed to evaluate the safe storage of HBU fuel for longer than 20 years, as well as the safe transportation offsite of HBU fuel, it argues that this type of evaluation is limited to the NRC

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[30] *See* PIIC's Motion to Admit at 3.

[31] *See id.* at 3-4; NRC Staff's Answer at 5-6; Northern States' Answer at 4-5. As it did with Contention 1, Northern States interposed an objection to the admission of Contention 2 based on the migration tenet, but for the same reasons, we need not reach it. *See supra* note 27.

[32] PIIC's Motion to Admit at 7-8.

[33] *Id.* at 7.

[34] *Id.*

Staff's technical review.[35] The NRC Staff claims that it reviews the transportation of HBU fuel on a case-by-case basis as part of the cask certification process outlined in 10 C.F.R. Part 71[36] and points out that Northern States has not applied for approval to transport any casks currently located at the ISFSI.[37] Thus, the NRC Staff argues, any potential environmental impacts beyond those already considered for lower burnup fuel are too remote and speculative at this time to require an evaluation in the NRC Staff's draft EA.[38] The NRC Staff promises that if the safety review reveals any new and significant information relating to the environmental impacts of storage of HBU fuel, the NRC Staff will supplement its environmental analysis as required by the National Environmental Policy Act of 1969 (NEPA).[39] However, with respect to the certification of casks for transportation *per se,* the NRC Staff claims it need not conduct an environmental review because the Commission has determined cask certification poses such a minimal environmental impact that it merits a categorical exclusion from NEPA.[40]

Northern States argues that "PIIC is attempting to take another bite of the apple" by amending the high-burnup fuel portion of Contention 2.[41] Northern States contends that PIIC's amendment is nothing more than an attempt to force the NRC Staff, in its draft EA, to evaluate the "possibility of HBU fuel remaining on site"[42] and that whether this is due to the unavailability of a repository or alleged "transport difficulties,"[43] the environmental impacts of this potential long-term storage are solely Waste Confidence issues and should be held in abeyance.[44] Northern States asserts that the draft Waste Confidence Generic Environmental Impact Statement (GEIS) addresses transportation of HBU fuel as a Waste Confidence issue, further supporting Northern States' argument that this part of Contention 2 should be held in abeyance.[45]

In its Reply, PIIC maintains that its contention does not involve the safety of transporting HBU fuel, but rather the necessity of HBU fuel remaining in storage

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[35] *See* NRC Staff's Answer at 12.

[36] *Id.* at 11 (citing Interim Staff Guidance 11, Rev. 3, Cladding Considerations for the Transportation and Storage of Spent Fuel at 1 (Nov. 17, 2003) (ADAMS Accession No. ML033230335)).

[37] *Id.*

[38] *Id.* at 12.

[39] *Id.* (citing 10 C.F.R. § 51.92(a)(2)).

[40] *Id.* (citing 10 C.F.R. § 51.22(c)(13)). Pursuant to 10 C.F.R. § 51.22(a), this purportedly "belongs to a category of actions which the Commission, by rule or regulation, has declared to be a categorical exclusion, after first finding that the category of actions does not individually or cumulatively have a significant effect on the human environment."

[41] Northern States' Answer at 5.

[42] *Id.* at 5 (quoting Motion to Amend at 7).

[43] *Id.* (quoting Motion to Amend at 7).

[44] *Id.*

[45] *Id.* at 5-6.

onsite at PINGP because it will not be transported offsite.[46] Additionally, PIIC argues that neither the draft GEIS nor the draft EA's cumulative impacts analysis addresses all aspects of this issue that might apply to the PIIC community.[47] Therefore, PIIC asserts this issue should be considered now and should not be held in abeyance.

We understand PIIC's decided preference that the HBU fuel issue be considered now. However, because this subject matter implicates waste confidence, the HBU fuel portion of Contention 2 must also be held in abeyance in accordance with the Commission's Waste Confidence directive. Of course, in the event the Waste Confidence rule does not ultimately address these HBU fuel issues, then PIIC may reassert this claim at that point in time.

3. Cultural and Historic Resources

PIIC argues that the draft EA "fails to adequately address [t]he potential impacts of the reasonably foreseeable expansion of the PI ISFSI on cultural and historic resources."[48] PIIC contends that, were Northern States to operate PINGP to the end of its licensed life in 2034, the Prairie Island ISFSI must of necessity be expanded to accommodate a total of ninety-eight casks.[49] Pointing to the NRC Staff statements in the draft EA of a high probability that additional unrecorded cultural resources may exist within the PINGP property,[50] PIIC argues that this expansion of casks could have an adverse impact on cultural and historic resources.[51]

The NRC Staff argues that it need not consider the impacts of the potential ISFSI expansion in the draft EA because the NRC has yet to receive an application from Northern States to expand the ISFSI.[52] The NRC Staff attempts to justify this narrowed review using language from the Commission's decision in *McGuire*: "a possible future action must at least constitute a 'proposal' pending before the agency" to be ripe for adjudication,[53] and, "in order to establish that cumula-

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[46] PIIC's Reply at 8.

[47] *Id.* at 10.

[48] PIIC's Motion to Admit at 4.

[49] *Id.*

[50] *Id.* at 6 (citing Draft EA at 3-19, 4-10, 4-11).

[51] *Id.* at 4. Ultimately, PIIC hopes the NRC Staff either will require Northern States to perform additional field investigations before the license is renewed or will impose a license condition on Northern States to ensure that any potential impacts are mitigated, or both. *Id.*

[52] *See* NRC Staff's Answer at 7.

[53] *Id.* (quoting *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 295 (2002)).

tive impacts must be addressed, a petitioner must first show that any 'proposal' the applicant has made is so interdependent with the application at issue that it 'would be unwise or irrational to complete one without the other.'"[54]

Aside from its legal position, the NRC Staff suggests that PIIC need not worry about possible damage to its historical and cultural resources because the NRC Staff will require Northern States to submit an application to the NRC prior to any expansion of the ISFSI, and so, at that point, PIIC will be afforded an opportunity for hearing, as well as for consultation pursuant to the National Historic Preservation Act.[55] Moreover, the NRC Staff continues, the draft EA deems Northern States' Cultural Resources Management Plan (CRMP) to be an effective vehicle for identifying those activities with the potential to cause disturbance to known cultural and historic resources within the PINGP property, as well as for establishing procedures and practices for proper review, notification, and consultation with concerned parties prior to Northern States initiating construction and excavation projects at the PINGP.[56]

Northern States asserts that PIIC's argument fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v), because it lacks a concise statement of the alleged facts or expert opinions supporting its position.[57] Specifically, Northern States argues that PIIC relies on the NRC Staff's conclusion that "there is a high probability that additional unrecorded cultural resources may exist with the PINGP property,"[58] but ignores the rest of the NRC Staff's analysis.[59] Northern States also contends that PIIC does not provide expert opinion or other references to show that the ISFSI expansion will cause a "high and adverse" impact on archaeological and cultural resources because there is a "potential" for unrecorded cultural resources on the PINGP property.[60]

Additionally, Northern States argues that PIIC's contention fails to meet 10 C.F.R. § 2.309(f)(1)(vi) because it does not show a genuine dispute with the draft EA on a material issue of law or fact.[61] Northern States asserts that PIIC's position lacks legal support because (1) NEPA does not impose a substantive obligation for a reviewing agency to require or enforce mitigation measures discussed in an EA[62] and (2) the information presented in the draft EA is sufficient because NEPA

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[54] *Id.* (quoting *McGuire/Catawba,* CLI-02-14, 55 NRC at 295).

[55] *Id.* at 8-9.

[56] *Id.* at 9 (quoting Draft EA at 4-11 and citing Draft EA at 4-35).

[57] *See* Northern States' Answer at 7.

[58] *Id.* (citing PIIC's Motion to Admit at 6).

[59] *Id.*

[60] *Id.*

[61] *See id.*

[62] *Id.* at 10 (citing *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 351, 353 & n.16 (1989)).

does not require further data collection regarding the future ISFSI expansion in order to make a decision on the current proposed action.[63]

In reply, PIIC disputes the NRC Staff's and Northern States' claims that the ISFSI expansion does not rise to the level of a "proposal" under *McGuire,* and that Northern States' CRMP will suffice to address any potential future impacts.[64] In PIIC's estimation, the possible expansion of the ISFSI is now far beyond the stage at which it could be considered a mere "proposal" — for it is undisputed that Northern States has already submitted an application for a Certificate of Need from the Minnesota Public Utilities Commission (MPUC) to store up to sixteen additional casks for a total of sixty-four casks to store additional spent fuel.[65] PIIC asserts that the ER's failure to address potential future impacts is repeated in the draft EA because the draft EA neither requires an archaeological survey of the very area that is slated for future ISFSI expansion nor imposes a mitigating condition on any license granted for this renewal.[66]

In our original Order, we held PIIC had raised an admissible contention that the ER failed to address the cumulative impacts of the reasonably foreseeable expansion of the Prairie Island ISFSI.

> The fact that Northern States has applied for a state Certificate of Need to build more pads to house sixteen additional casks strongly suggests that such a future expansion is at least "reasonably foreseeable." Added to this is the fact, as was acknowledged by counsel for Northern States at oral argument, that if PINGP is to operate to the end of its current operating license, additional spent fuel storage would be required such that "[p]robably in the 2017 timeframe, we would submit an application for expansion of our ISFSI" [quoting Tr. at 88-89]. Thus, being reasonably foreseeable, this expansion must be the subject of a cumulative impacts analysis.[67]

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[63] *Id.* at 11.

[64] *See* PIIC's Reply at 2-3.

[65] *See id.* at 5; *see also* Draft EA at 1-9.

[66] *See* PIIC's Reply at 6.

[67] LBP-12-24, 76 NRC at 514 (citing *Strata Energy Inc.* (Ross In Situ Uranium Recovery Project), LBP-12-3, 75 NRC 164, 203 (2012) (cumulative impacts analysis required for future facility expansion described in ER)). Since at least as early as 1998, the Commission has recognized that the NRC Staff's issuance of an environmental report under NEPA does not necessarily moot contentions challenging an applicant's ER. *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 84 (1998). In certain instances, contentions challenging an ER are deemed to "migrate" from challenging the ER to challenging the NRC Staff's environmental report. *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-1, 73 NRC 19, 26 (2011). "The migration tenet obviates the requirement to file the same contention (and litigate its admissibility) three times — once against the ER, once against the DEIS [here, the draft EA], and once against the final environmental impact statement [here, the final EA]." *Id.* at 26. The migration tenet applies where, as here, the information in the DEIS is "sufficiently similar" to the information in the ER.

(Continued)

Plainly and simply, the draft EA does not address the potential impacts of the reasonably foreseeable expansion of the Prairie Island ISFSI on cultural and historic resources. This is so despite the fact that Northern States is now even closer to an expansion of the ISFSI than when we admitted the original cumulative impacts contention in 2012.

The dissent, however, claims that, even at this point in the proceeding, Northern States' ISFSI expansion activities do not constitute a "proposal" under *McGuire,* and hence that the NRC Staff need not consider the impacts of the potential ISFSI expansion in the draft EA until Northern States submits a license amendment to expand the ISFSI.

In *McGuire/Catawba,* the Licensing Board found that the Intervenor

> provide[d] a fact-based argument sufficient to show a genuine dispute on the material issue of combined fact and law, of whether future anticipated use of MOX fuel in the Duke plants is *sufficiently definite to constitute a "proposal"* under the law, with a connection, "cumulative impact," "interdependence," or similar relationship to matters at issue in this license renewal proceeding, to warrant being addressed in the SEIS for this proceeding.[68]

The Commission disagreed with the Board, stating:

> The Board's view that license renewal contemplates inquiry into future, inchoate plans of the Licensee would, as a general matter, invite petitioners in license renewal cases to raise safety issues involving a myriad of possible future license amendments. Here, while Duke apparently has a contractual arrangement to purchase MOX fuel, the proposed MOX fuel production facility remains unbuilt and is in the early stages of a contested NRC licensing proceeding. To actually use MOX fuel at Catawba and McGuire, Duke will have to obtain an NRC license amendment, for which Duke has not yet even applied. Nothing in our case law or regulations suggests that license renewal is an occasion for *far-reaching speculation* about unimplemented and uncertain plans like Duke's MOX plan.[69]

In other words, the Commission not only disagreed with the Licensing Board that the likelihood of Duke implementing MOX fuel in its nuclear plants was "sufficiently definite to constitute a proposal," but considered the MOX fuel plan

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Id.; *see also Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), LBP-12-23, 76 NRC 445, 471 (2012). Had PIIC failed to file a new or amended Contention 2 here, its original contentions would likely have been held to migrate from its challenge to the ER to a challenge to the EA. However, because PIIC filed amended Contention 2, we need not address whether its original contention would have migrated.

[68] *McGuire/Catawba,* CLI-02-14, 55 NRC at 292 (emphasis added).

[69] *Id.* at 292-93 (emphasis added).

to be "far-reaching speculation." That is most definitely different from Northern States' plans to expand the Prairie Island ISFSI.

The use of MOX fuel in a nuclear plant in *McGuire/Catawba* was an optional matter because the reactors at issue could continue to operate to the end of their useful life without the use of MOX fuel. Unless and until the operator of those reactors actually submitted an application for the use of MOX fuel, its planned use remained purely speculative.

In contrast to *McGuire/Catawba,* there is nothing optional about the expansion of the ISFSI. It is undisputed that if Northern States continues to operate its reactors through the end of their extended life, additional storage space will be required for any additional spent fuel assemblies generated from operating those reactors. This is neither uncertain nor speculative.

This is made even more certain by virtue of Northern States' application for, and receipt of, a Certificate of Need in 2009 from the State of Minnesota for additional ISFSI storage. The NRC Staff realizes just how certain this is, as evidenced by its acknowledgment that the ISFSI expansion is reasonably foreseeable by discussing the ISFSI expansion in the draft EA Cumulative Effects analysis (Section 4.14 of the draft EA):

> The Council on Environmental Quality regulations implementing NEPA define cumulative effects as "the impact on the environment which results from the action when added to other past, present, and *reasonably foreseeable* future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). The NRC staff evaluated whether cumulative environmental impacts could result from the incremental impact of the proposed action when added to the past, present, or reasonably foreseeable future actions in the area. For the purposes of this analysis, past actions are those related to the resources at the time of the PI ISFSI licensing and construction, present actions are those related to the resources at the time of current operation of the PI ISFSI, and *future actions are considered to be those that are reasonably foreseeable through the end of the PI ISFSI operation* including the proposed action. Therefore, the analysis considers potential impacts through the end of the current license term as well as the proposed 40-year PI ISFSI renewal license term. The geographic area over which past, present and future actions would occur is dependent on the type of action considered and consistent with the affected area described for each resource in Chapter 3 of this draft EA. *Actions considered in this cumulative impact include* the license renewal for PINGP Units 1 and 2; Lock and Dam 3 navigation safety and embankment improvements on the Mississippi River; the replacement of PINGP Unit 2 steam power generators; and *the potential expansion of the PI ISFSI* (NSPM, 2013a; NRC, 2011c).[70]

[70] Draft EA at 4-24 (emphasis added).

While *McGuire/Catawba* held that it was not reasonably foreseeable to utilize MOX fuel at the subject reactors (and so it was appropriate there to postpone a NEPA study until after the utility applied for a license amendment specifically seeking the NRC's approval to use MOX fuel), the NRC Staff here has reached just the opposite conclusion — finding that the ISFSI expansion is reasonably foreseeable.

PIIC seeks further to distinguish *McGuire,* arguing that Contention 2 assumes that the NRC is obligated to evaluate the cumulative impact on cultural and historic resources not only of the proposed action (ISFSI relicensing), but as well of a reasonably foreseeable future action (ISFSI expansion).[71] The NRC Staff, on the other hand, asserts that the draft EA need not consider the impacts on cultural and historic resources of the potential ISFSI expansion because the NRC has yet to receive an application from Northern States to expand the ISFSI.[72] The NRC Staff argues that "in order to establish that cumulative impacts must be addressed, a petitioner must first show that any 'proposal' the applicant has made is so interdependent with the application at issue that it 'would be unwise or irrational to complete one without the other.'"[73]

We agree with the NRC Staff to the extent it argues that cumulative impact analysis is required only for reasonably foreseeable future actions, not for future actions that are merely speculative. We would have no difficulty concluding, however, that expansion of the Prairie Island ISFSI is reasonably foreseeable. PIIC has alleged there is already an approved proposal for expansion of the Prairie Island ISFSI, in which case that expansion would satisfy the requirement of reasonable foreseeability.[74]

We disagree with the NRC Staff's argument that NEPA requires cumulative impact analysis only for interdependent actions (i.e., those where it would be unwise or irrational to complete one without the other).[75] That argument confuses the requirement to evaluate cumulative impacts with the requirement to evaluate all connected actions in one NEPA document (i.e., the requirement to avoid segmentation).[76] Under regulations promulgated by the Council on Environmental

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[71] *See* PIIC's Motion to Admit at 4-7.

[72] *See* NRC Staff's Answer at 7.

[73] *Id.* (quoting *McGuire/Catawba,* CLI-02-14, 55 NRC at 294).

[74] *See* PIIC's Motion to Admit at 4-7.

[75] *See* NRC Staff's Answer at 7.

[76] In *O'Reilly v. U.S. Army Corps of Engineers,* 477 F.3d 225, 236 n.10 (5th Cir. 2007), the court of appeals explained:

> Scholars have noted that the "cumulative effects" and "improper segmentation" issues raise separate-but-similar questions:

(Continued)

Quality (CEQ), "cumulative impact" is defined as the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."[77] The regulatory definition includes impacts resulting from "individually minor but collectively significant actions taking place over a period of time."[78] The NRC has expressly adopted, and is therefore bound by, this definition.[79] Thus, the NRC Staff's EIS or EA must include a cumulative impact analysis of reasonably foreseeable future actions that impact the same resources as the proposed action.

Moreover, and contrary to the NRC Staff's position,[80] an action can be reasonably foreseeable even if it is not "interdependent" with the proposed action. Interdependence is relevant not to cumulative impacts but to "connected actions" and the related concept of "segmentation." NRC's NEPA regulations direct the agency to use the CEQ regulations in defining the scope of its impact statements.[81] Under those regulations, the EIS must include all "connected actions."[82] Under CEQ regulation 40 C.F.R. § 1508.25, separate actions are "connected" if, among other things, they "[c]annot or will not proceed unless other actions are taken previously or simultaneously," or they "[a]re interdependent parts of a larger

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> Federal agencies may plan a number of related actions but may decide to prepare impact statements on each action individually rather than prepare an impact statement on the entire group. This decision creates a "segmentation" or "piecemealing" problem. . . .
>
> Another related issue is whether an environmental assessment or impact statement on a project or action must discuss the cumulative impacts of that project or action that occur outside the scope of the project or action. The issue here is what environmental impacts must be considered in an impact statement on a particular project or action, not whether a number of projects or actions must be gathered together in a single environmental assessment or impact statement.

Id. (quoting Daniel R. Mandelker, NEPA Law & Litigation § 9:11 (2006)). *See also Churchill County v. Norton,* 276 F.3d 1060, 1076 (9th Cir. 2001) (distinguishing connected actions from cumulative impacts).

[77] 40 C.F.R. § 1508.7.

[78] *Id.*

[79] 10 C.F.R. § 51.14(b).

[80] *See* NRC Staff's Answer at 7.

[81] The NRC regulation governing the scope of the EIS states that the agency should use the provisions of CEQ regulation 40 C.F.R. § 1502.4 for that purpose. *See* 10 C.F.R. § 51.29(a)(1). CEQ regulation 40 C.F.R. § 1502.4 in turn, directs that

> Agencies shall use the criteria for scope (§ 1508.25) to determine which proposal(s) shall be the subject of a particular statement. Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.

40 C.F.R. § 1502.4(a).

[82] *Id.* § 1508.25(a)(1).

action and depend on the larger action for their justification."[83] In general, "connected actions" include those that lack "independent utility."[84] The failure to include all connected actions within the scope of the proposed action is generally referred to as "segmentation." "'Segmentation' or 'piecemealing' occurs when an action is divided into component parts, each involving action with less significant environmental effects."[85] "Segmentation is to be avoided in order to 'insure that interrelated projects[,] the overall effect of which is environmentally significant, not be fractionalized into smaller, less significant actions.'"[86]

Because PIIC's claim is that the draft EA does not adequately evaluate the cumulative impact of the proposed ISFSI expansion, it need not show that the proposed relicensing and the proposed expansion are interdependent or otherwise constitute connected actions. The fact that future expansion of the ISFSI is reasonably foreseeable is sufficient to require that it be included in the cumulative impact analysis. The Eleventh Circuit rejected the argument that cumulative impact analysis is required only for interdependent actions (i.e., those that lack independent utility), noting that "[t]he regulations ask whether future actions are foreseeable, not whether they are interdependent."[87] The court of appeals ruled that, rather than being determinative, "[t]he interdependence of proposed actions with potential future actions should be considered alongside other pertinent facts and circumstances to determine whether there is a sufficient likelihood that an action will occur to render that action foreseeable."[88] The Ninth Circuit has also held that if "actions are 'reasonably foreseeable future actions' within the meaning of [40 C.F.R.] § 1508.7, the [CEQ] regulations require[ ] that they be included in a cumulative impact analysis."[89] The Fifth[90] and Eighth Circuits[91] also apply the reasonable foreseeability test for cumulative impacts. Thus, in *North Cascades Conservation Council v. U.S. Forest Service,* the court held that, even though projects were not interdependent, they must be included in the cumulative impact analysis:

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[83] *Id.* § 1508.25(a)(1)(ii) and (iii). NRC's NEPA regulations specifically adopt this definition. *See* 10 C.F.R. § 51.14(b).

[84] *See Society Hill Towers Owners' Ass'n v. Rendell,* 210 F.3d 168, 181 (3d Cir. 2000) (collecting cases); *Northwest Resource Information Center v. National Marine Fisheries Service,* 56 F.3d 1060, 1067-69 (9th Cir. 1995) (same).

[85] *Town of Huntington v. Marsh,* 859 F.2d 1134, 1142 (2d Cir. 1988) (citing *City of West Chicago v. NRC,* 701 F.2d 632, 650 (7th Cir. 1983)).

[86] *Id.* (quoting *Taxpayers Watchdog, Inc. v. Stanley,* 819 F.2d 294, 298 (D.C. Cir. 1987)).

[87] *City of Oxford v. Federal Aviation Administration,* 428 F.3d 1346, 1356 n.22 (11th Cir. 2005).

[88] *Id.*

[89] *Kern v. U.S. Bureau of Land Management,* 284 F.3d 1062, 1079 (9th Cir. 2002).

[90] *Coliseum Square Ass'n, Inc. v. Jackson,* 465 F.3d 215, 237-38 (5th Cir. 2006).

[91] *Missouri Coalition for the Environment v. Federal Energy Regulatory Commission,* 544 F.3d 955, 958 (8th Cir. 2008).

> The Forest Service confuses the important distinction between "cumulative impacts and actions" and "connected actions."
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> . . . .
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> Since the success or failure of one or all of the projects is not dependent upon the completion of the others, the [off-road trail] projects are not "connected" to one another. Nevertheless, each project proposes "tie-trails." These tie-trails relate to the same, larger area: the ORV trail system that "consists of the hub of one of the largest and most unique systems of interconnecting trail networks in the northwest." . . . That is, though the three projects are not "connected actions," they each are physically related to the ORV trail system. They are cumulative actions, as defined in 40 C.F.R. § 1508.25(a)(2), and subject to an examination of cumulative impacts, under 40 C.F.R. § 1508.7.[92]

Thus, if "actions are 'reasonably foreseeable future actions' within the meaning of [40 C.F.R.] § 1508.7, the [CEQ] regulations require[ ] that they be included in a cumulative impact analysis."[93]

Consistent with the prevailing rule, the United States Court of Appeals for the Eighth Circuit — whose jurisdiction includes Minnesota — has held that, because the future expansion of a power plant was reasonably foreseeable, it should have been included in the cumulative impacts analysis for the plant.[94]

> The Sierra Club plaintiffs alleged that the Permit Decision underlying the § 404 [of the Clean Water Act, 33 U.S.C. § 1344] permit failed to analyze the cumulative impacts reasonably foreseeable from the expected addition of a second generation unit at the plant. SWEPCO had previously admitted it had planned to add a second unit at the Hempstead County site, and the Permit Decision failed to analyze the possible cumulative impacts from that second unit. As in Davis, the failure to consider these cumulative possibilities together is "one of the most egregious shortfalls of the EA." 302 F.3d at 1121-22; *see also Save Our Sonoran,* 408 F.3d at 1121-23 (Corps improperly constrained NEPA analysis). The district court was correct to conclude that the Sierra Club plaintiffs were likely to succeed on the merits of this claim under NEPA.[95]

In the present case, the future expansion of the ISFSI is also reasonably foreseeable. Therefore, its cumulative impact must be analyzed in the draft EA for

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[92] 98 F. Supp. 2d 1193, 1198-99 (W.D. Wash. 1999) (internal citations omitted).

[93] *Kern,* 284 F.3d at 1079.

[94] *Sierra Club v. U.S. Army Corps of Engineers,* 645 F.3d 978, 991 (8th Cir. 2011).

[95] *Id.* The case was an appeal from the grant of a preliminary injunction against construction of facilities authorized under a Clean Water Act Section 404 permit, and therefore the question before the court of appeals was whether the plaintiffs had shown a likelihood of success on the merits of their challenge to the permit.

the relicensing of the ISFSI, whether or not the future expansion of the ISFSI is interdependent with the relicensing.

The NRC Staff relies on *McGuire/Catawba* for its argument that cumulative impact analysis is required only for actions that are "so interdependent with the application at issue that it 'would be unwise or irrational to complete one without the other.'"[96] In more recent decisions, however, the Commission has acknowledged that cumulative impact analysis is required for actions covered by CEQ regulation 40 C.F.R. § 1508.7 — that is, reasonably foreseeable future actions — without suggesting that the test for connected actions in CEQ regulation 40 C.F.R. § 1508.25 must also be satisfied.[97] This is consistent with the weight of recent federal authority, as discussed above, including the prevailing rule in the Eighth Circuit.

Moreover, the NRC Staff itself has, in other contexts, conducted cumulative impact analyses of covered actions that were not interdependent with the proposed action. For example, in the Final Environmental Impact Statement for the Vogtle Early Site Permit Site, "the Staff's water use and quality analysis in fact considered 'cumulative impacts of the proposed [Vogtle] Units 3 and 4, the existing [Vogtle] Units 1 and 2, the DOE's Savannah River Site directly across the Savannah River from the [Vogtle] site, and other water users in the region.'"[98] And here, the NRC Staff evaluated the cumulative impacts of Northern States' ISFSI expansion, *except* with regard to historical and cultural resources.[99]

In any event, even were the Board to assume that cumulative impact analysis is required only for actions that satisfy both 40 C.F.R. §§ 1508.7 and 1508.25, PIIC's cumulative impact contention would still be admissible. Under 40 C.F.R. § 1508.25, separate actions are "connected" if they "[c]annot or will not proceed unless other actions are taken previously or simultaneously,"[100] as well as when they "[a]re interdependent parts of a larger action and depend on the larger action for their justification."[101] Absent relicensing of the ISFSI, the expansion of the ISFSI could not proceed. Even this alternative test for connected actions is therefore satisfied.

Separate and apart from its legal argument that it is not required to examine the cumulative impacts from a potential ISFSI expansion, however, the NRC Staff alleges that it actually did address these cumulative impacts by printing

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[96] NRC Staff's Answer at 7 (quoting *McGuire/Catawba,* CLI-02-14, 55 NRC at 294).

[97] *See Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-10-5, 71 NRC 90, 102 n.60 (2010); *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, NM 87313), CLI-06-29, 64 NRC 417, 422 & n.23 (2006).

[98] *Vogtle,* CLI-10-5, 71 NRC at 102 n.63.

[99] *See* NRC Staff's Answer at 7-9; *see also, e.g.,* Draft EA at 4-23.

[100] 40 C.F.R. § 1508.25(a)(1)(ii).

[101] *Id.*

substantive comments in the draft EA that were made by PIIC.[102] In effect, the NRC Staff is saying that by putting a heading of "Cumulative Impacts on Historic and Cultural Resources," in its draft EA and by quoting the concerns raised by PIIC,[103] it has discharged its duties under NEPA without actually performing any analysis. PIIC counters that the draft EA merely quoted these concerns and made no effort to evaluate the merits of PIIC's concerns.[104]

The NRC Staff's claim that it somehow evaluated PIIC's concerns regarding historical and cultural resources seems in stark contrast with the NRC Staff's cumulative effects analysis of the ISFSI expansion for all of the identified impacts, save one — the expansion's impact on cultural and historical resources.[105] Yet the apparent need to study this matter is evidenced by the section of the draft EA entitled: "Cumulative Impacts on Historic and Cultural Resources," which states: "[a]reas around the ISFSI could retain potential for archaeological materials."[106] Further, elsewhere in the draft EA, the NRC Staff observes "[s]everal recent studies indicate potential for additional unrecorded archaeological resources within the PINGP boundary. First, the results of the 2009 geomorphological study indicate that the island-terrace landform that encompasses the PINGP site has moderate to high potential to contain buried archaeological sites (Hudak, 2009)";[107] that "[a]ny evidence of past human activity that might have occurred on that former surface now lies buried beneath the current surface";[108] and that, "these buried archaeological deposits would not have been recognized by those [previous]

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[102] NRC Staff's Answer at 7-8 (citing Draft EA at 4-23). In October 2012, the NRC and PIIC entered into a Memorandum of Understanding (MOU), which states that PIIC has "special expertise in the following areas as they relate to the PIIC: (a) Historical and Archaeological Resources, (b) Socioeconomics, (c) Land Use, [and] (d) Environmental Justice." Memorandum of Understanding Between the U.S. Nuclear Regulatory Commission and the [PIIC] as a Cooperating Agency at 3 (Oct. 3, 2012) (Adams Accession No. ML12284A456). It was in this capacity of a cooperating agency that PIIC provided these substantive comments that were printed in the draft EA.

[103] Draft EA at 4-34 to -35.

[104] *See* PIIC's Reply at 3.

[105] Specifically, the NRC Staff states that

> Prior to any licensing activities (expansion or decommissioning), NSPM would submit a license application to the NRC for review. NRC authorization for ISFSI expansion would constitute a federal action under NEPA and would be an undertaking under the NHPA. NRC would consult with the Minnesota SHPO, the PIIC, NSPM, and other interested parties to determine whether additional subsurface testing is warranted. *Impacts to historic and cultural resources would be assessed at that time.*

Draft EA at 4-34 (emphasis added).

[106] *Id.*

[107] *See id.* at 3-19.

[108] *Id.*

surveyors who only searched the ground surface for evidence of archaeological sites."[109]

In addition, the draft EA mentions two other recent archaeological investigations (Boden et al., 2010; and Schirmer, 2013) that reported previously unknown burial sites within and near the PINGP property. One of them, a 2010 limited archaeological reconnaissance survey, recorded a previously unrecorded mound site, 21GD277 (Boden et al., 2010). The other study, which employed light detection and ranging remote sensing technology in 2012, identified a group of fifteen previously unreported burial mounds on Prairie Island near the PINGP property (Schirmer, 2013).[110]

And yet, even though these studies led the NRC Staff to conclude that "[b]ased on the number, type and density of known archaeological sites identified, there is a high probability that additional unrecorded resources may exist within the PINGP property,"[111] the NRC Staff does not appear to have made any effort to evaluate the cumulative impact of the ISFSI expansion on them. Such a refusal has been held to be "one of the most egregious shortfalls of the EA."[112]

The dissent's statement that "requirements for detail in an EIS are extensive when compared to that in an EA,"[113] seems to suggest that it is acceptable for an EA to give short shrift to an analysis of cumulative impacts. Nothing could be further from the truth — as courts emphasize the importance of discussing cumulative effects in EAs.[114] For example, the court in *Kern v. U.S. Bureau of Land Management* stated:

> The importance of analyzing cumulative impacts in EAs is apparent when we consider the number of EAs that are prepared. The Council on Environmental Quality has noted that "in a typical year, 45,000 EAs are prepared compared to 450 EISs. . . . Given that so many more EAs are prepared than EISs, adequate consideration of cumulative effects requires that EAs address them fully."[115]

Here, in the absence of the NRC Staff conducting an adequate analysis, it would

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[109] *Id.*

[110] *See id.*

[111] *Id.*

[112] *See Sierra Club,* 645 F.3d at 991 (holding that the district court did not abuse its discretion in balancing the harms in favor of an injunction related to an electric utility's Clean Water Act permit for the construction of a new power plant); *see also Davis v. Mineta,* 302 F.3d 1104, 1121-22 (10th Cir. 2002) (holding that an agency's decision to issue a FONSI rather than prepare an EIS was arbitrary because the agency had obligated itself contractually to issue a FONSI before it conducted an EA).

[113] Dissent at p. 436.

[114] *See generally Kern,* 284 F.3d 1062.

[115] *Id.* at 1078 (quoting Council on Environmental Quality, *Considering Cumulative Effects Under the National Environmental Policy Act* at 4 (Jan. 1997)).

be easy to underestimate the cumulative impacts of the reasonably foreseeable expansion of the ISFSI on cultural and historic resources. Such a restricted analysis would impermissibly subject the decisionmaking process contemplated by NEPA to "'the tyranny of small decisions.'"[116]

It is difficult to reconcile the NRC Staff's claim that it performed its review "in accordance with the requirements of 10 C.F.R. Part 51 and [S]taff guidance found in NUREG-1748 (NRC, 2003),"[117] with the draft EA's apparent failure to analyze the possible cumulative impact on historical and cultural resources resulting from an expansion of the ISFSI.

PIIC has pleaded an admissible contention that the draft EA's cumulative impact analysis is inadequate by meeting the contention admissibility requirements of 10 C.F.R. § 2.309. Specifically, and in accordance with 10 C.F.R. § 2.309(f)(1)(i), PIIC provides a specific statement of law or fact for the basis of Contention 2: "the draft EA fails to adequately address [t]he potential impacts of the reasonably foreseeable expansion of the PI ISFSI on cultural and historic resources."[118]

PIIC also provides a brief explanation of the basis for Contention 2 pursuant to 10 C.F.R. § 2.309(f)(1)(ii). Specifically, PIIC maintains that

> [t]he NRC staff repeatedly states in the draft EA that there is a high probability that additional unrecorded cultural resources may exist within the PINGP property. In its cumulative impact analysis, the NRC staff finds that it is reasonably foreseeable that the ISFSI may be expanded to accommodate 98 casks. However, the NRC staff does not believe that any action needs to be taken now, in considering this application for license renewal, to ensure that these historic and cultural resources will be protected.[119]

Moreover, PIIC demonstrates that the issue raised in Contention 2 is within the scope of the proceeding, satisfying the pleading requirements of 10 C.F.R. § 2.309(f)(1)(iii). For instance, PIIC argues that the ISFSI license "should not be

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[116] *Id.* (quoting Council on Environmental Quality, *Considering Cumulative Effects Under the National Environmental Policy Act* at 1 (Jan. 1997)).

[117] Draft EA at 1-11. The NRC Staff is not alone in staking out such an Alice-In-Wonderland position. Northern States argues that PIIC's original Contention 2, as admitted, alleged only that Northern States' ER was deficient because it failed to address the cumulative impacts of the ISFSI expansion on archaeological resources, but that the draft EA, as well as Northern States' responses to the NRC Staff's request for additional information, addresses this issue — and hence cures this defect in the ER. Northern States' Answer at 12 (citing Draft EA at 4-25, 4-35, 4-40 and Northern States' responses to the NRC Staff's request for additional information at ADAMS Accession No. ML13073A087).

[118] PIIC's Motion to Admit at 4.

[119] *Id.* at 6 (internal citations omitted).

renewed until an archeological survey sufficient to identify unrecorded cultural resources is performed by the applicant and/or by imposing a license condition on the any [sic] renewed license that no expansion can be considered as a subject of an amended license until such a survey is performed."[120]

Satisfying the pleading requirements of 10 C.F.R. § 2.309(f)(1)(iv), PIIC also demonstrates that the issue raised in Contention 2 is material to the findings the NRC must make by specifically stating that "[t]he NRC staff repeatedly states in the draft EA that there is a high probability that additional unrecorded cultural resources may exist within the PINGP property. . . . Potential destruction of historic and cultural resources of importance to the PIIC would constitute a disproportionately high and adverse impact on the PIIC."[121]

Furthermore, Contention 2 provides a concise statement of alleged facts and meets the pleading requirements of 10 C.F.R. § 2.309(f)(1)(v).[122] Again, PIIC relies on the NRC Staff's conclusions both that "there is a high probability that additional unrecorded cultural resources may exist within the PINGP property"[123] and "that it is reasonably foreseeable that the ISFSI may be expanded to accommodate 98 casks."[124] These facts, PIIC claims, stand in stark contrast with the NRC Staff's decision not to conduct a thorough assessment of these impacts now, but instead to wait until some later date, when Northern States submits an application and ER for the expansion of the ISFSI.[125]

Finally, Contention 2 provides sufficient information to show that a genuine dispute on a material issue of fact exists, meeting the pleading requirements of 10 C.F.R. § 2.309(f)(1)(vi). Specifically, PIIC maintains NEPA obligates the NRC Staff to evaluate the cumulative effects,[126] arguing that — contrary to the position of the NRC Staff and Northern States — the ISFSI license "should not be renewed until an archeological survey sufficient to identify unrecorded cultural resources is performed by the applicant and/or by imposing a license condition on the any [sic] renewed license that no expansion can be considered as a subject of an amended license until such a survey is performed."[127]

Accordingly, this portion of amended Contention 2 is admitted.

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[120] *Id.* at 6-7.

[121] *See id.* at 6; *see also id.* at 5-7.

[122] *See id.* at 4-6.

[123] *Id.* at 6.

[124] *Id.* (citing Draft EA at 4-26).

[125] *Id.* (citing Draft EA at 4-26).

[126] *Id.* at 4-6.

[127] *Id.* at 6-7.

C. Contention 3: The Draft Environmental Assessment Fails to Satisfy the NRC's Federal Trust Responsibility to Assess and Mitigate the Potential Impacts on the PIIC, Its People, and Its Land

PIIC first raised its "trust responsibility"[128] contention in its petition to intervene.[129] We denied it at that time because Northern States owes no duty to address the federal government's trust responsibility in its ER, and so the contention at that time failed to raise a genuine dispute with the ER.[130] However, we also made clear that "[a]lthough we deny Contention 3, PIIC is free to raise a contention challenging the Staff's compliance with its trust responsibility once the Staff issues its EA or draft EIS. We express no opinion as to whether such a contention would be admissible."[131]

In its instant motion, PIIC seeks to renew Contention 3, as amended, by challenging, not Northern States, but instead the NRC Staff for its failure to comply with its trust responsibilities to Native American tribes.[132] Specifically, PIIC maintains there are two significant deficiencies requiring additional NRC action: (1) the draft EA inadequately analyzes the cumulative impacts of a possible expansion of the ISFSI on cultural and historic resources, and wrongly concludes that such an allegedly deficient analysis discharges the NRC's trust responsibility; and (2) the draft EA fails to address the likelihood of a terrorist attack on the ISFSI, as well as the physical and economic impacts such an attack would cause to the PIIC homeland.[133]

We turn first to the latter alleged deficiency, regarding the likelihood of terrorist attacks.[134] While there is a conflict between the United States Courts of Appeals for the Ninth Circuit[135] and the Third Circuit[136] on whether the NRC is required to evaluate the likelihood of a terrorist attack, the Commission has ruled in *Pilgrim*[137] that only those NRC-regulated facilities located within the Ninth Circuit's jurisdictional boundaries are required to conduct environmental analyses of possible terrorist acts.[138] As noted above, Prairie Island's ISFSI lies within the jurisdiction of the Eighth Circuit, and hence it is outside the Ninth Circuit's

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[128] *See, e.g., Seminole Nation v. United States,* 316 U.S. 286, 296-97 (1942).

[129] Original PIIC Petition at 36-42.

[130] *See* LBP-12-24, 76 NRC at 519-20.

[131] *Id.* at 520.

[132] PIIC's Motion to Admit at 9.

[133] *See id.* at 9-14.

[134] *See id.* at 13-14.

[135] *See San Luis Obispo Mothers for Peace v. NRC,* 449 F.3d 1016, 1031 (9th Cir. 2006).

[136] *See New Jersey Department of Environmental Protection v. NRC,* 561 F.3d 132, 142-43 (3d Cir. 2009).

[137] *See generally Pilgrim,* CLI-10-14, 71 NRC 449.

[138] *See id.* at 476-77.

jurisdictional boundaries. Accordingly, pursuant to the Commission's ruling, this portion of PIIC's amended Contention 3 is dismissed.

As to the cumulative impacts of the ISFSI expansion, PIIC points to the draft EA's conclusion that there is a high probability additional unrecorded cultural resources lie within the PINGP property.[139] PIIC asserts that, even though the NRC Staff's cumulative impact analysis finds it reasonably foreseeable the ISFSI may be expanded to accommodate ninety-eight casks, the NRC Staff nevertheless claims there is no need to take action now to ensure those historic and cultural resources will be protected. Instead, the NRC Staff would postpone any such analysis of the impact of the expansion on these resources until Northern States submits an application for this expansion, at which time the NRC Staff will review and either approve or deny such expansion.[140] The NRC Staff claims that, at that point in time, but no earlier, it would be proper to conduct a thorough assessment of any potential environmental impacts on historic and cultural resources.[141] PIIC disputes this, arguing that "[t]his provides little assurance that any unrecorded historic and cultural resources would be protected."[142] PIIC asserts that, pursuant to the trust responsibility it owes PIIC, the NRC has a fiduciary duty to take action now, not later, to determine whether unrecorded cultural resources are present in the expansion area for the ninety-eight casks.[143]

The NRC Staff maintains that for agencies like the NRC, "which do not manage, control or supervise Indian affairs, 'unless there is a specific duty that has been placed on the [agency] with respect to Indians, this responsibility is discharged by the agency's compliance with general regulations and statutes not specifically aimed at protecting Indian tribes.'"[144] Similarly, Northern States asserts that the NRC's trust responsibility does not impose a duty on the NRC to take action beyond complying with generally applicable statutes and regulations.[145] Northern States further contends the NRC Staff is not required to take action now to ascertain whether unrecorded cultural resources are present in any future ISFSI

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[139] PIIC's Motion to Admit at 12 (citing Draft EA at 3-19, 4-10, 4-11).

[140] *Id.*

[141] *Id.* at 12-13 (citing Draft EA at 4-26).

[142] *Id.* at 13.

[143] *Id.*

[144] NRC Staff's Answer at 13-14 (quoting *Morongo Band of Mission Indians v. Fedaral Aviation Administration,* 161 F.3d 569, 574 (9th Cir. 1998)). The NRC Staff and Northern States repeat here the same argument made earlier that merely quoting PIIC's concerns in the EA, without evaluating them, represents compliance with NEPA, and that this discharges any trust responsibility the NRC owes. Even if the NRC Staff and Northern States really intend to assert this claim, however, at a minimum there is a genuine factual dispute as to whether such an analysis was actually conducted, and if so, the extent to which that analysis discharges the NRC's trust responsibility to the Tribes.

[145] Northern States' Answer at 13 (citing *Shoshone-Bannock Tribes v. Reno,* 56 F.3d 1476, 1482 (D.C. Cir. 1995) and *Morongo,* 161 F.3d at 574).

expansion area.[146] Northern States also argues that PIIC's claim the NRC breached its trust responsibility is not supported by the law or facts.[147]

PIIC counters that, because the NRC Staff has concluded there is a high probability that unrecorded tribal cultural resources lie within the PINPG property, the NRC's trust responsibility requires that it go beyond compliance with laws and regulations directed to the public in general.

For the reasons set forth below, we are persuaded that PIIC's Contention 3 is admissible under 10 C.F.R. § 2.309.

First, this contention provides a specific statement of law or fact pursuant to 10 C.F.R. § 2.309(f)(1)(i), namely, "PIIC does not believe that the NRC has fulfilled the trust responsibility in its . . . analysis and conclusion of the cumulative impacts on historic and cultural resources from the reasonably foreseeable expansion of the ISFSI."[148]

Second, PIIC has provided a brief explanation of the basis for the contention pursuant to 10 C.F.R. § 2.309(f)(1)(ii). Specifically, PIIC's basis for this contention is that the draft EA finds "there is a high probability that additional unrecorded cultural resources may exist within the PINGP property."[149] PIIC contends that, even though the draft EA's cumulative impact analysis states it is reasonably foreseeable that the ISFSI may be expanded to accommodate ninety-eight casks,[150] the NRC Staff made no attempt to evaluate whether PIIC's historic and cultural resources will be protected if the ISFSI license is renewed.[151]

Third, Contention 3 is within the scope of the proceeding pursuant to 10 C.F.R. § 2.309(f)(1)(iii).[152] This dispute arises from the NRC Staff's conclusion that there is a high probability that additional unrecorded cultural resources lie within the PINGP property, which PIIC maintains have not been evaluated for cumulative impacts from an expansion of the ISFSI.[153] It is undisputed that PIIC

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[146] *Id.* at 14.

[147] *Id.* at 13-14.

[148] PIIC's Motion to Admit at 12.

[149] *Id.* (citing Draft EA at 3-19, 4-10, 4-11).

[150] *Id.* (citing Draft EA at 4-26).

[151] *See id.*

[152] In addition to arguing that Contention 3 is unsupported by law and fact, (*see* Northern States' Answer at 12-13), Northern States contends that one of PIIC's bases supporting Contention 3 — that the NRC failed to comply with the Nuclear Waste Policy Act (NWPA) with respect to establishing a permanent repository (*see* PIIC's Motion to Admit at 9) — is immaterial to an ISFSI licensing renewal proceeding. *See* Northern States' Answer at 13. PIIC counters that whether the NRC failed to comply with the NWPA is material because it is related to the expansion of the Prairie Island ISFSI to accommodate ninety-eight casks. *See* PIIC's Reply at 12. However, Northern States has provided no authority establishing that the NWPA exempts the NRC from complying with its trust responsibility. *See generally* Northern States' Answer.

[153] PIIC's Motion to Admit at 6 (citing Draft EA at 3-19, 4-10, 4-11).

has alleged a valid concern about such historical and cultural resources, and the NRC Staff's own analysis of the archaeological investigations conducted in the area of the ISFSI suggests there is a high probability those resources lie within the PINGP property[154] and specifically around the ISFSI area.[155] This is the precise concern raised by Contention 3. Thus, PIIC's Contention 3 satisfies 10 C.F.R. § 2.309(f)(1)(iii).

Fourth, the issue raised in Contention 3 is material to the findings the NRC must make to support the action that is involved in this proceeding pursuant to 10 C.F.R. § 2.309(f)(1)(iv). Again, the NRC Staff recognizes there is a high probability that additional unrecorded resources may lie within the PINGP property[156] and specifically around the ISFSI area.[157] PIIC's Contention 3 alleges that such unrecorded cultural and architectural resources may be adversely affected by the expansion of the ISFSI.[158] Moreover, PIIC claims there are several archaeological sites recorded within the PINGP property that have not been assessed for possible additional unrecorded resources.[159] Thus, PIIC's concern about its additional unrecorded historical and cultural resources lying within the PINPG property designated for the expansion of the ISFSI is material to the finding that the NRC must make.

Fifth, PIIC has alleged facts on which it relies to support Contention 3, as required by 10 C.F.R. § 2.309(f)(1)(v).[160] These facts relate specifically to the NRC Staff's conclusion, on the one hand, that there is a high probability unrecorded resources lie within the PINGP property and around the ISFSI area, but on the other that the draft EA will not evaluate the possible adverse effects on these resources from a likely expansion. It is the NRC Staff's apparent refusal to evaluate these cumulative impacts further that forms the basis for PIIC's claim that the NRC Staff is violating its trust responsibility.[161] This is sufficient support and meets the requirements of section 2.309(f)(1)(v).

Finally, we conclude that Contention 3 presents a genuine dispute between PIIC and the draft EA on a material issue of fact pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

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[154] Draft EA at 3-19.

[155] *See id.* at 4-34 ("The NRC staff evaluated whether ISFSI expansion could affect historic and cultural resources. Areas around the ISFSI could retain potential for archaeological materials.").

[156] *See id.* at 3-19.

[157] *See id.* at 4-34 ("The NRC staff evaluated whether ISFSI expansion could affect historic and cultural resources. Areas around the ISFSI could retain potential for archaeological materials.") We note this appears to be the only "evaluation" performed in the EA — i.e., whether the expansion may affect the resources. There is no suggestion, however, that the NRC Staff actually evaluated the cumulative impacts upon such resources of the expansion.

[158] *See* PIIC's Motion to Admit at 9-13.

[159] *See id.* at 12; *see also* Draft EA at 3-16 to -19.

[160] *See* PIIC's Motion to Admit at 12 (citing Draft EA at 3-19, 4-10, 4-11, 4-26).

[161] *See id.* at 12-13 (citing Draft EA at 3-19, 4-10, 4-11, 4-26).

PIIC maintains (1) that the NRC Staff, as a federal agency, owes a trust responsibility to PIIC, independent of NEPA, (2) that this trust responsibility prevents the NRC Staff from postponing an analysis of the environmental impacts of expanding the ISFSI — even if NEPA would permit such a postponement, and (3) that this trust responsibility requires the NRC Staff either to perform additional field investigations before the license is renewed or to impose a license condition on Northern States to ensure that any potential impacts are mitigated. The NRC Staff and Northern States dispute PIIC's claims. This meets the dispute requirements of section 2.309(f)(1)(vi). Of course, whether the Staff has properly discharged its trust responsibility to PIIC — and the extent to which it must undertake specific actions in order to comply with this duty — is a merits determination that the Commission has instructed us cannot be decided at the contention admissibility stage.[162]

Accordingly, this portion of renewed Contention 3 is admissible.

IV. NORTHERN STATES' MOTION TO STRIKE

On January 28, 2014, Northern States moved to strike portions of PIIC's Reply.[163] Specifically, Northern States requests the Board to strike certain statements in PIIC's Reply regarding (1) Northern States' CRMP, on the ground that PIIC did not mention Northern States' CRMP in its motion, and (2) the HBU fuel portion of Contention 2, on the ground that PIIC impermissibly attempts to add a new basis of support that was not alleged in its motion to admit new and amended contentions.[164]

PIIC's response, dated February 4, 2014,[165] argues that Northern States' motion should be denied in its entirety because PIIC's reply "contains appropriate arguments that logically flow from, and are narrowly focused on, the legal or logical arguments presented in the original motion supporting [amended] Contention 2, and the NRC Staff or [Northern States] responses on the issues of cumulative impacts on cultural resources or the concerns about [HBU fuel]."[166]

We agree with PIIC. A motion to strike may be granted where a pleading or

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[162] *See Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 443 (2011).

[163] *See generally* Motion to Strike.

[164] *See* Motion to Strike at 1-3.

[165] *See* Response to Motion to Strike.

[166] *Id.* at 2.

other submission contains information that is irrelevant.[167] In this case, it appears that the statements Northern States seeks to strike from PIIC's reply were based on arguments advanced by the NRC Staff and Northern States in their answers to PIIC's motion.[168] For example, it appears that PIIC refers to the CRMP in its Reply[169] because Northern States refers to the CRMP in its answer in arguing that it will ensure the protection of archaeological and cultural resources on the PINGP property by implementing the CRMP.[170] In regards to PIIC's HBU fuel statements that Northern States seeks to strike, PIIC was addressing the NRC Staff's argument that PIIC's claim about HBU fuel[171] is too remote and speculative at this time.[172]

The statements Northern States seeks to strike are neither irrelevant to the contentions nor impermissible in response to arguments made by Northern States and the NRC Staff.[173] There is nothing that would unfairly surprise the NRC Staff or the Applicant (which cannot file a surreply), and so neither is prejudiced by these statements.

For these reasons, we deny Northern States' motion in its entirety.

V. CONCLUSION

For the reasons stated above, we hold in abeyance amended Contention 1, in whole, and amended Contention 2, in part. We also admit amended Contention 2, in part, and a renewed and amended Contention 3, in part.

An appeal of this Memorandum and Order may be filed within twenty-five (25) days of service of this Memorandum and Order by filing a notice of appeal and an accompanying supporting brief, in accordance with 10 C.F.R. § 2.311(b). Any party opposing an appeal may file a brief in opposition to the appeal. All briefs must conform to the requirements of 10 C.F.R. § 2.341(c)(2).

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[167] *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-05-20, 62 NRC 187, 228 (2005) (citing *Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-01-14, 53 NRC 488, 514 (2001)).

[168] *See generally* Response to Motion to Strike.

[169] *See, e.g.,* PIIC's Reply at 3.

[170] *See, e.g.,* Northern States' Answer at 8.

[171] *See* PIIC's Reply at 9.

[172] *See* NRC Staff's Answer at 12.

[173] Additionally, however, we note that we did not rely on any of PIIC's statements that are the subject of Northern States' motion in reaching our decision on the admissibility of contentions.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Michael M. Gibson, Chairman
ADMINISTRATIVE JUDGE

Nicholas G. Trikouros
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 30, 2014

Dissenting Opinion of Judge Arnold

Although I agree with some of what is contained in this Order (e.g., the Waste Confidence discussion), I must respectfully disagree with the majority of the board on one significant issue. Original Contentions 2, 3, and 4,[1] and revised Contentions 2 and 3[2] all claim among other things that the ER and draft EA are deficient in their consideration of impacts on cultural and historic resources contained within the area of the ISFSI. Contrary to a majority of the Board, I do not believe these parts of the contentions are admissible.

1. Summary of Original Contentions 2, 3, and 4

Original Contentions 2, 3, and 4[3] claimed amongst other things that the ER was deficient in that it did not consider impacts upon the cultural and historic resources. Original Contention 2 claimed that eventual expansion of the ISFSI is inevitable due to relicensing of the two operating reactors, that the ER must consider the cumulative impacts of relicensing the ISFSI with the eventual expansion of the ISFSI, and that this cumulative impact assessment must include impacts upon cultural and historic resources that may be present on the ISFSI site. Original Contention 3[4] claimed that the NRC's Federal Trust Responsibility to the PIIC requires it to consider impacts upon cultural and historic resources on the site. And finally, original Contention 4 was in regards to the need for the environmental record to include an Environmental Justice review that must include an evaluation of the impacts of the ISFSI relicensing on adjacent minority populations. The PIIC claimed to be such an adjacent minority population, and that relicensing and eventual expansion of the ISFSI will impact cultural and historic resources within the ISFSI site. In admitting Contention 4, the Board focused the admitted contention on "potential disturbance of historic and archaeological resources" and "skyshine radiation."[5] A majority of the Board stated that these impacts "stem from the likely future expansion of the ISFSI that is not examined in the ER."[6]

Since the ER, in fact, did not contain any evaluation of future expansion of

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[1] *See* Original PIIC Petition at 26-49.

[2] *See* PIIC's Motion to Admit at 3-14.

[3] The majority's decision does not address PIIC's original Contention 4, but I believe it should have. This contention alleged the same lack of an assessment of historical and cultural resources, but provides the additional basis of Environmental Justice.

[4] Original Contention 3 was not admitted by the Board. *See* LBP-12-24, 76 NRC at 518-20. However, since PIIC's Motion to Admit attempts to resurrect it as a challenge to the draft EA, I discuss it here.

[5] *See* LBP-12-24, 76 NRC at 522. The skyshine radiation portion of original Contention 4 is not addressed in this dissenting opinion.

[6] *Id.*

the ISFSI, the information sought by Intervenors would not, and could not have been documented in the ER. These contentions were advanced as contentions of omission and were admitted by the Board solely as allegations of required information missing from the environmental record.

2. The Environmental Assessment Addresses Contention 2, 3, and 4

The NRC Staff's environmental assessment is documented in an Environmental Assessment (EA) rather than in an Environmental Impact Statement (EIS). When an EA is appropriate, it need only include a "brief discussion" of "environmental impacts of the proposed action."[7] Alternatively, an EIS must include among other things:

> Unless excepted in this paragraph or § 51.75, the draft environmental impact statement will include a preliminary analysis that considers and weighs the environmental effects, including any cumulative effects, of the proposed action; the environmental impacts of alternatives to the proposed action; and alternatives available for reducing or avoiding adverse environmental effects. Additionally, the draft environmental impact statement will include a consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives. The draft environmental impact statement will indicate what other interests and considerations of Federal policy, including factors not related to environmental quality, if applicable, are relevant to the consideration of environmental effects of the proposed action identified under paragraph (a) of this section.[8]

The requirements for detail in an EIS are extensive when compared to that in an EA. Where one would expect to see the entire cumulative impact analysis in an EIS, the EA would only include a brief discussion, which might be as short as a statement that no significant impacts are expected. And here, Intervenors have not contested that the draft EA is inappropriate or that an EIS is required. So we should expect to see in the draft EA only "brief discussions" of the evaluations performed by the NRC Staff, regardless of how extensive those evaluations may have been.

The NRC Staff, in documenting its environmental impact evaluation in its draft EA, addressed the historical and cultural resource omissions alleged in original Contentions 2, 3, and 4 as follows:

"Site Location and Description," section 1.3.1 of the draft EA, describes

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[7] 10 C.F.R. § 51.30.

[8] *Id.* § 51.71 (2014). This regulation requires that an EIS include an evaluation of cumulative impacts such as that sought by the PIIC. The rules do not specifically require such a cumulative impact analysis to be contained in an EA.

the ISFSI site and its location. It identifies the PIIC as the ISFSI's nearest residential neighbor. The topography of the site and nearby structures are described.

"Cooperating Agencies," section 1.5 of the draft EA, describes the NRC's Federal Trust Responsibility and summarizes how it will be met.

"Land Use," section 3.1 of the draft EA, describes current ISFSI land use including the extent to which initial ISFSI construction disturbed the ground beneath it. Current PIIC buildings and land use are described, as well as population.

"Demographics and Socioeconomics," section 3.3 of the draft EA, provides extensive information concerning the PIIC and its relation to the ISFSI.

"Historic and Cultural Resources," section 3.10 of the draft EA, provides a five-page discussion focusing on cultural background of the PIIC and an evaluation of historic and cultural resources within the Area of Potential Effect (APE) with a final summarizing statement:

> No archaeological sites, potential archaeological resources, or sites determined eligible for listing in the NRHP [National Registry of Historical Places] are within the APE for the ISFSI license renewal.[9]

"Environmental Justice," section 3.12 of the draft EA, provides introductory information concerning the scope of the EJ assessment.

"Environmental Impacts, Land Use," section 4.1 of the draft EA, states that relicensing of the ISFSI "will not result in any construction or expansion of the existing ISFSI footprint or operations." It also discusses the NRC Staff's interactions with the PIIC to ensure that the community's special expertise in historic and cultural resources was considered in the EA.

"Environmental Impacts, Historic and Cultural Resources," section 4.10 of the draft EA, evaluates the impacts of license renewal on historic and cultural resources. Although there are no current indications that such historic and cultural resources exist on the ISFSI site, it does admit:

> [T]here remains the potential for unreported archaeological resources to be present in subsurface contexts in portions of the ISFSI that were not completely disturbed by the original construction.[10]

[9] Draft EA at 4-10.
[10] *Id.*

"Environmental Justice," section 4.13 of the draft EA, provides an evaluation of EJ issues, and considers as well the impacts of hypothetical[11] expansion of the ISFSI to accommodate ninety-eight casks (twice the current capacity of forty-eight casks) upon EJ issues.

"Cumulative Impacts," section 4.14 of the draft EA, considers the cumulative impacts of relicensing the ISFSI in conjunction with possible future expansion of the ISFSI. This seventeen-page evaluation assesses cumulative impacts upon, among other things, historic and cultural resources and environmental justice issues. It includes the statement:

> [N]o historic and cultural resources are located within the area of potential effect; however, there remains the potential for unknown historic and cultural resources near the ISFSI.[12]

This statement clearly indicates that the NRC Staff had considered the possible presence of cultural and historical resources both on the ISFSI site and nearby.

3. Original Contentions 2, 3, and 4 on Cultural and Historic Resources Are Moot

Original Contentions 2, 3, and 4 were solely challenges concerning omissions from the ER. As the Commission has stated:

> If the EIS addresses the concerns alleged in the contention, the original contention becomes moot and the intervenor must raise a new contention if it claims the EIS discussion is still inaccurate or incomplete.[13]

In the current situation the relevant environmental document is the draft EA rather than an EIS. Considering the extensive coverage of the relevant topics in the draft EA, no conclusion can be reached other than that these aspects of original Contentions 2, 3, and 4 are now moot. And if Intervenors desire to challenge the adequacy of the NRC Staff's assessment they must raise *new* contentions.

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[11] I refer to the expansion of the current ISFSI as "hypothetical" because it is not inevitable. It is simply the most likely current alternative. PINGP could choose to build another ISFSI either under its general or specific license either on site or at some remote location. It might also choose to expand its spent fuel pool storage or even, as in the case with Vermont Yankee, SONGS, Crystal River, and Kewaunee, cease operations for as-yet unknown reasons. Expanding storage at the current ISFSI cannot currently be considered inevitable.

[12] Draft EA at 4-34.

[13] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 130 (2004).

4. New Revised Contentions 2 and 3

The PIIC's Motion to Admit seeks, among other things, to revise Contentions 2 and 3. Revised Contention 2 challenges the adequacy of the draft EA in three areas:

> 1) the failure to address the cumulative impacts of long-term waste storage; 2) the failure to adequately address the potential impacts of the reasonably foreseeable expansion of the PI ISFSI on cultural and historic resources; and 3) the failure to address the potential inability to transport high burnup (HBU) fuel off site.[14]

Revised Contention 3 regards inadequacies alleged in the draft EA reflecting the NRC's Federal Trust Responsibility. Two significant deficiencies are alleged:

> The first deficiency concerns the inadequacy of the analysis and conclusion on the cumulative impacts of the ISFSI on cultural and historic resources. The second deficiency concerns the absence of any analysis of the likelihood of a terrorist attack on the ISFSI, and the potentially devastating physical and economic impacts on the PIIC homeland from such an attack.[15]

I disagree with the Board's ruling admitting those portions of revised Contentions 2 and 3 regarding cumulative impacts of license renewal with possible future ISFSI expansion on cultural and historic resources. The requirements for admitting a contention for litigation in this case are contained in 10 C.F.R. § 2.309(f)(1) subparagraphs (i) through (vi). I believe that revised Contentions 2 and 3 fail to provide the information required by subparagraphs (iii), (v), and (vi) as discussed below.

5. Revised Contentions 2 and 3 Do Not Meet 10 C.F.R. § 2.309(f)(1)(iii)

Subparagraph (iii) requires that the contention "[d]emonstrate that the issue raised in the contention is within the scope of the proceeding."[16] Revised Contention 2 is predicated on the need of the environmental review to consider the impact of related actions, and upon the asserted need to expand the ISFSI at some unspecified and hypothetical future date to accommodate additional spent fuel casks. But expansion of the ISFSI would require a licensing amendment,[17] and no such license amendment application has been filed with the NRC. The Com-

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[14] PIIC's Motion to Admit at 3.

[15] *Id.* at 9-10.

[16] 10 C.F.R. § 2.309(f)(1)(iii).

[17] *See* Draft EA at 4-23 ("Expansion of the ISFSI would require that an application and ER be submitted to the NRC for review and approval of the proposed action.").

mission has provided guidance on when future license amendments are within the scope of a cumulative impact evaluation:

> Our collective reading of the post-*Kleppe* rulings suggests, as the Board indicated, that to bring NEPA into play, a possible future action must at least constitute a "proposal"pending before the agency (i.e., ripeness), and must be in some way interrelated with the action that the agency is actively considering (i.e., nexus).[18]

And in the same order the Commission explained what constituted a proposal before the agency:

> Taken literally, *Kleppe* invalidates NIRS's NEPA contention because Duke has submitted no *"proposal" (i.e., a license amendment application)* to use MOX fuel in the Catawba and McGuire reactors.[19]

That is, in order for a future license amendment to be a proposal before the agency, an application for that license amendment must have been submitted. The Commission went further and explained why:

> We would, to say the least, have a very difficult time analyzing the environmental effects of a "merely contemplated" license application that we have never seen, and we would have an even more difficult time appraising how those effects would combine with those of another action to create "cumulative impacts."[20]

Since no license amendment application has been submitted to the NRC for ISFSI expansion, the hypothetical future expansion of the ISFSI is not within the scope of the current cumulative impacts assessment of ISFSI relicensing. Therefore, that portion of revised Contention 2 regarding cumulative impacts on cultural and historic resources is not within the scope of this proceeding.

Regarding that portion of revised Contention 3 concerned with cumulative impacts of the ISFSI on cultural and historic resources, the Intervenors claim that the Federal Trust Responsibility to the PIIC "requires that the Federal Government (and its agencies) protect Indian trust lands from alienation, confiscation, environmental degradation, or the risk of environmental degradation."[21] The PIIC provides support for their assertion that such a trust responsibility exists. However, they have made no showing that any law, regulation, or precedent requires government agencies to consider cumulative impacts of future hypothetical ac-

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[18] *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 295 (2002).

[19] *Id.* at 294-95 (emphasis added).

[20] *Id.* at 295.

[21] PIIC's Motion to Admit at 9.

tions that are too vague to be considered in the cumulative impact assessment required under NEPA. The PIIC has not so much as attempted to support that this part of revised Contention 3 is within the scope of this proceeding. Thus, neither revised Contention 2 or 3 is within the scope of the current ISFSI license renewal proceeding.

6. Revised Contentions 2 and 3 Do Not Meet 10 C.F.R. § 2.309(f)(1)(v)

Section 2.309(f)(1)(v) requires that a contention

> [p]rovide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue.[22]

In support for their revised Contention 2, the Intervenors provide neither expert opinion nor any alleged facts in support of their claim. Regarding the draft EA evaluation of impacts of ISFSI expansion on cultural and historic resources, Intervenors opine, the "PIIC believes that it is a high and adverse impact — potential destruction of tribal historic and cultural resources is a serious matter — and that the NRC is required to take action now to mitigate the potential impacts of the expansion."[23] However this is not proffered as an expert opinion. And nowhere in the motion is there any claim that this is an expert opinion. This is simply speculative opinion that contradicts the conclusion of the draft EA. The motion presents the illusion that it provides alleged facts by stating:

> The NRC staff repeatedly states in the draft EA that there is a high probability that additional unrecorded cultural resources may exist within the PINGP property. In its cumulative impact analysis, the NRC staff finds that it is reasonably foreseeable that the ISFSI may be expanded to accommodate 98 casks. However, the NRC staff does not believe that any action needs to be taken now, in considering this application for license renewal, to ensure that these historic and cultural resources will be protected. The NRC staff bases this conclusion on the fact that the NRC would require that an application and an ER be submitted to the NRC for review and approval of the proposed expansion.[24]

Although these appear to contain facts in support of their contention, they are

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[22] 10 C.F.R. § 2.309(f)(1)(v).

[23] PIIC's Motion to Admit at 5.

[24] *Id.* at 6.

in fact quotes from the draft EA. Citing draft EA statements does not establish a challenge to the draft EA. The Commission has explained:

> The 1989 revisions to the contention rule thus insist upon some factual basis for an admitted contention. The intervenor must be able to identify some facts at the time it proposes a contention to indicate that a dispute exists between it and the applicant on a material issue. These requirements are intended to preclude a contention from being admitted where an intervenor has no facts to support its position and [instead] contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts.[25]

Citing the facts upon which the NRC Staff assessment in the draft EA is based does not and cannot support a dispute with that assessment. Furthermore, the Commission has stated:

> Contentions, however, must be based on a genuine material dispute, not the possibility that petitioners, if they perform their own additional analyses, may ultimately disagree with the application.[26]

And

> Contentions "will be ruled inadmissible if the petitioner 'has offered no tangible information, no experts, no substantive affidavits,' but instead only 'bare assertions and speculation.'"[27]

Revised Contention 2 is clearly a case where Intervenors, without factual support or opinion other than that contained in the draft EA, and agreeing with those facts in the draft EA, disagree with the conclusions of the draft EA and would like those conclusions replaced with their own speculative opinion.

Regarding that portion of revised Contention 3 concerning the effects of ISFSI expansion on cultural and historic resources, there is a similar total absence of alleged facts or expert opinions in this contention. The contention makes the unsupported assertion:

> The license for the ISFSI should not be renewed until an archeological survey sufficient to identify unrecorded cultural resources is performed by the applicant and/or by imposing a license condition on the any [sic] renewed license that no

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[25] *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 335 (1999) (internal citations and quotations omitted).

[26] *USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 480 (2006).

[27] *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003) (citing *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000)).

> expansion could be considered as a subject of an amended license until such a survey is performed. The higher duty imposed by the trust responsibility requires such action.[28]

Similar to revised Contention 2, revised Contention 3 concerning cultural and historic resources is not admissible because it provides no alleged facts or expert opinions in contravention of 10 C.F.R. § 2.309(f)(1)(v).

7. Revised Contentions 2 and 3 Do Not Meet 10 C.F.R. § 2.309(f)(1)(vi)

Paragraph (vi) of 10 C.F.R. § 2.309(f)(1) requires that the proposed contention:

> provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact, and must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute.

As discussed above, Intervenors have provided no expert opinions regarding cultural and historic resources. The only facts provided are excerpts from the draft EA, and these do not establish a dispute with the draft EA. In revised Contentions 2 and 3, the only citations to the draft EA are to statements made to support the NRC Staff's evaluation, and Intervenors do not challenge these.

In the end, concerning cultural and historic resources, the PIIC disagrees with nothing except the draft EA conclusion that impacts to cultural and historic resources are small, and asserts without support that these impacts should be considered high and adverse. For failing to meet 10 C.F.R. § 2.309(f)(1)(iii), (v), and (vi) those portions of revised Contentions 2 and 3 concerning cumulative impacts of ISFSI relicensing with ISFSI expansion are not admissible.

The majority decision relies heavily on the NRC Staff repeated statement in the EA that, "there is a high probability that additional unrecorded cultural resources may exist within the PINGP property."[29] This dependence on the part of the majority is unconvincing in light of statements contained in the draft EA including:

> Although no [historic or cultural resource] sites have been identified within the PI ISFSI boundary or the area of potential effect (APE) for this proposed action . . . .[30]

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[28] *See* PIIC's Motion to Admit at 13.

[29] This statement occurs twice in the draft EA, on pages 3-19 and 4-35. It is repeated approximately a dozen times in the majority opinion.

[30] Draft EA at 3-16.

> To identify historic and cultural resources within the APE, NSPM hired Westwood Professional Services, Inc. to conduct a Phase I archaeological survey (Sather, 2010; NRC, 2011c, pp. 4-39). The survey was specifically designed to evaluate the depth of previous ground disturbance within the ISFSI facility and determine whether any archaeological deposits were present within potentially undisturbed buried soil. Eight test pits were excavated to an average depth of 1.8 m [6 ft] below the surface between the PI ISFSI security fence and the earthen berm (NSPM, 2011a). All eight tests were positioned outside the perimeter fence for the cask storage area. No cultural materials were recovered from any of the eight test excavations, and the consulting archaeologists interpreted all but one of the eight exposed soil profiles as significantly disturbed by past construction activities (Sather, 2010, p. 5; NSPM, 2011a).[31]
>
> No archeological sites, potential archaeological resources, or sites determined eligible for listing in the NRHP are within the [area of potential effect] for this ISFSI license renewal.[32]
>
> [N]o historic and cultural resources are located within the area of potential effect; however, there remains the potential for unknown historic and cultural resources near the ISFSI.[33]

Essentially the NRC Staff's evaluation of all available archaeological evidence finds that it is unlikely that expansion of the ISFSI will impact any historical or cultural resources, but because the area has not been 100% surveyed, the presence of such resources cannot be definitively ruled out.[34]

[31] *Id.* at 3-20.
[32] *Id.*
[33] *Id.* at 4-34.
[34] *See id.* at 4-10 to -11.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Allison M. Macfarlane, Chairman
Kristine L. Svinicki
George Apostolakis
William D. Magwood, IV
William C. Ostendorff

In the Matter of	**Docket Nos. 50-454-LR** **50-455-LR** **50-456-LR** **50-457-LR**
EXELON GENERATION COMPANY, LLC **(Byron Nuclear Power Station, Units 1 and 2; Braidwood Nuclear Power Station, Units 1 and 2)**	**May 2, 2014**

The Commission denies a request for a protective stay of the license renewal proceeding.

SUSPENSION OF PROCEEDING

Under 10 C.F.R. § 2.802(d), a rulemaking petitioner may request that a licensing proceeding in which the petitioner is a participant be suspended pending disposition of the rulemaking petition.

SUSPENSION OF PROCEEDING

Under NRC practice, once all contentions have been decided, the contested adjudicatory proceeding is terminated. The Commission generally has denied requests to hold adjudicatory proceedings in abeyance pending the outcome of

other Commission actions. Nor do NRC rules contemplate motions filed as a placeholder for a further motion to be filed later.

SUSPENSION OF PROCEEDING

The Commission is not inclined to issue a protective stay, suspending a proceeding, based on a petitioner's bare assertion that it intends to file a petition for rulemaking at some unknown time in the future.

MEMORANDUM AND ORDER

This proceeding stems from the application of Exelon Generation Company, LLC to renew the operating licenses for Byron Nuclear Power Station, Units 1 and 2, and Braidwood Nuclear Power Station, Units 1 and 2.[1] Before us is the appeal of the Environmental Law and Policy Center (ELPC) of LBP-13-12, an Atomic Safety and Licensing Board decision that denied ELPC's request for hearing and petition to intervene.[2]

ELPC styles its filing as an appeal pursuant to 10 C.F.R. § 2.311(a), as if it were an appeal of the Board's decision to reject ELPC's intervention petition and hearing request. But ELPC's "appeal" does not challenge any of the Board's grounds for rejecting ELPC's hearing request and instead requests a "protective stay" of the proceeding.[3] We consider ELPC's submission as a request for a protective stay and, for the reasons outlined below, we deny the request.

I. BACKGROUND

On September 23, 2013, ELPC requested a hearing on Exelon's license renewal application and submitted two contentions with its petition to intervene.[4] In Contention 1, ELPC claimed that Exelon's environmental reports for the Byron and Braidwood plants failed to include an analysis of the need for power, resulting

[1] *See* Byron Nuclear Station, Units 1 and 2, and Braidwood Nuclear Station Units 1 and 2; Exelon Generation Company, LLC, 78 Fed. Reg. 44,603 (July 24, 2013).

[2] *See* Notice of Appeal of ASLBP No. 13-929-02-LR-BD01 by Environmental Law and Policy Center (Dec. 16, 2013); Appeal of ASLB Denial of ELPC's Petition for Intervention and Hearing Request as Request for Protective Stay (Dec. 16, 2013) (Appeal); LBP-13-12, 78 NRC 239 (2013).

[3] *See* Appeal at 1, 3.

[4] *See* Hearing Request and Petition to Intervene by the Environmental Law and Policy Center (Sept. 23, 2013) (Petition), Ex. 4, Contentions Included with Petition to Intervene by the Environmental Law and Policy Center, at 1-6 (Contentions).

in "material legal flaws" in Exelon's environmental analysis of reasonable alternatives to the nuclear stations.[5] ELPC argued that the lack of a need-for-power analysis led Exelon to "improperly reject potentially better, lower-cost, safer and environmentally preferable energy efficiency, renewable energy resource, and distributed generation alternatives."[6] ELPC acknowledged that, under our regulations (specifically, 10 C.F.R. § 51.53(c)(2)), license renewal applicants need not include a need-for-power discussion in their environmental reports. ELPC argued, however, that section 51.53(c)(2) "improperly constrained" the alternatives analysis, "in clear violation of" the National Environmental Policy Act (NEPA).[7] In Contention 2, ELPC claimed that the proposed license renewals are "premature," given that the current operating licenses for the Byron and Braidwood units will not expire "for another eleven to fourteen years."[8]

In LBP-13-12, the Board rejected both contentions, finding that each impermissibly challenged an NRC regulation, fell beyond the scope of the renewal proceeding, and failed to meet contention pleading requirements.[9] The Board explained that absent a rule waiver, NRC rules and regulations are not subject to attack in an adjudicatory proceeding, and that ELPC had neither sought a rule waiver nor pointed to any special circumstances that might warrant one.[10] The Board further explained that ELPC's "sole remedy" to challenge the lawfulness of a regulation is to file a petition for rulemaking with the Commission.[11] In addition, the Board concluded that the contentions lacked even "minimal factual" support for their underlying claims and failed to identify a genuine dispute with the applicant on a material issue.[12] Having found both contentions inadmissible, the Board denied ELPC's intervention petition and terminated the proceeding before it.[13]

In its appeal, ELPC addresses only Contention 1. We address the appeal below.

II. ELPC'S APPEAL

While styled an "appeal" of the Board's decision, ELPC nowhere contests any of the Board's grounds for rejecting its contentions. Instead, ELPC characterizes

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[5] *See* Contentions at 1-4.

[6] *See id.* at 2.

[7] *See id.*

[8] *See id.* at 4-6.

[9] LBP-13-12, 78 NRC at 241-45.

[10] *See id.* at 243-44; *see also* 10 C.F.R. § 2.335.

[11] *See* LBP-13-12, 78 NRC at 242 (citing 10 C.F.R. § 2.802).

[12] *See id.* at 244-45 (citing contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v)-(vi)).

[13] *See id.* at 245.

its appeal as a "petition for a protective stay" of the license renewal proceeding.[14] Specifically, ELPC requests a stay to "preserve ELPC's right to intervene in the [Byron and Braidwood] license renewal proceeding while it pursues the [Board's] recommended course of filing a petition for rulemaking."[15] ELPC acknowledges that the proper avenue for challenging an NRC rule is to file a petition for rulemaking, as the Board described.[16] ELPC goes on to state that it plans to file a rulemaking petition to request the NRC to require a "cost/benefit need for power analysis for license renewals."[17]

ELPC stresses that while it is not currently asking the NRC to suspend its review of the license renewal application, it may wish to seek a suspension of the proceeding later, under 10 C.F.R. § 2.802(d).[18] Section 2.802(d) allows a rulemaking petitioner the opportunity to request a suspension of a licensing proceeding in which the petitioner is a participant, pending disposition of the rulemaking petition.[19] Critically, however, ELPC has not yet filed a petition for rulemaking. It merely seeks a "protective stay" to "preserve" an opportunity to later request a suspension of the proceeding under section 2.802(d) "if its petition for rulemaking is pending at the time that the NRC intends to issue its final decision" on the renewal applications.[20] ELPC also requests that the NRC defer any final decision on the renewal application until the agency has made a "final ruling on ELPC's forthcoming rulemaking [petition]" and has provided "sufficient time for ELPC to raise its Contention 1 that Exelon has not conducted the need for power analysis necessary under NEPA."[21]

We deny the request for a protective stay. What ELPC seeks is to keep the door to the adjudicatory proceeding open although no contention remains before the Board — in effect, to hold the proceeding in abeyance indefinitely pending potential future events. But ELPC's request is inconsistent with our longstanding interest in sound case management and regulatory finality and would be unfair to

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[14] *See* Appeal at 3.

[15] *Id.*

[16] *See id.* at 1-2.

[17] *See id.* at 2.

[18] *Id.* at 3.

[19] *See* 10 C.F.R. § 2.802(d).

[20] *See* ELPC Reply in Support of Its Appeal of the ASLB Denial of ELPC's Petition for Intervention and Hearing Request (Jan. 2, 2014) at 1-4 (Reply). Exelon moved to strike ELPC's reply as unauthorized. *See* Exelon's Motion to Strike Environmental Law & Policy Center's Unauthorized Reply (Jan. 13, 2014); *see also* ELPC's Answer Opposing Exelon's Motion to Strike ELPC's Reply (Jan. 23, 2014); NRC Staff Answer Opposing Environmental Law and Policy Center Motion for Leave to File Reply (Feb. 3, 2014). Section 2.311 does not contemplate replies. We have considered ELPC's reply only as additional clarification of arguments presented in the appeal, and, specifically, its identification of the relief it seeks (namely, a protective stay).

[21] *See* Appeal at 3.

the other parties.[22] Under our practice, "once all contentions have been decided, the contested [adjudicatory] proceeding is terminated."[23] We generally have denied requests to hold adjudicatory proceedings in abeyance "pending the outcome of other Commission actions."[24] Nor do our rules contemplate motions filed "as a 'placeholder' for a further motion to be filed later."[25] And rarely do we grant an "indefinite or very lengthy stay . . . on the mere possibility of change."[26]

Here, ELPC has not filed a rulemaking petition even though it has known since at least the date of the Board's decision (November 19, 2013) that rulemaking is the appropriate avenue for challenging an NRC rule.[27] Nor does ELPC suggest when it plans to submit its petition for rulemaking. We are not inclined to issue a protective stay based on ELPC's bare assertion that it intends to file a petition for rulemaking at some unknown time in the future.[28] Moreover, ELPC does not address the standards weighed for licensing proceeding suspension requests[29] or stay requests,[30] and it otherwise provides insufficient reason for holding the adjudicatory proceeding open.

ELPC can raise its concerns through established agency processes. As ELPC describes, a final decision on the Byron and Braidwood license renewal application

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[22] *See, e.g., Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 391 (2001).

[23] *See Virginia Electric and Power Co.* (North Anna Power Station, Unit 3), CLI-12-14, 75 NRC 692, 699 (2012).

[24] *See Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 10 & n.36 (2010).

[25] *See Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 120 (2009).

[26] *See Petition for Rulemaking to Amend 10 C.F.R. § 54.17(c),* CLI-11-1, 73 NRC 1, 4 (2011).

[27] *See Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), DD-82-2, 15 NRC 1343, 1345 (1982) (section 2.802(d) suspension request "inapplicable" where no petition for rulemaking before the Commission).

[28] *Cf. Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-09-10, 69 NRC 521, 527-28 (2009) (ensuring that results of judicial review of rulemaking petition denial would be implemented in a meaningful way where state timely "ha[d] taken every conceivable procedural step to assure that the ultimate outcome of its rulemaking petition . . . would inform the NEPA analysis" of the licensing proceedings).

[29] *See, e.g., Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-12-6, 75 NRC 352, 373 (2012); *Union Electric Co.* (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 173-74 (2011).

[30] When considering "stays or other forms of temporary injunctive relief," we have applied the stay factors outlined in 10 C.F.R. § 2.342(e), which "restate commonplace principles of equity." *See Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237 n.4 (2008); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-13, 67 NRC 396, 399 (2008) (applying section 2.342(e) standards to motion to stay issuance of license); *see also* 10 C.F.R. § 2.342(e) (regarding requests to stay presiding officer decisions).

is not expected before August 2015.[31] It may be in ELPC's interest, therefore, to file its petition for rulemaking without delay.

We leave for another day any arguments regarding the propriety or merits of a request under section 2.802(d) to suspend the Byron and Braidwood licensing proceeding pending disposition of a rulemaking petition, or for some other form of relief. No section 2.802(d) request is before us, no rulemaking petition is pending, and a decision on the renewal application is not expected for at least another year and a half.[32] The only matter before us today is ELPC's request for a "protective stay," which we deny.[33]

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 2d day of May 2014.

[31] *See* Appeal at 3; Byron and Braidwood Nuclear Stations, Units 1 and 2: License Renewal Application; License Renewal Review Schedule, available at http://www.nrc.gov/reactors/operating/licensing/renewal/applications/byron-braidwood.html (last visited Apr. 21, 2014) (reflecting the Staff's current estimated review schedule, which provides for a decision on the application by the Director, Office of Nuclear Reactor Regulation, in August 2015).

[32] In this regard, ELPC's request that we defer a decision on the license renewal applications pending disposition of its "forthcoming rulemaking" and other potential events is premature. *See* Appeal at 3. To the extent that this relief is independent of ELPC's request for a protective stay, we deny it on this basis. *See Oyster Creek,* CLI-08-13, 67 NRC at 399-400; *Callaway,* CLI-11-5, 74 NRC at 163.

[33] Exelon and the Staff both also argue that ELPC's stay request was filed out of time. Exelon's Answer Opposing Appeal of ASLB Denial of ELPC's Petition for Intervention and Hearing Request as Request for Protective Stay (Dec. 26, 2013) at 5; NRC Staff Answer to Environmental Law and Policy Center Appeal of LBP-13-12 and Request for Protective Stay (Dec. 26, 2013) at 7. Given our decision to deny ELPC's request, we need not reach questions regarding its timeliness.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ronald M. Spritzer, Chairman
Dr. Anthony J. Baratta
Dr. Randall J. Charbeneau

In the Matter of **Docket No. 52-033-COL**
(ASLBP No. 09-880-05-COL-BD01)

DTE ELECTRIC COMPANY
(Fermi Nuclear Power Plant,
Unit 3) **May 23, 2014**

This proceeding involves challenges to the combined license application of the DTE Electric Company ("Applicant") to operate a new reactor, designated Unit 3, on its existing Fermi nuclear facility site near Newport City in Monroe County, Michigan. The Licensing Board rules in favor of the NRC Staff on Contention 8, which challenges the adequacy of the assessment of impacts on the eastern fox snake contained within the Final Environmental Impact Statement ("FEIS"), and in favor of the Applicant on Contention 15, which challenges the adequacy of the quality assurance ("QA") program developed and implemented by the Applicant.

LICENSING DECISION: BURDEN OF PROOF

While an applicant in a licensing decision bears the burden of proving by a preponderance of the evidence that it is entitled to the applied-for license, the NRC Staff bears the burden of establishing compliance with the National Environmental Policy Act ("NEPA") when an environmental contention alleges noncompliance. Because the Staff typically relies on an applicant's Environmental

Report in preparing the FEIS, an applicant is free to support positions set forth in the FEIS that are under challenge.

NATIONAL ENVIRONMENTAL POLICY ACT: RULE OF REASON

Under NEPA, the NRC is required to take a hard look at the environmental impacts of a proposed action. The hard look requirement, however, is tempered by a rule of reason that requires agencies to address only impacts that are reasonably foreseeable — not those that are remote and speculative.

NATIONAL ENVIRONMENTAL POLICY ACT: CONSIDERATION OF MITIGATION MEASURES

One important part of an agency's hard look at the environmental consequences of a proposed federal action is the duty to discuss measures to mitigate potential environmental harm. NEPA does not require a fully developed, enforceable, or funded plan to mitigate all environmental harm. But mitigation must be discussed in sufficient detail to ensure that the environmental consequences have been fully evaluated.

NATIONAL ENVIRONMENTAL POLICY ACT: RELIANCE ON MITIGATION

Consistent with CEQ guidance, a federal agency may rely upon the ameliorative effects of mitigation in evaluating the environmental impacts of an activity in an EIS only if reliance is justified by (1) the proposed mitigation being more than a mere possibility because it is imposed by statute or regulation or sufficiently integrated into the initial proposal such that it is impossible to define the proposal without mitigation, and (2) there being some assurance, either through supporting evidence or accountability measures, that the mitigation will adequately protect against the negative environmental impacts of the activity.

STANDARD OF PROOF: REASONABLE ASSURANCE

Neither the Atomic Energy Act nor the NRC's regulations require an applicant to show that its quality assurance program is perfect as a precondition to the issuance of a license. Rather, an applicant must provide reasonable assurance that the plant, as built, can and will be operated without endangering the public health and safety.

REGULATIONS: INTERPRETATION

Regulatory interpretation, like the interpretation of a statute, begins with the language and structure of the provisions, and the entirety of each provision must be given effect. Where the meaning of a regulation is clear, the regulatory language is conclusive and the Board may not disregard the letter of the regulation, but must enforce the regulation as written.

REGULATIONS: INTERPRETATION (10 C.F.R. PART 50, APPENDIX B)

Appendix B's use of the past tense when referring to "quality assurance applied to the design" shows that safety-related design activities must have been performed under an acceptable QA program even if those activities were performed prior to the date on which the application was filed with the NRC.

REGULATIONS: INTERPRETATION (10 C.F.R. PART 50, APPENDIX B)

The Appendix B requirements apply to the design of the safety-related functions of the structures, systems, and components that prevent or mitigate the consequences of postulated accidents. The regulation draws no distinction between safety-related design activities performed before the application is submitted and those performed later. For licensing purposes, all safety-related design activities must be performed under a QA program that satisfies the requirements of Appendix B.

REGULATIONS: INTERPRETATION (10 C.F.R. § 52.79(a)(25))

Section 52.79(a)(25) of 10 C.F.R. establishes the requirements for an applicant's Final Safety Analysis Report, including a requirement that safety-related design activities must have been performed under an acceptable QA program prior to the date on which the application is filed. The regulation also confirms that the QA program must meet the requirements of Appendix B.

REGULATIONS: INTERPRETATION (10 C.F.R. PART 50, APPENDIX B)

Appendix B allows an applicant to "delegate to others . . . the work of establishing and executing the quality assurance program, or any part thereof, but [requires that the applicant] shall retain responsibility for the quality assurance program." Appendix B does not define what is meant by "retain responsibility." The Board

will, therefore, consider all relevant facts and circumstances to determine whether the applicant has exercised sufficient supervision, oversight, and contractual control of a contractor's QA program during the preapplication period.

PARTIAL INITIAL DECISION
(Ruling on Contentions 8 and 15)

In this Partial Initial Decision ("PID"), the Board rules on the merits of Contention 8, which challenges the adequacy of the impacts assessment on the snake contained within the Final Environmental Impact Statement ("FEIS"); and on the merits of Contention 15, which challenges the adequacy of the quality assurance ("QA") program developed and implemented by the Applicant.[1]

On October 30 and 31, 2013, the Board held an evidentiary hearing in Monroe, Michigan, on Contentions 8 and 15.[2] After considering all of the evidence and arguments presented, we find in favor of the Staff on Contention 8 and the DTE Electric Company ("DTE" or "Applicant") on Contention 15.

I. INTRODUCTION

On September 18, 2008, DTE submitted a combined license application

[1] Although this Partial Initial Decision resolves Contentions 8 and 15, it does not resolve all matters pending in this proceeding. First, this was among the cases in which a proposed new contention concerning temporary storage and ultimate disposal of nuclear waste was filed following the D.C. Circuit's Decision in *New York v. NRC,* 681 F.3d 471 (D.C. Cir. 2012). *See Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 66 (2012). Pursuant to the Commission's direction, *see Calvert Cliffs,* CLI-12-16, 76 NRC at 67-69 & n.10, that proposed new contention has been held in abeyance pending further order from the Commission. Licensing Board Order (Holding New Contention in Abeyance) (Aug. 29, 2012) (unpublished). Second, one day before the start of the evidentiary hearing, Intervenors filed a request to suspend the hearing and admit a new version of their previously proposed Contention 13. Motion for Suspension of Licensing Hearing, for Admission of Proposed Contention 13 for Adjudication, and for Supplementation of the Final Environmental Impact Statement (Oct. 29, 2013). The Board denied the request to suspend on the first day of the hearing. Tr. at 279-80 (J. Spritzer). The Board today issued a separate order rejecting proposed new Contention 13 and the accompanying request for supplementation of the FEIS. Finally, the Board previously raised the question whether it should ask the Commission to authorize *sua sponte* review of Intervenors' proposed Contention 23 pursuant to 10 C.F.R. § 2.340(b). Licensing Board Order (Denying Intervenors' Motion for Resubmission of Contentions 3 and 13, for Resubmission of Contention 23 or Its Admission as a New Contention, and for Admission of New Contentions 26 and 27) at 22-24 (Apr. 30, 2013) (unpublished). The Board will decide that issue by separate order.

[2] Tr. at 307, 388.

("COLA") pursuant to 10 C.F.R. Part 52, Subpart C, to construct and operate a GE Hitachi Economic Simplified Boiling Water Reactor ("ESBWR") designated Unit 3 ("Fermi 3") on its existing Fermi nuclear facility site near Newport City in Monroe County, Michigan.[3] The Commission published a notice of hearing and opportunity to petition for leave to intervene on January 8, 2009.[4] On March 9, 2009, the Intervenors[5] filed a timely Request for a Hearing and Petition to Intervene,[6] and on March 19, 2009, this Board was established to preside over the proceeding.[7] In its July 31, 2009 Order, the Board concluded that the Intervenors had standing, admitted four of their contentions, including Contention 8, and granted their hearing request.[8] On November 6, 2009, Intervenors submitted a supplemental petition alleging that DTE failed to establish a QA program compliant with 10 C.F.R. Part 50, Appendix B ("Appendix B").[9] Contention 15 was admitted by the Board as part of its June 10, 2010 Order.[10] Contentions 8 and 15 are addressed in this Partial Initial Decision.

II. BOARD RULING ON CONTENTION 8

A. Background

As admitted by the Board, Contention 8 stated that the Applicant's Environmental Report ("ER")[11] "fails to adequately assess [Fermi 3]'s impacts on the eastern fox snake and to consider alternatives that would reduce or eliminate those

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[3] *See* 74 Fed. Reg. 836, 836 (Jan. 8, 2009).

[4] *Id.*

[5] Intervenors include Beyond Nuclear, Citizens for Alternatives to Chemical Contamination, Citizens Environmental Alliance of Southwestern Ontario, Don't Waste Michigan, the Sierra Club (Michigan Chapter), and numerous individuals.

[6] Petition of Beyond Nuclear, et al. for Leave to Intervene in Combined Operating License Proceedings and Request for Adjudication Hearing (Mar. 9, 2009); REFILED Petition of Beyond Nuclear, et al. for Leave to Intervene in Combined Operating License Proceedings and Request for Adjudication Hearing (Apr. 21, 2009).

[7] 74 Fed. Reg. 12,913 (Mar. 25, 2009).

[8] LBP-09-16, 70 NRC 227, 237, *aff'd,* CLI-09-22, 70 NRC 932, 933 (2009).

[9] Supplemental Petition of Beyond Nuclear, Citizens for Alternatives to Chemical Contamination, Citizens Environmental Alliance of Southwestern Ontario, Don't Waste Michigan, Sierra Club, Keith Gunter, Edward McArdle, Henry Newman, Derek Coronado, Sandra Bihn, Harold L. Stokes, Michael J. Keegan, Richard Coronado, George Steinman, Marilyn R. Timmer, Leonard Mandeville, Frank Mantei, Marcee Meyers, and Shirley Steinman for Admission of a Newly-Discovered Contention, and for Partial Suspension of COLA Adjudication (Nov. 6, 2009) [hereinafter Supplemental Petition].

[10] LBP-10-9, 71 NRC 493, 498-99 (2010).

[11] Fermi 3 Combined License Application, Part 3: Environmental Report, Rev. 0 (Sept. 2008) (ADAMS Accession No. ML082730641). Contention 8, along with all of the other contentions addressed in the Board's July 31, 2009 Order, were analyzed based on Rev. 0 of the Applicant's ER.

impacts."[12] The eastern fox snake ("the snake") is listed as a threatened species by the Michigan Department of Natural Resources ("MDNR").[13]

On November 16, 2010, DTE submitted a Motion for Summary Disposition of Contention 8,[14] asserting that "Detroit Edison has resolved the discrepancy in the ER regarding the presence of the Eastern Fox snake at the Fermi site, developed a mitigation plan for the snake, and submitted an addenda to the ER describing those plans."[15] In response to a Request for Additional Information ("RAI"), DTE had provided updated information regarding the location of the snake sightings, including a map showing the locations where observations of the snake were made by DTE employees.[16] DTE also revised the site layout to reduce potential wetland impacts, which results in a reduction of impact to primary snake habitat. The revised site layout reduced wetland impacts by approximately 120 acres (from 169 acres to 49 acres), and of the impacted acreage, approximately 80% of which are temporary impacts that would be restored following construction.[17] To further reduce potential impacts to the snake, DTE developed a mitigation plan[18] that included: (1) an employee education program (i.e., training), (2) prejob briefings at the beginning of each construction shift where the snake may be encountered, (3) preconstruction surveys (developed areas), (4) preconstruction surveys (undeveloped areas), (5) construction mitigation measures, and (6) monitoring and reporting.[19] The Board denied the motion for summary disposition, concluding that, although DTE had made significant modifications to the project and provided relevant new information, inconsistencies and disputes of material fact remained concerning the ER's evaluation of the impact of Fermi 3 on the snake and the status of mitigation measures to reduce those impacts.[20]

On June 11, 2012, DTE submitted a second Motion for Summary Disposition of Contention 8.[21] DTE explained that the ER had been superseded by the Draft Environmental Impact Statement ("DEIS"), which acknowledges the potential adverse impacts to fox snakes from Fermi 3 construction activities and describes the role of MDNR with respect to mitigation of potential impacts to the snake.[22]

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[12] LBP-09-16, 70 NRC at 286.

[13] Tr. at 347 (Mifsud).

[14] Applicant's Motion for Summary Disposition of Contention 8 at 1 (Nov. 16, 2010).

[15] *Id.* at 4.

[16] *Id.* at 6.

[17] *Id.* at 8.

[18] Habitat and Species Conservation Plan Eastern Fox Snake (*Elaphe gloydi*) (Exh. NRC E5) (Mar. 2012) [hereinafter Mitigation Plan].

[19] *Id.* at 8-9.

[20] LBP-11-14, 73 NRC 591, 604 (2011).

[21] Applicant's [Second] Motion for Summary Disposition of Contention 8 (June 11, 2012).

[22] *Id.* at 9.

DTE noted that the DEIS cites the Mitigation Plan that would be submitted to and reviewed by MDNR, and asserted that MDNR likely will require monitoring of the snake to assess the effectiveness of Detroit Edison's mitigation measures.[23] DTE also affirmed that, while at the time the DEIS was issued MDNR had not yet reviewed the Mitigation Plan, the Plan has subsequently been reviewed by MDNR and found to adequately address the concerns for potential threatened and endangered species at the site in question, and further that the proposed project would have minimal impacts on the snake if it proceeded according to the Mitigation Plan.[24]

The Board concluded that, although DTE's second motion identified additional developments that resolved some of the problems that had led the Board to deny the earlier motion, the new information was not sufficient to resolve all disputed questions of material fact or law relevant to resolution of Contention 8.[25] Intervenors argued that the Staff's reliance on the Mitigation Plan was inconsistent with CEQ Guidance,[26] which states that, if a federal agency relies on mitigation to support a finding in an environmental assessment or in an environmental impact statement ("EIS"), the agency should ensure that mitigation commitments will be implemented, monitor the effectiveness of those commitments, be able to remedy failed mitigation, and involve the public in mitigation planning.[27] In the DEIS, the Staff provided no indication that it had done or intended to do any of those things. Instead, the Staff based its conclusion that the impact of construction and preconstruction activities on the snake would be small on its assumption that a State agency, the MDNR, would through future regulatory action require mitigation sufficient to protect the snake from the impacts of such activities.[28] The Board also noted that, even if the CEQ Guidance did not apply to the DEIS, federal courts have developed rules for deciding when federal agencies may rely on mitigation to support findings with regard to environmental impacts of an activity.[29] Reliance is justified if the proposed mitigation is required by statute, regulation, or equivalent assurance.[30] Because the DEIS failed to identify any

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[23] *Id.* at 10.

[24] *Id.* at 12.

[25] LBP-12-23, 76 NRC 445, 465 (2012).

[26] Final Guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact, 76 Fed. Reg. 3843, 3847 (Council on Environmental Quality, Jan. 21, 2011).

[27] LBP-12-23, 76 NRC at 466 (citing 76 Fed. Reg. at 3847).

[28] Office of New Reactors (NRO), NRC, Draft Environmental Impact Statement for Combined License (COL) for Enrico Fermi Unit 3, NUREG-2105, Vol.1, at 4-44 (Oct. 2011) (ADAMS Accession No. ML11287A108).

[29] LBP-12-23, 76 NRC at 467-69.

[30] *Ohio Valley Environmental Coalition v. Hurst,* 604 F. Supp. 2d 860, 888 (S.D. W. Va. 2009).

such requirement that would justify its reliance on the Mitigation Plan, the Board agreed with Intervenors that there remained disputed questions of material fact or law relevant to resolution of Contention 8. Accordingly, the Board denied DTE's second motion for summary disposition.

On November 19, 2012, DTE filed a Motion for Reconsideration of the Board's Order denying its Second Motion for Summary Disposition of Contention 8.[31] On January 30, 2013, the Board denied this motion as moot.[32] The Second Motion for Summary Disposition was based on the DEIS, but in January 2013 NRC Staff issued the FEIS[33] that superseded the DEIS and contains a different analysis of construction impacts on the snake than that contained in the DEIS. The DEIS found the impacts on the snake to be small based on the assumed implementation of mitigation measures. By contrast, the FEIS relied on a bounding analysis under which the impacts to the snake range from small based on successful implementation of mitigation measures to moderate if mitigation measures are not successful or are not fully implemented. Thus, the appropriate focus of litigation concerning Contention 8 was now the FEIS, not the DEIS. Moreover, DTE's Reconsideration Motion failed to satisfy the demanding requirements of 10 C.F.R. § 2.323(e). DTE failed to identify a significant factual or legal matter that the Board overlooked or provide compelling circumstances that render the Board's decision invalid. DTE's new argument concerning State law requirements was too late, given the requirement that a motion for reconsideration should not include new arguments or evidence unless it relates to a Board concern that DTE could not reasonably have anticipated.

DTE did not file a motion for summary disposition based on the FEIS.

B. Burden of Proof

In general, an applicant in a licensing proceeding bears the burden of proving by a preponderance of the evidence that it is entitled to the applied-for license.[34] Nonetheless, because Contention 8 alleges a violation of the National Environmental Policy Act ("NEPA"),[35] the burden shifts to the Staff because the NRC, not

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[31] Applicant's Motion for Reconsideration (Nov. 19, 2012).

[32] Memorandum and Order (Denying Motion for Reconsideration of the Board's Order Denying Second Motion for Summary Disposition of Contention 8) at 4 (Jan. 30, 2013) (unpublished).

[33] NRO, NRC, Environmental Impact Statement for the Combined License (COL) for Enrico Fermi Unit 3, Final Report, NUREG-2105, Vols. 1-4 (Exh. NRC E1A and Exh. NRC E1B) (Jan. 2013) [hereinafter FEIS]. The NRC Staff submitted the FEIS into evidence as Exh. NRC E1A, containing Volumes 1 (Chapters 1-6) and 2 (Chapter 7–Appendix D), and Exh. NRC E1B, containing Volumes 3 (Appendix E) and 4 (Appendices F-M). When citing to the FEIS, the Board cites to these two exhibits.

[34] *See* 10 C.F.R. § 2.325.

[35] 42 U.S.C. §§ 4321 *et seq.*

the applicant, bears the ultimate burden of establishing compliance with NEPA.[36] As a practical matter, however, the Staff typically relies on the applicant's ER in preparing the FEIS.[37] Consequently, while environmental contentions ultimately challenge the NRC's compliance with NEPA,[38] an applicant is free to support positions set forth in the EIS that are under challenge.[39]

C. Witnesses

The Staff presented the prefiled direct testimony of Bruce A. Olson[40] to sponsor the introduction of the Staff's FEIS into the record of this proceeding. The Staff also submitted the prefiled direct testimony and prefiled rebuttal testimony of J. Peyton Doub, Environmental Scientist in the NRO Division of Site Safety and Environmental Analysis, and David A. Weeks, an Environmental Scientist with Ecology and Environment, Inc., to present the Staff's position with regard to Contention 8.[41] The professional qualifications of the Staff's witnesses were submitted together with their testimony.[42] Both Mr. Doub and Mr. Weeks testified at the hearing.[43] The parties stipulated to the admission of the FEIS into evidence,[44] making it unecessary for Mr. Olson to testify.

DTE presented the direct and rebuttal testimony of three witnesses: (1) Peter Smith, Director, Nuclear Development — Licensing and Engineering, DTE; (2) Randall Westmoreland, Licensing Technical Expert, DTE; and (3) David Mifsud, certified professional wildlife biologist and owner of Herpetological Resource and Management in Michigan.[45] The professional qualifications of the Applicant's

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[36] *See, e.g., Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983).

[37] *See* 10 C.F.R. §§ 51.41, 51.45(c).

[38] *Catawba,* CLI-83-19, 17 NRC at 1049.

[39] *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-96-25, 44 NRC 331, 339 (1996) (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-471, 7 NRC 477, 489 n.8 (1978)), *rev'd on other grounds,* CLI-97-15, 46 NRC 294 (1997).

[40] Prefiled Direct Testimony of Bruce A. Olson Sponsoring NUREG-2105 into the Hearing Record (Exh. NRC E20) (Mar. 28, 2013).

[41] Prefiled Direct Testimony of J. Peyton Doub and David A. Weeks Regarding Contention 8 (Exh. NRC E21) (Mar. 29, 2013) [hereinafter Staff Prefiled Direct Testimony]; Prefiled Rebuttal Testimony of J. Peyton Doub and David A. Weeks Regarding Contention 8 (Exh. NRC E22) (Apr. 29, 2013).

[42] Professional Qualifications of Bruce A. Olson (Exh. NRC E2); Professional Qualifications of David A. Weeks (Exh. NRC E3); Professional Qualifications of J. Peyton Doub (Exh. NRC E4).

[43] Tr. at 308.

[44] Tr. at 304 (Lodge; T. Smith).

[45] Initial Written Testimony of Peter Smith, Randall Westmoreland and David Mifsud (Exh. DTE 001) (Mar. 29, 2013) [hereinafter DTE Initial Written Testimony]; Written Rebuttal Testimony of Peter Smith, Randall Westmoreland and David Mifsud (Exh. DTE 096) (Apr. 29, 2013).

witnesses were submitted together with their written testimony.[46] All of the Applicant's witnesses testified at the hearing.[47]

Intervenors did not offer testimony regarding Contention 8; however, they did provide initial and rebuttal statements of position.

D. Applicable Legal Requirements

Contention 8 arises under NEPA and the NRC's implementing regulations in 10 C.F.R. Part 51. Under NEPA, the NRC is required to take a "hard look" at the environmental impacts of a proposed action.[48] The proposed action relevant to this proceeding is the NRC's issuance of a combined license ("COL") authorizing construction and operation of one new GEH ESBWR power reactor on the Detroit Edison Enrico Fermi Atomic Power Plant ("Fermi") site in Monroe County, Michigan.[49] The FEIS considers and weighs the environmental impacts of constructing and operating a new nuclear unit at the Fermi site and at alternative sites and mitigation measures available for reducing or avoiding adverse impacts.

The "hard look" requirement is tempered by a "rule of reason" that requires agencies to address only impacts that are reasonably foreseeable — not those that are remote and speculative.[50] The discussion of mitigation measures is an important part of an agency's hard look at the environmental consequences of a proposed Federal action.[51] However, "NEPA does not require a fully developed plan that will mitigate all environmental harm before an agency can act."[52] Instead, "NEPA requires only that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fully evaluated."[53] In *Methow Valley,* the Supreme Court distinguished an agency's procedural obligation to discuss mitigation in sufficient detail (to ensure that environmental consequences have been fairly evaluated) from any substantive requirement to actually develop and adopt a detailed mitigation plan.[54] The Court explained: "[b]ecause NEPA

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[46] Affidavit of Peter W. Smith (Exh. DTE 002) (Mar. 29, 2013); Affidavit of Randall Westmoreland (Exh. DTE 003) (Mar. 29, 2013); Affidavit of David Mifsud (Exh. DTE 004) (Mar. 29, 2013).

[47] Tr. at 346.

[48] *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998).

[49] FEIS (Exh. NRC E1A) at 1-9.

[50] *See, e.g., Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-156, 6 AEC 831, 836 (1973).

[51] *See Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 352 (1989).

[52] *Laguna Greenbelt, Inc. v. U.S. Department of Transportation,* 42 F.3d 517, 528 (9th Cir. 1994) (citations omitted).

[53] *Id.*

[54] *Methow Valley,* 490 U.S. at 352.

imposes no substantive requirement that mitigation measures actually be taken, it should not be read to require agencies to obtain an assurance that third parties will implement particular measures."[55] Thus, under *Methow Valley* and related cases, EISs do not need to present mitigation plans that are legally enforceable, fully developed, or funded in order to satisfy NEPA.

Nevertheless, according to CEQ Guidance,

> although NEPA does not require mitigation of environmental impacts, it does require that, if a federal agency relies on mitigation to support a finding in an [EIS] or a finding of no significant impact (FONSI), the agency should ensure that mitigation commitments are implemented, monitor the effectiveness of such commitments, be able to remedy failed mitigation, and involve the public in mitigation planning.[56]

Federal courts have agreed that, "[w]hen conducting a NEPA-required environmental review, an agency may consider the ameliorative effects of mitigation in determining the environmental impacts of an activity."[57] But courts insist that "[a]n agency's reliance on mitigation in making a FONSI . . . must be justified."[58] Reliance is justified if the proposed mitigation satisfies two criteria: (1) "the proposed mitigation underlying the FONSI 'must be more than a possibility' in that it is 'imposed by statute or regulation or ha[s] been so integrated into the initial proposal that it is impossible to define the proposal without mitigation'"[59]; and (2) "there must be some assurance that the mitigation measures 'constitute an adequate buffer against the negative impacts that result from the authorized activity to render such impacts so minor as to not warrant an EIS.'"[60] Proposed

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[55] *Id.* at 353 n.16.

[56] LBP-12-23, 76 NRC at 466 (citing 76 Fed. Reg. at 3847).

[57] *Ohio Valley Envtl. Coalition,* 604 F. Supp. 2d at 888 (citing *O'Reilly v. U.S. Army Corps of Engineers,* 477 F.3d 225, 231 (5th Cir. 2007); *Sierra Club v. U.S. Army Corps of Engineers,* 464 F. Supp. 2d 1171, 1224 (M.D. Fla. 2006), *aff'd,* 508 F.3d 1332 (11th Cir. 2007)). Although these cases involved agency reliance on mitigation to support a FONSI, there is no sound reason why an agency should be able to take credit for unenforceable mitigation in an EIS to support a finding that an impact will be insignificant or small when it may not do so in an EA. *See Sierra Club v. U.S. Army Corps of Eng'rs,* 464 F. Supp. 2d at 1227 ("[T]he level of analysis required by NEPA in an EIS is *more* rigorous than is required when the [agency] has determined on the basis of its EA that the project as proposed will not result in significant environmental impact.") (emphasis added).

[58] *Ohio Valley Envtl. Coalition,* 604 F. Supp. 2d at 888 (citing *Sierra Club,* 464 F. Supp. 2d at 1224).

[59] *Id.* (quoting *Sierra Club,* 464 F. Supp. 2d at 1225 (quoting *Wyoming Outdoor Council v. U.S. Army Corps of Engineers,* 351 F. Supp. 2d 1232, 1250 (D. Wyo. 2005))). *Accord Davis v. Mineta,* 302 F.3d 1104, 1125 (10th Cir. 2002).

[60] *Ohio Valley Envtl. Coalition,* 604 F. Supp. 2d at 888 (quoting *Wetlands Action Network v. U.S. Army Corps of Engineers,* 222 F.3d 1105, 1121 (9th Cir. 2000) (citing *Greenpeace Action v. Franklin,* 14 F.3d 1324, 1332 (9th Cir. 1992))).

mitigation measures are sufficient "if they are supported by sufficient evidence, such as studies conducted by the agency, or are 'adequately policed.'"[61]

As explained in Section II.A, above, the FEIS, unlike the DEIS, relied on a bounding analysis under which the predicted impacts to the snake range from small based on successful implementation of mitigation measures to moderate if mitigation measures are not implemented as planned. Thus, in the FEIS, the Staff no longer assumes that mitigation will necessarily occur, but has evaluated the impact to the snake both with and without mitigation. The question now before the Board, therefore, is whether the Staff's bounding analysis is reasonable and whether the Staff otherwise fulfilled its obligation to take a hard look at the impact of construction on the snake.

E. Findings of Fact

1. The range of the snake extends from Michigan and Ohio into Ontario, Canada. It is protected as a "threatened" species in Michigan.[62] It is both provincially and federally protected in Canada. In Ohio, the snake is designated a species of special concern. It is not protected under the federal Endangered Species Act.[63]

2. MDNR is the agency responsible for protection of the snake under the Michigan Natural Resources and Environmental Protection Act.[64]

3. The snake was sighted on the Fermi site twice in June 2008 and fifteen other times between 1990 and 2007.[65] In her review of the Applicant's ER, Lori Sargent, a Nongame Wildlife Biologist in MDNR's Wildlife Division, stated that MDNR's recorded sightings of the snake at the Fermi 3 site conflicted with statements in the ER alleging that the species had not been observed on the site.[66] She also opined that "going forward with the construction would not only kill snakes but destroy the habitat in which they live and possibly exterminate the species from the area. We would like to see a plan for protection of this rare species with regard to this new reactor project."[67] This conflicted with the statement in the ER that any impact of the project on the snake would be small and therefore no mitigation measures were necessary.

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[61] *Id.* (quoting *Wetlands Action Network,* 222 F.3d at 1121 (quoting *Wyo. Outdoor Council,* 351 F. Supp. 2d at 1250)).

[62] Tr. at 347 (Mifsud); FEIS (Exh. NRC E1A) at 2-64.

[63] Tr. at 346-47 (Mifsud); FEIS (Exh. NRC E1A) at 2-64.

[64] DTE Initial Written Testimony (Exh. DTE 001) at A43.

[65] FEIS (Exh. NRC E1A) at 2-53.

[66] E-mail from Lori Sargent, Nongame Wildlife Biologist, MDNR (Exh. DTE 013) (Feb 9, 2009).

[67] *Id.*

4. The term "take" is defined by Michigan law with respect to fish and wildlife as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct."[68] The Michigan Natural Resources and Environmental Protection Act (Act 451) prohibits an individual from "taking" wildlife indigenous to the state that have been determined to be endangered or threatened.[69] "Upon good cause shown . . . , endangered or threatened species found on the state list . . . may be removed, [or] captured, . . . but only as authorized by a permit issued by the department."[70]

5. The FEIS evaluated the potential impacts from building the proposed Fermi 3 on the snake. The FEIS notes that, because they have less ability to flee during land-clearing activities compared to more mobile species (such as most mammals), eastern fox snakes inhabiting work areas could be inadvertently killed during land-clearing activities, such as tree felling, grubbing, and grading.[71] Increased wildlife mortality may also result from increased traffic volume on nearby roadways during the building of the proposed Fermi 3.[72] Detroit Edison substantially reduced the amount of intended wetland disturbance, including disturbance of the emergent wetlands particularly favored by the snake, by redesigning the project layout.[73] Nevertheless, approximately 21 acres of emergent wetlands, as well as other potential eastern fox snake habitat, would still be unavoidably disturbed.[74]

6. Because the potential impacts on the snake of preconstruction and construction activities described on pages 4-36 and 4-37 of the FEIS fall within the definition of "take," the Staff expects that DTE will require a permit from MDNR authorizing take of the snake before building activities at the Fermi 3 site may proceed.[75] The wetlands permit for the Fermi 3 project specifically acknowledges the snake and states that "[i]ssuance of this permit does not obviate the need to obtain approval under Part 365, Endangered Species, of the [Natural Resources and Environmental Protection Act], from the Michigan Department of Natural Resources' (MDNR) Natural Heritage Program prior to commencement of construction activity."[76]

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[68] Michigan Natural Resources and Environmental Protection Act, Mich. Comp. Laws § 324.36501(f) (Exh. NRC E17) (2012); Staff Prefiled Direct Testimony (Exh. NRC E21) at A23.

[69] Mich. Comp. Laws § 324.36505(1)(a) (Exh. NRC E17).

[70] *Id.* § 324.36505(5).

[71] FEIS (Exh. NRC E1A) at 4-26.

[72] *Id.*

[73] *Id.* at 4-38.

[74] *Id.*

[75] Staff Prefiled Direct Testimony (Exh. NRC E21) at A23.

[76] Michigan Department of Environmental Quality Water Resources Division Permit, No. 10-58-011-P (Exh. DTE 010) at 4 (Oct. 22, 2012); DTE Initial Written Testimony (Exh. DTE 001) at A55.

7. Applicant first met with MDNR in 2009 to provide an overview of the project, and was informed that a mitigation plan for the fox snake would be required.[77] A draft mitigation plan was provided for MDNR review and comment, and, following additional meetings between DTE and MDNR, a final mitigation plan ("the Mitigation Plan") was developed.[78] MDNR found that information provided by DTE "adequately address[es] the concerns for potential threatened and endangered species at the site in question," and "[t]he proposed project should have minimal direct impacts on known special natural features at the location(s) specified if it proceeds *according to the plans provided.*"[79]

8. MDNR noted the snake as a special feature at the site, and stated that "[a]n endangered species permit is required *if* activities will harm the species that are present, including *transplanting* them to another location"[80] as called for in the Mitigation Plan.

9. The Mitigation Plan outlines specific measures to be implemented during the building of Fermi 3, including

> educating construction workers through use of a site-specific eastern fox snake manual, briefing workers on the possible presence of the snake, relocating snakes from work areas to other suitable habitat, . . . inspecting undeveloped areas for snakes prior to initiating work[,] . . . . walking down work areas to inspect for the eastern fox snake, developing procedures for capturing and relocating eastern fox snakes, instructing workers to halt work in the presence of an eastern fox snake until it can be relocated, and maintaining a log of monitoring efforts and actions taken.[81]

10. The targeted collection goal for the snake in affected areas is a minimum 90% during the 6 to 8 weeks prior to any construction activities. For such areas, there would be another walkdown 1 week prior to the start of construction, and on the day of construction there would be additional assessments looking for fox snakes.[82] "The emphasis for this project will first and foremost be to mitigate onsite, keeping the eastern fox snakes within the current Fermi facility to the extent possible."[83] If suitable habitat is not available onsite, snakes may

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[77] Tr. at 361 (Westmoreland).

[78] *Id.*

[79] Letter from Lori Sargent, Endangered Species Specialist, MDNR, to Randall Westmoreland, DTE Energy (Exh. DTE 014) at 1 (Apr. 6, 2012) [hereinafter Sargent Letter]; Tr. at 361-62 (Westmoreland & Mifsud).

[80] Sargent Letter (Exh. DTE 014) at 2.

[81] FEIS (Exh. NRC E1A) at 4-37; *see also* Staff Prefiled Direct Testimony (Exh. NRC E21) at A18.

[82] Tr. at 348-49 (Mifsud).

[83] Tr. at 375 (Mifsud).

be relocated to the offsite wetland mitigation area that will be constructed as a condition of the wetlands permit.[84] That permit

> requires the construction of 107.31 acres of wetland mitigation to compensate for permanent and temporary wetland impacts [from the construction of Fermi Unit 3]. The mitigation site [will be] located approximately 7.25 miles south of the proposed Fermi 3 location on an agricultural field on the southern border of the Monroe [coal-fired] Power Plant site.[85]

11. The Fermi site as a whole is 1,260 acres, of which 650 acres are part of the Detroit International Wildlife Refuge.[86] The wetland impact is about 35 acres and the overall construction impact once construction is complete will be 50 acres.[87] Snakes that are captured will have transponder tags inserted.[88] Movement and survival of the snakes will be tracked, and their behavior and response to the new setting will be monitored.[89]

12. The Mitigation Plan requires DTE to produce an annual monitoring report that will be submitted to MDNR.[90] Metrics for success of the Mitigation Plan are presented in Appendix C of the Plan as follows:

> 1. Documented survival of marked and relocated snakes within restored, enhanced, or created habitat areas.
>
> 2. Continued survival and long-term viability of Fermi eastern fox snake population through presence of multiple age classes within targeted areas post construction and use of habitat features and structures for intended purposes.
>
> 3. Use of restored and enhanced habitat by eastern fox snakes and other native wildlife and establishment of eastern fox snakes within the offsite mitigation area (pending [MDNR] approval).
>
> 4. Reduction in number of eastern fox snake deaths post construction.[91]

13. If problems or deficiencies in the Mitigation Plan are found, then DTE's lead biologist will identify corrective actions.[92]

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[84] Tr. at 377 (P. Smith).
[85] Mitigation Plan (Exh. NRC E5), App. C at 1.
[86] Tr. at 376 (P. Smith).
[87] Tr. at 376-77 (Westmoreland).
[88] Tr. at 310 (Weeks).
[89] Tr. at 312 (Doub).
[90] DTE Initial Written Testimony (Exh. DTE 001) at A37.
[91] Mitigation Plan (Exh. NRC E5), App. C at 2.
[92] Tr. at 352 (Westmoreland).

14. The area of the Fermi site that would be impacted by construction is small compared with the overall size of the facility.[93] The largest populations of eastern fox snakes are found in the coastal habitat contiguous to the north and south of the Fermi site, and long-term, even with the temporary or permanent impacts from construction, the Fermi site "is actually the most highly protected area within that region in the sense that one of the biggest threats to eastern fox snakes is actually persecution by people."[94]

15. MDNR has provided review and consultation in development of the Mitigation Plan for the snake.[95] It will review annual monitoring reports required by its threatened/endangered species permit and will participate in the development of any corrective actions required to ensure effective implementation of the Mitigation Plan.[96]

16. If the Applicant is noncompliant with the permit, then a stop work order can be issued.[97] The Michigan Natural Resources and Environmental Protection Act includes potential criminal penalties for noncompliance.[98] MDNR has a law enforcement division that would be charged with enforcing any criminal actions.[99]

17. Unlike the DEIS, which assumed that impacts to the snake would be small, the FEIS describes a range of potential impacts from preconstruction, construction, and operation of Fermi 3 on the snake. The FEIS concludes:

> The staff's evaluation of the potential impacts on the eastern fox snake recognizes the potential for mitigation measures proposed by Detroit Edison . . . and approved by the MDNR to significantly reduce impacts from Fermi 3 on that species, thereby leading to SMALL impacts, but acknowledges the possibility of MODERATE impacts if proposed mitigation is not implemented as described in their plan.[100]

18. Because there was some uncertainty in the FEIS analysis, the Staff took a conservative approach that included a bounding analysis.[101] Staff acknowledged that the term "bounding analysis" is not specifically used in Staff NEPA guidance (NUREG-1555), but the guidance does not prohibit use of a bounding analysis.[102] Although the Staff believes that the mitigation measures will be successfully

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[93] *See* Tr. at 376-77 (P. Smith & Westmoreland).
[94] Tr. at 382-83 (Mifsud).
[95] *See* Tr. at 360-62 (Westmoreland).
[96] Tr. at 354 (Mifsud).
[97] Tr. at 362 (Mifsud).
[98] Mich. Comp. Laws § 324.36507 (Exh. NRC E17).
[99] Tr. at 363 (Mifsud).
[100] FEIS (Exh. NRC E1A) at 7-21.
[101] Tr. at 325-26 (Doub).
[102] Tr. at 326 (Doub).

implemented, it also acknowledged the possibility that the Mitigation Plan may not work as planned. For that reason, the Staff decided that in the FEIS it would take the more conservative approach of describing the potential impacts as small to moderate.[103]

19. Intervenors acknowledged during closing argument that there is no evidence to show that impacts to the snake would be greater than moderate, as that term is defined by the NRC.[104] Moreover, Michigan has four known populations of the snake.[105] Because only one of the four regional populations would be impacted by the construction of Fermi 3, the record supports the Staff's determination that impacts from construction would have at most a moderate impact upon the survival of the snake. The Board therefore finds that the FEIS analysis reasonably bounds the potential impacts to the snake from the construction of Fermi 3.

F. Conclusions of Law

Based on all of the evidence and testimony presented by the parties, including the FEIS, the Board concludes that NRC Staff has taken the requisite "hard look" at potential impacts to the snake from preconstruction and construction activities for development of Fermi 3. NRC Staff considered the effectiveness of DTE's Mitigation Plan to reduce impacts to the snake population, as well as other actions to reduce impacts to wetlands generally. Staff has also considered the range of impacts to the snake that might occur if no mitigation measures are undertaken. Initiation of preconstruction and construction activities for Fermi 3 will require a permit from MDNR and MDNR will likely require implementation of the Mitigation Plan or a similar plan. MDNR has sufficient authority to require compliance with its permit requirements. CEQ guidance allows reliance on mitigation to support FEIS findings, as long as there is reasonable assurance that the mitigation will actually occur.

NRC Staff has evaluated Fermi 3 impacts on the snake under conditions ranging from successful implementation of mitigation measures to conditions where mitigation measures are not successful. The FEIS reports findings on impacts to the snake under this range of conditions. Staff has therefore taken the required "hard look" at impacts of Fermi 3 on the snake under a reasonable range of conditions, including both implementation of mitigation measures and the failure to do so.

We therefore conclude that the NRC Staff has met its obligation under NEPA to evaluate impacts to the snake, and that the FEIS's examination of that issue

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[103] FEIS (Exh. NRC E1A) at 7-21; Tr. at 344 (Weeks).

[104] Tr. at 641-42 (Lodge).

[105] Tr. at 382 (Mifsud).

satisfies Part 51 and NEPA. The Board accordingly rules for the Staff on Contention 8.

Although Intervenors have not prevailed on Contention 8, they arguably have won the war despite losing the battle. The admission of Contention 8 in this proceeding resulted in significant changes to the Fermi 3 project that, if implemented, are likely to significantly reduce impacts to the snake. DTE has acknowledged as much. In response to the question "[w]hat steps did DTE take in response to Contention 8," DTE's prefiled testimony states that it

> re-evaluated the original proposed site layout and, based on that review, made changes to its application to reduce potential wetland impacts, which, in turn, reduced impacts to Eastern Fox Snake habitat. And, DTE developed a mitigation plan to reduce impacts to the Eastern Fox Snake during the site clearing, preconstruction, and construction phases of the Fermi 3 project.[106]

By contrast, DTE's position as set forth in its ER was that the snake had not been observed on the Fermi 3 property, construction activities would primarily be located away from potential snake habitat and "the snake would be expected to move away from these activities," the impact to the species would therefore be small, and "no mitigative measures are needed."[107] There has clearly been a major shift in DTE's position since the admission of Contention 8 that resulted in a detailed mitigation plan intended to protect the snake from the impacts of construction and that will likely be incorporated in the MDNR permit for the project. Thus, the resolution of Contention 8 represents a NEPA success story.[108]

III. BOARD RULING ON CONTENTION 15

A. Background

On November 6, 2009, the Intervenors filed a Supplemental Petition for Admission of a Newly Discovered Contention ("Supplemental Petition"), which

[106] DTE Initial Written Testimony (Exh. DTE 001) at A17.

[107] LBP-09-16, 70 NRC at 289 (quoting Applicant's ER at 4-45).

[108] *See Surfrider Foundation v. Dalton,* 989 F. Supp. 1309, 1325 (S.D. Cal. 1998) ("In many respects, this project represents a NEPA success story, because the final proposal includes numerous environmental improvements that might not have been realized without the lengthy NEPA process.").

included a QA[109] contention numbered as Contention 15.[110] Intervenors' proposed Contention 15 was based upon a Staff inspection in August 2009 that resulted in a Notice of Violation ("NOV") issued in October 2009 ("2009 NOV"). In the 2009 NOV, the NRC Staff accused DTE of having failed in several respects to comply with the QA requirements of 10 C.F.R. Part 50, Appendix B.[111]

In June 2010, the Board admitted a reformulated version of Contention 15, dividing it into two parts:

> Detroit Edison (DTE) failed to comply with Appendix B to 10 C.F.R. Part 50 to establish and implement its own quality assurance (QA) program when it entered into a contract with Black and Veatch (B&V) for the conduct of safety-related combined license (COL) application activities and to retain overall control of safety-related activities performed by B&V. This violation began in March 2007 and continued through at least February 2008. Further, DTE failed to complete internal audits of QA programmatic areas implemented for the Fermi 3 COL Application, and DTE also has failed to document trending of corrective actions to identify recurring conditions adverse to quality since the beginning of the Fermi Unit 3 project in March 2007.
>
> *Contention 15A:* These deficiencies adversely impact the quality of the safety related design information in the FSAR that is based on B&V's tests, investigations, or other safety-related activities. Because the NRC may base its licensing decision on safety-related design information in the FSAR only if it has reasonable assurance of the quality of that information, it may not lawfully issue the COL until the deficiencies have been adequately corrected by the Applicant, or until the Applicant demonstrates that the deficiencies do not affect the quality of safety-related design information in the FSAR.
>
> *Contention 15B:* Although DTE claims that in February 2008 it adopted a QA program that conforms to Appendix B, DTE has failed to implement that program in the manner required to properly oversee the safety-related design activities of B&V. This demonstrates an ongoing lack of commitment on the part of DTE's management to compliance with NRC QA regulations. The NRC cannot support a finding of reasonable assurance that the plant, as built, can and will be operated

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[109] As used in Appendix B,

> "quality assurance" comprises all those planned and systematic actions necessary to provide adequate confidence that a structure, system, or component will perform satisfactorily in service. Quality assurance includes quality control, which comprises those quality assurance actions related to the physical characteristics of a material, structure, component, or system which provide a means to control the quality of the material, structure, component, or system to predetermined requirements.

10 C.F.R. Part 50, App. B, Introduction.

[110] Supplemental Petition at 2-3.

[111] *See* LBP-10-9, 71 NRC 493, 500 (2010). The specific violations are identified in Finding of Fact 22, below.

> without endangering the public health and safety until DTE provides satisfactory proof of a fully-implemented QA program that will govern the design, construction, and operation of Fermi Unit 3 in conformity with all relevant NRC regulations.[112]

In substance, Contention 15A alleges that DTE lacked an adequate Fermi 3 QA program for the conduct of safety-related COLA activities. An adequate QA program is basic to ensuring that a nuclear power plant is designed and built to the exacting standards needed to provide adequate assurance of safety. The QA program used to develop design and site characteristics must therefore be robust enough to ensure all data and design information is reliable and accurate. The Commission requires that an adequate QA

> program must provide for control over activities affecting quality of "structures, systems, and components, to an extent consistent with their importance to safety." The program must also include provisions requiring that the applicant regularly review the status and adequacy. [Appendix B] further mandate[s] that the program establish measures to assure that conditions "adverse to quality" are promptly identified and corrected.[113]

Contention 15A maintains that DTE's QA program was insufficient to enable the Applicant to satisfy those requirements for safety-related work conducted during the pre-application period.

Contention 15B claims that, given DTE's QA violations and alleged general lack of commitment to compliance with Appendix B requirements, the NRC may not make the safety findings necessary to support issuance of the COL until DTE provides satisfactory proof of a fully implemented QA program.

On April 17, 2012, DTE moved for summary disposition of Contention 15 and subparts 15A and 15B.[114] On May 7, 2012, the Staff filed an answer supporting DTE's motion.[115] On May 17, the Intervenors filed a response opposing summary disposition.[116] DTE asserted that, throughout the preparation of the material to support the application, the work was performed under the contractor's Appendix B QA program. However, Intervenors responded that there were conflicting interests between B&V acting as the QA contractor, design contractor, and

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[112] *Id.* at 510-11.

[113] *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), ALAB-802, 21 NRC 490, 492-93 (1985) (internal citations omitted); *see also* 10 C.F.R. Part 50, App. B, § XVI, Corrective Action.

[114] Applicant's Motion for Summary Disposition of Contention 15 (Apr. 17, 2012).

[115] NRC Staff Answer to Applicant's Motion for Summary Disposition of Contention 15 (May 7, 2012).

[116] *See* Intervenors' Response in Opposition to Applicant's Motion for Summary Disposition of Contention 15 (May 17, 2012).

preapplication activity contractor.[117] Intervenors also questioned whether the arrangement satisfied the requirement that DTE "retain responsibility for the quality assurance program."[118] As admitted by the Board, Contention 15 included a dispute over whether DTE exercised proper oversight of its contractor, something that Intervenors continued to dispute in their response to the summary disposition motion. The Board concluded that the dispute had not been fully resolved. Therefore, Intervenors identified a material issue relevant to Contention 15 that remained in dispute. The Board accordingly denied DTE's Motion for Summary Disposition of Contention 15.

B. Burden of Proof

The applicant has the burden of proof on Contention 15.[119] As we pointed out, however, in our ruling admitting Contention 15:

> [P]erfection in plant construction and the facility construction quality assurance program is not a precondition for a license under either the Atomic Energy Act or the Commission's regulations. What is required instead is reasonable assurance that the plant, as built, can and will be operated without endangering the public health and safety.[120]

During closing argument, counsel for both Intervenors and DTE agreed that reasonable assurance, not perfection, is the correct standard to be applied in this case.[121] Accordingly, DTE's burden is to show that the quality control procedures it implemented for safety-related COLA activities provide reasonable assurance that the plant, as built, can and will be operated without endangering the public health and safety.

C. Witnesses

The Staff presented three witnesses in its direct and rebuttal testimony: (1) Adrian Muñiz, (2) Aida Rivera-Varona, and (3) George A. Lipscomb. Mr. Muñiz is an electrical engineer with 11 years of NRC experience. He has been a Project Manager in the New Reactor Licensing Division of NRO since 2008,

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[117] *See id.* at 8.

[118] *Id.*

[119] 10 C.F.R. § 2.325.

[120] LBP-10-9, 71 NRC at 519 (quoting *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-756, 18 NRC 1340, 1345 (1983)) (citing 42 U.S.C. §§ 2133(d), 2232(a); 10 C.F.R. § 50.57(a)(3)(i)) (other citations omitted).

[121] Tr. 643-44, 699 (Lodge; T. Smith).

and has been the Lead Project Manager for the safety review of the Fermi 3 COLA since June 2010. Mrs. Rivera-Varona is a chemical engineer with 11 years of NRC experience. From February 2007 to January 2010, she was a Vendor Inspection Team Leader in Quality and Vendor Branch 2 in the NRO Division of Construction Inspection and Operational Programs. In that capacity, she led a Staff inspection at the Applicant's headquarters in August 2009 that resulted in three cited violations that initially formed the basis for Contention 15.[122] Mr. Lipscomb is an electrical engineer with over 25 years of experience in the U.S. Navy, in the nuclear industry, and at NRC. Since July 2008, he has worked as a QA Inspector and technical reviewer in the NRO Division of Construction Inspection and Operational Programs. He was the lead technical reviewer for QA for Chapter 17 of the SER (Exhibit NRC S1), and he was a member of the inspection team for the August 2009 inspection of DTE that resulted in the cited QA violations that underlie Contention 15 (Exhibit NRC S2). The professional qualifications of the Staff's witnesses were submitted together with their written testimony.

DTE presented four expert witnesses in its direct and rebuttal testimony: (1) Peter W. Smith, (2) Stanley Stasek, (3) Ronald Sacco, and (4) Steven Thomas. Mr. Smith has been employed by DTE as the Director, Nuclear Development — Licensing and Engineering, since 2007. He has overall responsibility for the Fermi 3 project, including the COLA and other state and federal permits and approvals. Mr. Stasek is employed by DTE as Director, Quality Management, for the Fermi 3 project. In this position, he is responsible for developing and maintaining the Fermi 3 QA program, evaluating compliance with the program, and managing QA organization resources. Mr. Sacco is employed by B&V as the Director of Nuclear Quality Assurance for B&V Energy in Overland Park, Kansas. He has been in that position since 2006. In that capacity, he has provided QA and quality management support for nuclear projects including the River Bend, Turkey Point, and Bell Bend COL projects in addition to Fermi 3. Mr. Thomas is employed by B&V as an Engineering Manager in Overland Park, Kansas. He has been in that position since 2007 and was responsible for all engineering and technical activities necessary to develop the Fermi 3 COLA. The professional qualifications of the Applicant's witnesses were submitted together with their written testimony.

The Intervenors presented one witness, Mr. Arnold Gundersen, in their direct and rebuttal testimony. Mr. Gundersen is employed as Chief Engineer for Fairewinds Associates, a Vermont-based nonprofit dedicated to nuclear energy issues. He has provided expert witness testimony in numerous state and federal proceedings. He is a former manager of an NRC-licensed company with expertise

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[122] *See* NRC Inspection Report 05200033/2009-201 and Notice of Violation [NOV] (Exh. NRC S2) (Oct. 5, 2009) [hereinafter Oct. 2009 Inspection Report/NOV].

in nuclear decommissioning and remediation. Mr. Gundersen's qualifications were submitted together with his written testimony.

D. Applicable Legal Requirements

1. Contention 15A

According to DTE, "[t]here are no QA requirements that apply prior to submittal of a COL application — that is, before a company is an 'applicant.' Rather, implicitly, the prospective applicant must conduct activities that are important to safety (particularly safety-related site investigation activities) in a manner such that the quality can be demonstrated to support the eventual application."[123] Intervenors disagree, arguing that DTE was required to have its own in-house Appendix B QA program during the preapplication period and to apply that program to all safety-related COLA activities, including those performed by B&V.[124] The Staff takes an intermediate position, contending that DTE was not required to have its own in-house QA Program during the preapplication period, but that it had to assure that all safety-related COLA activities were performed consistently with the QA requirements of Appendix B. It could do this by having the safety-related activities performed by a contractor with its own QA program that satisfies Appendix B requirements, provided that DTE retained responsibility for the QA program.[125] In general, the Board agrees with the Staff.

Appendix B sets forth the requirements for a QA program for a nuclear power plant. Also relevant here is 10 C.F.R. § 52.79, which establishes the requirements for the applicant's FSAR and is cited in the Introduction to Appendix B. Interpretation of these regulations, like the interpretation of a statute, begins with the language and structure of the provisions, and the entirety of each provision must be given effect.[126] Where the meaning of a regulation is clear and obvious, the regulatory language is conclusive, and the Board may not disregard the letter of the regulation; it must enforce the regulation as written.[127] Interpretation "may

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[123] Initial Written Testimony of [DTE] Witnesses Peter Smith, Stanley Stasek, Ronald Sacco, and Steven Thomas on Contention 15 (Exh. DTE 015) at A21 (Apr. 30, 2013) [hereinafter Initial Written Testimony of Smith et al.].

[124] *See* Intervenors' Rebuttal Statement of Position on Contention 15 at 6-8 (May 30, 2013).

[125] *See* Tr. at 672-92 (Carpentier); *see also* Tr. at 580 (Lipscomb).

[126] *See AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 674-75 (2008); *Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Unit 3), CLI-01-10, 53 NRC 353, 361 (2001); *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-97-15, 46 NRC 294, 299 (1997).

[127] *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), LBP-95-17, 42 NRC 137, 145 (1995), *rev'd on other grounds,* CLI-96-13, 44 NRC 315 (1996).

not conflict with the plain meaning of the wording used in [a] regulation," which in the end "of course must prevail."[128]

The Introduction to Appendix B states:

> Every applicant for a combined license under part 52 of this chapter is required by the provisions of § 52.79 of this chapter to include in its final safety analysis report a description of the quality assurance *applied to the design,* and *to be applied* to the fabrication, construction, and testing of the structures, systems, and components of the facility and to the managerial and administrative controls to be used to assure safe operation.[129]

The use of the past tense when referring to "quality assurance applied to the design" shows that safety-related design activities must have been performed under an acceptable QA program even though those activities were performed prior to the date on which the COLA (which includes the FSAR) was filed with the NRC. That the use of the past tense was intentional is confirmed by the immediately following reference to the QA program "to be applied" to fabrication, construction, and testing — activities that will ordinarily occur after the COLA is filed.

The Introduction also clarifies that the quality assurance program that must have been applied to the design is an Appendix B program:

> Nuclear power plants and fuel reprocessing plants include structures, systems, and components that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. This appendix establishes quality assurance requirements for the *design,* manufacture, construction, and operation of those structures, systems, and components. The pertinent requirements of this appendix apply to *all activities affecting the safety-related functions of those structures, systems, and components;* these activities include *designing,* purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, and modifying.[130]

Thus, Appendix B requirements apply to, *inter alia,* the design of the safety-related functions of the structures, systems, and components that prevent or mitigate the consequences of postulated accidents.[131] The regulation draws no distinction between safety-related design activities performed before the COLA

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[128] *See Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 288, 290, *review declined,* CLI-88-11, 28 NRC 603 (1988); *see also Graystar, Inc.* (Suite 103, 200 Valley Road, Mt. Arlington, NJ 07856), LBP-01-7, 53 NRC 168, 187 (2001).

[129] 10 C.F.R. Part 50, App. B, Introduction.

[130] *Id.* (emphasis added).

[131] *See* Tr. at 611 (Lipscomb).

is submitted to the NRC and those performed later. All such activities must be performed under a QA program that satisfies the requirements of Appendix B.

Our reading is reinforced by 10 C.F.R. § 52.79, which establishes the requirements for the applicant's FSAR. Section 52.79(a)(25) requires that the applicant for a COL include in its FSAR:

> A description of the quality assurance program, *applied to the design,* and *to be applied* to the fabrication, construction, and testing, of the structures, systems, and components of the facility. Appendix B to 10 CFR part 50 sets forth the requirements for quality assurance programs for nuclear power plants. The description of the quality assurance program for a nuclear power plant must include a discussion of how the applicable requirements of appendix B to 10 CFR part 50 *have been* and *will be* satisfied, including a discussion of how the quality assurance program will be implemented.[132]

Here also, the use of the past tense when referring to the QA program "applied to the design" shows that safety-related design activities must have been performed under an acceptable QA program even though the activities were performed prior to the date on which the COLA (which includes the FSAR) was filed with the NRC. Equally important, the text of section 52.79(a)(25) confirms that the QA program that must have been applied to the design is one that meets the requirements of Appendix B. An applicant will only be able to explain "how the applicable requirements of appendix B to 10 CFR part 50 have been . . . satisfied" if it implemented an Appendix B QA program for safety-related design activities.

Not only does the relevant text of Appendix B fail to distinguish between activities performed before or after the COLA is filed, we fail to see any logical reason why it would do so. Regardless of when safety-related design work is performed, it must be done under a QA program that meets the NRC's requirements for the Commission to find that the design will provide adequate assurance of the protection of public health and safety.[133] A licensing board should not interpret regulatory text in a way that would essentially negate the stated purpose of the regulation or impute to the Commission an intent to create a "schizophrenic" rule.[134]

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[132] 10 C.F.R. § 52.79(a)(25) (emphasis added).

[133] The Commission may issue a COL if the Commission finds, *inter alia,* that (i) the applicable standards of the Atomic Energy Act and the Commission's regulations have been met; and (iii) there is reasonable assurance that the facility will be constructed and will operate in conformity with the license, the provisions of the Act, and the Commission's regulations. *See* 10 C.F.R. § 52.97(a)(1)(i), (iii). The applicable regulations include the quality assurance requirements specified in Appendix B to 10 C.F.R. Part 50. *See* 10 C.F.R. § 52.79(a)(25) and 10 C.F.R. Part 50, Appendix B, Introduction.

[134] *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-06-1, 63 NRC

(Continued)

We are not persuaded by DTE's argument that Appendix B requirements apply to activities performed only after the COLA is submitted to the NRC. DTE assumes that because the requirements of Appendix B apply to an "applicant," they apply only after the COLA is filed with the NRC because only then does a company become an "applicant." The issue whether DTE was an "applicant" prior to submitting its COLA for Fermi 3 arose because of the dispute whether the Staff could issue an NOV to DTE for alleged QA violations during the preapplication period. DTE argued, and the Staff eventually agreed, that the use of the term "applicant" in Appendix B limits the Staff's authority to issue an NOV for violations that may have occurred before DTE submitted the COLA to the NRC. The Intervenors disagree with both the Staff and DTE on that issue, stating that under 10 C.F.R. § 50.2 "[a]n applicant means a person or entity applying for a license."[135] Using this definition, the Intervenors argue that DTE was an applicant from the point when it notified the NRC of its intent to apply for a COL for Fermi 3.[136]

The Board need not resolve this question because Contention 15 concerns licensing, not enforcement. For licensing purposes, all safety-related design activities, including site characterization, performed before the COLA is submitted must be performed under a QA program meeting applicable Appendix B requirements. Even if the Staff is correct that it may not issue an NOV for failure to satisfy Appendix B requirements during the preapplication period, it may deny the COL for failure to satisfy the standards and requirements of the Commission's regulations.[137]

The Board also disagrees with the Intervenors' argument that DTE was required to have an in-house Appendix B QA program (i.e., an Appendix B program established and implemented solely by DTE personnel) throughout the preapplication period and to use that program to provide oversight of all safety-related COLA activities performed by B&V. The Intervenors argue that DTE's preliminary QA efforts, undertaken from 2007 to 2009 (the period before and after the September 2008 COLA submission), were inadequate. According to the Intervenors, DTE failed to comply with Appendix B by (1) not establishing and maintaining its own QA program after March 2007, when it entered into a contract with B&V for the conduct of safety-related COLA activities; and (2) failing to retain overall control

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41, 68-69 (2006) (citing *Exxon Nuclear Co.* (Nuclear Fuel Recovery and Recycling Center), ALAB-447, 6 NRC 873, 878 (1977)), *aff'd,* CLI-06-14, 63 NRC 510 (2006); *see also New York State Department of Social Services v. Dublino,* 413 U.S. 405, 419-20 (1973); *Treadway v. Gateway Chevrolet Oldsmobile Inc.,* 362 F.3d 971, 976 (7th Cir. 2004).

[135] Tr. at 390 (Gundersen).

[136] *See id.*

[137] 10 C.F.R. § 52.97(a)(1)(i).

of safety-related activities performed by B&V.[138] Mr. Gundersen testified that he has never seen a nuclear reactor program that did not have a fully operational QA Program in place at the onset of its design process. He maintains that the owner's QA program and its supporting design review, document control, and rigorous process must begin several years prior to COLA submittal.[139] He acknowledges that DTE could delegate the QA function to a contractor, but DTE had to provide adequate oversight of the contractor through its in-house QA program. This required DTE to have throughout the preapplication period a Fermi 3 QA program staffed by its own QA professionals.[140]

Intervenors' position is in substance a legal argument that Appendix B requirements can only be satisfied during the preapplication period in the manner specified by Mr. Gundersen. It is true that Appendix B requires that the applicant be responsible for the establishment and execution of the QA program.[141] But it also states that the applicant may "delegate to others, such as contractors, agents, or consultants, the work of establishing and executing the quality assurance program, or any part thereof, but [the applicant] shall retain responsibility for the quality assurance program."[142] Appendix B does not define what is meant by "retain responsibility." This suggests that the Board should consider all relevant facts and circumstances to determine whether DTE exercised sufficient supervision, oversight, and contractual control of B&V and its QA program during the preapplication period.

We therefore do not accept Intervenors' argument that the only way in which DTE could "retain responsibility" during the preapplication period was through an in-house QA program that met Appendix B requirements. DTE could delegate to its contractor the work of establishing and executing the QA program for site characterization activities, provided that the contractor had a QA program that satisfied Appendix B requirements and DTE retained responsibility for the program. The question whether DTE did in fact retain responsibility is the factual issue in dispute with respect to Contention 15A.

2. Contention 15B

Contention 15B concerns the time period after the COLA was filed. For that period, there is no dispute that Appendix B requirements apply to the Applicant's QA program. Intervenors question whether DTE's QA program will in fact be

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[138] Prefiled Direct Testimony of Gundersen (Exh. INTS 068) at A22 [hereinafter Gundersen Testimony].

[139] *Id.*

[140] *See* Tr. at 415-16 (Gundersen).

[141] *See generally* 10 C.F.R. Part 50, App. B.

[142] *Id.* § I, Organization.

implemented during construction and operation of Fermi 3. In the *Callaway* licensing proceeding, the Appeal Board recognized that, even when an applicant shows that all ascertained construction errors have been cured,

> there may remain a question whether there has been a breakdown in quality assurance procedures of sufficient dimensions to raise legitimate doubt as to the overall integrity of the facility and its safety-related structures and components. A demonstration of a pervasive failure to carry out the quality assurance program might well stand in the way of the requisite safety finding.[143]

Intervenors allege such a pervasive failure.

E. Findings of Fact

1. DTE Preapplication Activities for the Fermi 3 COLA

1. The Fermi 3 COLA project was initiated in December 2006. In late April 2007, DTE formally established the Fermi 3 Nuclear Development Project group to oversee the COLA project. The COLA was ultimately submitted to the NRC on September 18, 2008.[144]

2. Site characterization was one of the major activities to develop the Fermi 3 COLA performed prior to September 2008.[145] DTE acknowledges that its subsurface investigations (i.e., site characterization work) performed during 2007 were safety related or supported safety-related information.[146] Thus, the site characterization work had to be performed under the QA program required by Appendix B for "all activities affecting the safety-related functions of those structures, systems, and components" that prevent or mitigate the consequences of postulated accidents.[147] ASME Standard NQA-1-1994[148] provides a method found acceptable by the NRC Staff for satisfying Appendix B QA requirements.[149]

3. With respect to the site characterization and information gathering for the FSAR, the principal safety-related site activities were site geotechnical and hydrogeological investigations and seismic analysis. These work activities had

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[143] *Union Electric Co.* (Callaway Plant, Unit 1), ALAB-740, 18 NRC 343, 346 (1983).

[144] Initial Written Testimony of Smith et al. (Exh. DTE 015) at A24.

[145] *Id.* at A25.

[146] Tr. at 478 (P. Smith).

[147] 10 C.F.R. Part 50, App. B, Introduction.

[148] NQA-1-1994, Quality Assurance Requirements for Nuclear Facility Applications (Exh. BRD-001) at 155 (Undated) [hereinafter NQA-1-1994].

[149] The NRC endorsed NQA-1-1994 in Regulatory Guide 1.28, "Quality Assurance Program Requirements (Design and Construction)" (Rev. 3). *See* Initial Written Testimony of Smith et al. (Exh. DTE 015) at A22.

at least the potential to influence the design of safety-related structures, systems, and components.[150]

4. The principal safety-related site characterization activities involved core borings and test wells to determine whether hydrogeological characteristics and site seismic hazards fall within the bounds of the ESBWR design certification.[151]

5. NQA-1-1994, Subpart 2.20, "Quality Assurance Requirements for Subsurface Investigations for Nuclear Power Plants," identifies QA measures to be used for site investigation activities.[152]

6. Subsurface investigations are defined in NQA-1-1994 as the determination, correlation, and interpretation of soil, rock, and groundwater subsurface features as disclosed or inferred by exploratory excavating, drilling, sampling, testing, and geophysical surveying.[153] Subpart 2.20 is intended to apply to any of these activities which will be used to formulate design bases for the plant. The extent to which the individual requirements of Subpart 2.20 apply will depend upon the nature and scope of work to be performed and the importance of the item or service involved.[154]

7. DTE agrees that the subsurface investigations were safety related or supported safety-related information.[155]

2. QA During Site Characterization

8. DTE did not have an in-house QA program (i.e., a program established and implemented solely by DTE personnel) in place for Fermi 3 at the outset of the COLA development project.[156]

9. DTE prepared a formal Request for Proposals ("RFP") from contractors to perform the activities necessary to prepare a COL application.[157]

10. The RFP required bidders to demonstrate as a prerequisite that they had an established Appendix B QA program.[158]

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[150] Initial Written Testimony of Smith et al. (Exh. DTE 015) at A25.

[151] *Id.* at A27.

[152] NQA-1-1994 (Exh. BRD-001) at 155.

[153] *Id.*

[154] *Id.*

[155] Tr. at 478 (P. Smith).

[156] *See* Written Direct Testimony of George A. Lipscomb Concerning the Staff's Review of the Fermi 2 Quality Assurance Program as It Relates to Contention 15 (Exh. NRC S23) at A35 (Apr. 30, 2013) [hereinafter Lipscomb Written Direct Testimony]; Initial Written Testimony of Smith et al. (Exh. DTE 015) at A35; Gundersen Testimony (Exh. INTS 068) at A27.

[157] Initial Written Testimony of Smith et al. (Exh. DTE 015) at A30.

[158] *Id.*

11. The proposal submitted by B&V referenced and appended B&V's QA Program, which satisfies Appendix B and NQA-1-1994.[159]

12. DTE contracted with B&V to perform safety-related activities that supported development of the Fermi 3 COLA, including site characterization, and B&V personnel and subcontractors performed those activities under the B&V QA program rather than under a DTE program.[160] B&V was required by DTE to have a QA program.[161] The site characterization work was obtained from B&V under its QA program.[162]

13. During the site characterization, DTE observed the B&V site work. For example, Mr. Smith (DTE's Director, Nuclear Development — Licensing and Engineering) observed the collection of core samples.[163] DTE also established an owner's engineer organization to perform the QA oversight of the B&V work.[164] The owner's engineer organization was staffed by people from the Ann Arbor office of B&V, an office independent from the B&V Kansas City office that performed the site investigation work.[165]

14. Appendix B directs that

> [a] comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program. The audits shall be performed in accordance with the written procedures or check lists by appropriately trained personnel not having direct responsibilities in the areas being audited. Audit results shall be documented and reviewed by management having responsibility in the area audited. Followup action, including reaudit of deficient areas, shall be taken where indicated.[166]

The B&V QA program was audited by the Nuclear Procurement Issues Committee ("NUPIC") prior to placement of the purchase order by DTE for site

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[159] *See generally* Binder 2 Submittal — Technical Requirements, Pricing, and Disaster Recovery/Business Resumption Response; Lipscomb Written Direct Testimony (Exh. NRC S23) at A18, A25; Initial Written Testimony of Smith et al. (Exh. DTE 015) at A31; Tr. at 395 (Gundersen).

[160] *See* Lipscomb Written Direct Testimony (Exh. NRC S23) at A25; Initial Written Testimony of Smith et al. (Exh. DTE 015) at A37, A39-43; Gundersen Testimony (Exh. INTS 068) at A27.

[161] *See* Project Management Memorandum, [DTE] (Fermi Site) COL Application Preparation (Exh. DTE 056) at 22-23 (Mar. 30, 2007).

[162] Initial Written Testimony of Smith et al. (Exh. DTE 015) at A29.

[163] Tr. at 488 (P. Smith).

[164] Tr. at 474 (P. Smith & Stasek).

[165] *Id.*

[166] 10 C.F.R. Part 50, App. B, § XVIII.

characterization services. NUPIC provides such audit services for many utilities. The NUPIC audit was led by Entergy.[167]

15. DTE reviewed the results of the NUPIC audit. No deficiencies were identified by the NUPIC audit of B&V.[168]

16. DTE performed its own audit of B&V in 2009. During that audit DTE also reviewed the earlier NUPIC audit and did not identify any issues that were identified during that previous audit as well.[169]

17. Personnel from both the Owner's Engineer Office in Ann Arbor and the QA office within the B&V Kansas City Office periodically performed surveillances of activities on the Fermi 3 site.[170]

18. The owner's engineer assisted DTE in providing oversight of site activities.[171] DTE had personnel onsite such that DTE had firsthand knowledge of what work was being done.[172]

19. DTE acknowledges that when it became an applicant more activities needed to be managed in house, and DTE needed to have its own QA program in place to guide those activities.[173] Beginning in November 2007, DTE began developing a formal process for the receipt, review, and acceptance of safety-related COLA work product from B&V. DTE established its own QA program for the Fermi 3 project under the Nuclear Development Quality Assurance Program Description ("ND QAPD") on February 4, 2008.[174] DTE did not accept any safety-related B&V work product until after the Fermi 3 project had its own QA program in place to govern the receipt, review, and acceptance of such information.[175]

20. Under the ND QAPD, DTE established applicable elements of an Appendix B program and created procedures for implementing those elements associated with the activities planned in support of the review and acceptance of

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[167] Tr. at 468 (P. Smith & Stasek). NUPIC is a committee that was formed because of the additional resources that were necessary to monitor and audit all of the nuclear vendors that nuclear utilities had in place. NUPIC's function is to facilitate resource sharing between the utilities such that all of the utilities may take credit for the audits that are done by NUPIC using a standard format. NUPIC performs audits of programs using a combined team of representatives from different utilities. These teams use a standard checklist from vendor to vendor so that there is consistency between the audits. *See* Tr. at 468-69 (Stasek).

[168] Tr. at 469-70 (P. Smith & Stasek).

[169] Tr. at 470 (P. Smith & Stasek).

[170] Tr. at 480-81 (P. Smith).

[171] Tr. at 473 (P. Smith).

[172] *Id.*

[173] Tr. at 617 (Rivera-Verona & Lipscomb).

[174] Initial Written Testimony of Smith et al. (Exh. DTE 015) at A35.

[175] *Id.* at A30, A55.

the B&V COLA application work product.[176] Using these procedures, DTE was able to verify for each chapter and section of the COLA that there was a reference to a B&V calculation, a reference to the source, and that there were trails enabling someone to verify that that calculation is correct and based on the information presented.[177]

3. NRC Staff Investigation and the NOV

21. At the beginning of the Fermi 3 FSAR review, the Staff was familiar with other COL applications which used the QA programs from the applicants' existing reactors to control both preapplication activities and activities in the application review phase. In contrast to the approach used by such applicants, DTE informed the Staff that, for the Fermi 3 project, it intended to develop a new QA program for Fermi 3 that was separate from the program in place for Fermi 2. The Staff determined that further clarification of this approach was necessary.[178]

22. The Staff conducted an inspection in August 2009 that resulted in an NOV issued to DTE in October 2009.[179] In the 2009 NOV, the Staff accused DTE of having failed in several respects to comply with the QA requirements of 10 C.F.R. Part 50, Appendix B. The alleged violations included: (A) failing to establish and implement a Fermi 3 QA program between March 2007 (when DTE initially contracted with B&V for the conduct of COLA activities for Fermi 3) and February 2008 and failing to retain overall control of contracted COLA activities as required under Criterion II, "Quality Assurance Program" of Appendix B, resulting in inadequate control of procurement documents and ineffective control of contract services performed by B&V for COLA activities; (B) failing to perform internal audits of QA programmatic areas implemented for Fermi 3 COLA activities; and (C) failing to document trending of corrective action reports.[180]

23. DTE responded to the Staff's NOV letter on November 9, 2009, denying that any violation occurred because DTE was not a COL applicant before September 18, 2008, and thus could not be subject to an NOV for QA deficiencies before that date.[181] DTE acknowledged, however, that quality deficiencies prior

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[176] *See* Tr. at 587-88 (Lipscomb).

[177] Tr. at 483-84 (P. Smith).

[178] Lipscomb Written Direct Testimony (Exh. NRC S23) at A19.

[179] *See* Oct. 2009 Inspection Report/NOV (Exh. NRC S2).

[180] *See generally id.*

[181] [DTE] Reply to a [NOV] 05200033/2009-201-01, 02, and 03, Attach. 1, NRC3-09-0041, Response to Violation 05200033/2009-201-01 (Exh. NRC S3) at 4 (Nov. 9, 2009).

to that date "would affect the licensing review."[182] DTE's reply also described the corrective actions it had taken since the NOV was issued:

> To address the concerns noted in the violation and to assure that all COLA activities continue to be conducted at a level of quality necessary to support future safety related activities the following measures are now in place:
>
> 1) As stated in the NRC's "Vendor Inspection Report," Detroit Edison put in place the Nuclear Development Quality Assurance Program Description, Revision 0 on February 4, 2008.
>
> 2) Subsequently, Detroit Edison put in place the Fermi 3 Quality Assurance Program Description (Fermi 3 QAPD), Revision 0 on September 25, 2008 which implements in full the requirements from Criterion II, "Quality Assurance Program," Criterion IV, "Procurement Control," and Criterion VII, "Control of Purchased Materials, Equipment, and Services," of Appendix B to 10 CFR Part 50.[183]

24. On April 27, 2010, the Staff responded to DTE, agreeing that the Staff could not issue an NOV for actions or omissions before the date on which DTE submitted the Fermi 3 COLA to the NRC.[184] But the Staff also stated that "Detroit Edison must demonstrate compliance with Appendix B in order to receive a COL from the Nuclear Regulatory Commission."[185] The Staff response contained a revised NOV that reformulated the original violations A, B, and C into two new violations.

25. Under the Staff's revised NOV, "Detroit Edison's activities related to Fermi 3 became subject to NRC regulations and NRC enforcement upon filing the Fermi 3 COL application on September 18, 2008."[186] The NOV was therefore revised to eliminate references to activities occurring before the Fermi 3 Application was submitted to the NRC on September 18, 2009.[187] Violation A cited Detroit Edison "for failure to perform an evaluation of the B&V quality assurance program and adequately document the basis for the qualification of B&V to perform safety-related Fermi 3 COL activities after September 18, 2008." The Staff required DTE to respond within 30 days to the revised Violation A.[188]

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[182] *Id.* at 5.

[183] *Id.* at 9.

[184] NRC Response to [DTE] Reply to a [NOV] 05200033/2009-201-01, 02, and 03 and Revised [NOV] to [DTE] (Exh. NRC S4) at 1 (Apr. 27, 2010).

[185] *Id.*

[186] *Id.* at 2.

[187] *See id.*

[188] *Id.*

26. Revised Violation B combined previous violations B and C. The Staff's April 27, 2010 letter stated that it had reviewed DTE's corrective actions relating to Violations B and C of the Initial NOV and found them responsive to the Initial Notice. The Staff stated that it had

> no further questions or comments at this time and you are not required to respond further to these two violations, or to Violation B of the Revised Notice. We may review the implementation of your corrective actions during a future NRC staff inspection to determine that full compliance has been achieved and maintained.[189]

27. DTE sent a response to the revised NOV in May 2010.[190] DTE did not dispute revised Violation A, acknowledging that it "failed to sufficiently document a review of the Black & Veatch, Overland Park, Kansas (B&V) 10 CFR 50 Appendix B QA program, which would typically include the basis for qualifying the B&V QA program, thereby assuring that B&V was qualified to perform safety-related Fermi 3 COL activities."[191] But DTE maintained that the violation had been corrected:

> As of July 2009, Detroit Edison has taken the necessary steps to assure that B&V is qualified to supply the safety-related services to Detroit Edison, as required by Criterion VII, "Control of Purchased Material, Equipment, and Services" of 10 CFR 50 Appendix B. Detroit Edison expanded the guidance within implementing procedures NP-7.1, "Supplier Audits, Surveillances, and Commercial Grade Surveys", and NP-7.2, "Supplier Evaluations." Audit and surveillance schedules initiated by Detroit Edison further specify supplier evaluation activities. With these changes in place, Detroit Edison has established a program to comply with the requirements of Criterion VII, "Control of Purchased Materials, Equipment, and Services," of Appendix B to 10 CFR Part 50.[192]

DTE also stated it had "confirmed that the safety-related activities performed by B&V prior to July 2009 were completed in accordance with 10 CFR 50 Appendix B requirements."[193] Finally, DTE stated that it had established processes to prevent any future violations.[194]

28. The Staff reviewed DTE's response, together with RAI responses that

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[189] *Id.*

[190] *See* [DTE] Reply to [NOV] 05200033/2009-201-04 (Exh. NRC S5) (May 25, 2010).

[191] *See id.,* Attach. 1, NRC3-10-0023, at 2.

[192] *Id.* at 3.

[193] *Id.*

[194] *Id.* at 4.

DTE also submitted in May 2010,[195] and determined that in its view all post-application issues related to DTE's contracting with B&V were resolved.[196] The Staff issued a letter closing the NOV on June 4, 2010.[197] The Staff has not identified any post-application QA issues other than those identified in the revised NOV.[198]

29. The Staff acknowledges that its resolution of the NOV does not resolve the questions in Contention 15A related to preapplication safety-related activities.[199]

F. Conclusions of Law

1. Contention 15A

As explained in Section III.D, above, Appendix B permits DTE to delegate the work of establishing and executing the QA program, provided that it retained responsibility for the program. Accordingly, the factual dispute that the Board must resolve is whether DTE in fact retained responsibility for the QA program during the preapplication period.

The Board concludes that, although DTE's QA program was different from the previously typical situation in which the applicant utilizes a QA program from one of its existing reactors, DTE satisfied Appendix B requirements during the preapplication period. To fulfill the obligation to provide quality information in support of its application, DTE found a vendor which had in place a QA program that met the Appendix B requirements. DTE chose to use that program for the conduct of all of the safety-related site investigation work and other COLA development work. In keeping with Appendix B and NQA-1, DTE retained responsibility for the QA program by requiring by contract that B&V have a QA program that satisfied Appendix B requirements and that would be applied to the safety-related COLA activities; reviewing the prior audit of B&V's QA program by NUPIC; providing oversight of B&V activities onsite and through the use of an owner's engineer to oversee the B&V QA effort on Fermi 3; and not receiving any work product from B&V until DTE had its own Appendix B QA program in place to govern the receipt, review, and acceptance of safety-related COLA

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[195] [DTE] Response to NRC Request for Additional Information Letter No. 26 — Related to SRP Section 17.5 (Exh. NRC S7) (May 10, 2010).

[196] Lipscomb Written Direct Testimony (Exh. NRC S23) at A23.

[197] [NRC] Inspection Report 05200033/2009-201 and Revised [NOV] to [DTE] (Exh. NRC S6) (June 4, 2010).

[198] Lipscomb Written Direct Testimony (Exh. NRC S23) at A24.

[199] NRC Staff Proposed Findings of Fact and Conclusions of Law for Contentions 8 and 15, ¶ 117 (Jan. 22, 2014).

work product. Thus, DTE retained responsibility for the work product during the preapplication period.

Nor do we find anything improper in DTE's use of a B&V office different from the one doing the design work to act as its owner's engineer and ensure that QA standards were being met. The separation between the owner's engineer organization in Ann Arbor performing the QA function and the B&V organization in Kansas City is similar to the relationship in a nuclear utility between the production and QA organization in that they both meet at some common point in the organization at a high level.[200] We therefore conclude that the relationship between the owner's engineer is not unlike the method used successfully in the nuclear utility industry for QA and that it provides sufficient separation of function to ensure independence of the QA function from the production function.

The Board therefore concludes that DTE, through direct supervision, oversight, and contractual control of B&V and its QA program during the preapplication period, retained and exercised sufficient responsibility for the Fermi 3 QA program during that time frame. DTE's QA efforts during the preapplication period satisfied Appendix B requirements so that there is reasonable assurance that the data used in the design of Fermi 3 are of high quality. The Board accordingly rules for the Applicant on Contention 15A.

2. Contention 15B

With respect to Contention 15B, which applies to post-application QA requirements, it is undisputed that the QA plan in the Fermi 3 COLA meets the requirements of Appendix B and is consistent with the NRC's Standard Review Plan. All QA violations identified by the Staff have been resolved, and the record shows that those violations had no effect on any safety-related activities performed after initial submittal of the application. We conclude that there is reasonable assurance that the plant, as built, can and will be operated without endangering the public health and safety because the Applicant has provided satisfactory evidence of a fully implemented QA program governing the design, construction, and operation of Fermi 3 in conformity with all relevant NRC regulations. We find no evidence of a pervasive failure to comply with QA requirements. The Board therefore rules for DTE on Contention 15B.

IV. CONCLUSION

Accordingly, the Board, after considering all of the evidence and arguments presented, finds in favor of the Staff on Contention 8 and DTE on Contention 15.

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[200] *See* Tr. at 474 (P. Smith & Stasek).

In accordance with 10 C.F.R. § 2.1210, this Partial Initial Decision will constitute a final decision of the Commission forty (40) days after its issuance unless: (1) a party files a petition for Commission review within twenty-five (25) days after service of this Initial Decision; or (2) the Commission directs otherwise. Within twenty-five (25) days after service of a petition for Commission review, parties to the proceeding may file an answer supporting or opposing Commission review. A party who seeks judicial review of this Decision must first seek Commission review, unless otherwise authorized by law.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Ronald M. Spritzer, Chairman
ADMINISTRATIVE JUDGE

Dr. Anthony J. Baratta
ADMINISTRATIVE JUDGE

Dr. Randall J. Charbeneau
ADMINISTRATIVE JUDGE

Rockville, Maryland
May 23, 2014

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Jennifer L. Uhle, Deputy Director

In the Matter of

ALL OPERATING REACTOR LICENSEES

May 6, 2014
(Revised June 17, 2014)

On July 27, 2011, Mr. Geoff Fettus, Senior Project Attorney for the Natural Resources Defense Council (NRDC), submitted a petition under Title 10, "Energy," of the *Code of Federal Regulations* (10 C.F.R.) section 2.206, "Requests for Action Under This Subpart," to Annette Vietti-Cook, Secretary of the U.S. Nuclear Regulatory Commission (NRC) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11216A085). Mr. Fettus submitted the petition on behalf of the NRDC (the Petitioner). The petition was submitted in the form of twelve letters, which the NRC treated as one petition.

The Petitioner requested that the NRC order licensees to comply with twelve specific recommendations in the NRC Near-Term Task Force (NTTF) Report, "Recommendations for Enhancing Reactor Safety in the 21st Century," issued July 12, 2011 (ADAMS Accession No. ML111861807). The Petitioner cited the NTTF Report as the rationale for and basis of the petition.

In Director's Decision DD-14-2, issued May 6, 2014, the Deputy Director of the Office of Nuclear Reactor Regulation determined that the Petitioner's requests were addressed through the issuance of orders, 10 C.F.R. 50.54(f) letters, rulemaking, and the Emergency Response Data System initiative.

Subsequently, the NRC found two revisions necessary, and on June 17, 2014, issued a revised Director's Decision DD-14-2 (ADAMS Accession No. ML14148A152). The NRC's response to the Petitioner's Request 7 is corrected to reference the *final* regulatory basis issued on October 1, 2013 (ADAMS Accession No. ML13101A344) instead of the draft regulatory basis as originally stated. The NRC's response to the part of Request 8 stating that licensees should be required

to "maintain ERDS [Emergency Response Data System] capability throughout the accident" is corrected to state that the request will be addressed by an advance notice of proposed rulemaking (ANPR).

REVISED DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

On July 27, 2011, Mr. Geoff Fettus, Senior Project Attorney for the Natural Resources Defense Council (NRDC), submitted a petition under Title 10, "Energy," of the *Code of Federal Regulations* (10 C.F.R.) section 2.206, "Requests for Action Under This Subpart," to Annette Vietti-Cook, Secretary of the U.S. Nuclear Regulatory Commission (NRC) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11216A085). Mr. Fettus submitted the petition on behalf of the NRDC (the Petitioner). The petition was submitted in the form of twelve letters, which the NRC treated as one petition.

The Petitioner requested that the NRC order licensees to comply with twelve specific recommendations in the NRC Near-Term Task Force (NTTF) Report, "Recommendations for Enhancing Reactor Safety in the 21st Century," issued July 12, 2011 (ADAMS Accession No. ML111861807). The Petitioner cited the NTTF Report as the rationale for and basis of the petition.

On December 28, 2011, the NRC issued an acknowledgment letter to the Petitioner accepting the petition for review, as recommended by the NRC's Petition Review Board (PRB). The acknowledgment letter is available in ADAMS under Accession No. ML113260015. The letter informed the Petitioner that the topic of the petition is undergoing NRC review as part of the lessons-learned review related to the Fukushima event. The letter also stated that the PRB intends to use information gathered from this review to inform its final decision on whether to implement the actions requested in the petition. Based on the time line related to the Fukushima lessons-learned review, the acknowledgment letter explained that this activity might take longer than the standard of 120 days for reaching a decision on the petition.

The NRC sent a copy of the proposed director's decision to the Petitioner and to licensees for comment on March 10, 2014. The proposed director's decision and the letter to the Petitioner are available in ADAMS under Accession Nos. ML13282A373 and ML13282A358. The letter to the licensees, which includes a listing of all operating reactor licensees affected by the proposed director's decision, is available in ADAMS under Accession No. ML13282A372. The Staff did not receive any comments on the proposed director's decision.

On May 6, 2014, the NRC issued a Final Director's Decision (ADAMS Accession No. ML14098A166). Subsequently, the NRC found two revisions necessary. The NRC's response to the Petitioner's Request 7 is corrected to reference the *final* regulatory basis issued on October 1, 2013 (ADAMS Accession No. ML13101A344), instead of the draft regulatory basis as originally stated. The NRC's response to the part of Request 8 stating that licensees should be required to "maintain ERDS [Emergency Response Data System] capability throughout the accident" is corrected to state that the request will be addressed by an advance notice of proposed rulemaking (ANPR).

II. DISCUSSION

This section includes both the Petitioner's requests for orders to be issued and the NRC's decisions. The NRC did not issue orders within 90 days of the date of the petition, as the Petitioner had requested, because the agency determined that the continued operation of operating reactors did not pose an imminent risk to public health and safety.

Request 1

Order licensees to provide reasonable protection for equipment currently provided pursuant to 10 C.F.R. § 50.54(hh)(2) from the effects of design-basis external events and to add equipment as needed to address multiunit events while other requirements are being revised and implemented. NRDC requests that the Commission issue its order within 90 days. (Corresponds to NRC Task Force Recommendation 4.2.)

NRC Decision

The NRC has addressed this request through Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," March 12, 2012 (ADAMS Accession No. ML12054A736). This request is also being addressed through rulemaking (Station Blackout Mitigation Strategies rulemaking, RIN 3150-AJ08, NRC-2011-0299). The rulemaking is making generically applicable the requirements of the mitigation strategies order, giving consideration to lessons learned and feedback from implementation of the order's requirements.

Request 2

Order licensees to include a reliable hardened vent in BWR [boiling-water

reactor] Mark I and Mark II containments. (Corresponds to NRC Task Force Recommendation 5.1.)

NRC Decision

The NRC has addressed this request through Order EA-12-050, "Order to Modify Licenses with Regard to Reliable Hardened Containment Vents," issued on March 12, 2012 (ADAMS Accession No. ML12054A694), and superseded by a modified Order EA-13-109, "Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable for Operation Under Severe Accident Conditions" (ADAMS Accession No. ML13143A334), issued on June 6, 2013.

Request 3

Order licensees to have an installed, seismically qualified means to spray water into the spent fuel pools, including an easily accessible connection to supply the water (e.g., using a portable pump or pumper truck) at grade outside the building. (Corresponds to NRC Task Force Recommendation 7.4.)

NRC Decision

The NRC has addressed this request through Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," issued on March 12, 2012 (ADAMS Accession No. ML12054A736). This order imposes requirements to maintain or restore spent fuel pool cooling capability. The capability is maintained or restored through the use of self-powered portable pumps through multiple connection points, including connections diverse from the spent fuel pool deck. This request is also being addressed through rulemaking (Station Blackout Mitigation Strategies rulemaking, RIN 3150-AJ08, NRC-2011-0299). The rulemaking is making generically applicable the requirements of the mitigation strategies order, giving consideration to lessons learned and feedback from implementation of the order's requirements.

Request 4

Order licensees to perform seismic and flood protection walkdowns to identify and address plant-specific vulnerabilities and verify the adequacy of monitoring and maintenance for protection features such as watertight barriers and seals in the interim period until longer term actions are completed to update the design

basis for external events. (Corresponds to NRC Task Force Recommendation 2.3.)

NRC Decision

The NRC has decided not to issue orders at this time. It is addressing this request through a 10 C.F.R. § 50.54(f) letter titled, "Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident" (ADAMS Accession No. ML12056A046), issued on March 12, 2012.

The reasons for this decision are set forth in the following documents. On September 9, 2011, the NRC Staff provided SECY-11-0124, "Recommended Actions to Be Taken Without Delay from the Near Term Task Force Report," to the Commission (ADAMS Accession No. ML11245A158). The document identified those actions from the NTTF report that should be taken without unnecessary delay. As part of the October 18, 2011, staff requirements memo for SECY-11-0124 (ADAMS Accession No. ML112911571), the Commission approved the Staff's proposed actions, including the development of three information requests under 10 C.F.R. § 50.54(f). The information collected will be used to support the NRC Staff's evaluation of whether further regulatory action is needed regarding licensees' compliance with their existing seismic and flooding design or licensing basis.

Request 5

Order licensees to provide safety-related AC electrical power for the spent fuel pool makeup system. (Corresponds to NRC Task Force Recommendation 7.2.)

NRC Decision

The NRC has addressed this request through Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," issued on March 12, 2012 (ADAMS Accession No. ML12054A736). This order imposes requirements to maintain or restore spent fuel pool cooling capability. The spent fuel pool cooling capability (i.e., providing makeup to the spent fuel pool) is maintained or restored through the use of self-powered portable pumps using multiple connection points. This strategy provides makeup independent of AC power and accordingly is a superior strategy to the recommendation provided by the NTTF. This request is also being addressed through rulemaking (Station Blackout Mitigation Strategies rulemak-

ing, RIN 3150-AJ08, NRC-2011-0299). The rulemaking is making generically applicable the requirements of the mitigation strategies requested order, giving consideration to lessons learned and feedback from implementation of the order's requirements.

Request 6

Order licensees to revise their technical specifications to address requirements to have one train of onsite emergency electrical power operable for spent fuel pool makeup and spent fuel pool instrumentation when there is irradiated fuel in the spent fuel pool, regardless of the operational mode of the reactor. (Corresponds to NRC Task Force Recommendation 7.3.)

NRC Decision

NRC has addressed this request through Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," issued on March 12, 2012 (ADAMS Accession No. ML12054A736). This order imposes requirements to maintain or restore spent fuel pool cooling capability. This capability is maintained or restored through the use of self-powered portable pumps through multiple connection points. As part of the mitigation strategies, licensees are required to have sufficient equipment to maintain or restore core cooling, containment, and spent fuel pool cooling for all reactors on a given site simultaneously. Additionally, licensees are required to be able to implement the strategies in all modes. As a result, the intent of this NTTF recommendation (to ensure that sufficient spent fuel pool cooling equipment is always available) is met by the requirements of the mitigation strategies order. Additionally, this strategy provides makeup independent of AC power (which might not be available for severe events) and additionally would make use of the spent fuel pool level instrumentation required by EA-12-051. The NRC is also addressing this request through rulemaking (Station Blackout Mitigation Strategies rulemaking, RIN 3150-AJ08, NRC-2011-0299). The rulemaking is making generically applicable the requirements of the mitigation strategies order, giving consideration to lessons learned and feedback from implementation of the order's requirements.

Request 7

Order licensees to modify the EOP technical guidelines (required by Supplement 1, "Requirements for Emergency Response Capability," to NUREG-0737, issued January 1983 (GL 82-33)), to (1) include EOPs, Severe Accident Mitigation

Guidelines (SAMGs), and Extensive Damage Mitigation Guidelines (EDMGs) in an integrated manner; (2) specify clear command and control strategies for their implementation; and (3) stipulate appropriate qualification and training for those who make decisions during emergencies. (Corresponds to NRC Task Force Recommendation 8.1.)

NRC Decision

The NRC is addressing this request through the rulemaking, "Onsite Emergency Response Capabilities" (RIN 3150-AJ11; NRC-2012-0031). The reasons for this decision are given in SECY-11-0137, "Prioritization of Recommended Actions to Be Taken in Response to Fukushima Lessons Learned" (ADAMS Accession No. ML11272A111), and SRM-SECY-11-0137 (ADAMS Accession No. ML113490055). The Commission directed the NRC Staff to initiate rulemaking on NTTF Recommendation 8 in the form of an ANPR. The Staff published the advance notice on April 18, 2012 (ADAMS Accession No. ML12058A062), and the comments received were considered in the development of the regulatory basis. The final regulatory basis was issued on October 1, 2013 (ADAMS Accession No. ML13101A344). The rulemaking would make SAMGs a requirement; integrate onsite emergency response processes, training, and exercises; and clarify command and control issues as appropriate.

Request 8

Order licensees to do the following until rulemaking is complete:

- Determine and implement the required staff to fill all necessary positions for responding to a multiunit event.
- Add guidance to the emergency plan that documents how to perform a multiunit dose assessment (including releases from spent fuel pools) using the licensee's site-specific dose assessment software and approach.
- Conduct periodic training and exercises for multiunit and prolonged SBO scenarios. Practice (simulate) the identification and acquisition of offsite resources, to the extent possible.
- Ensure that EP equipment and facilities are sufficient for dealing with multiunit and prolonged SBO scenarios.
- Provide a means to power communications equipment needed to communicate onsite (e.g., radios for response teams and between facilities) and offsite (e.g., cellular telephones, satellite telephones) during a prolonged SBO.

- Maintain ERDS [Emergency Response Data System] capability throughout the accident.

(Corresponds to NRC Task Force Recommendation 9.3.)

NRC Decision

The NRC has decided not to issue orders at this time. It is addressing this request through several means, including a 10 C.F.R. § 50.54(f) letter titled, "Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident" (ADAMS Accession No. ML12056A046), issued on March 12, 2012.

The reasons for this decision are set forth in the following documents. On September 9, 2011, the NRC Staff provided SECY-11-0124, "Recommended Actions to Be Taken Without Delay from the Near Term Task Force Report," to the Commission (ADAMS Accession No. ML11245A158). The document identified those actions from the NTTF report that should be taken without unnecessary delay. As part of the October 18, 2011, staff requirements memo for SECY-11-0124 (ADAMS Accession No. ML112911571), the Commission approved the Staff's proposed actions, including the development of three information requests under 10 C.F.R. 50.54(f). The information collected will be used to support the NRC Staff's evaluation of whether further regulatory action is needed.

Further, regarding the request to add guidance to the emergency plan that documents how to perform a multiunit dose assessment, in the NTTF Report, the Task Force recommended that an Order be issued requiring licensees to develop and add guidance to their emergency plan regarding performing multiunit dose assessments. To determine whether an Order was warranted, the NRC Staff in a letter dated February 27, 2013 (ADAMS Accession No. ML13029A632), requested that the Nuclear Energy Institute (NEI) provide additional information on the number of sites that currently have multiunit dose-assessment capabilities and the date by which all sites will have these capabilities. By letter dated March 14, 2013 (ADAMS Accession No. ML13073A522), NEI informed the Staff that each licensee would notify the NRC of its multiunit or multisource dose-assessment capabilities no later than June 30, 2013. Subsequently, the NRC Staff developed COMSECY-13-0010, "Schedule and Plans for Tier 2 Order on Emergency Preparedness for Japan Lessons Learned" (ADAMS Accession No. ML12339A262), which requested a change to the implementation of the Tier 2 NTTF Recommendation 9.3 Emergency Preparedness Japan lessons-learned items. The Commission, in the staff requirements memorandum to COMSECY-13-0010 (ADAMS Accession No. ML13120A339), agreed with the approach,

and directed the Staff to keep them informed regarding the implementation of licensees' stated commitments.

The responses from licensees included: (1) a summary of their current capabilities to perform multiunit or multisource dose assessments; (2) the anticipated schedule to establish full multiunit and/or multisource capabilities on an interim and/or permanent basis if such capabilities are not already in place; (3) due dates associated with each key action or milestone; and (4) a description of how the implementation schedule will be tracked. The final implementation date for permanent multiunit or multisource dose-assessment capabilities is no later than December 31, 2014.

The NRC Staff confirmed that licensees currently have multiunit or multisource dose-assessment capabilities or will have these capabilities by December 31, 2014. NRC Staff expects that as part of the implementation of these new dose-assessment capabilities, an appropriate level of site procedures and training will be provided to ensure adequate integration and licensee staff familiarity. NRC Staff will verify the implementation of these dose-assessment capabilities through the inspection program. The Petitioner also requests that the NRC order licensees to maintain ERDS capability throughout an accident. This issue is identified as a Tier 3 item (long-term evaluation) in SECY-11-0137, "Prioritization of Recommended Actions to Be Taken in Response to Fukushima Lessons Learned" (ADAMS Accession No. ML11272A111). As stated in SECY-11-0137, the Staff determined that ERDS may need a more integrated and comprehensive set of requirements. The Staff intends to address ERDS capability through an ANPR. An ANPR is a tool that allows the NRC to solicit early written stakeholder input on a new potential rulemaking effort. The Staff will use the ANPR feedback to inform the decision regarding the need for rulemaking.

Request 9

Order licensees to complete the ERDS modernization initiative by June 2012 to ensure multiunit site monitoring capability. (Corresponds to NRC Task Force Recommendation 9.4.)

NRC Decision

This request has been addressed fully without the need for an order. As of June 1, 2012, all 104 reactors have completed the transition to the new Emergency Response Data System (ERDS). Over the past several years, the NRC engaged licensees in a program that replaced the existing modems used to transmit ERDS data with Virtual Private Network (VPN) devices. Because all 104 reactors have already transitioned to VPN communication for ERDS, the NRC is not

issuing an order (NTTF Recommendation 9.4, "Order licensees to complete the ERDS modernization initiative by June 2012 to ensure multi-unit site monitoring capability") to address this request.

Request 10

Modify Section 5.0, "Administrative Controls," of the Standard Technical Specifications for each operating reactor design to reference the approved EOP technical guidelines for that plant design. Subsequently order licensees to modify each plant's technical specifications to conform to the changes. (Corresponds to NRC Task Force Recommendations 8.2 and 8.3.)

NRC Decision

The Petitioner's requests are being addressed through the actions discussed in the NRC's decision under Request 7, above (rulemaking).

Request 11

Order licensees to reevaluate the seismic and flooding hazards at their sites against current NRC requirements and guidance, and if necessary, update the design basis and SSCs [structures, systems, and components] important to safety to protect against the updated hazards. (Corresponds to NRC Task Force Recommendation 2.1.)

NRC Decision

The NRC has decided not to issue orders at this time. It is addressing this request through a 10 C.F.R. § 50.54(f) letter titled, "Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident" (ADAMS Accession No. ML12056A046), issued on March 12, 2012.

The reasons for this decision are set forth in the following documents. On September 9, 2011, the NRC Staff provided SECY-11-0124, "Recommended Actions to Be Taken Without Delay from the Near Term Task Force Report," to the Commission (ADAMS Accession No. ML11245A158). The document identified those actions from the NTTF report that should be taken without unnecessary delay. As part of the October 18, 2011, staff requirements memo for SECY-11-0124 (ADAMS Accession No. ML112911571), the Commission approved the Staff's proposed actions, including the development of three information requests

under 10 C.F.R. § 50.54(f). The information collected will be used to support the NRC Staff's evaluation of whether further regulatory action is needed regarding the adequacy of licensees' seismic and flooding design and licensing bases.

Request 12

Order licensees to provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters (i.e., water level, temperature, and area radiation levels) from the control room. (Corresponds to NRC Task Force Recommendation 7.1.)

NRC Decision

The NRC has addressed this request through Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," issued on March 12, 2012 (ADAMS Accession No. ML12056A044).

III. CONCLUSION

The NRC has addressed the Petitioner's requests through the issuance of orders, 10 C.F.R. § 50.54(f) letters, rulemaking, and the Emergency Response Data System initiative. Therefore, the NRC is closing this petition.

In a manner consistent with 10 C.F.R. § 2.206(c), the NRC Staff will file a copy of this Director's Decision with the Secretary of the Commission for the Commission to review. As set forth in 10 C.F.R. § 2.206(c)(1), the Director's Decision will constitute the Commission's final action within 25 days of the date of the Decision unless the Commission, on its own motion, chooses to review the decision within that time.

FOR THE NUCLEAR
REGULATORY COMMISSION

Jennifer L. Uhle, Deputy Director
for Reactor Safety Programs
Office of Nuclear Reactor
Regulation

Dated at Rockville, Maryland,
this 17th day of June 2014.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Eric J. Leeds, Director

In the Matter of **Docket No. 50-302**
(License No. DPR-72)

DUKE ENERGY FLORIDA, INC.
(Crystal River Nuclear Generating Plant, Unit 3) **May 6, 2014**

The Petitioners requested that the U.S. Nuclear Regulatory Commission (NRC) engage enforcement action to prevent Crystal River, Unit 3 (CR-3) from restarting with regard to potential violations of NRC regulations for containment integrity. Specifically, the petition requested the following actions: (1) Physically remove the outer 25 centimeters (10 inches) of concrete surrounding the CR-3 containment building from the top of the containment building to the bottom of the containment building and encompassing 360 degrees around the entire containment building; (2) Test samples of the concrete removed from the CR-3 containment building for composition and compare the test results to a sample of concrete from a similarly designed facility like the Florida Power and Light Company, Turkey Point Nuclear Plant; (3) Keep the CR-3 in cold shutdown mode until such time as the licensee can demonstrate full compliance with its NRC operating license for CR-3 within the safety margins delineated in the Licensee's final safety analysis report (FSAR) and within the CR-3 site-specific technical specifications; and (4) Provide the public with an opportunity to intervene at a public hearing before the NRC Atomic Safety and Licensing Board to challenge any certification made by the Licensee to the NRC that it has reestablished full compliance with 10 C.F.R. Part 50, "Domestic Licensing of Production and Utilization Facilities," and the safety margins delineated in its FSAR and technical specifications.

The final Director's Decision on this petition was issued on May 6, 2014. The final Director's Decision determined that the Petitioner obtained the requested actions without the NRC initiating an enforcement action. Since the submission

of the petitions and supplement, CR-3 certified the permanent cessation of power operations and permanent removal of fuel from the reactor vessel. As such, the Petitioner's request for the NRC to issue an order for CR-3 to remain in a shutdown mode is moot because the Licensee decided to retire the plant.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated December 5, 2009, as supplemented on January 7, 2010, Mr. Thomas Saporito (the Petitioner) filed a petition under Title 10 of the *Code of Federal Regulations* (10 C.F.R.) § 2.206, "Requests for Action Under This Subpart," related to damage to the Crystal River Nuclear Generating Plant, Unit 3 (CR-3), containment structure (Agencywide Documents Access and Management System (ADAMS) Accession No. ML093430702). The Petitioner also filed a separate petition regarding the containment structure under 10 C.F.R. § 2.206 on August 6, 2010 (ADAMS Accession No. ML102220032). The U.S. Nuclear Regulatory Commission (NRC) has consolidated the relevant portions of the August 6, 2010, petition with the December 5, 2009, petition. The Petitioner requested that the NRC take enforcement action.

A. Action Requested for December 5, 2009, Petition

In the original petition, the Petitioner requested that the NRC take enforcement action against Duke Energy Florida, Inc. The Petitioner requested that the NRC issue a confirmatory order to Duke Energy Florida, Inc., the Licensee (formerly Florida Power Corp., Inc., a subsidiary of Progress Energy), requiring that the Licensee perform the following actions:

1. Physically remove the outer 25 centimeters (10 inches) of concrete surrounding the CR-3 containment building from the top of the containment building to the bottom of the containment building and encompassing 360 degrees around the entire containment building.
2. Test samples of the concrete removed from the CR-3 containment building for composition and compare the test results to a sample of concrete from a similarly designed facility like the Florida Power and Light Company, Turkey Point Nuclear Plant.
3. Keep the CR-3 in cold shutdown mode until such time as the Licensee can demonstrate full compliance with its NRC operating license for CR-3 within the safety margins delineated in the Licensee's final safety

analysis report (FSAR) and within the CR-3 site-specific technical specifications.

4. Provide the public with an opportunity to intervene at a public hearing before the NRC Atomic Safety and Licensing Board to challenge any certification made by the Licensee to the NRC that it has reestablished full compliance with 10 C.F.R. Part 50, "Domestic Licensing of Production and Utilization Facilities," and the safety margins delineated in its FSAR and technical specifications.

By a teleconference on January 7, 2010 (ADAMS Accession No. ML-100200966), the Petitioner supplemented the December 5, 2009, petition by requesting that the Licensee reform the containment building with additional concrete. The NRC determined that this additional information supplemented the first requested action of the December 5, 2009, petition.

The NRC's acknowledgment letter to the Petitioner for the December 5, 2009, petition, dated March 4, 2010 (ADAMS Accession No. ML100471416), addressed the original petition dated December 5, 2009, as supplemented on January 7, 2010. In this letter, the NRC accepted the Petitioner's third requested action because it met the criteria established in Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions," for review under the 10 C.F.R. § 2.206 process. Items 1, 2, and 4 did not meet the criteria established in MD 8.11 for review under the 10 C.F.R. § 2.206 process, as described in the March 4, 2010, letter.

By letter dated August 6, 2010, the Petitioner filed a separate request related, in part, to the containment delamination; however, it was not accepted for review under the 10 C.F.R. § 2.206 process. The decision to not accept the request as a petition was documented in a letter dated September 3, 2010 (ADAMS Accession No. ML102290577). In the August 6, 2010, request, the Petitioner stated that at the end of a June 30, 2010, public meeting, he verbally supplemented the December 5, 2009, petition by asserting that:

1. The Licensee discovered new cracks when concrete was removed from the external walls of the containment building near the access cut made for replacement of steam generators.

2. The Licensee failed to identify these cracks earlier upon the initial discovery of the delamination event.

3. The Licensee cannot realistically provide any degree of assurance to the NRC that additional cracks within the containment building structure do not exist because, as with the newly discovered cracks, the Licensee has no means to inspect the existing containment building structure to detect the existence of further cracks in the concrete.

4. The Licensee has not sufficiently addressed the delamination event to effectively make repairs that will return CR-3 to the safety margins described in the Licensee's FSAR and technical specifications.

While the request was not accepted, the information contained in the August 6, 2010, petition request was consolidated with the December 5, 2009, petition, as discussed in the letter dated September 3, 2010.

The NRC sent a copy of the proposed director's decision to the Petitioner and to Duke Energy Florida, Inc., for comment on January 24, 2014. The staff did not receive any comments on the proposed director's decision.

II. DISCUSSION

Under 10 C.F.R. § 2.206(b), the director of the NRC office with responsibility for the subject matter shall either institute the requested proceeding or shall advise the person who made the request in writing that no proceeding will be instituted in whole or in part, with respect to the request, and the reason for the decision. Accordingly, the decision of the Director of the Office of Nuclear Reactor Regulation is provided below.

As stated previously, the NRC accepted for review the December 5, 2009, petition request that the NRC issue a confirmatory order requiring CR-3 to remain in cold shutdown mode until the Licensee demonstrates full compliance with the safety margins delineated in the license's FSAR and technical specification requirements. Since September 26, 2009, CR-3 has been shut down while the Licensee performed repairs related to the containment delamination. The Licensee has not attempted to restart the reactor.

On February 5, 2013, the Licensee publicly announced that it had decided to retire the CR-3 plant. On February 20, 2013 (ADAMS Accession No. ML13056A005), the Licensee provided the certifications required by 10 C.F.R. § 50.82(a)(1)(i) and (ii) to the NRC Staff that CR-3 had permanently ceased power operations and that all fuel had been permanently removed from the reactor vessel. In accordance with 10 C.F.R. § 50.82(a)(2), upon docketing of these two certifications, the Licensee's 10 C.F.R. Part 50 license no longer authorized operation of the CR-3 reactor or emplacement or retention of fuel into the reactor vessel. Accordingly, the Licensee is prohibited by regulation from restarting CR-3 or loading fuel into the reactor vessel. Because the Licensee is no longer authorized to operate the reactor, CR-3 may not enter a mode of operation that requires the containment to be in an operable condition. As such, the Petitioner's request for CR-3 to remain in cold shutdown mode until satisfying FSAR and technical specification limits is moot.

Although the NRC Staff will not take action on the Petition's request, the following additional information is provided concerning other actions the NRC

has taken related to the containment delamination issue. In fall 2010, the NRC conducted a special inspection of the Crystal River containment building to better understand the containment delamination issue, its impact to public safety, and to assess the Licensee's actions to address it. The NRC reviewed the Licensee's root-cause evaluation, design analysis, and planned corrective actions, along with the Licensee's programs for containment inspection, maintenance, and testing. The results of the special inspection were documented in a special inspection report dated October 12, 2010 (ADAMS Accession No. ML102861026). The NRC found that the Licensee's root-cause evaluation was thorough and supported its conclusions that the delamination occurred during initial containment detensioning. Detensioning occurred after the plant was shut down, when containment operability was not required. The NRC determined that the delamination did not represent an increase in risk to the public and it discovered no violations of NRC requirements.

III. CONCLUSION

The Petitioner raised issues related to the containment delamination that occurred at CR-3 during steam generator replacement in fall 2009. The NRC performed a special inspection at CR-3 and found that the Licensee's root-cause evaluation was thorough and supported its conclusions that the delamination occurred during initial containment detensioning. Detensioning occurred after the plant was shut down, when containment operability was not required. The NRC determined that the delamination did not represent an increase in risk to the public.

Since the special inspection, CR-3 has permanently ceased power operations and the Licensee has permanently removed the fuel from the reactor vessel. As such, the Petitioner's request for the NRC to issue an order for CR-3 to remain in a shutdown mode is moot because the Licensee decided to retire the plant. Based on the above, the Director of the Office of Nuclear Reactor Regulation will not be instituting the proceeding requested by the Petitioner, either in whole or in part.

As provided in 10 C.F.R. § 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the Decision will constitute the final action of the

Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR
REGULATORY COMMISSION

Eric J. Leeds, Director
Office of Nuclear Reactor
Regulation

Dated at Rockville, Maryland,
this 6th day of May 2014.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF FEDERAL AND STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS

Brian E. Holian, Acting Director

In the Matter of **Docket No. 030-38594**
(License No. 20-35022-01)

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)

CSMI, LLC **May 27, 2014**

By letter dated August 10, 2013, George E. Walther-Meade from Science Applications International Corporation (SAIC or the Petitioner) filed a petition (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13226A020) pursuant to Title 10 of the *Code of Federal Regulations* (10 C.F.R.) § 2.206, "Requests for Action Under This Subpart"). The Petitioner requested that the U.S. Nuclear Regulatory Commission (NRC or the Commission) take immediate enforcement action by issuing an order to revoke CSMI, LLC (CSMI) License Number 20-35022-01. As the basis for the request, the Petitioner stated that CSMI (the Licensee) had committed a willful violation involving falsification of information. Such violations are of particular concern to the NRC because the NRC's regulatory program is based on licensees acting with integrity and communicating with candor.

In Director's Decision DD-14-4, dated May 27, 2014, the Deputy Director of the Office of Federal and State Materials and Environmental Management Programs denied the Petitioner's request. The NRC Staff evaluated the information provided by the Petitioner, obtained during the PRB public meeting, information gathered during an onsite inspection at CSMI, and comments received on the proposed Director's Decision. Based on its review, the NRC Staff did not substantiate the Petitioner's concern that CSMI committed a willful violation involving

falsification of information. Additionally, the Staff did not identify any safety basis for revoking or suspending CSMI License Number 20-35022-01. However, the NRC addressed certain issues raised by the Petitioner in its comments on the Proposed Director's Decision in a separate letter (ADAMS Accession No. ML14128A268) and process. As noted in that letter, as a result of its review of the additional information provided by the Petitioner, the Staff corrected CSMI's license to authorize only the provision of routine maintenance services.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated August 10, 2013, George E. Walther-Meade from Science Applications International Corporation (SAIC or the Petitioner) filed a petition pursuant to Title 10 of the *Code of Federal Regulations* (10 C.F.R.) § 2.206. The Petitioner requested that the U.S. Nuclear Regulatory Commission (NRC or the Commission) take immediate enforcement action by issuing an order to revoke CSMI, LLC (CSMI) License No. 20-35022-01. As the basis for the request, the Petitioner stated that CSMI (the Licensee) had committed a willful violation involving falsification of information. Such violations are of particular concern to the NRC because the NRC's regulatory program is based on licensees acting with integrity and communicating with candor.

The Petitioner met with the NRC Petition Review Board (PRB) on September 10, 2013, to clarify the basis for the petition. The transcript of this meeting was treated as a supplement to the petition and is available for inspection at the NRC's Public Document Room (PDR), located at O1F21, 11555 Rockville Pike (first floor), Rockville, Maryland 20852. The transcript is also accessible electronically through the Agencywide Documents Access and Management System (ADAMS) Accession No. ML13263A388 in the NRC Library at http://www.nrc.gov/reading-rm/adams.html. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC's PDR reference staff by telephone at 1-800-397-4209, or 301-415-4737, or by e-mail to pdr.resource@nrc.gov.

On September 25-26, 2013, the NRC Staff conducted an inspection of CSMI, and on October 29, 2013, the NRC Staff held a telephone exit meeting with the Licensee. The NRC inspector reviewed CSMI's organizational structure and the scope of its licensed program to determine compliance with NRC rules and regulations and license conditions. The inspection consisted of observations by the NRC inspector, interviews with CSMI personnel, and a review of documents, procedures, and records. The inspection included a review of CSMI personnel

training records, qualifications, and experience, and a discussion of CSMI's proposed service activities.

In a letter dated November 4, 2013 (ADAMS Accession No. ML13275A306), the NRC informed the Petitioner that their request for immediate action was denied because there was no immediate impact on public health and safety, national security, or the environment. The Petitioner was also informed that their petition was accepted for review under 10 C.F.R. § 2.206.

The NRC sent a copy of the proposed director's decision to the Petitioner and to CSMI for comment on February 28, 2014. The Petitioner responded with comments on April 4, 2014 (ADAMS Accession No. ML14101A127), and the Licensee responded with no comments on March 26, 2014. The comments and the Staff's response to them are included in the Director's Decision.

II. DISCUSSION

As the basis for this request, the Petitioner stated that the Licensee had committed a willful violation involving falsification of information. Such violations are of particular concern because the NRC's regulatory program is based on licensees acting with integrity and communicating with candor. The list below summarizes the Petitioner's concerns about potential misrepresentations made by the Licensee, which form the basis for the petition, followed by NRC's evaluation:

1. *Concern*: In the cover letter to its license application dated December 3, 2012 (ADAMS Accession No. ML12340A385), CSMI stated that they have provided installation, transportation, and maintenance services related to the radiological safety of SAIC Vehicle and Cargo Inspection System (VACIS) for 10 years as a subcontractor. However, according to the Petitioner, SAIC has only been operating VACIS system for the U.S. government since 2006 (a period of less than 10 years).

   NRC Evaluation: The regulations in 10 C.F.R. § 30.9(a) require that information provided to the Commission by an applicant for a license shall be complete and accurate in all material respects. The NRC conducts an initial inspection of every new licensee to verify that they are complying with the regulations and license, including the license conditions. During the initial NRC inspection performed on September 25-26, 2013, the inspector determined that CSMI previously provided services as a subcontractor for VACIS systems for several international clients located outside of NRC's jurisdiction for approximately 10 years.

   Based on this information, the NRC Staff determined that the Licensee had performed service activities on VACIS systems and functioned as a subcontractor to its clients, including SAIC, over a span of 10 years.

Therefore, the Petitioner's concern that the information provided by the Licensee, CSMI, was not accurate and in violation of 10 C.F.R. § 30.9(a), was not substantiated.

Petitioner's Comment: CSMI was a subcontractor to SAIC in only two instances, Subcontract Nos. 4400087650 and 440097582, dated March 4, 2004, and September 13, 2004, both of which concluded in March and August 2005, respectively, of which neither included scope for any type of maintenance of Military Mobile VACIS systems. The first Military Mobile VACIS, which is the only VACIS system authorized by the CSMI license, was fielded/deployed on June 23, 2007, and CSMI has never been a subcontractor of SAIC (now Leidos) to service and to conduct maintenance on the Military Mobile VACIS systems. It is also important to note that the U.S. Army is the sole customer/end user for this type of VACIS system which is International Traffic in Arms Regulation (ITAR)-controlled so there are no other cases where CSMI could have been a subcontractor for other international clients.

NRC Response: CSMI stated in their application dated December 3, 2012 (ADAMS Accession No. ML12340A385) that they have provided installation, transportation, and maintenance services related to the radiological safety of SAIC VACIS system for 10 years as a subcontractor, but CSMI did not specify the type of VACIS. As stated in the NRC evaluation, during the initial NRC inspection, the inspector determined that CSMI previously provided services as a subcontractor for VACIS systems for several international clients located outside of NRC's jurisdiction for approximately 10 years.

In addition, even though CSMI contracts concluded in 2005, before the first Military Mobile VACIS was fielded or deployed in 2007, CSMI provided the NRC Staff copies of training certificates indicating CSMI personnel training on the maintenance of the Mobile VACIS systems. These training certificates included the "Radiation Safety Course for Mobile VACIS Operations" and the "Mobile VACIS Inspection System Maintenance Course" offered by SAIC. Therefore, the Petitioner's concern that CSMI willfully falsified information concerning its experience with the VACIS system was not substantiated.

2. *Concern*: Three of the Petitioner's concerns involved training that CSMI stated their employees had received from SAIC. CSMI stated that Mr. Roberto Bhaday, their Radiation Safety Officer (RSO), received 40 hours of SAIC Field Service Representative radiation safety training in January 2005 in San Diego, California. Additionally, CSMI stated that their staff attended 80 hours of Initial Field Service Representative technical training

in January 2005, at SAIC's facility in Rancho San Bernardo, California. The Petitioner stated, however, that SAIC did not provide training to Mr. Bhaday or any CSMI staff.

NRC Evaluation: The regulations in 10 C.F.R. § 30.9(a) require that information provided to the Commission by an applicant for a license shall be complete and accurate in all material respects. The regulations in 10 C.F.R. § 30.33(a)(3) state that an application for a specific license will be approved if, in addition to other requirements met, the applicant is qualified by training and experience to use the material for the purpose requested in such manner as to protect health and minimize danger to life or property. NUREG-1556, Volume 18, "Program-Specific Guidance About Service Provider Licenses," Appendix H, provides criteria for training and experience for service providers that the NRC Staff finds acceptable for meeting the regulatory requirements. It states that training should emphasize practical subject matter important to the safe handling of licensed materials and that the duration and technical level should be commensurate with the expected hazards encountered during routine and emergency conditions. In addition, the training should occur before duties with, or in the vicinity of, radioactive materials.

CSMI provided the NRC Staff copies of training certificates for selected members of its staff, including Mr. Bhaday. One of the certificates states that Mr. Bhaday attended the "Radiation Safety Course for Mobile VACIS Operations," which was offered by SAIC at its San Diego, California, facility in January 2005 for a period of 1 week (40 hours). The NRC Staff noted that individuals designated as authorized service technicians or authorized users, including Mr. Bhaday, had certificates from SAIC documenting attendance at a 2-week (80 hours) training of "Mobile VACIS Inspection System Maintenance Course," offered by SAIC at its San Diego, California, training facility (Note: Rancho San Bernardo, California, is a suburb of San Diego). While the certificates do not specify "SAIC Field Service Representative radiation safety training" or "Initial Field Service Representative technical training," the courses provide equivalent training and education in support of the requirements for an authorized user. Therefore, the Petitioner's concern that the information provided by the Licensee, CSMI, concerning the training received by their employees was not accurate and in violation of 10 C.F.R. § 30.9(a), was not substantiated.

Petitioner's Comment: The applicable training guideline that CSMI should be judged on is Appendix P. While Appendix H provides guidelines for authorized users, CSMI's license (No. 20-35022-01), as issued by the Commission, allows "Installation, radiation surveys, relocation, removal

from service, source exchange, source retrieval, transportation, replacement, disposal of the sealed source, maintenance, or repair of components related to the radiological safety of Science Applications International Corporation Military Mobile VACIS." As explained in Appendix P, such activities encompass nonroutine maintenance. Appendix P states that "applicants wishing to perform nonroutine operations must use personnel with special training." This is a higher level of training that is specified in Appendix H.

NRC Response: The Petitioner's comment is not related to the basis of this request, which is willful violations involving falsification of information. Therefore, this comment does not affect the Staff's determination related to the Petitioner's concern that the information provided by the Licensee, CSMI, concerning the training received by their employees was not accurate and in violation of 10 C.F.R. § 30.9(a); therefore, this concern was not substantiated. However, the NRC has addressed the issues raised in this comment in a separate letter (ADAMS Accession Number ML14128A268) and process. As noted in that letter, as a result of its review of the additional information provided by the Petitioner, the Staff has corrected CSMI's license to authorize only the provision of routine maintenance services.

3. *Concern*: Two of the Petitioner's concerns involved communication with SAIC for maintenance and emergency support. CSMI stated that their service personnel will adhere to the strict guidelines provided by SAIC (e.g., maintenance procedure) and that SAIC will be consulted immediately in the case of an emergency. However, the Petitioner stated that the Licensee does not have access to current guidelines and procedures nor is there any vehicle to consult SAIC in case of an emergency.

   NRC Evaluation: The regulations in 10 C.F.R. § 30.9(a) require that information provided to the Commission by an applicant for a license shall be complete and accurate in all material respects. During the inspection performed on September 25-26, 2013, the NRC inspector reviewed CSMI's service procedures, radiation safety procedures, and emergency procedures. During discussions with CSMI's RSO, the Licensee provided clarification to statements made in their license application. Specifically, CSMI stated that it would follow the user's instructions outlined in the operator's manual that is readily available at the computer console for the VACIS device or on the Internet. The NRC Staff finds that this documentation is acceptable because the design of the VACIS device has not changed and the initial procedures continue to apply. During an emergency, the owner of the VACIS device, not CSMI, would be responsible

for notifying the device manufacturer per contractual agreement. CSMI also stated that requests for replacements parts would originate from the owner of the device and not CSMI.

Based on the results of the inspection, the NRC Staff determined that the information provided in the application represents the Licensee's established process and intent for conducting licensed activities. The owner of the device will have access to procedures and will be able to contact the manufacturer in case of an emergency. Therefore, the Petitioner's concern is not substantiated.

Petitioner's Comment: License 20-35022-01, Amendment 1 states that CSMI is allowed to conduct the following activities: "Installation, radiation surveys, relocation, removal from service, source exchange, source retrieval, transportation, replacement, disposal of the sealed source, maintenance, or repair of components related to the radiological safety of Science Applications International Corporation Military Mobile VACIS." None of these activities are discussed in the Operator's Manual for the Military Mobile VACIS product, or for that matter any VACIS product.

CSMI initially requested the ability to conduct nonroutine maintenance, and when pressed by the Commission for NUREG 1556, Volume 18, Appendix P data to support their request, CSMI changed their stance to only provide routine maintenance. This is understandable since in order to comply with the data requirements of NUREG 1556, Volume 18, Appendix P, CSMI would require, as pointed out to the PRB, access to SAIC (now Leidos) proprietary information, which they do not have. Nevertheless, the license specifically authorizes CSMI to conduct the nonroutine maintenance activities CSMI had listed initially.

The NRC's evaluation above states that "Based on the results of the inspection, the NRC Staff determined that the information provided in the application represents the Licensee's established process and intent for conducting licensed activities." There are two problems with this statement: (1) the information provided by CSMI does not comply with the requirements of NUREG-1556, Volume 18, Appendix P, which is necessary to support the activities listed on their license; and (2) the "established process and intent for conducting licensed activities" appears to be based on the assumption that CSMI will only be performing routine maintenance as described in the User's Manual of the Military Mobile VACIS system. However, the issued license allows nonroutine maintenance activities that are not described in the User's Manual of the Military Mobile VACIS system. The license specifically authorizes CSMI to conduct "nonroutine" maintenance as described in Appendix P of NUREG-1556, Volume 18.

NRC Response: The Petitioner's comment is not related to the basis of this request, which is willful violations involving falsification of information. Therefore, this comment does not affect the Staff's determination related to the Petitioner's concern that the information provided by the Licensee, CSMI, concerning the process and intent for conducting licensed activities, was not accurate and in violation of 10 C.F.R. § 30.9(a); therefore, this concern was not substantiated. However, the NRC has addressed the issues raised in this comment in a separate letter (ADAMS Accession No. ML14128A268) and process. As noted in that letter, as a result of its review of the additional information provided by the Petitioner, the Staff has corrected CSMI's license to authorize only the provision of routine maintenance services.

4. *Concern*: CSMI stated that radiation safety training is supervised by an RSO-qualified representative of the system manufacturer and that all radiation safety training materials are provided by the system manufacturer. However, the Petitioner states that no such agreement exists, nor is there evidence to support this claim.

   NRC Evaluation: The regulations in 10 C.F.R. § 30.9(a) require that information provided to the Commission by an applicant for a license shall be complete and accurate in all material respects. In accordance with the regulations in 10 C.F.R. § 30.33(a)(3), an application for a specific license will be approved if, in addition to other requirements met, the applicant is qualified by training and experience to use the material for the purpose requested in such manner as to protect health and minimize danger to life or property. NUREG-1556, Volume 18, "Program-Specific Guidance About Service Provider Licenses," Appendix H, provides criteria for training and experience for service that the NRC Staff finds acceptable for meeting the regulatory requirements. It states that training should emphasize practical subject matter important to the safe handling of licensed materials and that the duration and technical level should be commensurate with the expected hazards encountered during routine and emergency conditions. In addition, the training should occur before duties with, or in the vicinity of, radioactive materials.

   The NRC inspector noted that at the time of the inspection, CSMI had not initiated licensed activities authorized under its NRC license in areas within the NRC jurisdiction. Until such time as the Licensee decides to initiate licensed activities, the Licensee is not required to provide training to authorized users or ancillary personnel such as administrative and custodial staff. The Licensee clarified that individuals who would be users of the systems were expected to have obtained training from the

respective device manufacturer. The Licensee provided clarification that before it initiated licensed activities, it would develop a training program for its service personnel, including field managers.

Based on this information and the commitments in the Licensee's letter dated January 7, 2013 (ADAMS Accession No. ML13011A413), the NRC Staff has reasonable assurance that the Licensee will develop a training program in accordance with the applicable requirements of 10 C.F.R. Parts 19 and 30 upon initiation of licensed activities. Therefore, the Petitioner's concern is not substantiated.

Petitioner's Comment: CSMI is licensed as a service provider for non-routine maintenance. General VACIS user-level training is insufficient for this function and, in accordance with NUREG 1556, Volume 18, Appendix P, a service provider for nonroutine maintenance needs "special training" or specific training on the systems they are licensed to provide nonroutine service for; in this particular case the Military Mobile VACIS. User training in and of itself is insufficient for nonroutine maintenance, and service-level training for Mobile VACIS systems is insufficient for the Military Mobile VACIS, as the latter product has important safety subsystems that are not present on the Mobile VACIS system. For CSMI to be a service provider for nonroutine maintenance of Military Mobile VACIS, their personnel need service-level "special" training on Military Mobile and not user-level training on general VACIS products.

NRC Response: The Petitioner's comment is not related to the basis of this request, which is willful violations involving falsification of information. Therefore, this comment does not affect the Staff's determination related to the Petitioner's concern that the information provided by the Licensee, CSMI, concerning the process and intent for conducting licensed activities, was not accurate and in violation of 10 C.F.R. § 30.9(a); therefore, this concern was not substantiated. However, the NRC has addressed the issues raised in this comment in a separate letter (ADAMS Accession No. ML14128A268) and process. As noted in that letter, as a result of its review of the additional information provided by the Petitioner, the Staff has corrected CSMI's license to authorize only the provision of routine maintenance services.

5. *Concern*: CSMI stated that leak analysis will be the responsibility of the manufacturer. However, the Petitioner stated that no such agreement exists, nor is there evidence to support the Licensee's claim.

   NRC Evaluation: The regulations in 10 C.F.R. § 30.9(a) require that information provided to the Commission by an applicant for a license

shall be complete and accurate in all material respects. In accordance with CSMI License No. 20-35022-01, License Condition 14.E, tests for leakage and/or contamination, limited to leak-test sample collection, shall be performed by the Licensee or by other persons specifically licensed by the NRC or an Agreement State to perform such services.

The regulations do not require that leak analyses be performed by the device manufacturer; rather, they require that the test be conducted by a company licensed to perform the analysis, for example, the source manufacturer. The NRC Staff concluded that the Licensee's process for conducting sealed-source leak testing would be performed in accordance with its NRC license condition. Therefore, the Petitioner's concern is not substantiated.

6. *Concern*: In telephone conversations with the NRC (telephone logs dated January 22, 2013 (ADAMS Accession No. ML13028A087), and January 23, 2013 (ADAMS Accession No. ML13028A092)), CSMI stated that Mr. Michael Hartnett would be named RSO with Mr. Roberto Bhaday as backup and that Mr. Hartnett was scheduled for RSO training in mid-February. However, the Petitioner stated, Mr. Bhaday is no longer with CSMI and Mr. Christopher Knox has since been appointed RSO.

   NRC Evaluation: The regulations in 10 C.F.R. 30.9(a) require that information provided to the Commission by an applicant for a license shall be complete and accurate in all material respects. The regulations in 10 C.F.R. § 30.33(a)(3) state that an application for a specific license will be approved if, in addition to other requirements met, the applicant is qualified by training and experience to use the material for the purpose requested in such manner as to protect health and minimize danger to life or property. NUREG-1556, Volume 18, "Program-Specific Guidance About Service Provider Licenses," Appendix H, provides criteria for training and experience for service providers that the NRC Staff finds acceptable for meeting the regulatory requirements. Service provider licensees must have an RSO who is qualified by training and experience in radiation protection, and who is available for advice and assistance on radiological safety matters. The Licensee must provide documentation of the training and experience of the individual as RSO.

   In a letter dated February 19, 2013 (ADAMS Accession No. ML-13064A167), CSMI requested an amendment to its NRC license to appoint a new RSO, Mr. Knox. The former RSO, Mr. Bhaday, departed the company in April 2013. The Licensee included a copy of the training certificate for Mr. Knox indicating that he attended an RSO training course in February 2013 offered by Nevada Technical Associates. Based on this

information, the NRC Staff has reasonable assurance that Mr. Knox has completed training that satisfies the training requirements in 10 C.F.R. § 30.33(a)(3). NRC determined that CSMI has maintained an RSO with the required training and experience. Therefore, the Petitioner's concern is not substantiated.

7. *Concern*: The Petitioner stated that Messrs. Knox, Hartnett, and Bhaday have not received training by the Petitioner as implied in the license application and correspondence.

   NRC Evaluation: The regulations in 10 C.F.R. 30.9(a) require that information provided to the Commission by an applicant for a license shall be complete and accurate in all material respects. With regard to training, the regulations in 10 C.F.R. § 30.33(a)(3) state that an application for a specific license will be approved if, in addition to other requirements met, the applicant is qualified by training and experience to use the material for the purpose requested in such manner as to protect health and minimize danger to life or property. NUREG-1556, Volume 18, "Program-Specific Guidance About Service Provider Licenses," Appendix H, provides criteria for training and experience for service providers that the NRC Staff finds acceptable for meeting the regulatory requirements. Service provider licensees must be qualified by training and experience in radiation protection, and be available for advice and assistance on radiological safety matters. The Licensee must provide documentation of the training and experience of the individuals as RSO or authorized users.

   The NRC Staff reviewed the training certificates provided by CSMI and verified that Messrs. Harnett and Bhaday received operator/maintenance training from SAIC in 2005. In addition, the NRC Staff confirmed that Messrs. Hartnett, Bhaday, and Knox received "Radiation Safety Officer" training by Nevada Technical Associates as described in the license correspondence. Based on a review of the training syllabus, the NRC Staff determined that the course would satisfy the criteria listed in NUREG-1556, Volume 18 for a position as RSO for this license type. Furthermore, none of the VACIS system documents (e.g., device registration or manual) specify that the device is to be operated under an RSO's oversight who was trained by SAIC.

   Therefore, the Petitioner's concern that the information provided by the Licensee, CSMI, was not accurate and in violation of 10 C.F.R. § 30.9(a), was not substantiated. Additionally, the inspector confirmed that all individuals mentioned above had attended the training courses described in the Licensee's correspondence and that those courses would

satisfy the training requirements in 10 C.F.R. § 30.33(a)(3). Therefore, the Petitioner's concern is not substantiated.

III. CONCLUSION

The NRC Staff has evaluated the information provided by the Petitioner, obtained during the PRB public meeting, information gathered during an onsite inspection at CSMI, and comments received on the proposed Director's Decision. Based on its review, the NRC Staff has not substantiated the Petitioner's concern that CSMI has committed a willful violation involving falsification of information. Additionally, the Staff has not identified any safety basis for revoking or suspending CSMI License No. 20-35022-01. Therefore, the Staff denies this petition. However, the NRC has addressed certain issues raised by the Petitioner in its comments on the Proposed Director's Decision in a separate letter (ADAMS Accession No. ML14128A268) and process. As noted in that letter, as a result of its review of the additional information provided by the Petitioner, the Staff has corrected CSMI's license to authorize only the provision of routine maintenance services.

As provided in 10 C.F.R. § 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the Decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR
REGULATORY COMMISSION

Brian E. Holian, Acting Director
Office of Federal and State
Materials and Environmental
Management Programs

Dated at Rockville, Maryland,
this 27th day of May 2014.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ronald M. Spritzer, Chairman
Dr. Richard F. Cole
Dr. Alice C. Mignerey

In the Matter of **Docket No. 52-017-COL**
(ASLBP No. 08-863-01-COL)
(Combined License Application)

VIRGINIA ELECTRIC AND POWER COMPANY d/b/a DOMINION VIRGINIA POWER and OLD DOMINION ELECTRIC COOPERATIVE
(North Anna Power Station, Unit 3) **June 13, 2014**

In this previously terminated proceeding regarding the combined license application of Virginia Electric and Power Company, d/b/a Dominion Virginia Power, to operate a new unit at its existing North Anna Power Station, the Licensing Board denies the Blue Ridge Environmental Defense League's ("Petitioner") motion to reopen the proceeding and admit a new contention ("Contention 14") related to the August 23, 2011 earthquake in Mineral, Virginia. The Board declines to admit Contention 14 because Petitioner fails to satisfy the 10 C.F.R. § 2.309(f)(1) standard for admission of a new contention. The accompanying request to reopen the proceeding to admit the new contention is therefore moot.

RULES OF PRACTICE: MOTION TO REOPEN

The 10 C.F.R. § 2.326 standard for reopening a previously terminated pro-

ceeding sets a high bar for a petitioner, requiring that a motion be supported by affidavit, be timely, address a significant safety or environmental issue, and demonstrate that a materially different result would have been likely if the new evidence had been available.

RULES OF PRACTICE: MOTION TO REOPEN

Mere mention by a petitioner that it will rely on an expert's analysis to support its motion to reopen, without offering any details of that analysis, does not satisfy the 10 C.F.R. § 2.326(b) requirement that a motion to reopen be "accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim."

RULES OF PRACTICE: MOTION TO REOPEN

In addition to satisfying the 10 C.F.R. § 2.326 reopening standard, the petitioner must also show that the proposed new contention meets the standard for new or amended contentions in 10 C.F.R. § 2.309(c) and the underlying admissibility standards of 10 C.F.R. § 2.309(f)(1). Failure to satisfy any of these standards will lead to denial of the motion to reopen.

RULES OF PRACTICE: CONTENTION ADMISSIBILITY

Failure to comply with any of the 10 C.F.R. § 2.309(f)(1) requirements renders a contention inadmissible. Should a petitioner's proffered contention fail to satisfy the underlying admissibility requirements, an accompanying motion to reopen a terminated proceeding under 10 C.F.R. § 2.326 becomes moot.

RULES OF PRACTICE: CONTENTION ADMISSIBILITY

An applicant's mere request of a regulatory exemption, absent any showing that the request is improper or unsupported, does not give rise to a litigable issue sufficient to satisfy 10 C.F.R. § 2.309(f)(1)(i)'s requirement that a petitioner "[p]rovide a specific statement of the issue of law or fact to be raised or controverted."

APPEALS: TIMING

Resolution of all contentions pending before a Licensing Board gives rise to an immediate right of appeal under 10 C.F.R. § 2.341.

MEMORANDUM AND ORDER
(Denying BREDL's Motion to Reopen and Admit Contention 14)

Before the Board is a motion ("the Motion") by Blue Ridge Environmental Defense League ("BREDL" or "Petitioner") to reopen this proceeding and admit a new contention ("Contention 14") related to the August 23, 2011 earthquake in Mineral, Virginia.[1] The earthquake's epicenter was only 11 miles from the existing and proposed units at the North Anna Power Station operated by Virginia Electric and Power Company, d/b/a Dominion Virginia Power ("Dominion" or "Applicant").[2] Because Petitioner fails to satisfy the standard for admission of a new contention, the Board declines to admit Contention 14. BREDL's accompanying request to reopen the proceeding to admit the new contention is therefore moot. Thus, we need not consider whether the Motion satisfies the reopening standard of 10 C.F.R. § 2.326.

I. PROCEDURAL BACKGROUND

On September 22, 2011, BREDL submitted an earlier version of Contention 14 based upon the occurrence of the Virginia earthquake.[3] On October 20, 2011, the Board granted a motion to hold that contention in abeyance pending Applicant's assessment of the seismic analysis in its application in light of the earthquake.[4] On June 7, 2012, the Commission ruled that the proceeding should have been terminated prior to submission of BREDL's seismic contention and remanded to the Board "to exercise jurisdiction for the limited purpose of considering whether to reopen the record and admit BREDL's seismic contention."[5] On July 26, 2012, the Board ordered BREDL to submit any potential motion to reopen the proceeding for consideration of a new seismic contention within 60 days of Applicant's completion of its post-earthquake seismic assessment.[6] On January 6, 2014, Dominion notified the Board that it had completed its seismic assessment

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[1] *See* Motion to Reopen and Admit New Contention (Mar. 7, 2014) [hereinafter 2014 Motion].

[2] Dominion's Answer to BREDL's Motion to Reopen and Admit New Contentions (Apr. 1, 2014) at 4.

[3] Request to Admit Intervenor's New Contention (Sept. 22, 2011) at 1 [hereinafter 2011 Motion].

[4] Licensing Board Order (Granting Consent Motion to Hold BREDL's New Contention in Abeyance) (Oct. 20, 2011) at 2 (unpublished).

[5] CLI-12-14, 75 NRC 692, 702 (2012).

[6] Licensing Board Order (Setting Time for Filing Motion to Reopen the Proceeding) (July 26, 2012) at 2 (unpublished) [hereinafter Scheduling Order].

and included the results in its updated application.[7] BREDL subsequently filed the pending motion to reopen, along with an amended version of Contention 14, on March 7, 2014.[8]

Meanwhile, on July 9, 2012, BREDL filed a proposed new contention and accompanying motion to reopen concerning temporary storage and ultimate disposal of nuclear waste ("Waste Confidence Contention").[9] The proposed new contention was based on the D.C. Circuit's decision in *New York v. NRC.*[10] On August 7, 2012, the Commission directed that BREDL's Waste Confidence Contention (as well as similar contentions filed in numerous other proceedings) be held in abeyance pending further order from the Commission.[11] On September 25, 2012, the Commission reiterated that the fate of BREDL's Waste Confidence Contention must await the Commission's "ultimate direction."[12]

II. PETITIONER'S PROPOSED CONTENTION

BREDL seeks to admit a new contention asserting that, "Dominion-Virginia Power . . . has not presented a sound probabilistic basis for the magnitude of the possible adverse consequences and the likelihood of the occurrence of each consequence for issuing a license to construct and operate North Anna Unit 3."[13]

This is not the first time BREDL has sought admission of a contention relating to the seismicity of the North Anna site. In declining to admit Contention 2, the Board ruled that the seismic suitability of the North Anna site had been evaluated at the early site permit stage and that "further litigation of the geologic fault issue is foreclosed by section 52.39(a)(2)" of the regulations.[14] The Board later declined to admit Contention 13, which challenged Dominion's request for a site-specific exemption to certain seismic requirements claiming "that Dominion has acknowledged 'that the proposed Unit 3 cannot . . . meet the standards for safe shutdown during an earthquake.'"[15] The Board acknowledged that whether

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[7] Letter from David R. Lewis, Counsel for Dominion, to ASLBP (Jan. 6, 2014) at 1.

[8] 2014 Motion at 1-2.

[9] *See* Motion to Reopen the Record for North Anna Unit 3 and Intervenors' Motion for Leave to File a New Contention Concerning Temporary Storage and Ultimate Disposal of Nuclear Waste at North Anna Unit 3 (July 9, 2012).

[10] *New York v. NRC,* 681 F.3d 471 (D.C. Cir. 2012).

[11] *See Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 67-69 & n.10 (2012).

[12] CLI-12-17, 76 NRC 207, 212 (2012).

[13] *Id.* The wording of this contention is nearly identical to the contention filed by BREDL immediately after the earthquake in 2011. *See* 2011 Motion at 4.

[14] LBP-08-15, 68 NRC 294, 326-27 (2008).

[15] LBP-11-10, 73 NRC 424, 449 (2011).

Dominion's exemption request satisfied NRC's regulations was material to the licensing decision, but declined to admit the contention because BREDL had not provided any reason to believe that the exemption request was "improper" as it had claimed.[16]

III. LEGAL STANDARD

In the July 26, 2012 order, the Board indicated that, due to the Commission's ruling in CLI-12-14, any new contention:

> will need to meet each of the following requirements: Under subsection 2.326(a), the motion must be timely, must concern a significant environmental or safety issue, and must demonstrate the likelihood of a materially different result. Under subsection 2.326(b), the motion must be supported by an affidavit that separately addresses each of the 2.326(a) criteria. Because the contention relates to a matter not previously in controversy among the parties, under subsection 2.326(d) the motion must also satisfy the requirements of 10 C.F.R. § 2.309(c). Additionally, the underlying contention must meet the admissibility requirements of 10 C.F.R. § 2.309(f).[17]

The section 2.326 reopening standard requires that a motion be supported by affidavit and (1) be timely, (2) address a significant safety or environmental issue, and (3) demonstrate that a materially different result would have been likely if the evidence had been available.[18] The reopening standard sets a high bar.[19]

Even if a petitioner is able to satisfy the reopening standard, the petitioner must also show that its proposed new contention meets the standard for new or amended contentions in section 2.309(c)[20] and the underlying admissibility standards of section 2.309(f)(1).[21]

Section 2.309(c) requires that the filing be based upon information that (1) was not previously available, and (2) is materially different from information previously available, and (3) is timely filed.[22]

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[16] *Id.* at 452.

[17] Scheduling Order at 2-3.

[18] 10 C.F.R. § 2.326(a) and (b).

[19] LBP-11-22, 74 NRC 259, 269-70 (2011) (citing multiple Commission decisions detailing the heightened burden required of petitioners to satisfy the reopening standard).

[20] 10 C.F.R. § 2.326(d).

[21] *See Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 124 (2009); *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-21, 72 NRC 616, 643 (2010).

[22] 10 C.F.R. § 2.309(c).

Section 2.309(f)(1) requires, in relevant part, that a contention

> (i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
>
> (ii) Provide a brief explanation of the basis for the contention;
>
> (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
>
> (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
>
> (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; [and]
>
> (vi) In a proceeding other than one under 10 CFR 52.103, provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.[23]

Failure to comply with any of the section 2.309(f)(1) requirements renders a contention inadmissible.[24]

IV. ANALYSIS

Although Contention 14 was timely filed under section 2.309(c), it fails to satisfy the contention admissibility requirements of section 2.309(f)(1). Because that failure is sufficient to warrant denial of the Motion, the Board deems it unnecessary to consider whether the Motion would satisfy the reopening standard of section 2.326.

Contention 14 is based upon the August 23, 2011 earthquake in Mineral, Virginia. BREDL quotes a U.S. Geological Survey report on the 2011 earthquake stating that "Dominion has confirmed that the August 23, 2011 earthquake exceeded the spectral and peak ground accelerations for the Operating Basis and Design Basis earthquakes . . . for North Anna Units 1 and 2."[25] This information

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[23] 10 C.F.R. § 2.309(f).

[24] *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

[25] 2014 Motion at 10-11.

was not available before the earthquake occurred, and it is materially different from information previously available concerning earthquakes in the vicinity of the North Anna Plant. On September 22, 2011, BREDL submitted an earlier version of Contention 14[26] that was consistent with the Board's scheduling order.[27] Subsequently, after the parties agreed to hold the proposed new contention in abeyance until Dominion completed its post-earthquake seismic assessment, BREDL refiled proposed Contention 14 and its motion to reopen within 60 days of Dominion's completion of its seismic assessment, as permitted by the Board's July 26, 2012 Order.[28] The Board therefore concludes that Contention 14 is timely under section 2.309(c).

The Board nevertheless concludes that Contention 14 fails to satisfy the requirements of section 2.309(f)(1). The current motion largely reasserts the case made in BREDL's September 2011 motion, which the Board held in abeyance pending Dominion's completion of a post-earthquake seismic assessment. In seeking to meet the section 2.309(f)(1)(i) requirement to specifically state the issue raised, BREDL asserts, as it did in its initial motion, that 10 C.F.R. § 100.23 requires investigation of geological, seismological, and engineering characteristics of a site and that "[t]he August 23, 2011 earthquake is now, according to this rule, part of the 'nature' of the site which must be investigated."[29] BREDL further states that, pursuant to 10 C.F.R. § 52.47(a), "the North Anna Unit 3 [combined license application (COLA)] 'must contain a final safety analysis report (FSAR) that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components and of the facility as a whole.'"[30]

The Motion, however, makes no attempt to address whether Dominion's seismic assessment sufficiently investigated the earthquake and incorporated necessary changes into its COLA. Therefore, the Motion fails to state specifically the issue of law or fact that it seeks to litigate before the Board. While such an investigation may be necessary for regulatory compliance, Dominion notified the Board and the Parties on January 6, 2014, that it had completed a seismic assessment and revised its COLA.[31] BREDL does not challenge any part of the seismic analysis Dominion included in its COLA and FSAR. In fact, BREDL's only mention of Applicant's revised COLA states that "Applicant seeks depar-

[26] 2011 Motion at 1.

[27] *See* Licensing Board Order (Establishing Schedule to Govern Further Proceedings) (Sept. 10, 2008) at 2 (unpublished).

[28] Scheduling Order at 2.

[29] 2014 Motion at 4; *see also* 2011 Motion at 5.

[30] 2014 Motion at 5; *see also* 2011 Motion at 6.

[31] *See* Letter from David R. Lewis, Counsel for Dominion, to ASLBP (Jan. 6, 2014) at 1.

tures, exceptions and variances" from the NRC's design certification.[32] Assuming that BREDL intended to suggest that these exemption requests are "improper," as it did with Contention 13, the present motion again provides no reason to believe the requests are improper.[33] Merely requesting an exemption, as we have explained, is not sufficient to raise a litigable issue.[34] As such, BREDL fails to meet section 2.309(f)(1)(i)'s requirement to raise a specific issue of law or fact.

To meet the section 2.309(f)(1)(ii) requirement for a brief explanation of the basis for its contention, BREDL states only that new post-earthquake information "must be assessed and integrated into the FSAR, ER, FEIS and other required documents."[35] Again, BREDL's current motion does not address any of the additional analysis that Dominion has now included in its FSAR. Even if BREDL had raised a specific issue of fact or law under section 2.309(f)(1)(i), it has not provided any basis to support the contention, under section 2.309(f)(1)(ii), having failed to challenge any part of Dominion's updated COLA.

BREDL asserts generally that Contention 14 demonstrates that the issue raised is within the scope of the proceeding and material to the findings the NRC must make, as required by section 2.309(f)(1)(iii) and (iv).[36] BREDL claims that the NRC must establish conformity with the Atomic Energy Act and the National Environmental Policy Act, which require the NRC and applicants to show that proposed seismic specifications are satisfactory. We have already determined that BREDL failed to provide a specific statement of the issue to be raised. Here, again, BREDL's lack of specificity cannot support the admissibility of its contention.

To meet the section 2.309(f)(1)(v) requirement for a concise statement of facts and opinions that support its contention, BREDL refers to multiple studies that predate the 2011 earthquake along with one post-earthquake analysis of the impacts on Central Virginia, including on the North Anna site.[37] None of these studies point to any deficiency in the seismic analysis conducted by Dominion and incorporated into its FSAR. For instance, BREDL cites a 2011 article by M.V. Ramana that critiques the use of probabilistic risk assessments.[38] Whether or not Mr. Ramana has a valid point, his article predates the earthquake and does

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[32] 2014 Motion at 4; *see also* 2011 Motion at 11.

[33] *See supra* text accompanying note 12.

[34] *See* LBP-11-10, 73 NRC at 450-53.

[35] 2014 Motion at 5; *see also* 2011 Motion at 6.

[36] *See* 2014 Motion at 6-7; *see also* 2011 Motion at 6-8.

[37] *See* 2014 Motion at 8-9. The pre-earthquake studies cited by BREDL were included in its September 2011 motion. *See* 2011 Motion at 8-9.

[38] *See* 2014 Motion at 8-9.

not address the actual assessment conducted by Dominion — the focus of this license proceeding.[39]

At another point, BREDL points to a U.S. Geological Survey study of the 2011 earthquake.[40] The findings are significant: (1) little is known about the cause of earthquakes in Central Virginia; (2) future earthquakes greater than 5.8 magnitude are possible; (3) geologic mapping in the area is incomplete; and (4) "Dominion has confirmed that the August 23, 2011 earthquake exceeded the spectral and peak ground accelerations for the Operating Basis and Design Basis earthquakes . . . for North Anna Units 1 and 2."[41] These are important findings worthy of further study and analysis, but BREDL makes no claim about the degree to which Dominion has failed to adequately address each of these uncertainties in its revised COLA and FSAR.

Finally, BREDL has not shown that a genuine dispute exists as to a material issue of fact or law as required by section 2.309(f)(1)(vi). In attempting to do so, BREDL refers to its previous attempt to raise a contention related to Dominion's request for a site-specific exemption related to seismicity.[42] In that case, the Board declined to admit the contention because, though BREDL claimed the request was "improper," it did not state what was improper or inappropriate about it.[43] Here also, BREDL claims that Dominion must fully incorporate new information related to the 2011 earthquake into the COLA's seismic analysis but provides the Board no reason to believe that what Dominion has done is in any way improper or inappropriate. As the Board said then, "[t]his vague accusation does not rise to the level of an admissible genuine dispute of material fact or law under section 2.309(f)(1)(vi)."[44]

V. CONCLUSION

As a result of the deficiencies detailed above, we find Contention 14 inadmissible pursuant to 10 C.F.R. § 2.309(f)(1). Petitioner has not provided a specific statement of the issue of law or fact to be raised, has not pointed to any alleged facts or expert opinions that can lend support to its contention, and has not

[39] Additionally, BREDL asserts that it will rely on an expert's analysis without providing the specificity required for contention admissibility. *See* 2014 Motion at 9. This statement appears to be an attempt to satisfy the affidavit requirement in 10 C.F.R. § 2.326(b). While we do not fully analyze the reopening standard here, mere mention of the future filing of an affidavit does not satisfy this requirement.

[40] *See* 2014 Motion at 10-11.

[41] *See id.*

[42] *See id.* at 9-10.

[43] *See* LBP-11-10, 73 NRC at 452-53.

[44] *See id.* at 452.

provided sufficient information to show that a genuine dispute exists to warrant admission of the proposed contention. Given our ruling that Contention 14 is inadmissible, BREDL's accompanying request to reopen the proceeding to admit the new contention is moot. Thus, we need not consider whether the Motion satisfies the reopening standard of 10 C.F.R. § 2.326.

As mentioned earlier, BREDL's Waste Confidence Contention remains in abeyance pending further order from the Commission.[45] Absent that contention, an appeal of this Board ruling would likely be permitted under 10 C.F.R. § 2.341.[46] The Waste Confidence Contention's pendency, however, creates some uncertainty as to whether BREDL may now appeal the Board's ruling on proposed Contention 14, or whether it must await resolution of the waste confidence issue (either by a ruling declining to reopen the proceeding or to admit the contention, or by a decision resolving the contention on the merits).

The Commission recently held, in *Sequoyah,* that an appeal under 10 C.F.R. § 2.311 of a licensing board order holding various contentions inadmissible was premature because a waste confidence contention had been held in abeyance, and the Board had therefore not yet granted or denied the hearing request. The Commission stated that the "limited interlocutory appeal right [under section 2.311] attaches only when the Board has fully ruled on the initial intervention petition — that is, when it has admitted or rejected all proposed contentions."[47]

The present order, however, does not concern an initial intervention petition. The Commission instructed the Board "to exercise jurisdiction for the limited purpose of considering whether to reopen the record and admit BREDL's seismic contention."[48] In *Calvert Cliffs,* the Commission did not state that this Board would have jurisdiction to rule on BREDL's Waste Confidence Contention, when and if it becomes appropriate for decision.[49] Rather, the Commission retained authority to provide "ultimate direction"[50] on the contentions and recently confirmed that "the direction we provided in *Calvert Cliffs* remains in place."[51] In light of this Board's limited jurisdiction, we therefore conclude that the situation here is distinguishable from that in *Sequoyah,* and that BREDL may appeal our decision

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[45] *See Calvert Cliffs,* CLI-12-16, 76 NRC at 67-69 & n.10.

[46] *See Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4), CLI-12-7, 75 NRC 379, 385 (2012).

[47] *Tennessee Valley Authority* (Sequoyah Nuclear Plant, Units 1 and 2), CLI-14-3, 79 NRC 31, 36 (2014).

[48] CLI-12-14, 75 NRC at 702.

[49] *See generally Calvert Cliffs,* CLI-12-16, 76 NRC at 67-69 & n.10.

[50] CLI-12-17, 76 NRC at 212.

[51] *Sequoyah,* CLI-14-03, 79 NRC at 37.

immediately under 10 C.F.R. § 2.341.[52] An immediate appeal will also ensure that BREDL does not inadvertently sacrifice any right to appeal it may have.

Pursuant to the Commission's ruling in CLI-12-14, this proceeding remains terminated.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Ronald M. Spritzer, Chairman
ADMINISTRATIVE JUDGE

Dr. Richard F. Cole
ADMINISTRATIVE JUDGE

Dr. Alice C. Mignerey
ADMINISTRATIVE JUDGE

Rockville, Maryland
June 13, 2014

[52] Our views are intended to advise the parties regarding the potentially applicable appeal provisions. Our opinion does not bind the Commission, which will make its own decision whether an appeal may be filed at this juncture in the event such an appeal is filed. *Id.* at 37 n.33.

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Alaska Department of Transportation and Public Facilities, CLI-04-26, 60 NRC 399, 406 (2004)
concern that involves safety will not support standing in an enforcement proceeding if petitioner seeks merely a better settlement, i.e., one that promises greater improvements to safety than the settlement that was actually negotiated; LBP-14-4, 79 NRC 329 (2014)
no one can challenge an enforcement order as long as the order, in any way, improves the safety situation over what it was in the absence of the order; LBP-14-4, 79 NRC 359 (2014)

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nonparty petitioners may not challenge a confirmatory order embodying a settlement if the order improves the safety situation over what it was in the absence of the order; LBP-14-4, 79 NRC 321 (2014)

Alaska Department of Transportation and Public Facilities, CLI-04-26, 60 NRC 399, 406 n.28 (2004)
it is unlikely that petitioners will often obtain hearings on confirmatory enforcement orders; LBP-14-4, 79 NRC 321, 329 (2014)
NRC's notice of opportunity for hearing on a confirmatory order provides the public a safety valve because conceivably the order might remove a restriction upon a licensee or otherwise have the effect of worsening the safety situation; LBP-14-4, 79 NRC 321 (2014)
standing to challenge a confirmatory order exists only when a petitioner credibly alleges that a settlement somehow actually reduces safety; LBP-14-4, 79 NRC 329 (2014)

Alaska Department of Transportation and Public Facilities, CLI-04-26, 60 NRC 399, 407 (2004)
NRC's choice of sanctions is a matter of the Commission's sound discretion; LBP-14-4, 79 NRC 336 (2014)

Alaska Department of Transportation and Public Facilities, CLI-04-26, 60 NRC 399, 408 (2004)
petitioner is not adversely affected by a confirmatory order that improves the safety situation over what it was in the absence of the order; LBP-14-4, 79 NRC 359 (2014)
settlements may become illusory if licensees consent to confirmatory orders and are nonetheless subjected to formal proceedings, possibly leading to different or more severe enforcement actions; LBP-14-4, 79 NRC 333 (2014)
too freely allowing third parties to contest enforcement settlements at hearings would undercut NRC's policy favoring enforcement settlements; LBP-14-4, 79 NRC 333 (2014)

Alaska Department of Transportation and Public Facilities, CLI-04-26, 60 NRC 399, 408-409 (2004)
holding that "petitioner does not have standing is dispositive of this case and the board need not decide this issue" is dicta; LBP-14-4, 79 NRC 368 (2014)
to allow third parties to contest enforcement settlements at hearings would undercut NRC policy favoring enforcement settlements; LBP-14-4, 79 NRC 367 (2014)

Alaska Department of Transportation and Public Facilities, LBP-04-16, 60 NRC 99, *rev'd on other grounds,* CLI-04-26, 60 NRC 399 (2004)
section 2.309 criteria are applied when evaluating a third-party request for hearing on a confirmatory order; LBP-14-4, 79 NRC 327 n.40 (2014)

Alfred J. Morabito (Senior Operator License for Beaver Valley Power Station, Unit 1), LBP-88-16, 27 NRC 583 (1988)
senior reactor operator licenses shall be effective as of the date issued and shall be subject to the usual terms and conditions; LBP-14-2, 79 NRC 139 (2014)

All Operating Boiling Water Reactor Licensees with Mark I and Mark II Containments: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents, CLI-13-2, 77 NRC 39, 44 n.20 (2013)
section 2.311 does not provide for the filing of replies; CLI-14-3, 79 NRC 34 (2014)

Allied-General Nuclear Services (Barnwell Nuclear Fuel Plant Separation Facility), ALAB-296, 2 NRC 671, 680 (1975)
NRC Staff is obliged to lay all relevant materials before the board to enable it to adequately dispose of the issues before it; LBP-14-2, 79 NRC 243 (2014)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118 (2006)
contention admissibility rules are strict by design; LBP-14-4, 79 NRC 374 n.70 (2014)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006)
license applicant may take an appeal under section 2.311(d)(1) if it contends that, after considering all pending contentions, the board has erroneously granted a hearing to petitioner; CLI-14-3, 79 NRC 36 n.31 (2014)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-13, 67 NRC 396, 399 (2008)
section 2.342(e) standards are applied to motion to stay issuance of a license; CLI-14-6, 79 NRC 449 n.30 (2014)

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AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-13, 67 NRC 396, 399-400 (2008)
petitioner's request that the Commission defer a decision on the license renewal applications pending disposition of its forthcoming rulemaking and other potential events is premature and is therefore denied; CLI-14-6, 79 NRC 450 n.32 (2014)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 476 (2008)
Commission has inherent authority to supervise both NRC Staff's work and adjudicatory proceedings relating to license applications; CLI-14-1, 79 NRC 2 (2014)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 674-75 (2008)
interpretation of regulations, like interpretation of a statute, begins with the language and structure of the provisions, and the entirety of each provision must be given effect; LBP-14-7, 79 NRC 473 (2014)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 677 (2008)
filings not otherwise authorized by NRC rules are perrmitted only where necessity or fairness dictates; CLI-14-3, 79 NRC 35 (2014)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 263 (2009)
in context of a license renewal application, reasonable assurance is based on sound technical judgment of the particulars of a case and on compliance with NRC regulations; LBP-14-1, 79 NRC 52 (2014)
to meet the reasonable assurance standard, applicant must make a showing that meets the preponderance-of-the-evidence threshold of compliance with the applicable regulations; LBP-14-1, 79 NRC 52 (2014)

Andrew Siemaszko, CLI-06-16, 63 NRC 708, 714 n.3 (2006)
demands for a hearing by the subject of an enforcement order are automatic without regard to satisfying section 2.309; LBP-14-4, 79 NRC 326, 342 (2014)

Andrew Siemaszko, CLI-06-16, 63 NRC 708, 716 (2006)
discretionary intervention is allowed only if some other person has established standing but only in very extraordinary situations; LBP-14-4, 79 NRC 373 (2014)

Andrew Siemaszko, CLI-06-16, 63 NRC 708, 724 (2006)
both the Commission and licensing boards have continued to treat third-party requests for a hearing on an enforcement order as traditional petitions for intervention under Subpart C; LBP-14-4, 79 NRC 327 (2014)

Andrew Siemaszko, LBP-09-11, 70 NRC 151 (2009)
if an enforcement order blacklists a worker by name, under 10 C.F.R. 2.202(a)(3) he has the right to demand a hearing even though he may be motivated by purely economic concerns; LBP-14-4, 79 NRC 347 (2014)

Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991)
board decisions that have inferred additional bases for contentions beyond those supplied by the petitioner have been overturned; CLI-14-2, 79 NRC 28 (2014)

Atchison, Topeka & Santa Fe Railway Co. v. Wichita Board of Trade, 412 U.S. 800, 808 (1973)
whatever the ground for the agency's departure from prior norms, it must be clearly set forth so that the reviewing court may understand the basis of the agency's action; LBP-14-2, 79 NRC 150 n.87 (2014)

Bellotti v. NRC, 725 F.2d 1380 (D.C. Cir. 1983)
both standing (redressability) and contention admissibility (scope) in the context of an NRC enforcement order are addressed; LBP-14-4, 79 NRC 357 (2014)
whether licensee or other person consents to an enforcement order, other persons adversely affected by an order issued under section 2.202 will be offered an opportunity for a hearing consistent with current practice and the authority of the Commission to define the scope of the proceeding on an enforcement order; LBP-14-4, 79 NRC 326, 349 (2014)

Bellotti v. NRC, 725 F.2d 1380, 1381 (D.C. Cir. 1983)
Commission has the authority to set the scope of its own hearings; LBP-14-4, 79 NRC 341 n.5, 373 n.64 (2014)

court will examine a specific barrier to participation, in isolation, and generally conclude that it is not illegal; LBP-14-4, 79 NRC 374 (2014)

Bellotti v. NRC, 725 F.2d 1380, 1382 (D.C. Cir. 1983)
challenges to NRC enforcement orders are limited to whether the order should be sustained; LBP-14-4, 79 NRC 357 (2014)
NRC has the authority to define the scope of its proceedings and challenges to an enforcement order may only be made by an affected person who opposes issuance of the order; LBP-14-4, 79 NRC 357 (2014)

Bellotti v. NRC, 725 F.2d 1380, 1386 (D.C. Cir. 1983) (Wright, dissenting)
where a licensed and operating plant has been found unsafe, where the Commission has ordered some remedial amendment, and where the licensee has accepted that amendment, there is no public interest in the proceeding; LBP-14-4, 79 NRC 360 n.40 (2014)

Bennett v. Spear, 520 U.S. 154, 162 (1997)
in determining standing, boards should determine whether plaintiff's grievance arguably falls within the zone of interests protected or regulated by the statutory provision invoked in the suit; LBP-14-4, 79 NRC 355 (2014)

Bennett v. Spear, 520 U.S. 154, 175-76 (1997)
whether plaintiff's interest is arguably protected by the statute within the meaning of the zone-of-interests test is to be determined not by reference to the overall purpose of the act in question, but by reference to the particular provision of law upon which plaintiff relies; LBP-14-4, 79 NRC 355-56 (2014)

Bennett v. Spear, 520 U.S. 154, 176-77 (1997)
obvious purpose of the requirement that each agency use the best scientific and commercial data available is to ensure that a statute not be implemented haphazardly, on the basis of speculation or surmise; LBP-14-4, 79 NRC 356 (2014)
petitioners' claim that they are victims of an agency's mistake is plainly within the zone of interests that a statute protects; LBP-14-4, 79 NRC 356 (2014)

Block v. Community Nutrition Institute, 467 U.S. 340, 348 (1984)
standing is refused only when congressional intent specifically precludes the party or issue from obtaining judicial review; LBP-14-4, 79 NRC 355 n.36 (2014)

Boston Edison Co. (Pilgrim Nuclear Power Station), CLI-82-16, 16 NRC 44 (1982)
hearing on a confirmatory order is limited solely to whether, on the basis of matters set forth in the order, the order should be sustained; LBP-14-4, 79 NRC 341 (2014)

Boston Edison Co. (Pilgrim Nuclear Power Station), CLI-82-16, 16 NRC 44, 45-46 (1982)
challenges to NRC enforcement orders are limited to whether the order should be sustained; LBP-14-4, 79 NRC 357, 373 n.64 (2014)

Boston Edison Co. (Pilgrim Nuclear Power Station, Unit 2), LBP-76-7, 3 NRC 156, 157 (1976)
if a party fails to file an answer or pleading within the time prescribed in 10 C.F.R. Part 2 or as specified in the notice of hearing or pleading, to appear at a hearing or prehearing conference, to comply with any prehearing order entered by the presiding officer, or to comply with any discovery order entered by the presiding officer, the Commission or the presiding officer may make any orders in regard to the failure that are just; CLI-14-2, 79 NRC 14 n.10 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 914 (2009)
board rulings on standing are given substantial deference on appeal; CLI-14-2, 79 NRC 13 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009)
NRC has long applied contemporaneous judicial concepts of standing, requiring concrete and particularized injury that is fairly traceable to the challenged action and is likely to be redressed by a favorable decision, where the injury is to an interest arguably within the zone of interests protected by the governing statute; LBP-14-4, 79 NRC 353 (2014)
NRC is not strictly bound by judicial standing doctrines but has long applied contemporaneous judicial concepts of standing; LBP-14-4, 79 NRC 372 n.61 (2014)

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Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 917 (2009)
proximity presumption to establish standing is based on the finding that persons living within the roughly 50-mile radius of the facility face a realistic threat of harm if a release from the facility of radioactive material were to occur; LBP-14-4, 79 NRC 331-32 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 63-65 (2012)
the Commission responded to a series of petitions to suspend final licensing decisions in twenty-two reactor licensing proceedings; CLI-14-3, 79 NRC 33 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 66-67 (2012)
because waste confidence undergirds certain agency licensing decisions, the Commission held that NRC should not issue licenses affected by the Waste Confidence Decision until the remanded issues are resolved; CLI-14-3, 79 NRC 33 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 67 (2012)
NRC will not issue licenses dependent upon the Waste Confidence Decision or the Temporary Storage Rule until the District of Columbia Circuit's remand is appropriately addressed; LBP-14-3, 79 NRC 273 n.10 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 67-69 & n.10 (2012)
contention concerning temporary storage and ultimate disposal of nuclear waste was held in abeyance pending further order from the Commission; LBP-14-7, 79 NRC 454 n.1 (2014)
the Commission retained authority to provide ultimate direction on the waste confidence contentions being held in abeyance; LBP-14-8, 79 NRC 528 (2014)
waste confidence and similar contentions are held in abeyance pending further order from the Commission; LBP-14-8, 79 NRC 522 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 68-69 (2012)
as an exercise of its inherent supervisory authority over adjudications, the Commission directs that waste confidence contentions and any related contentions that may be filed in the near term be held in abeyance pending its further order; LBP-14-6, 79 NRC 410 (2014)
waste disposal contentions are to be held in abeyance pending further order of the Commission; CLI-14-3, 79 NRC 33-34 (2014); LBP-14-3, 79 NRC 273 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 69 n.11 (2012)
should the Commission determine at a future time that case-specific challenges to waste confidence are appropriate for consideration, normal procedural rules will apply; LBP-14-6, 79 NRC 410 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-12-19, 76 NRC 184, 187 (2012), *petition for review denied,* CLI-13-4, 77 NRC 101 (2013)
where a foreign entity proposed to own 100% of the entire facility, a negation action plan was of no consequence; LBP-14-3, 79 NRC 306-07 (2014)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-12-19, 76 NRC 184, 195-201 (2012), *petition for review denied,* CLI-13-4, 77 NRC 101 (2013)
there is generally no specific ownership percentage above which the NRC Staff would conclusively determine that an applicant is per se controlled by foreign interests, but a 100% foreign ownership has formed the basis for the licensing board's grant of summary disposition in favor of the intervenors; LBP-14-3, 79 NRC 280 n.56 (2014)

Charlissa C. Smith (Denial of Senior Reactor Operator License), LBP-13-3, 77 NRC 82, 90 (2013)
"demand" for a hearing is understood to confer a right to a hearing; LBP-14-4, 79 NRC 371 (2014)

Charlissa C. Smith (Denial of Senior Reactor Operator License), LBP-13-3, 77 NRC 82, 91 (2013)
one demanding a hearing on a challenge to an enforcement order need not comply with the section 2.309(f)(1) requirements; LBP-14-4, 79 NRC 342 n.7 (2014)

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Charlton v. Donley, 846 F. Supp. 2d 76, 85 (D.D.C. 2012)
in proving prejudicial error by a federal agency, it is sufficient that the agency's error may have affected the outcome; LBP-14-2, 79 NRC 166, 175 (2014)

Chevron v. Natural Resources Defense Council, Inc., 467 U.S. 837, 863-64 (1984)
NRC must consider varying interpretations and the wisdom of its policy on a continuing basis; LBP-14-4, 79 NRC 375 n.73 (2014)

Churchill County v. Norton, 276 F.3d 1060, 1076 (9th Cir. 2001)
connected actions are distinguished from cumulative impacts; LBP-14-6, 79 NRC 419-20 n.76 (2014)

Citizens Awareness Network, Inc. v. NRC, 59 F.3d 284, 291 (1st Cir. 1995)
to avoid a finding of arbitrary and capricious agency action, NRC Staff may not depart from its established policies, procedures, and practices without a reasonable explanation for the change; LBP-14-2, 79 NRC 150 n.87 (2014)

City of Oxford v. Federal Aviation Administration, 428 F.3d 1346, 1356 n.22 (11th Cir. 2005)
in context of cumulative impact analysis, regulations ask whether future actions are foreseeable, not whether they are interdependent; LBP-14-6, 79 NRC 421 (2014)
rather than being determinative, interdependence of proposed actions with potential future actions should be considered alongside other pertinent facts and circumstances to determine whether there is a sufficient likelihood that an action will occur to render that action foreseeable; LBP-14-6, 79 NRC 421 (2014)

City of West Chicago v. NRC, 701 F.2d 632, 650 (7th Cir. 1983)
failure to include all connected actions within the scope of the proposed action is generally referred to as segmentation; LBP-14-6, 79 NRC 421 (2014)
segmentation or piecemealing occurs when an action is divided into component parts, each involving action with less significant environmental effects; LBP-14-6, 79 NRC 421 (2014)

Clarke v. Securities Industry Ass'n, 479 U.S. 388, 396-97 (1987)
to be adversely affected or aggrieved within the meaning of a statute, plaintiff must establish that the injury complained of falls within the zone of interests sought to be protected by the statutory provision whose violation forms the legal basis for the complaint; LBP-14-4, 79 NRC 354 (2014)

Clarke v. Securities Industry Ass'n, 479 U.S. 388, 399 (1987)
NRC is to look to federal law in applying the zone-of-interests test; LBP-14-4, 79 NRC 353 (2014)
where plaintiff is not itself the subject of the contested regulatory action, the zone-of-interests test denies a right of review if plaintiff's interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot be assumed that Congress intended to permit the suit; LBP-14-4, 79 NRC 328 n.44, 354 (2014)
zone-of-interests test is not meant to be especially demanding, there being no indication of congressional purpose to benefit the would-be plaintiff; LBP-14-4, 79 NRC 355 (2014)

Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)
in determining standing, NRC asks whether an interest arguably within the zone of interests protected by the governing statute has been injured; LBP-14-4, 79 NRC 372 n.62 (2014)

Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Unit 1), LBP-95-17, 42 NRC 137, 145 (1995), *rev'd on other grounds,* CLI-96-13, 44 NRC 315 (1996)
where the meaning of a regulation is clear and obvious, the regulatory language is conclusive, and the board may not disregard the letter of the regulation, but rather must enforce the regulation as written; LBP-14-7, 79 NRC 473 (2014)

Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-802, 21 NRC 490, 492-93 (1985)
quality assurance programs must establish measures to ensure that conditions adverse to quality are promptly identified and corrected; LBP-14-7, 79 NRC 470 (2014)

Cohens v. State of Virginia, 19 U.S. 264, 399-400 (1821)
dicta ought not to control the judgment in a subsequent suit when the very point is presented for decision; LBP-14-4, 79 NRC 360 n.39 (2014)

Coliseum Square Ass'n, Inc. v. Jackson, 465 F.3d 215, 237-38 (5th Cir. 2006)
reasonable foreseeability test for cumulative impacts is applied; LBP-14-6, 79 NRC 421 (2014)

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Collins v. Shinseki, 2013 WL 6000535 at *6 (Vet. App. 2013)
- although public officials are afforded a presumption of regularity in the discharge of their duties, if facts before the board do not appear regular, then the presumption does not attach; LBP-14-2, 79 NRC 151 (2014)

Commonwealth Edison Co. (Zion Station, Units 1 and 2), 4 AEC 231, 233 (1969)
- if allegations are accurate that applicant is subject to foreign direction, it would be reasonable to expect that there would be manifestations of this in the corporate organization and management and that there would be recognition of such circumstances by those corporate officers who must furnish the Commission with the sworn information prescribed by 10 C.F.R. 50.33; LBP-14-3, 79 NRC 303 (2014)

Concrete Pipe & Products of California, Inc. v. Construction Laborers Pension Trust for Southern California, 508 U.S. 602, 622 (1993)
- preponderance-of-the-evidence standard requires the trier of fact to believe that the existence of a fact is more probable than its nonexistence; LBP-14-3, 79 NRC 278 (2014)

Consolidated Edison Co. of New York (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 129-30 (2001)
- any discretionary diversion from the usual Subpart M procedural track will be rare, requiring extraordinary and unusual circumstances, and all requests to date to provide a non-Subpart M hearing in a license transfer case have been denied; CLI-14-5, 79 NRC 260 n.31 (2014)

Consolidated Edison Co. of New York (Indian Point, Units 1, 2, and 3), CLI-77-2, 5 NRC 13, 15 (1977)
- NRC Staff is obliged to lay all relevant materials before the board to enable it to adequately dispose of the issues before it; LBP-14-2, 79 NRC 243 (2014)

Consumers Energy Co. (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007)
- to establish representational standing, union must show that the interests it seeks to protect are germane to its own purposes, identify by name and address at least one member who qualifies for standing in his or her own right, show that it is authorized by that member to request a hearing on his or her behalf, and show that neither the claim asserted nor the relief requested requires that member's participation in the proceeding in an individual capacity; LBP-14-4, 79 NRC 327-28 (2014)

Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-123, 6 AEC 331, 345 (1973)
- although applicant carries the burden of proof on safety issues, intervenors have the initial burden of going forward wth each contention and must provide sufficient evidence to support the claims made; LBP-14-1, 79 NRC 53 (2014)
- if intervenors provide sufficient evidence to support the claims made, applicant has the burden of demonstrating by a preponderance of the evidence that it has met the relevant NRC regulations and that the board should therefore reject each contention on the merits; LBP-14-1, 79 NRC 53 (2014)

Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-283, 2 NRC 11, 17 (1975)
- applicant carries the burden of proof on safety issues; LBP-14-1, 79 NRC 53 n.62 (2014)
- on safety issues, applicant has the burden of establishing that it is entitled to the applied-for license by a preponderance of the evidence; LBP-14-3, 79 NRC 278 (2014)

Consumers Power Co. (Palisades Nuclear Plant), CLI-82-18, 16 NRC 50 (1982)
- licensing board rejected union's claim to standing, but the appeal board under the rules then in effect permitted discretionary intervention and subsequently vacated both decisions, ruling that they should not be cited as precedent; LBP-14-4, 79 NRC 321-22 n.6 (2014)

Consumers Power Co. (Palisades Nuclear Plant), LBP-81-26, 14 NRC 247 (1981), *rev'd on other grounds,* ALAB-670, 15 NRC 493 (1982)
- licensing board rejected union's claim to standing, but the appeal board under the rules then in effect permitted discretionary intervention; LBP-14-4, 79 NRC 321-22 (2014)

Consumers Power Co. (Palisades Nuclear Plant), LBP-81-26, 14 NRC 247, 249 (1981)
- third-party requests for a hearing on an enforcement order have been treated as a petition for intervention under the Commission's generally applicable rules; LBP-14-4, 79 NRC 326-27 (2014)

Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 336 (2009)
- Commission defers to a board's contention admissibility rulings unless the appeal points to an error of law or abuse of discretion; CLI-14-2, 79 NRC 13-14 (2014)

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Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 351 (2009)
contention claiming that NRC Staff's consultation was inadequate does not ripen until issuance of the Staff's draft environmental review document; CLI-14-2, 79 NRC 20 n.49 (2014)

Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 365 & n.180 (2009)
following issuance of the board's final dispositive decision on contentions held in abeyance, and consistent with NRC procedural rules, applicant and intervenor will have the opportunity to appeal the board's decisions; CLI-14-3, 79 NRC 37 (2014)

Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), LBP-08-24, 68 NRC 691, 714 (2008), *aff'd in part, rev'd in part,* CLI-09-9, 69 NRC 331 (2009)
board based tribe's standing on the presence onsite of cultural resources that could be harmed as a result of mining activities; CLI-14-2, 79 NRC 14 (2014)
federal law not only recognizes that Native American tribes have a protected interest in cultural resources found on their aboriginal land, but as well has imposed on federal agencies a consultation requirement under the National Historic Preservation Act to ensure the protection of tribal interests in cultural resources; CLI-14-2, 79 NRC 14 (2014)

Crow Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 543 (2009)
board rulings on standing are given substantial deference on appeal; CLI-14-2, 79 NRC 13-14 (2014)
Commission defers to a board's contention admissibility rulings unless the appeal points to an error of law or abuse of discretion; CLI-14-2, 79 NRC 13-14 (2014)

Crow Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 559 (2009)
confinement of aquifers is material to the environmental impacts of the licensing action; CLI-14-2, 79 NRC 26 (2014)

Curators of the University of Missouri, CLI-95-1, 41 NRC 71, 98 (1995)
standard review plan does not in itself impose requirements on an applicant but provides guidance to NRC Staff in reviewing an application; CLI-14-2, 79 NRC 23 n.70 (2014)

David Geisen, LBP-09-24, 70 NRC 676 (2009)
if an enforcement order blacklists a worker by name, under 10 C.F.R. 2.202(a)(3) he has the right to demand a hearing even though he may be motivated by purely economic concerns; LBP-14-4, 79 NRC 347 (2014)

Davis v. Mineta, 302 F.3d 1104, 1121-22 (10th Cir. 2002)
agency's decision to issue a finding of no significant impact rather than prepare an environmental impact statement was arbitrary because the agency had obligated itself contractually to issue a FONSI before it conducted an environmental assessment; LBP-14-6, 79 NRC 425 n.112 (2014)
failure of decision underlying the Clean Water Act § 404 permit to analyze the cumulative impacts reasonably foreseeable from the expected addition of a second generation unit at the plant is one of the most egregious shortfalls of the environental assessment; LBP-14-6, 79 NRC 422 (2014)

Davis v. Mineta, 302 F.3d 1104, 1125 (10th Cir. 2002)
reliance on mitigation is justified if the proposed mitigation underlying the finding of no significant impact must be more than a possibility in that it is imposed by statute or regulation or has been so integrated into the initial proposal that it is impossible to define the proposal without mitigation; LBP-14-7, 79 NRC 461 (2014)

Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), LBP-12-23, 76 NRC 445, 470-71 (2012)
board may construe an admitted contention contesting the environmental report as a challenge to a subsequently issued draft environmental impact statement or final EIS without the necessity for intervenors to file a new or amended contention; LBP-14-5, 79 NRC 383 n.29 (2014)

Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), LBP-12-23, 76 NRC 445, 471 (2012)
migration tenet applies where information in the draft environmental impact statement is sufficiently similar to information in the environmental report; LBP-14-6, 79 NRC 416-17 n.67 (2014)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003)
contention admissibility rules are strict by design; LBP-14-4, 79 NRC 374 n.70 (2014)

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Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-08-17, 68 NRC 231, 233 (2008)
contention admissibility rules are strict by design; LBP-14-4, 79 NRC 374 n.70 (2014)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 120 (2009)
NRC rules do not contemplate motions filed as placeholders for a further motion to be filed later; CLI-14-6, 79 NRC 449 (2014)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 124 (2009)
petitioner who satisfies the reopening standard must also show that its proposed new contention meets the standard for new or amended contentions in section 2.309(c) and the underlying admissibility standards of section 2.309(f)(1); LBP-14-8, 79 NRC 523 (2014)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001)
contention admissibility rules are strict by design; LBP-14-4, 79 NRC 374 n.70 (2014)

Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 411 (2001)
licensing of the MOX facility has been governed by a two-part licensing process designed specifically for it; LBP-14-1, 79 NRC 124 (2014)

Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-04-9, 59 NRC 286, 293-95 (2004)
at the Construction Authorization Request stage, the board dismissed a material control and accounting contention as moot, pending submittal of applicant's Fundamental Nuclear Material Control Plan which would require inclusion of a detailed MC&A program; LBP-14-1, 79 NRC 45 (2014)

Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 NRC 431, 439 (2008)
in the standing analysis, boards construe the petition in favor of the petitioner; CLI-14-2, 79 NRC 19 n.45 (2014)

Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 74 (2004)
boards lack authority to order NRC Staff to bring licensee employees into settlement negotiations; LBP-14-4, 79 NRC 369 (2014)

Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-11, 59 NRC 203, 205-07 (2004)
limited interlocutory appeal right attaches only when the board has fully ruled on the initial intervention petition, that is, when it has admitted or rejected all proposed contentions; CLI-14-3, 79 NRC 36 n.30 (2014)

Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-11, 59 NRC 203, 208 (2004)
for a hearing petitioner to take an appeal pursuant to section 2.311(c), petitioner must claim that, after considering all pending contentions, the board has erroneously denied a hearing; CLI-14-3, 79 NRC 36 n.31 (2014)
license applicant may take an appeal under 2.311(d)(1) if it contends that, after considering all pending contentions, the board has erroneously granted a hearing to the petitioner; CLI-14-3, 79 NRC 36 n.31 (2014)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 391 (2001)
request for a protective stay to hold the proceeding in abeyance indefinitely pending potential future events is inconsistent with NRC's longstanding interest in sound case management and regulatory finality and would be unfair to the other parties; CLI-14-6, 79 NRC 448-49 (2014)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 292 (2002)
contention questioning whether future anticipated use of MOX fuel is sufficiently definite to constitute a proposal under the law, with a connection, cumulative impact, interdependence, or similar relationship to matters at issue in a license renewal proceeding to warrant being addressed in the supplemental environmental impact statement is admissible; LBP-14-6, 79 NRC 417 (2014)

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Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 292-93 (2002)
nothing in NRC case law or regulations suggests that license renewal is an occasion for far-reaching speculation about unimplemented and uncertain plans; LBP-14-6, 79 NRC 417 (2014)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 294 (2002)
to establish that cumulative impacts must be addressed, petitioner must first show that any proposal applicant has made is so interdependent with the application at issue that it would be unwise or irrational to complete one without the other; LBP-14-6, 79 NRC 419, 422 (2014)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 294-95 (2002)
to bring NEPA into play, a possible future action must at least constitute a proposal pending before the agency (i.e., ripeness), and must be in some way interrelated with the action that the agency is actively considering (i.e., nexus); LBP-14-6, 79 NRC 440 (2014)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 295 (2002)
possible future action must at least constitute a proposal pending before the agency to be ripe for adjudication, and to establish that cumulative impacts of the action must be addressed, petitioner must first show that any proposal applicant has made is so interdependent with the application at issue that it would be unwise or irrational to complete one without the other; LBP-14-6, 79 NRC 414 (2014)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382 (2002)
although a contention contesting applicant's environmental report generally may be viewed as a challenge to the NRC Staff's subsequent draft environmental impact statement, new claims must be raised in a new or amended contention; LBP-14-5, 79 NRC 383-84 & n.32 (2014)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382-83 (2002)
there is a difference between contentions that merely allege an omission of information and those that challenge substantively and specifically how particular information has been discussed in a license application; LBP-14-5, 79 NRC 384 n.34 (2014)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 383 (2002)
contention of omission that has been admitted may be rendered moot by subsequent license-related documents filed by NRC Staff that address the alleged omission; LBP-14-5, 79 NRC 384-85 & n.35 (2014)
if a motion for summary disposition is granted, then the party that filed the original contention of omission must file a new or amended contention if it wishes to challenge the adequacy or sufficiency of the NRC Staff's treatment of the relevant issue; LBP-14-5, 79 NRC 385 (2014)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 383 n.45 (2002)
based on its language, a contention can be characterized as a contention of omission, a contention of adequacy, or both; LBP-14-5, 79 NRC 384 (2014)

Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999)
dispute at issue is material if its resolution would make a difference in the outcome of the licensing proceeding; CLI-14-2, 79 NRC 30 (2014)

Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 335 (1999)
factual basis requirement for contention admission is intended to preclude contentions from being admitted where an intervenor has no facts to support its position and instead contemplates using discovery or cross-examination as a fishing expedition that might produce relevant supporting facts; LBP-14-6, 79 NRC 442 (2014)

Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1048 (1983)
applicant carries the burden of proof on safety issues; LBP-14-1, 79 NRC 52-53 n.62 (2014)

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Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983)
NRC, not applicant, bears the ultimate burden of establishing compliance with NEPA; LBP-14-7, 79 NRC 458-59 (2014)
on safety issues, applicant has the burden of establishing that it is entitled to the applied-for license by a preponderance of the evidence; LBP-14-3, 79 NRC 278 (2014)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-07-2, 65 NRC 10, 11 (2007)
license applicant may take an appeal under 2.311(d)(1) if it contends that, after considering all pending contentions, the board has erroneously granted a hearing to petitioner; CLI-14-3, 79 NRC 36 n.31 (2014)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-09-10, 69 NRC 521, 527-28 (2009)
Commission is not inclined to issue a protective stay based on petitioner's bare assertion that it intends to file a petition for rulemaking at some unknown time in the future; CLI-14-6, 79 NRC 449 n.28 (2014)
results of judicial review of rulemaking petition denial would be implemented in a meaningful way where petitioner had timely taken every conceivable procedural step to ensure that the ultimate outcome of its rulemaking petition would inform the NEPA analysis of the licensing proceedings; CLI-14-6, 79 NRC 449 (2014)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 476-77 (2010)
only those NRC-regulated facilities located within the Ninth Circuit's jurisdictional boundaries are required to conduct environmental analyses of possible terrorist acts; LBP-14-6, 79 NRC 428 (2014)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-12-6, 75 NRC 352, 360 n.36 (2012)
section 2.311 does not provide for the filing of replies; CLI-14-3, 79 NRC 34 (2014)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-12-6, 75 NRC 352, 373 (2012)
when considering stays or other forms of temporary injunctive relief, the Commission has applied the stay factors outlined in 10 C.F.R. 2.342(e), which restate commonplace principles of equity; CLI-14-6, 79 NRC 449 (2014)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-12-6, 75 NRC 352, 374 n.138 (2012)
because applicant has not shown that it could not have addressed issues in its appeal, nor has presented genuinely new information in its reply, neither necessity nor fairness dictates that its reply should be permitted; CLI-14-3, 79 NRC 35 (2014)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-12-15, 75 NRC 704, 714 (2012)
petitioner, rather than the licensing board, bears the burden of establishing the admissibility of proffered contentions; CLI-14-2, 79 NRC 28 (2014)

Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-11-14, 74 NRC 801, 807 (2011)
filings not otherwise authorized by NRC rules are perrmitted only where necessity or fairness dictates; CLI-14-3, 79 NRC 35 (2014)

Entergy Nuclear Operations, Inc. (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 260 (2008)
absent an obvious potential for harm, to obtain standing, it is petitioner's burden to show how harm will or may occur; LBP-14-4, 79 NRC 332 (2014)

Entergy Nuclear Operations, Inc. (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 266 (2008)
union's organizational standing argument was rejected in an indirect license transfer proceeding initiated before the Commission because it was merely the Local's representational standing argument dressed up in different clothes; LBP-14-4, 79 NRC 332 n.69 (2014)

Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237 (2006)
merely raising the specter of a nuclear accident does not demonstrate irreparable harm; CLI-14-4, 79 NRC 253 (2014)

Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237 n.4 (2008)
when considering stays or other forms of temporary injunctive relief, the Commission has applied the stay factors outlined in 10 C.F.R. 2.342(e), which restate commonplace principles of equity; CLI-14-6, 79 NRC 449 n.30 (2014)

Envirocare of Utah, Inc. v. NRC, 194 F.3d 72, 74 (D.C. Cir. 1999)
NRC sometimes imposes standing requirements more stringent than those imposed in federal court; LBP-14-4, 79 NRC 375 n.75 (2014)

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Envirocare of Utah, Inc. (Byproduct Waste Disposal), LBP-92-8, 35 NRC 167, 174 (1992)
economic injuries suffered by ratepayers are not particularized or distinct to the extent required to support standing, but are instead generalized and shared by a large class; LBP-14-4, 79 NRC 352 (2014)

Evans v. Perry, 944 F. Supp. 25, 29 (D.D.C. 1996)
in proving prejudicial error by a federal agency, it is sufficient that the agency's error may have affected the outcome; LBP-14-2, 79 NRC 166 (2014)

Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-04-31, 60 NRC 461 (2004)
because the board granted a hearing request, its decision to reject some contentions may not be appealed until the end of the case; CLI-14-2, 79 NRC 13 n.3 (2014)

Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-04-31, 60 NRC 461, 468 (2004)
license applicant may take an appeal under 2.311(d)(1) if it contends that, after considering all pending contentions, the board has erroneously granted a hearing to the petitioner; CLI-14-3, 79 NRC 36 n.31 (2014)

Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808 (2005)
contention admissibility rules are strict by design; LBP-14-4, 79 NRC 374 n.70 (2014)

Exxon Nuclear Co. (Nuclear Fuel Recovery and Recycling Center), ALAB-447, 6 NRC 873, 878 (1977)), *aff'd,* CLI-06-14, 63 NRC 510 (2006)
licensing boards should not interpret regulatory text in a way that would essentially negate the stated purpose of the regulation or impute to the Commission an intent to create a schizophrenic rule; LBP-14-7, 79 NRC 475-76 (2014)

Fansteel, Inc. (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003)
contentions will be ruled inadmissible if petitioner has offered no tangible information, no experts, no substantive affidavits, but instead only bare assertions and speculation; LBP-14-6, 79 NRC 442 (2014)

FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), CLI-04-23, 60 NRC 154, 157-58 (2004)
sections 2.309(d) and (f) are the relevant legal standards when evaluating a third-party petition for hearing on a confirmatory order; LBP-14-4, 79 NRC 327 n.40 (2014)

Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Unit 2), CLI-80-41, 12 NRC 650, 652 (1980)
Commission authority to reconsider or clarify a decision, if needed, is inherent in its authority to render the decision in the first instance; CLI-14-1, 79 NRC 2 (2014)

Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989)
individual member who qualifies an organization for standing must have suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action, likely redressable by a favorable decision, and arguably within the zone of interests protected by the governing statute; LBP-14-4, 79 NRC 328 (2014)

Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), LBP-08-14, 68 NRC 279, 290-92 (2008)
third-party request for a hearing on a confirmatory order was denied, in part, because petitioner failed to establish standing or raise an admissible contention under section 2.309(f); LBP-14-4, 79 NRC 327 n.40 (2014)

Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), DD-82-2, 15 NRC 1343, 1345 (1982)
section 2.802(d) suspension request is inapplicable where no petition for rulemaking has been filed before the Commission; CLI-14-6, 79 NRC 449 (2014)

Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 199-200 (2011)
based on its language, a contention can be characterized as a contention of omission, a contention of adequacy, or both; LBP-14-5, 79 NRC 384 (2014)

Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 200 (2011)
two primary types of contentions are contentions of omission and contentions of adequacy; LBP-14-5, 79 NRC 384 (2014)

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Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 200 n.53 (2011)
contention of omission alleges an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues have been discussed in the application; LBP-14-5, 79 NRC 384 (2014)

Fort Stewart Schools v. Federal Labor Relations Authority, 495 U.S. 641, 654 (1990)
agencies must abide by their own regulations; LBP-14-4, 79 NRC 371 n.56 (2014)

Frank J. Calabrese Jr. (Denial of Senior Reactor Operator License), LBP-97-16, 46 NRC 66, 68-69 (1997)
licensing boards have limited their review of NRC Staff reactor operator licensing decisions to those issues that were resolved against the license applicant in NRC Staff's informal review; LBP-14-2, 79 NRC 148 (2014)

Frank J. Calabrese Jr. (Denial of Senior Reactor Operator License), LBP-97-16, 46 NRC 66, 86 (1997)
in assessing whether applicant satisfies the burden of establishing that NRC Staff's determination of applicant's performance was inappropriate, unjustified, arbitrary, or an abuse of discretion, the board should consult NUREG-1021; LBP-14-2, 79 NRC 150 (2014)
NRC Staff improperly discharges its duties with respect to the grading of an operating test if the grading is inappropriate or unjustified or if the grading strays too far afield of the twin goals of equitable and consistent examination administration, thus becoming arbitrary or an abuse of discretion; LBP-14-2, 79 NRC 150 (2014)

Frank J. Calabrese Jr. (Denial of Senior Reactor Operator License), LBP-97-16, 46 NRC 66, 89 (1997)
applicants may prevail against NRC Staff if they prove that a particular contested assessment of a deficiency was arbitrary or an abuse of discretion; LBP-14-2, 79 NRC 150 (2014)

Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc., 528 U.S. 167, 183-85 (2000)
injury-in-fact can result when the risk of encountering environmental harms prevents a plaintiff from taking an action; LBP-14-4, 79 NRC 351 n.28 (2014)

General Electric Co. and Southwest Atomic Energy Associates, 3 AEC 99, 101 (1966)
in context with the other provisions of the Atomic Energy Act § 104d, the foreign control limitation should be given an orientation toward safeguarding the national defense and security; LBP-14-3, 79 NRC 280, 307 (2014)
intent of Congress in the Atomic Energy Act is to prohibit relationships where an alien has the power to direct the actions of the licensee; LBP-14-3, 79 NRC 280 (2014)
"owned, controlled, or dominated" in the Atomic Energy Act refers to relationships in which the will of one party is subjugated to the will of another; LBP-14-3, 79 NRC 280 (2014)
to be inimical to the common defense and security or to the health and safety of the public, control or domination must be of such a degree that the will of the licensee is subjugated to the will of the foreign entity, and the foreign entity must have the power to direct the actions of the licensee; LBP-14-3, 79 NRC 307 n.250 (2014)

Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995)
in the standing analysis, boards construe the petition in favor of petitioner; CLI-14-2, 79 NRC 19 n.45 (2014)
individual member who qualifies an organization for standing must have suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action and the injury is likely redressable by a favorable decision; LBP-14-4, 79 NRC 328 (2014)
to evaluate a petitioner's standing, boards construe the petition in favor of petitioner; LBP-14-4, 79 NRC 361 (2014)

GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000)
contentions will be ruled inadmissible if petitioner has offered no tangible information, no experts, no substantive affidavits, but instead only bare assertions and speculation; LBP-14-6, 79 NRC 442 (2014)

Graystar, Inc. (Suite 103, 200 Valley Road, Mt. Arlington, NJ 07856), LBP-01-7, 53 NRC 168, 187 (2001)
interpretation may not conflict with the plain meaning of the wording used in a regulation, which in the end of course must prevail; LBP-14-7, 79 NRC 474 (2014)

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Greenpeace Action v. Franklin, 14 F.3d 1324, 1332 (9th Cir. 1992)
there must be some assurance that mitigation measures constitute an adequate buffer against the negative impacts that result from the authorized activity to render such impacts so minor as to not warrant an environmental impact statement; LBP-14-7, 79 NRC 461 (2014)

Hazardous Waste Treatment Council v. Environmental Protection Agency, 861 F.2d 277, 281-82 (D.C. Cir 1988)
for constitutional standing, plaintiff must allege personal injury fairly traceable to the defendant's allegedly unlawful conduct and likely to be redressed by the requested relief; LBP-14-4, 79 NRC 350 n.27 (2014)
for prudential standing, plaintiff usually must show, in addition to constituional standing requirements, that the interest sought to be protected by complainant is arguably within the zone of interests to be protected or regulated by the statute; LBP-14-4, 79 NRC 350 n.27 (2014)

Hein v. Freedom from Religion Foundation, 551 U.S. 587, 599 (2007)
taxpayer interest is too generalized and attenuated to support Article III standing; LBP-14-4, 79 NRC 353 n.35 (2014)

Howard R.L. Cook & Tommy Shaw Foundation ex rel. Black Employees of the Library of Congress, Inc. v. Billington, 737 F.3d 767, 771 (D.C. Cir. 2013)
zone-of-interests requirement poses a low bar; LBP-14-4, 79 NRC 355 (2014)

Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuqerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999)
new contention must present a seriously different picture of the environmental impact of the proposed project; LBP-14-5, 79 NRC 399 (2014)

Hydro Resources, Inc. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 71 (2001)
flyspecking of environmental documents is inappropriate for environmental contentions; CLI-14-2, 79 NRC 30 (2014)

Hydro Resources, Inc. (P.O. Box 777, Crownpoint, NM 87313), CLI-06-29, 64 NRC 417, 422 & n.23 (2006)
cumulative impact analysis is required for reasonably foreseeable future actions and test for connected actions in CEQ regulation 40 C.F.R. 1508.25 need not be satisfied; LBP-14-6, 79 NRC 423 (2014)

Hydro Resources, Inc. (P.O. Box 777, Crownpoint, NM 87313), LBP-06-1, 63 NRC 41, 68-69 (2006)
licensing boards should not interpret regulatory text in a way that would essentially negate the stated purpose of the regulation or impute to the Commission an intent to create a schizophrenic rule; LBP-14-7, 79 NRC 475-76 (2014)

International Uranium (USA) Corp., CLI-00-1, 51 NRC 9, 19 (2000)
guidance documents describe particular means of satisfying regulatory requirements in ways acceptable to NRC Staff, but do not bind applicants, who remain free to choose different means; LBP-14-1, 79 NRC 53 (2014)
guidance documents do not bind the board, and so applicant's compliance with guidance does not ensure grant of a license; LBP-14-1, 79 NRC 53 n.67 (2014)

Jacobson v. Massachusetts, 197 U.S. 11, 30 (1905)
to determineh whether the record facts before it established the position being advocated, the court looked beyond the record by indicating that what everybody knows, the court must know; LBP-14-1, 79 NRC 125 (2014)

Jicarilla Apache Nation v. U.S. Department of the Interior, 613 F.3d 1112, 1121 (D.C. Cir. 2010)
burden of proving prejudicial error by a federal agency rests with the party challenging the agency's action, but this is not a particularly onerous requirement; LBP-14-2, 79 NRC 166 (2014)
if the agency error did not affect the outcome, it did not prejudice the petitioner; LBP-14-2, 79 NRC 166 (2014)

Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1078 (9th Cir. 2002)
given that so many more environmental assessments are prepared than environmental impact statements, adequate consideration of cumulative effects requires that EAs address them fully; LBP-14-6, 79 NRC 425 (2014)
restricted environmental analysis that fails to consider cumulative impacts would impermissibly subject the decisionmaking process contemplated by NEPA to the tyranny of small decisions; LBP-14-6, 79 NRC 425 (2014)

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Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1079 (9th Cir. 2002)
if actions are reasonably foreseeable future actions within the meaning of 40 C.F.R. 1508.7, CEQ regulations require that they be included in a cumulative impact analysis; LBP-14-6, 79 NRC 421, 422 (2014)

Laborers Health & Welfare Trust Fund v. Advanced Lightweight Concrete Co., 484 U.S. 539 (1988)
National Labor Relations Board is the agency equipped to handle alleged violations of the National Labor Relations Act, including collective bargaining disputes; LBP-14-4, 79 NRC 331 n.65 (2014)

Laguna Greenbelt, Inc. v. U.S. Department of Transportation, 42 F.3d 517, 528 (9th Cir. 1994)
NEPA does not require a fully developed plan that will mitigate all environmental harm before an agency can act, only that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fully evaluated; LBP-14-7, 79 NRC 460 (2014)

Local No. 93, International Association of Firefighters v. Cleveland, 478 U.S. 501, 529 (1986)
parties who choose to resolve litigation through settlement may not dispose of the claims of a third party and may not impose duties or obligations on a third party without that party's agreement; LBP-14-4, 79 NRC 368 (2014)

Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-156, 6 AEC 831, 836 (1973)
NEPA's hard-look requirement is tempered by a rule of reason that requires agencies to address only impacts that are reasonably foreseeable, not those that are remote and speculative; LBP-14-7, 79 NRC 460 (2014)

Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 288, 290, *review declined,* CLI-88-11, 28 NRC 603 (1988)
interpretation may not conflict with the plain meaning of the wording used in a regulation, which in the end of course must prevail; LBP-14-7, 79 NRC 474 (2014)

Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-97-15, 46 NRC 294, 299 (1997)
interpretation of regulations, like interpretation of a statute, begins with the language and structure of the provisions, and the entirety of each provision must be given effect; LBP-14-7, 79 NRC 473 (2014)

Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 84 (1998)
admitted contentions challenging applicant's environmental report may, in appropriate circumstances, function as challenges to similar portions of NRC Staff's environmental impact statement; LBP-14-5, 79 NRC 383 (2014)
NRC Staff's issuance of an environmental assessment under NEPA does not necessarily moot contentions challenging an applicant's environmental report; LBP-14-6, 79 NRC 416 n.67 (2014)

Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998)
under NEPA, NRC is required to take a hard look at the environmental impacts of a proposed action; LBP-14-7, 79 NRC 460 (2014)

Louisiana Energy Services, L.P. (Claiborne Enrichment Center), LBP-96-25, 44 NRC 331, 339 (1996)
although environmental contentions ultimately challenge the NRC's compliance with NEPA, applicant is free to support positions set forth in the environmental impact statement that are under challenge; LBP-14-7, 79 NRC 459 (2014)

Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 224-25 (2004)
there simply would be no end to NRC licensing proceedings if petitioners could disregard timeliness requirements; LBP-14-4, 79 NRC 373 n.67 (2014)

Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-06-22, 64 NRC 37, 49 n.48 (2006)
governmental officials, acting in their official capacities, are presumed to have properly discharged their duties and, to rebut this presumption, petitioner's burden of proof involves presentation of clear evidence to the contrary; LBP-14-2, 79 NRC 150 (2014)

Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1091 n.18 (1983)
NRC Staff is obliged to lay all relevant materials before the board to enable it to adequately dispose of the issues before it; LBP-14-2, 79 NRC 243 (2014)

Lujan v. Defenders of Wildlife, 504 U.S. 555, 560-61 (1992)
judicial concepts of standing require that petitioner allege injury-in-fact, a causal connection, and redressability; LBP-14-4, 79 NRC 350-51 (2014)

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Lujan v. National Wildlife Federation, 497 U.S. 871, 883 (1990)
to be adversely affected or aggrieved within the meaning of a statute, plaintiff must establish that the injury complained of falls within the zone of interests sought to be protected by the statutory provision whose violation forms the legal basis for the complaint; LBP-14-4, 79 NRC 354 (2014)

Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), CLI-12-7, 75 NRC 379, 385 (2012)
waste confidence contention's pendency creates some uncertainty as to whether petitioner may appeal the board's ruling on a proposed contention, or whether it must await resolution of the waste confidence issue; LBP-14-8, 79 NRC 528 (2014)

Massachusetts v. Environmental Protection Agency, 549 U.S. 497, 520-23 (2007)
risk of future harm as an injury must be both actual and imminent; LBP-14-4, 79 NRC 351 n.28 (2014)

McIntyre-Handy v. West Telemarketing Corp., 97 F. Supp. 2d 718, 727 (E.D. Va. 2000)
public officials are afforded a presumption of regularity in the discharge of their duties; LBP-14-2, 79 NRC 151 (2014)

Meredith v. Fair, 305 F.2d 343, 344-45 (5th Cir. 1962)
to determineh whether the record facts before it established the position being advocated, the court looked beyond the record by indicating that what everybody knows, the court must know; LBP-14-1, 79 NRC 125 (2014)

Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), ALAB-738, 18 NRC 177, 197 n.39 (1983), *rev'd in part on other grounds,* CLI-85-2, 21 NRC 282 (1985)
all parties, including NRC Staff, are obligated to bring any significant new information to the board's attention; LBP-14-2, 79 NRC 243 (2014)

Michel A. Philippon (Denial of Senior Operator License Application), CLI-00-3, 51 NRC 82, 85 (2000)
NRC Staff cannot defend its decision on a basis inconsistent with its own informal review; LBP-14-2, 79 NRC 148 (2014)

Michel A. Philippon (Denial of Senior Operator License Application), LBP-99-44, 50 NRC 347, 358 (1999), *rev'd on other grounds,* CLI-00-3, 51 NRC 82 (2000)
applicants may prevail against NRC Staff if they prove that a particular contested assessment of a deficiency was inappropriate or unjustified; LBP-14-2, 79 NRC 150 (2014)

Michel A. Philippon (Denial of Senior Operator License Application), LBP-99-44, 50 NRC 347, 377 (1999), *rev'd on other grounds,* CLI-00-3, 51 NRC 82 (2000)
NRC Staff's decision at the conclusion of its administrative reviews is the final Staff position and hence the only Staff position open to applicant to challenge before the presiding officer; LBP-14-2, 79 NRC 148 (2014)
silence is not a confession of error, nor can there be an implied confession of error; LBP-14-2, 79 NRC 149 n.75 (2014)

Michel A. Philippon (Denial of Senior Operator License Application), LBP-99-44, 50 NRC 347, 378 (1999), *rev'd on other grounds,* CLI-00-3, 51 NRC 82 (2000)
although NRC Staff is free to carry on internecine warfare, it is not free to wage it in an adjudicatory proceeding where all elements of the NRC Staff appear as a single party; LBP-14-2, 79 NRC 149 n.77 (2014)
NRC Staff may not take a position or assert facts before the presiding officer contrary to a matter decided by the appeal board (i.e., the Staff itself) on applicant's informal appeal absent an explicit confession of error; LBP-14-2, 79 NRC 148 (2014)

Missouri Coalition for the Environment v. Federal Energy Regulatory Commission, 544 F.3d 955, 958 (8th Cir. 2008)
reasonable foreseeability test for cumulative impacts is applied; LBP-14-6, 79 NRC 421 (2014)

Morongo Band of Mission Indians v. Fedaral Aviation Administration, 161 F.3d 569, 574 (9th Cir. 1998)
for federal agencies that do not manage, control, or supervise Indian affairs, unless there is a specific duty that has been placed on the agency with respect to Indians, this responsibility is discharged by the agency's compliance with general regulations and statutes not specifically aimed at protecting Indian tribes; LBP-14-6, 79 NRC 429 (2014)
NRC's trust responsibility does not impose a duty on the NRC to take action beyond complying with generally applicable statutes and regulations; LBP-14-6, 79 NRC 429 (2014)

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National Credit Union Administration v. First National Bank & Trust Co., 522 U.S. 479, 489 (1998)
courts should not inquire whether there has been a congressional intent to benefit the would-be plaintiff; LBP-14-4, 79 NRC 355 (2014)

Natural Resources Defense Council, Inc. v. Environmental Protection Agency, 464 F.3d 1, 6 (D.C. Cir. 2006)
increases in risk can at times be injuries in fact sufficient to confer standing; LBP-14-4, 79 NRC 351 n.28 (2014)

New Jersey Department of Environmental Protection v. NRC, 561 F.3d 132, 142-43 (3d Cir. 2009)
only those NRC-regulated facilities located within the Ninth Circuit's jurisdictional boundaries are required to conduct environmental analyses of possible terrorist acts; LBP-14-6, 79 NRC 428 (2014)

New York v. NRC, 681 F.3d 471 (D.C. Cir. 2012)
waste confidence and similar contentions are held in abeyance pending further order from the Commission; LBP-14-8, 79 NRC 522 (2014)

New York v. NRC, 681 F.3d 471, 473 (D.C. Cir. 2012)
regarding waste confidence, NRC failed to comply with the National Environmental Policy Act in issuing its 2010 update to the Waste Confidence Decision and accompanying Temporary Storage Rule; CLI-14-3, 79 NRC 33 (2014)

New York State Department of Social Services v. Dublino, 413 U.S. 405, 419-20 (1973)
licensing boards should not interpret regulatory text in a way that would essentially negate the stated purpose of the regulation or impute to the Commission an intent to create a schizophrenic rule; LBP-14-7, 79 NRC 475-76 (2014)

NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 326-27, 329 (2012)
deference to board rulings on contention admissibility is appropriate even where the Commission may consider that the support for the contention is weak, or where the claim's materiality presents a close question; CLI-14-2, 79 NRC 26 n.89 (2014)

NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 338 (2012)
although a standard review plan lacks the legal force of regulations, it is to be given special weight as a guidance document that has been approved by the Commission but is nonbinding guidance; LBP-14-3, 79 NRC 279, 307 (2014)

Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Station, Units 1 and 2), CLI-99-30, 50 NRC 333, 345 (1999)
any discretionary diversion from the usual Subpart M procedural track will be rare, requiring extraordinary and unusual circumstances, and all requests to date to provide a non-Subpart M hearing in a license transfer case have been denied; CLI-14-5, 79 NRC 260 n.31 (2014)
when promulgating Subpart M, the Commission was well aware that most license transfer issues would be financial in nature; CLI-14-5, 79 NRC 260 n.32 (2014)

Nixon v. United States, 506 U.S. 224, 232 (1993)
plain language of enacted text is the best indicator of intent; LBP-14-4, 79 NRC 348 (2014)

North Cascades Conservation Council v. U.S. Forest Service, 98 F. Supp. 2d 1193, 1198-99 (W.D. Wash. 1999)
projects that are not connected actions, but are physically related to the system, are cumulative actions and are subject to an examination of cumulative impacts; LBP-14-6, 79 NRC 422 (2014)

Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), CLI-01-10, 53 NRC 353, 361 (2001)
interpretation of regulations, like interpretation of a statute, begins with the language and structure of the provisions, and the entirety of each provision must be given effect; LBP-14-7, 79 NRC 473 (2014)

Northern California Power Agency v. Federal Energy Regulatory Commission, 37 F.3d 1517, 1522 (D.C. Cir. 1994)
to avoid a finding of arbitrary and capricious agency action, NRC Staff may not depart from its established policies, procedures, and practices without a reasonable explanation for the change; LBP-14-2, 79 NRC 150 n.87 (2014)

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Northern Indiana Public Service Co. (Bailly Generating Station, Nuclear-1), ALAB-224, 8 AEC 244, 250 (1974)
if a party fails to file an answer or pleading within the time prescribed in 10 C.F.R. Part 2 or as specified in the notice of hearing or pleading, to appear at a hearing or prehearing conference, to comply with any prehearing order entered by the presiding officer, or to comply with any discovery order entered by the presiding officer, the Commission or the presiding officer may make any orders in regard to the failure that are just; CLI-14-2, 79 NRC 14 n.10 (2014)

Northern States Power Co. (Prairie Island Nuclear Generating Plant Independent Spent Fuel Storage Installation), LBP-12-24, 76 NRC 503, 507-08 (2012)
proximity presumption is limited to reactor licensing proceedings and to other cases where there is an obvious potential for offsite radiological consequences; LBP-14-4, 79 NRC 332 (2014)

Northwest Resource Information Center v. National Marine Fisheries Service, 56 F.3d 1060, 1067-69 (9th Cir. 1995)
"connected actions" include those that lack independent utility; LBP-14-6, 79 NRC 421 (2014)

Nuclear Fuel Services, Inc. (Special Nuclear Facility), LBP-07-16, 66 NRC 277, 284-85 (2007)
section 2.309 standing and contention admissibility criteria are the relevant legal standards for evaluating third-party requests for hearing on a confirmatory order; LBP-14-4, 79 NRC 327 n.40 (2014)

Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), LBP-12-5, 75 NRC 227, 248 (2012)
contentions migrate because the underlying issue and concern raised in response to the draft supplemental environmental impact statement remains, and because a motion for summary disposition has not been filed; LBP-14-5, 79 NRC 395 n.100 (2014)

Nuclear Management Co., LLC (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006)
purpose of a reply is narrow, to give petitioner an opportunity to address arguments in the opposing parties' answers; LBP-14-4, 79 NRC 330 (2014)
reply cannot expand the scope of the arguments set forth in the original hearing request; LBP-14-4, 79 NRC 330 (2014)

Ohio Edison Co. (Perry Nuclear Power Plant, Unit 1), LBP-91-38, 34 NRC 229, 249 n.61 (1991)
economic interest generally is not sufficient to afford standing in NRC licensing proceedings regarding health and safety; LBP-14-4, 79 NRC 352 (2014)

Ohio Valley Environmental Coalition v. Hurst, 604 F. Supp. 2d 860, 888 (S.D. W. Va. 2009)
agency's reliance on mitigation in making a finding of no significant impact must be justified; LBP-14-7, 79 NRC 461 (2014)
proposed mitigation measures are sufficient if they are supported by sufficient evidence, such as studies conducted by the agency, or are adequately policed; LBP-14-7, 79 NRC 461-62 (2014)
reliance on mitigation is justified if the proposed mitigation underlying the finding of no significant impact must be more than a possibility in that it is imposed by statute or regulation or has been so integrated into the initial proposal that it is impossible to define the proposal without mitigation; LBP-14-7, 79 NRC 461 (2014)
reliance on mitigation to support findings with regard to environmental impacts of an activity is justified; LBP-14-7, 79 NRC 457 (2014)
there must be some assurance that mitigation measures constitute an adequate buffer against the negative impacts that result from the authorized activity to render such impacts so minor as to not warrant an environmental impact statement; LBP-14-7, 79 NRC 461 (2014)
when conducting a NEPA-required environmental review, an agency may consider the ameliorative effects of mitigation in determining the environmental impacts of an activity; LBP-14-7, 79 NRC 461 (2014)

O'Reilly v. U.S. Army Corps of Engineers, 477 F.3d 225, 231 (5th Cir. 2007)
when conducting a NEPA-required environmental review, an agency may consider the ameliorative effects of mitigation in determining the environmental impacts of an activity; LBP-14-7, 79 NRC 461 (2014)

O'Reilly v. U.S. Army Corps of Engineers, 477 F.3d 225, 236 n.10 (5th Cir. 2007)
cumulative effects and improper segmentation issues raise separate-but-similar questions; LBP-14-6, 79 NRC 419-20 n.76 (2014)

federal agencies may plan a number of related actions but may decide to prepare impact statements on each action individually rather than prepare an impact statement on the entire group, creating a segmentation or piecemealing problem; LBP-14-6, 79 NRC 419-20 n.76 (2014)

Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-756, 18 NRC 1340, 1345 (1983)
perfection in plant construction and the facility construction quality assurance program is not a precondition for a license under either the Atomic Energy Act or the Commission's regulations; LBP-14-7, 79 NRC 471 (2014)

Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 334-35 (2002)
any discretionary diversion from the usual Subpart M procedural track will be rare, requiring extraordinary and unusual circumstances, and all requests to date to provide a non-Subpart M hearing in a license transfer case have been denied; CLI-14-5, 79 NRC 260 n.31 (2014)

Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 345 (2002)
one type of litigant found repeatedly to present economic interests not cognizable in an NRC license transfer proceeding is a utility ratepayer; LBP-14-4, 79 NRC 352 (2014)

Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 442 (2011)
whether a contention should properly be characterized as a contention of omission or a contention of adequacy and the ramifications of such a designation with regard to contention admissibility are discussed; LBP-14-5, 79 NRC 384 n.33 (2014)

Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 443 (2011)
merits determinations cannot be made at the contention admissibility stage; LBP-14-6, 79 NRC 432 (2014)

Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23, 56 NRC 230, 237 (2002)
Commission has inherent authority to supervise both NRC Staff's work and adjudicatory proceedings relating to license applications; CLI-14-1, 79 NRC 2 (2014)

Petition for Rulemaking to Amend 10 C.F.R. § 54.17(c), CLI-11-1, 73 NRC 1, 4 (2011)
Commission rarely grants an indefinite or very lengthy stay on the mere possibility of change; CLI-14-6, 79 NRC 449 (2014)

Portland General Electric Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976)
in determining whether intervention petitioner has alleged an interest that may be affected by the proceeding within the meaning of section 189a of the Atomic Energy Act, contemporaneous judicial concepts of standing should be used; LBP-14-4, 79 NRC 350 (2014)

Portland General Electric Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 617 (1976)
six criteria for discretionary intervention were first articulated in this case; LBP-14-4, 79 NRC 333 n.70 (2014)

Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85 (1974)
consideration in adjudicatory proceedings of issues presently to be taken up by the Commission in rulemaking would be a wasteful duplication of effort; LBP-14-1, 79 NRC 95 n.293 (2014)

Power Authority of the State of New York (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 290-91 (2000)
any discretionary diversion from the usual Subpart M procedural track will be rare, requiring extraordinary and unusual circumstances, and all requests to date to provide a non-Subpart M hearing in a license transfer case have been denied; CLI-14-5, 79 NRC 260 n.31 (2014)

Power Authority of the State of New York (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 290-91 & nn.10-11 (2000)
Subpart M logically applies to all license transfer hearing requests, regardless of who files them, because the types of issues litigated (e.g., financial assurance, technical qualifications, foreign

ownership, and staffing levels) are likely to be similar regardless of whether they are initiated by intervention petitions or by challenges to a Staff action; CLI-14-5, 79 NRC 260 (2014)
when promulgating Subpart M, the Commission was well aware that most license transfer issues would be financial in nature; CLI-14-5, 79 NRC 260 n.32 (2014)
Power Authority of the State of New York (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 291 (2000)
separate hearings have been shown to be appropriate for cases governed by different procedural rules; CLI-14-5, 79 NRC 261 n.38 (2014)
Power Authority of the State of New York (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-01-14, 53 NRC 488, 514 (2001)
motion to strike may be granted where a pleading or other submission contains information that is irrelevant; LBP-14-6, 79 NRC 432-33 (2014)
PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 139-40
intervenor is entitled to cure deficiencies with regard to standing when it files its reply; LBP-14-4, 79 NRC 361 (2014)
PPL Susquehanna LLC (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 303-04 (2007)
generalized grievances with sufficiency of NRC Staff's analysis or the adequacy of included documentation are not enough to raise a proposed contention to the level of admissibility; LBP-14-5, 79 NRC 385 n.38 (2014)
PPL Susquehanna LLC (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-10, 66 NRC 1, 23 (2007)
generalized grievances with sufficiency of NRC Staff's analysis or the adequacy of included documentation are not enough to raise a proposed contention to the level of admissibility; LBP-14-5, 79 NRC 385 (2014)
Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999)
failure to comply with any of the section 2.309(f)(1) pleading requirements renders a contention inadmissible; LBP-14-8, 79 NRC 524 (2014)
Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 29 (2000)
license conditions can be an acceptable method for providing reasonable assurance of financial qualifications; LBP-14-3, 79 NRC 311 (2014)
Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 33 (2000)
to be an acceptable method for providing reasonable assurance of financial qualifications, a proposed license condition must be ministerial and by its very nature require and be readily susceptible to post-licensing verification such that the NRC Staff is not deferring its safety finding through the use of the license condition; LBP-14-3, 79 NRC 311 (2014)
Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-9, 53 NRC 232, 235-36 (2001)
not all license commitments must be converted into license conditions in order to be enforceable; LBP-14-3, 79 NRC 308 n.258 (2014)
Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-03-8, 58 NRC 11, 21 (2003)
applicant's negation action plan is part of its final safety analysis report and therefore is part of the licensing basis of the facility; LBP-14-3, 79 NRC 308 (2014)
if applicant subsequently wished to change its commitments to any significant extent, it would need to file a license amendment request, which could then be challenged by seeking a hearing; LBP-14-3, 79 NRC 308 (2014)
Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 130 (2004)
if the environmental impact statement addresses the concerns alleged in the contention, the original contention becomes moot and the intervenor must raise a new contention if it claims the EIS discussion is still inaccurate or incomplete; LBP-14-6, 79 NRC 438 (2014)

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Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-23, 54 NRC 163, 172 n.3 (2001)
admitted contentions challenging applicant's environmental report may, in appropriate circumstances, function as challenges to similar portions of NRC Staff's environmental impact statement; LBP-14-5, 79 NRC 383 (2014)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-05-20, 62 NRC 187, 228 (2005)
motion to strike may be granted where a pleading or other submission contains information that is irrelevant; LBP-14-6, 79 NRC 432-33 (2014)

Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-09-8, 69 NRC 317, 323-27 (2009)
board decisions that have revised inadmissible contentions to render them admissible have been overturned; CLI-14-2, 79 NRC 28 (2014)

Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-08-21, 68 NRC 554, 559 (2008)
in the standing analysis, boards construe the petition in favor of the petitioner; CLI-14-2, 79 NRC 19 n.45 (2014)

Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC 51, 147 n.89 (2009)
NRC Staff and licensee may file interlocutory appeals on the admission of a contention, but intervenors are prohibited from filing such appeals on the denial of a contention unless all contentions have been denied; LBP-14-4, 79 NRC 374 n.69 (2014)

Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-1, 73 NRC 19, 26 (2011)
in certain instances, contentions challenging an environmental report are deemed to migrate from challenging applicant's environmental report to challenging NRC Staff's environmental assessment; LBP-14-6, 79 NRC 416 n.67 (2014)
migration tenet applies when the information in the final supplemental environmental impact statement is sufficiently similar to the information in the draft SEIS; LBP-14-5, 79 NRC 383 (2014)

Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), CLI-80-10, 11 NRC 438 (1980)
third-party requests for a hearing on an enforcement order have been treated as a petition for intervention under the Commission's generally applicable rules; LBP-14-4, 79 NRC 327 n.37 (2014)

Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), CLI-80-10, 11 NRC 438, 441 (1980)
NRC has long preferred concentrating its resources on actual field inspections and related scientific and engineering work, as opposed to the conduct of legal proceedings; LBP-14-4, 79 NRC 333 (2014)
settlements may become illusory if licensees consent to confirmatory orders and are nonetheless subjected to formal proceedings, possibly leading to different or more severe enforcement actions; LBP-14-4, 79 NRC 333 (2014)

Public Service Co. of New Hampshire (Seabrook Station, Unit 2), CLI-84-6, 19 NRC 975, 978 (1984)
economic interest generally is not sufficient to afford standing in NRC licensing proceedings regarding health and safety; LBP-14-4, 79 NRC 352 (2014)

Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-471, 7 NRC 477, 489 n.8 (1978)), *rev'd on other grounds,* CLI-97-15, 46 NRC 294 (1997)
although environmental contentions ultimately challenge the NRC's compliance with NEPA, applicant is free to support positions set forth in the environmental impact statement that are under challenge; LBP-14-7, 79 NRC 459 (2014)

Quivira Mining Co. (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 12 (1998)
NRC is to look to federal law in applying the zone-of-interests test; LBP-14-4, 79 NRC 353 (2014)
where plaintiff is not itself the subject of the contested regulatory action, the zone-of-interests test denies a right of review if plaintiff's interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot be assumed that Congress intended to permit the suit; LBP-14-4, 79 NRC 328 n.44, 354 (2014)

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Ralph L. Tetrick (Denial of Application for Reactor Operator License), CLI-97-10, 46 NRC 26, 31-32 (1997)
because agency practice is one indicator of how the agency interprets regulations, a consistently held NRC Staff view on an operator testing policy matter will not be disturbed; LBP-14-2, 79 NRC 150-51 n.88 (2014)

Randall L. Herring (Senior Reactor Operator License for Catawba Nuclear Station), LBP-98-30, 48 NRC 355, 357 (1998)
NRC issued NUREG-1021 to set forth consistent standards for operator and senior reactor operator examinations at various facilities; LBP-14-2, 79 NRC 150 (2014)

Randall L. Herring (Senior Reactor Operator License for Catawba Nuclear Station), LBP-98-30, 48 NRC 355, 358 (1998)
licensing boards have limited their review of NRC Staff reactor operator licensing decisions to those issues that were resolved against the license applicant in the Staff's informal review; LBP-14-2, 79 NRC 148 (2014)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 351, 353 & n.16 (1989)
NEPA does not impose a substantive obligation for a reviewing agency to require or enforce mitigation measures discussed in an environmental assessment; LBP-14-6, 79 NRC 415 (2014)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 (1989)
agency's procedural obligation to discuss mitigation in sufficient detail to ensure that environmental consequences have been fairly evaluated is distinguished from any substantive requirement to actually develop and adopt a detailed mitigation plan; LBP-14-7, 79 NRC 460 (2014)
discussion of mitigation measures is an important part of an agency's hard look at the environmental consequences of a proposed federal action; LBP-14-7, 79 NRC 460 (2014)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 n.16 (1989)
because NEPA imposes no substantive requirement that mitigation measures actually be taken, it should not be read to require agencies to obtain an assurance that third parties will implement particular measures; LBP-14-7, 79 NRC 460-61 (2014)

Rockwell International Corp. (Rocketdyne Division), CLI-90-5, 31 NRC 337, 340 (1990)
Commission, like other adjudicatory bodies, looks with favor upon settlements; LBP-14-4, 79 NRC 333 (2014)

Sackett v. Environmental Protection Agency, 132 S. Ct. 1367 (2012)
person does not need to wait until being charged with a crime and in the dock before he can challenge an order that imposes new burdens and liabilities on him; LBP-14-4, 79 NRC 370 n.52 (2014)
when the police power of the federal government is deployed to order a person to perform certain actions, under pain of losing his or her livelihood, liberty, and/or property, then that person has a right to challenge the order, and have a hearing to determine what the order means and whether it comports with the law; LBP-14-4, 79 NRC 370-71 (2014)

Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), ALAB-655, 14 NRC 799, 816 (1981)
matters that are or are about to become the subject of a general rulemaking are not appropriate subjects for contentions before individual licensing boards; LBP-14-1, 79 NRC 95 n.293 (2014)

Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 152-53 n.46 (1993)
all parties, including NRC Staff, are obligated to bring any significant new information to the board's attention; LBP-14-2, 79 NRC 243 (2014)

Safety Light Corp. (Bloomsburg Site Decontamination and License Renewal Denials), CLI-92-13, 36 NRC 79, 89 (1992)
related proceedings may be consolidated based on similarity of issues in the proceedings, commonality of litigants, and convenience and saving of time or expense; CLI-14-5, 79 NRC 261 (2014)

San Diego Building Trades Council v. Garmon, 359 U.S. 236, 245 (1959)
labor-related disputes are within the exclusive competence of the National Labor Relations Board; LBP-14-4, 79 NRC 331 (2014)

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San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016, 1031 (9th Cir. 2006)
only those NRC-regulated facilities located within the Ninth Circuit's jurisdictional boundaries are required to conduct environmental analyses of possible terrorist acts; LBP-14-6, 79 NRC 428 (2014)

Save Our Sonoran v. Flowers, 408 F.3d at 1113, 1121-23 (9th Cir. 2005)
Corps of Engineers improperly constrained NEPA analysis; LBP-14-6, 79 NRC 422 (2014)

Seminole Nation v. United States, 316 U.S. 286, 296-97 (1942)
applicant owes no duty to address the federal government's trust responsibility in its environmental report; LBP-14-6, 79 NRC 428 (2014)

Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64 (1994)
intervention has been granted to a third party seeking a hearing on an enforcement order on the basis of generally applicable standing and contention admissibility requirements; LBP-14-4, 79 NRC 327 n.38 (2014)

Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-97-13, 46 NRC 195, 205 (1997)
Commission, like other adjudicatory bodies, looks with favor upon settlements; LBP-14-4, 79 NRC 333 (2014)

Shaw AREVA MOX Services (Mixed Oxide Fuel Fabrication Facility), LBP-11-9, 73 NRC 391, 396 (2011)
at the Construction Authorization Request stage, the board dismissed a material control and accounting contention as moot, pending submittal of applicant's Fundamental Nuclear Material Control Plan which would require inclusion of a detailed MC&A program; LBP-14-1, 79 NRC 45 (2014)

Shieldalloy Metallurgical Corp. (Amendment Request for Decommissioning of the Newfield, New Jersey Facility), LBP-07-5, 65 NRC 341, 352 (2007)
contention rule is strict by design and does not permit the filing of a vague, unparticularized contention, unsupported by affidavit, expert, or documentary support; LBP-14-5, 79 NRC 385 n.38 (2014)

Shieldalloy Metallurgical Corp. (Decommissioning of the Newfield, New Jersey Site), CLI-13-6, 78 NRC 155 (2013)
Commission has inherent authority to supervise both NRC Staff's work and adjudicatory proceedings relating to license applications; CLI-14-1, 79 NRC 2 (2014)

Shinseki v. Sanders, 556 U.S. 396, 410 (2009)
burden of proving prejudicial error by a federal agency rests with the party challenging the agency's action, but this is not a particularly onerous requirement; LBP-14-2, 79 NRC 166 (2014)

Shoshone-Bannock Tribes v. Reno, 56 F.3d 1476, 1482 (D.C. Cir. 1995)
NRC's trust responsibility does not impose a duty on the NRC to take action beyond complying with generally applicable statutes and regulations; LBP-14-6, 79 NRC 429 (2014)

Sierra Club v. U.S. Army Corps of Engineers, 464 F. Supp. 2d 1171, 1224 (M.D. Fla. 2006), *aff'd,* 508 F.3d 1332 (11th Cir. 2007)
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Sierra Club v. U.S. Army Corps of Engineers, 464 F. Supp. 2d 1171, 1225 (M.D. Fla. 2006), *aff'd,* 508 F.3d 1332 (11th Cir. 2007)
reliance on mitigation is justified if the proposed mitigation underlying the finding of no significant impact must be more than a possibility in that it is imposed by statute or regulation or has been so integrated into the initial proposal that it is impossible to define the proposal without mitigation; LBP-14-7, 79 NRC 461 (2014)

Sierra Club v. U.S. Army Corps of Engineers, 464 F. Supp. 2d 1171, 1227 (M.D. Fla. 2006), *aff'd,* 508 F.3d 1332 (11th Cir. 2007)
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South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 7 (2010)
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South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-09-18, 70 NRC 859, 860 (2009)
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South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-09-18, 70 NRC 859, 862 (2009)
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South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-10-16, 71 NRC 486, 491 (2010)
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Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-13-7, 77 NRC 307, 316, 324-25 *vacated as moot,* CLI-13-9, 78 NRC 551, 552 (2013)
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Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-13-7, 77 NRC 307, 326 *vacated as moot,* CLI-13-9, 78 NRC 551 (2013)
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Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-13-7, 77 NRC 307, 344 *vacated as moot,* CLI-13-9, 78 NRC 551 (2013)
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Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), CLI-10-5, 71 NRC 90, 102 n.60 (2010)
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Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), CLI-10-5, 71 NRC 90, 102 n.63 (2010)
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Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 63-64 (2008)
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Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 64 (2008)
although a contention contesting applicant's environmental report generally may be viewed as a challenge to the NRC Staff's subsequent draft environmental impact statement, new claims must be raised in a new or amended contention; LBP-14-5, 79 NRC 384 n.32 (2014)

Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), CLI-09-16, 70 NRC 33, 35 (2009)
Commission defers to a board's contention admissibility rulings unless the appeal points to an error of law or abuse of discretion; CLI-14-2, 79 NRC 13-14 (2014)

Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), CLI-11-8, 7 NRC 214, 228-29 (2011)
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Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-21, 72 NRC 616, 643 (2010)
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Southern Pacific Co. v. Darnell-Taenzer Lumber Co., 245 U.S. 531, 533 (1918) (Holmes, J.)
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Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 456 (1981)
Commission, like other adjudicatory bodies, looks with favor upon settlements; LBP-14-4, 79 NRC 333 (2014)

Strata Energy, Inc. (Ross In Situ Uranium Recovery Project), CLI-12-12, 75 NRC 603, 608 (2012)
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Strata Energy, Inc. (Ross In Situ Uranium Recovery Project), LBP-12-3, 75 NRC 164, 203 (2012)
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Summers v. Earth Island Institute, 555 U.S. 488, 493 (2009)
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Surfrider Foundation v. Dalton, 989 F. Supp. 1309, 1325 (S.D. Cal. 1998)
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Taxpayers Watchdog, Inc. v. Stanley, 819 F.2d 294, 298 (D.C. Cir. 1987)
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Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), CLI-09-3, 69 NRC 68, 73 n.24 (2009)
board is free to decide contention admissibility on a theory different from those argued by the litigants, but only if it explained the specific basis of its ruling and gave the litigants a chance to present arguments (and, where appropriate, evidence) regarding the board's new theory; LBP-14-4, 79 NRC 362 n.44 (2014)

Tennessee Valley Authority (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC 1387 (1982)
NRC Staff is obliged to lay all relevant materials before the board to enable it to adequately dispose of the issues before it; LBP-14-2, 79 NRC 243 (2014)

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Tennessee Valley Authority (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC 1387, 1394 (1982)
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Tennessee Valley Authority (Sequoyah Nuclear Plant, Units 1 and 2), CLI-14-3, 79 NRC 31, 36 (2014)
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Tennessee Valley Authority (Sequoyah Nuclear Plant, Units 1 and 2), CLI-14-3, 79 NRC 31, 37 (2014)
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Tennessee Valley Authority (Sequoyah Nuclear Plant, Units 1 and 2), CLI-14-3, 79 NRC 31, 37 n.33 (2014)
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Town of Huntington v. Marsh, 859 F.2d 1134, 1142 (2d Cir. 1988)
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Treadway v. Gateway Chevrolet Oldsmobile Inc., 362 F.3d 971, 976 (7th Cir. 2004)
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Trujillo v. General Electric Co., 621 F.2d 1084, 1086 (10th Cir. 1980)
Commission has inherent authority to supervise both NRC Staff's work and adjudicatory proceedings relating to license applications; CLI-14-1, 79 NRC 2 (2014)

U.S. Department of Energy (High-Level Waste Repository), CLI-06-5, 63 NRC 143, 154 (2006)
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U.S. Department of Energy (High-Level Waste Repository), CLI-08-12, 67 NRC 386, 393 (2008)
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U.S. Department of Energy (High-Level Waste Repository), CLI-09-14, 69 NRC 580, 590 (2009)
to the extent that a contention raises an issue of law, it is exempt from 10 C.F.R. 2.309(f)(1)(v); LBP-14-4, 79 NRC 364, 366 (2014)

U.S. Department of Energy (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 431 (2009), *modified,* CLI-09-14, 69 NRC 580 (2009)
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U.S. Department of Energy (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 431-32 (2009), *modified,* CLI-09-14, 69 NRC 580 (2009)
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U.S. Department of Energy (High-Level Waste Repository), LBP-10-11, 71 NRC 609, 637 (2010)
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U.S. Department of Energy (Plutonium Export License), CLI-04-17, 59 NRC 357, 364-65 (2004)
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Union Electric Co. (Callaway Plant, Unit 1), ALAB-740, 18 NRC 343, 346 (1983)
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Union Electric Co. (Callaway Plant, Unit 1), ALAB-750, 18 NRC 1205, 1210 n.11 (1983)
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Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 158 (2011)
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Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 163 (2011)
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Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 173-74 (2011)
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Union of Concerned Scientists v. NRC, 880 F.2d 552, 558 (D.C. Cir. 1989)
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United States ex rel. Accardi v. Shaughnessy, 347 U.S. 260 (1954)
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United States v. Heffner, 420 F.2d 809, 811 (4th Cir. 1970)
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United States v. Roses Inc., 706 F.2d 1563, 1567 (Fed. Cir. 1983)
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USEC Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 480 (2006)
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Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 162 (2000)
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Virginia Electric and Power Co. (North Anna Power Station, Unit 3), CLI-12-14, 75 NRC 692, 699 (2012)
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Virginia Electric and Power Co. (North Anna Power Station, Unit 3), CLI-12-14, 75 NRC 692, 700 (2012)
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Virginia Electric and Power Co. (North Anna Power Station, Units 1 and 2), ALAB-342, 4 NRC 98, 107 (1976)
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Washington Public Power Supply System (WPPSS Nuclear Project No. 1), LBP-00-18, 52 NRC 9, 13-14 (2000)
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Wetlands Action Network v. U.S. Army Corps of Engineers, 222 F.3d 1105, 1121 (9th Cir. 2000)
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Wyoming Outdoor Council v. U.S. Army Corps of Engineers, 351 F. Supp. 2d 1232, 1250 (D. Wyo. 2005)
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10 C.F.R. 2.309(d)
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if intervenors make reference to new material in the final supplemental environmental impact statement but do not address the six elements of this section, such references to new material do not give rise to either a new or an amended contention; LBP-14-5, 79 NRC 385 (2014)
intervention petitioner must base its environmental contentions on information available at the time its intervention petition is to be filed, including applicant's environmental report; CLI-14-2, 79 NRC 21 (2014)
intervention petitioner need not discuss each and every portion of the application that bears any relation to the issue being contested, but only provide a brief explanation of the argument and a concise statement of the relevant facts; CLI-14-2, 79 NRC 25 (2014)
new contentions must satisfy six pleading requirements; LBP-14-8, 79 NRC 524 (2014)
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10 C.F.R. 2.309(f)(1)(i)
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10 C.F.R. 2.309(f)(1)(i)-(vi)
admissibility of contention asserting that a confirmatory order should not be sustained because, without sufficient justification in the record, it imposes obligations on licensee's off-duty employees not otherwise required by 10 C.F.R. 73.56(f)(1)-(3) is argued; LBP-14-4, 79 NRC 363, 365-66 (2014)
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10 C.F.R. 2.309(f)(1)(ii)
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10 C.F.R. 2.309(f)(1)(iii)
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10 C.F.R. 2.309(f)(1)(iv)
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labor disputes are not within the scope of enforcement proceedings; LBP-14-4, 79 NRC 337 (2014)
to be admissible, contentions must present a genuine dispute on a material fact; LBP-14-5, 79 NRC 395 n.100 (2014)

10 C.F.R. 2.309(f)(1)(v)
contention concerning cultural and historic resources is not admissible because it provides no alleged facts or expert opinions; LBP-14-6, 79 NRC 443 (2014)
contention that future expansion of independent spent fuel storage installation will cause a high and adverse impact on archaeological and cultural resources because there is a potential for unrecorded cultural resources on the property is admissible; LBP-14-6, 79 NRC 415 (2014)
contentions must provide a concise statement of the alleged facts or expert opinions that support petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the petitioner intends to rely to support its position; LBP-14-6, 79 NRC 441 (2014)
failure to show the final supplemental environmental impact statement's air emissions data represent new or materially different information renders a new contention inadmissible; LBP-14-5, 79 NRC 399 (2014)
to make additional claims on a contention, intervenor must provide a sufficient explanation of its concern and a concise statement of the alleged facts supporting its position; LBP-14-5, 79 NRC 395 (2014)

10 C.F.R. 2.309(f)(1)(v)-(vi)
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10 C.F.R. 2.309(f)(1)(vi)
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contention that considers the terms of a confirmatory order warranted or unwarranted is irrelevant if they fall within NRC's authority to impose; LBP-14-4, 79 NRC 335 (2014)
contention that future expansion of independent spent fuel storage installation will cause a high and adverse impact on archaeological and cultural resources because there is a potential for unrecorded cultural resources on the property is admissible; LBP-14-6, 79 NRC 415 (2014)
contention that NRC or licensee has abused or exceeded its lawful discretion with respect to nuclear safety programs is not admissible because it fails to provide sufficient information to show that a genuine dispute exists on a material issue of law or fact; LBP-14-4, 79 NRC 337 (2014)
failure to show that the final supplemental environmental impact statement's air emissions data represent new or materially different information renders a new contention inadmissible; LBP-14-5, 79 NRC 399 (2014)
labor disputes are not within the scope of enforcement proceedings; LBP-14-4, 79 NRC 337 (2014)
petitioner must provide sufficient information to show that a genuine dispute exists with applicant/licensee on a material issue of law or fact, including references to specific portions of the application that petitioner disputes and the supporting reasons for each dispute; CLI-14-2, 79 NRC 25, 30 (2014); LBP-14-6, 79 NRC 443 (2014)
10 C.F.R. 2.309(f)(2)
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10 C.F.R. 2.309(f)(2)(i), (ii)
request to admit a new or amended contention requires petitioner to show that the information upon which it is based was not previously available and is materially different from information previously available; CLI-14-2, 79 NRC 21 (2014)
10 C.F.R. 2.309(f)(2)(i)-(iii)
good cause exists when the requirements of this section are satisfied; LBP-14-5, 79 NRC 382 (2014)
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10 C.F.R. 2.309(f)(2)(ii)
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10 C.F.R. 2.310(a)
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10 C.F.R. 2.310(g)
Commission has authority to rule that a license transfer case be adjudicated under Subpart L; CLI-14-5, 79 NRC 259 (2014)
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10 C.F.R. 2.311
appeals from an order ruling on the admission of new or amended contentions is not permitted; LBP-14-5, 79 NRC 401 (2014)
limited interlocutory appeal right attaches only when the board has fully ruled on the initial intervention petition, that is, when it has admitted or rejected all proposed contentions; LBP-14-8, 79 NRC 528 (2014)
10 C.F.R. 2.311(a)
this section is applicable to an appeal of a board decision rejecting an intervention petition and a hearing request; CLI-14-6, 79 NRC 446 (2014)
10 C.F.R. 2.311(c)
appeal as of right from a board's ruling on an intervention petition is permitted upon denial of a petition to intervene and/or request for hearing, on the question as to whether it should have been granted; CLI-14-3, 79 NRC 36 (2014)
10 C.F.R. 2.311(d)(1)
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because the board granted a hearing request, its decision to reject some contentions may not be appealed until the end of the case; CLI-14-2, 79 NRC 13 n.3 (2014)
NRC rules of practice provide for an automatic right to appeal a board decision on the question whether a petition to intervene should have been wholly denied; CLI-14-2, 79 NRC 13 (2014)
10 C.F.R. 2.311(e)
appeal of an order selecting a hearing procedure is permitted on the question as to whether the selection of the particular hearing procedures was in clear contravention of the criteria set forth in section 2.310; CLI-14-3, 79 NRC 36 n.29 (2014)
10 C.F.R. 2.315(a)
board accepted written limited appearance statements from members of the public in connection with the hearing; LBP-14-3, 79 NRC 277 n.36 (2014)
10 C.F.R. 2.317(b)
consolidating proceedings is the exception rather than the rule; CLI-14-5, 79 NRC 261 n.37 (2014)
litigant asking for consolidation of proceedings has the burden of showing that it will be conducive to the proper dispatch of the Commission's business and to the ends of justice and will be conducted in accordance with the other provisions of Subpart C; CLI-14-5, 79 NRC 261 n.37 (2014)
10 C.F.R. 2.319(c)
consolidating proceedings is the exception rather than the rule; CLI-14-5, 79 NRC 261 n.37 (2014)
10 C.F.R. 2.320
if a party fails to file an answer or pleading within the time prescribed in 10 C.F.R. Part 2 or as specified in the notice of hearing or pleading, to appear at a hearing or prehearing conference, to comply with any prehearing order entered by the presiding officer, or to comply with any discovery order entered by the presiding officer, the Commission or the presiding officer may make any orders in regard to the failure that are just; CLI-14-2, 79 NRC 14 n.10 (2014)
10 C.F.R. 2.323(c)
to be considered under the motions rule, replies must satisfy the compelling circumstances standard; CLI-14-3, 79 NRC 35 n.27 (2014)
10 C.F.R. 2.323(e)
motion for reconsideration should not include new arguments or evidence unless it relates to a board concern that applicant could not reasonably have anticipated; LBP-14-7, 79 NRC 458 (2014)
motions for reconsideration must demonstrate a compelling circumstance, such as the existence of a clear and material error in a decision, which could not have been reasonably anticipated, which renders the decision invalid; CLI-14-1, 79 NRC 3 n.6 (2014)
reconsideration motion fails to identify a significant factual or legal matter that the board overlooked or provide compelling circumstances that render the board's decision invalid; LBP-14-7, 79 NRC 458 (2014)
10 C.F.R. 2.325
applicant bears the burden of proof in a licensing proceeding; LBP-14-1, 79 NRC 52-53 (2014); LBP-14-3, 79 NRC 278 (2014)
on safety issues, applicant has the burden of establishing that it is entitled to the applied-for license by a preponderance of the evidence; LBP-14-3, 79 NRC 278 (2014)
unless the presiding officer otherwise orders, applicant or proponent of an order has the burden of proof; LBP-14-2, 79 NRC 149 (2014)
10 C.F.R. 2.326
if a petition is rejected or dismissed at the docketing stage (before the evidentiary record has ever been opened), then subsequent petitions, in addition to meeting all of the other requirements, must also show that the evidentiary record should be reopened; LBP-14-4, 79 NRC 374 (2014)
10 C.F.R. 2.326(a)
new contention needs to meet requirements of this section, must be timely, must concern a significant environmental or safety issue, and must demonstrate the likelihood of a materially different result; LBP-14-8, 79 NRC 523 (2014)
10 C.F.R. 2.326(a) and (b)
motions to reopen must be supported by affidavit, be timely, address a significant safety or environmental issue, and demonstrate that a materially different result would have been likely if the evidence had been available; LBP-14-8, 79 NRC 523 (2014)

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10 C.F.R. 2.326(b)
mere mention of the future filing of an affidavit does not satisfy this requirement; LBP-14-8, 79 NRC 527 n.39 (2014)
motion to admit a new contention must be supported by an affidavit that separately addresses each of the 2.326(a) criteria; LBP-14-8, 79 NRC 523 (2014)
10 C.F.R. 2.326(d)
contention relating to a matter not previously in controversy among the parties must satisfy the requirements of section 2.309(c) and (f); LBP-14-8, 79 NRC 523 (2014)
petitioner who satisfies the reopening standard must also show that its proposed new contention meets the standard for new or amended contentions in section 2.309(c) and the underlying admissibility standards of section 2.309(f)(1); LBP-14-8, 79 NRC 523 (2014)
10 C.F.R. 2.335
absent a rule waiver, NRC rules and regulations are not subject to attack in an adjudicatory proceeding; CLI-14-6, 79 NRC 447 (2014)
10 C.F.R. 2.336(b)
because parties to a Subpart L proceeding may not seek discovery from the other parties to the proceeding, all such parties must make periodic mandatory disclosures; LBP-14-2, 79 NRC 146 (2014)
10 C.F.R. 2.336(c)
all disclosures under this section must be accompanied by a certification (in the form of a sworn affidavit) that all relevant materials required by this section have been disclosed, and that the disclosures are accurate and complete as of the date of the certification; LBP-14-2, 79 NRC 147 (2014)
10 C.F.R. 2.336(d)
disclosure updates shall include any documents subject to disclosure that were not included in any previous disclosure update; LBP-14-2, 79 NRC 147 (2014)
parties to a Subpart L proceeding must update their disclosures every month after initial disclosures on a due date selected by the presiding officer in the order admitting contentions; LBP-14-2, 79 NRC 147 (2014)
10 C.F.R. 2.336(e)(1)
parties, including NRC Staff, may be sanctioned for noncompliance with the disclosure regulations; LBP-14-2, 79 NRC 147 (2014)
10 C.F.R. 2.336(e)(2)
presiding officer may impose sanctions on a party that fails to provide any document required to be disclosed, unless the party demonstrates good cause for its failure to make the disclosure; LBP-14-2, 79 NRC 147 (2014)
10 C.F.R. 2.338
Commission, like other adjudicatory bodies, looks with favor upon settlements; LBP-14-4, 79 NRC 333 (2014)
10 C.F.R. 2.338(a)
NRC has a policy of encouraging settlements; LBP-14-4, 79 NRC 368 (2014)
10 C.F.R. 2.338(i)
NRC's policy of encouraging settlements specifically recognizes that settlements are not inviolate, and the presiding officer or Commission may order adjudication of the issues that the presiding officer or Commission finds is required in the public interest to dispose of the proceeding; LBP-14-4, 79 NRC 368 (2014)
10 C.F.R. 2.341
in light of the board's limited jurisdiction, it concludes that petitioner may appeal its decision immediately; LBP-14-8, 79 NRC 528-29 (2014)
waste confidence contention's pendency creates some uncertainty as to whether petitioner may appeal the board's ruling on a proposed contention, or whether it must await resolution of the waste confidence issue; LBP-14-8, 79 NRC 528 (2014)
10 C.F.R. 2.341(a), (b)
following issuance of the board's final dispositive decision on contentions held in abeyance, and consistent with NRC procedural rules, applicant and intervenor will have the opportunity to appeal the Board's decisions; CLI-14-3, 79 NRC 37 (2014)

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10 C.F.R. 2.341(d)
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10 C.F.R. 2.341(f)(2)
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10 C.F.R. 2.342(a)
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10 C.F.R. 2.342(e)
standards of this section are applied to requests to stay presiding officer decisions; CLI-14-6, 79 NRC 449 n.30 (2014)
10 C.F.R. 2.402
consolidating proceedings is the exception rather than the rule; CLI-14-5, 79 NRC 261 n.37 (2014)
10 C.F.R. 2.710(a)
motions for summary disposition must contend that there are facts on which there is no genuine issue to be heard; LBP-14-5, 79 NRC 395 n.100 (2014)
10 C.F.R. 2.802
sole remedy to challenge lawfulness of a regulation is to file a petition for rulemaking with the Commission; CLI-14-6, 79 NRC 447 (2014)
10 C.F.R. 2.802(d)
rulemaking petitioner may request a suspension of a licensing proceeding in which petitioner is a participant, pending disposition of the rulemaking petition; CLI-14-6, 79 NRC 448 (2014)
10 C.F.R. 2.1202(b)(1)(i)
NRC Staff will become a party to cases involving an application denied by the NRC Staff; CLI-14-5, 79 NRC 264 n.48 (2014)
10 C.F.R. 2.1203
NRC Staff violated requirements for initial disclosure of all relevant documents; LBP-14-2, 79 NRC 243 (2014)
10 C.F.R. 2.1203(a)
NRC Staff is also under a special obligation in Subpart L proceedings to create and to maintain a hearing file; LBP-14-2, 79 NRC 147 (2014)
10 C.F.R. 2.1203(b)
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10 C.F.R. 2.1203(c)
NRC Staff has a continuing duty to keep the hearing file up to date; LBP-14-2, 79 NRC 147, 243 n.664 (2014)
10 C.F.R. 2.1203(d)
parties to a Subpart L proceeding may not seek discovery from the other parties to the proceeding; LBP-14-2, 79 NRC 146 (2014)
10 C.F.R. 2.1205
if a party believes an admitted contention is mooted by the inclusion of additional information, that party may file a motion for summary disposition; LBP-14-5, 79 NRC 385 (2014)
to remove an admitted contention from the proceeding, a party must file, and a board must grant, a motion for summary disposition; LBP-14-5, 79 NRC 384 (2014)
10 C.F.R. 2.1207(a)(3)(iii)
questions proposed by all parties will be publicly released by order of this board 30 days after issuance of its partial initial decision; LBP-14-3, 79 NRC 277 n.40 (2014)
10 C.F.R. 2.1300
Commission has authority to rule that a license transfer case be adjudicated under Subpart L; CLI-14-5, 79 NRC 259 (2014)

scope of Subpart M proceedings covers all adjudicatory proceedings on an application for transfer of control of an NRC license, without distinction as to how the proceeding commences; CLI-14-5, 79 NRC 259 n.26 (2014)
10 C.F.R. 2.1308
absent a unanimous preference for a hearing consisting of written comments, the license transfer hearing will be an oral one; CLI-14-5, 79 NRC 264 (2014)
within 15 days from an order granting a hearing, each party must indicate what kind of hearing it prefers; CLI-14-5, 79 NRC 264 (2014)
10 C.F.R. 2.1309(a)(7)
although NRC Staff is not required to be a party to a license transfer adjudication, the Commission directs the Staff to become a party; CLI-14-5, 79 NRC 264 (2014)
10 C.F.R. 2.1316
NRC Staff is required to notify the presiding officer and the parties whether it desires to participate as a party in a license transfer proceeding; CLI-14-5, 79 NRC 264 n.47 (2014)
10 C.F.R. 2.1316(b)
NRC Staff is not required to be a party to a license transfer adjudication; CLI-14-5, 79 NRC 264 (2014)
10 C.F.R. 2.1319(a)
ordinarily, the Commission itself presides over license transfer hearings,but NRC rules allow the Commission to designate one or more Commissioners or any other person permitted by law to preside; CLI-14-5, 79 NRC 263 n.44 (2014)
10 C.F.R. 2.1320(b)(1)
presiding officer may certify questions or refer rulings to the Commission for decision; CLI-14-5, 79 NRC 264 n.46 (2014)
10 C.F.R. 2.1320(b)(3)
where the Commission does not preside over a license transfer proceeding, the presiding officer will certify the completed hearing record to the Commission, which may then issue its decision on the hearing or provide that additional testimony be presented; CLI-14-5, 79 NRC 263 n.44 (2014)
10 C.F.R. 2.1331
upon completion of a license transfer hearing, the Commission will issue a written opinion including its decision on the license transfer application and the reasons for the decision; CLI-14-5, 79 NRC 263 n.44 (2014)
10 C.F.R. Part 2, App. B, § III
once the nature of a license transfer hearing is settled, Subpart M and NRC Model Milestones set a default schedule for the remainder of the proceeding; CLI-14-5, 79 NRC 264 (2014)
10 C.F.R. 30.9(a)
information provided to NRC by license applicant shall be complete and accurate in all material respects; DD-14-4, 79 NRC 508, 509, 513, 514-15 (2014)
petitioner's concern that information provided by licensee concerning training received by its employees was not accurate and in violation was not substantiated; DD-14-4, 79 NRC 510, 511, 516 (2014)
10 C.F.R. 30.33(a)(3)
license applications will be approved if, in addition to other requirements met, applicant is qualified by training and experience to use the material for the purpose requested in such manner as to protect health and minimize danger to life or property; DD-14-4, 79 NRC 516 (2014)
10 C.F.R. 40.31(f)
contention that materials license amendment application fails to provide sufficient information regarding the geological setting of the area to meet regulatory requirements is admissible; CLI-14-2, 79 NRC 23 (2014)
10 C.F.R. 40.31(h)
regulation applies to uranium mills, but not to in situ recovery facilities; LBP-14-5, 79 NRC 397 (2014)
10 C.F.R. Part 40, Appendix A, Criteria 4(e) and 5G(2)
contention that materials license amendment application fails to provide sufficient information regarding the geological setting of the area to meet regulatory requirements is admissible; CLI-14-2, 79 NRC 23 (2014)
10 C.F.R. 50.2
"applicant" means a person or entity applying for a license; LBP-14-7, 79 NRC 476 (2014)

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10 C.F.R. 50.33
denial of license transfer applications typically is on grounds of operating costs and inability to pay the annual cost for spent fuel storage; CLI-14-5, 79 NRC 260 (2014)
general information required for a license transfer application is provided in this regulation; CLI-14-5, 79 NRC 260 n.32 (2014)
10 C.F.R. 50.38
absent a transfer, license renewal application will be denied where licensee remains under foreign ownership, control, or domination; CLI-14-5, 79 NRC 256 (2014)
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10 C.F.R. 50.47(c)(2)
NRC's safety regulations cover a 50-mile planning area; LBP-14-4, 79 NRC 375 n.74 (2014)
10 C.F.R. 50.54(f)
request that NRC order licensees to determine and implement required staff to fill all necessary positions for responding to a multiunit event until rulemaking is complete is addressed; DD-14-2, 79 NRC 495 (2014)
request that NRC order licensees to perform seismic and flood protection walkdowns to identify and address plant-specific vulnerabilities and verify the adequacy of monitoring and maintenance for protection features such as watertight barriers and seals in the interim period until longer-term actions are completed to update the design basis for external events is addressed; DD-14-2, 79 NRC 493 (2014)
request that NRC order licensees to reevaluate seismic and flooding hazards at their sites against current NRC requirements and guidance, and if necessary, update the design basis and structures, systems, and components important to safety to protect against the updated hazards is addressed; DD-14-2, 79 NRC 498 (2014)
10 C.F.R. 50.54(hh)(2)
request that NRC order licensees to provide reasonable protection for equipment from the effects of design-basis external events and to add equipment as needed to address multiunit events while other requirements are being revised and implemented is addressed; DD-14-2, 79 NRC 491 (2014)
10 C.F.R. 50.57(a)(3)(i)
perfection in plant construction and the facility construction quality assurance program is not a precondition for a license under either the Atomic Energy Act or NRC regulations; LBP-14-7, 79 NRC 471 (2014)
10 C.F.R. 50.59(c)(1)
licensees may make changes in the procedures described in updated final safety analysis report and conduct tests or experiments not otherwise described in the UFSAR, without obtaining a license amendment; CLI-14-4, 79 NRC 250 n.4 (2014)
10 C.F.R. 50.80
commitments in the revised combined license application restrict foreign ownership share to no more than 10% and require NRC consent for any change in foreign ownership of 5% or more; LBP-14-3, 79 NRC 302 n.214 (2014)
licensee is required to submit a license transfer application to NRC; CLI-14-5, 79 NRC 256 n.5 (2014)
10 C.F.R. 50.82(a)(1)(i) and (ii)
licensee must provide certifications to NRC Staff that it has permanently ceased power operations and that all fuel has been permanently removed from the reactor vessel; DD-14-3, 79 NRC 500, 503 (2014)
10 C.F.R. 50.82(a)(2)
docketing of certifications of shutdown and defueling means that licensee's Part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel; DD-14-3, 79 NRC 500, 503 (2014)
10 C.F.R. 50.90
licensees may make changes in the procedures described in its updated final safety analysis report and conduct tests or experiments not otherwise described in the UFSAR without obtaining a license amendment; CLI-14-4, 79 NRC 250 n.4 (2014)

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10 C.F.R. Part 50, App. B
applicant is responsible for the establishment and execution of the quality assurance program; LBP-14-7, 79 NRC 477 (2014)
quality assurance requirements apply to design of the safety-related functions of the structures, systems, and components that prevent or mitigate the consequences of postulated accidents; LBP-14-7, 79 NRC 474 (2014)
use of the past tense when referring to "quality assurance applied to the design" shows that safety-related design activities must have been performed under an acceptable QA program even though those activities were performed prior to the date on which the combined license application (which includes the FSAR) was filed with the NRC; LBP-14-7, 79 NRC 474 (2014)
10 C.F.R. Part 50, App. B, Introduction
quality assurance includes quality control, which comprises those quality assurance actions related to the physical characteristics of a material, structure, component, or system that provide a means to control the quality of the material, structure, component, or system to predetermined requirements; LBP-14-7, 79 NRC 469 n.109 (2014)
10 C.F.R. Part 50, App. B, § XVI
quality assurance programs must establish measures to ensure that conditions adverse to quality are promptly identified and corrected; LBP-14-7, 79 NRC 470 (2014)
10 C.F.R. Part 50, App. B, § XVIII
comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine effectiveness of the program; LBP-14-7, 79 NRC 480 (2014)
10 C.F.R. 51.10
contention that the final supplemental environmental impact statement violates the National Environmental Policy Act and implementing regulations by failing to conduct the required hard-look analysis of impacts of the proposed mine on species of birds and bats receiving special protection migrates as an admissible contention; LBP-14-5, 79 NRC 393 (2014)
10 C.F.R. 51.14(b)
NRC has expressly adopted, and is therefore bound by, the CEQ definition of cumulative impacts; LBP-14-6, 79 NRC 420 (2014)
separate actions are connected if, among other things, they cannot or will not proceed unless other actions are taken previously or simultaneously, or they are interdependent parts of a larger action and depend on the larger action for their justification; LBP-14-6, 79 NRC 421 (2014)
10 C.F.R. 51.22(a)
actions that the Commission, by rule or regulation, has declared to be a categorical exclusion do not individually or cumulatively have a significant effect on the human environment; LBP-14-6, 79 NRC 413 n.40 (2014)
10 C.F.R. 51.22(c)(13)
cask certification for transportation poses such a minimal environmental impact that it merits a categorical exclusion from NEPA; LBP-14-6, 79 NRC 413 (2014)
10 C.F.R. 51.29(a)(1)
NRC is directed to use the CEQ regulations in defining the scope of its impact statements; LBP-14-6, 79 NRC 420 n.81 (2014)
10 C.F.R. 51.30
when an environmental assessment is appropriate, it need only include a brief discussion of environmental impacts of the proposed action; LBP-14-6, 79 NRC 436 (2014)
10 C.F.R. 51.41
as a practical matter, NRC Staff typically relies on applicant's environmental report in preparing the final environmental impact statement; LBP-14-7, 79 NRC 459 (2014)
10 C.F.R. 51.45
contention that materials license amendment application fails to provide sufficient information regarding the geological setting of the area to meet regulatory requirements is admissible; CLI-14-2, 79 NRC 23 (2014)

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10 C.F.R. 51.45(c)
as a practical matter, NRC Staff typically relies on the applicant's environmental report in preparing the final environmental impact statement; LBP-14-7, 79 NRC 459 (2014)
10 C.F.R. 51.53(c)(2)
license renewal applicants need not include a need-for-power discussion in their environmental reports; CLI-14-6, 79 NRC 447 (2014)
10 C.F.R. 51.60
contention that materials license amendment application fails to provide sufficient information regarding the geological setting of the area to meet regulatory requirements is admissible; CLI-14-2, 79 NRC 23 (2014)
10 C.F.R. 51.70, 51.71
contention that the final supplemental environmental impact statement violates the National Environmental Policy Act and implementing regulations by failing to conduct the required hard-look analysis of impacts of the proposed mine on species of birds and bats receiving special protection migrates as an admissible contention; LBP-14-5, 79 NRC 393 (2014)
10 C.F.R. 51.71
draft environmental impact statement indicates what other interests and considerations of federal policy, including factors not related to environmental quality, if applicable, are relevant to the consideration of environmental effects of the proposed action; LBP-14-6, 79 NRC 436 (2014)
10 C.F.R. 51.92(a)(2)
if the NRC Staff safety review reveals any new and significant information relating to the environmental impacts of storage of high-burnup fuel, Staff will supplement its environmental analysis as required by the National Environmental Policy Act; LBP-14-6, 79 NRC 413 (2014)
10 C.F.R. 52.39(a)(2)
where seismic suitability of a site was evaluated at the early site permit stage, further litigation of the geologic fault issue is foreclosed at the combined license stage; LBP-14-8, 79 NRC 522 (2014)
10 C.F.R. 52.47(a)
combined license applications must contain a final safety analysis report that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components and of the facility as a whole; LBP-14-8, 79 NRC 525 (2014)
10 C.F.R. 52.75
any person except one excluded by section 50.38 may file an application for a combined license for a nuclear power facility; LBP-14-3, 79 NRC 279 (2014)
10 C.F.R. 52.79(a)(25)
combined license applicant's final safety analysis report must describe the quality assurance program applied to the design and to be applied to the fabrication, construction, and testing, of the structures, systems, and components of the facility; LBP-14-7, 79 NRC 475 (2014)
10 C.F.R. 52.97(a)(1)(i)
NRC Staff may not issue a notice of violation for failure to satisfy Appendix B requirements during the preapplication period, but it may deny a combined license for failure to satisfy the standards and requirements of the Commission's regulations; LBP-14-7, 79 NRC 476 (2014)
10 C.F.R. 55.2
any individual who manipulates the controls of any facility licensed under Parts 50, 52, or 54 of NRC's regulations is required to have an operator's license; LBP-14-2, 79 NRC 141 (2014)
10 C.F.R. 55.4
"senior reactor operator" is any individual licensed under Part 55 to manipulate the controls of a facility and to direct the licensed activities of licensed operators; LBP-14-2, 79 NRC 142 (2014)
10 C.F.R. 55.33
senior reactor operator licenses are subject to the satisfaction of other licensing requirements not considered in the adjusicatory proceeding, such as health, that the NRC Staff must assess before issuing a license; LBP-14-2, 79 NRC 139, 246 (2014)
10 C.F.R. 55.33(a)
to obtain a senior reactor operator license, the applicant must pass both a written test and an operating test and meet the other requirements specified in Part 55; LBP-14-2, 79 NRC 142 (2014)

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10 C.F.R. 55.33(a)(2)
goal of senior reactor operator tests is to determine whether applicant's level of knowledge and understanding meets the minimum requirements to safely operate the facility for which the license is sought; LBP-14-2, 79 NRC 142 (2014)

10 C.F.R. 55.35(b)
NRC regional office has the discretion to grant a waiver for retesting on a passed test for a senior reactor operator applicant who has failed only one part of the test if it determines that sufficient justification is presented; LBP-14-2, 79 NRC 143 (2014)
senior reactor operator applicant who has passed either the written examination or operating test and failed the other may request in a new application on Form NRC-398 to be excused from reexamination on the portions of the examination or test that the applicant has passed; LBP-14-2, 79 NRC 143 (2014)

10 C.F.R. 55.40
Commission shall use the criteria in NUREG-1021, Operator Licensing Examination Standards for Power Reactors, in effect 6 months before the examination date to prepare the written examinations required by sections 55.41 and 55.43 and the operating tests required by section 55.45; LBP-14-2, 79 NRC 151 (2014)
NRC shall use NUREG-1021 to prepare and evaluate senior reactor operator licensing examinations; LBP-14-2, 79 NRC 142 (2014)

10 C.F.R. 70.22(b)
applicant's program for control and accounting of special nuclear material must show how compliance with the requirements of section 74.51 will be accomplished; LBP-14-1, 79 NRC 51 n.56 (2014)

10 C.F.R. 70.23(a)(6)
applicant's proposed controls for strategic special nuclear material must be adequate to show compliance with material control and accounting regulations; LBP-14-1, 79 NRC 51 (2014)

10 C.F.R. 70.32(c)
if applicant decides to remove a method from the approved list of alarm resolution methods, it would have to follow the prescribed change process or the license amendment process; LBP-14-1, 79 NRC 103 n.342 (2014)

10 C.F.R. 70.34
if applicant decides to remove a method from the approved list of alarm resolution methods, it would have to follow the prescribed change process or the license amendment process; LBP-14-1, 79 NRC 103 n.342 (2014)

10 C.F.R. 73.56
it is well within NRC's discretion to impose specific requirements that clarify or go beyond those already established by regulations; LBP-14-4, 79 NRC 335 (2014)
licensees are permitted to develop their own individual access authorization programs, provided they satisfy this regulation; LBP-14-4, 79 NRC 336 (2014)

10 C.F.R. 73.56(a)(4)
access authorization rule leaves individual decisionmaking authority related to unescorted access to each licensee's discretion; LBP-14-4, 79 NRC 336 (2014)

10 C.F.R. 73.56(f)
contents of licensee's behavioral observation program cannot substitute for the duty of NRC Staff to be reasonably clear as to what is required of workers who are trying to comply with their legal obligation to report on their co-workers; LBP-14-4, 79 NRC 362 n.43 (2014)
reporting of observed behavior is the core concept of the behavioral observation program; LBP-14-4, 79 NRC 346 (2014)
reporting of observed conduct with a nexus to public health and safety or the common defense and security is required; LBP-14-4, 79 NRC 365 n.47 (2014)
there is no duty to report credible information; LBP-14-4, 79 NRC 346 (2014)
under an enforcement order, NRC requires that workers report any observed "illegal, unusual, or aberrant" behavior by their co-workers, words not appearing in this regulation; LBP-14-4, 79 NRC 346 (2014)

10 C.F.R. 73.56(f)(1)-(3)
contention alleges errors by NRC Staff in implementation of this regulation that fall within the zone of interests protected or regulated by those provisions; LBP-14-4, 79 NRC 356 (2014)

contention that a confirmatory order should not be sustained because, without sufficient justification in the record, it imposes obligations on the off-duty employees of licensee not otherwise required by the NRC to observe and report the offsite, off-duty conduct of fellow employees in inadmissible; LBP-14-4, 79 NRC 335 (2014)
licensee employees are protected against unnecessary or excessive restrictions on their conduct; LBP-14-4, 79 NRC 356 (2014)
10 C.F.R. 73.56(f)(2)
NRC's enforcement order does not state that any reportable illegal, unusual, or aberrant behavior must have a nexus to public health and safety or the common defense and security in order to be reportable; LBP-14-4, 79 NRC 346 (2014)
10 C.F.R. 73.56(f)(3)
board finds that the terms endorsed in a confirmatory order provide more specificity than the applicable NRC regulation which rather broadly requires reporting of any questionable behavior patterns or activities; LBP-14-4, 79 NRC 336 (2014)
individuals who are subject to an access authorization program shall at a minimum, report any concerns arising from behavioral observation and are individually liable if they fail to do so; LBP-14-4, 79 NRC 344 (2014)
10 C.F.R. 73.80
NRC can issue an order suspending an individual from working anywhere in the nuclear industry who fails to report any concerns arising from behavioral observation; LBP-14-4, 79 NRC 345 (2014)
NRC can order an individual to pay civil penalties of up to $100,000 for failing to report any concerns arising from behavioral observation; LBP-14-4, 79 NRC 345 (2014)
10 C.F.R. 73.81
NRC can take criminal enforcement action against an individual for failing to report any concerns arising from behavioral observation; LBP-14-4, 79 NRC 345 (2014)
10 C.F.R. Part 74
material control and accounting system is required for a fuel fabrication facility; LBP-14-1, 79 NRC 44 (2014)
10 C.F.R. 74.4
"alarm" is defined; LBP-14-1, 79 NRC 128 (2014)
"Category IA material" is defined as strategic special nuclear material directly usable in the manufacture of a nuclear explosive device; LBP-14-1, 79 NRC 56 n.80, 128 (2014)
"Category IB material" is defined as all strategic special nuclear material other than Category IA; LBP-14-1, 79 NRC 56 n.80, 128 (2014)
circumstances when an MC&A alarm exists are described; LBP-14-1, 79 NRC 96 n.295, 129 (2014)
"controlled access area" includes a permanently established area that is clearly demarcated, access to which is controlled, and which affords isolation of the material or persons within it; LBP-14-1, 79 NRC 56 n.80, 128 (2014)
definition of "power of detection" does not explicitly require a demonstration of data accuracy; LBP-14-1, 79 NRC 77 n.198 (2014)
"formula kilogram" is defined; LBP-14-1, 79 NRC 128 (2014)
"item" means any discrete quantity or container of special nuclear material or source material, not undergoing processing, having a unique identity and also having an assigned element and isotope quantity; LBP-14-1, 79 NRC 56 n.83, 128 (2014)
"power of detection" means the probability that the critical value of a statistical test will be exceeded when there is an actual loss of a specific quantity of strategic special nuclear material; LBP-14-1, 79 NRC 56 n.85, 128-29 (2014)
"sealed source" means any special nuclear material that is physically encased in a capsule, rod, element, etc. that prevents the leakage or escape of the special nuclear material and that prevents removal of the special nuclear material without penetrations of the casing; LBP-14-1, 79 NRC 56 n.82, 129 (2014)
"strategic special nuclear material" is defined; LBP-14-1, 79 NRC 44 n.1, 51 n.52, 129 (2014)
"tamper-safing" means the use of devices on containers or vaults in a manner and at a time that ensures a clear indication of any violation of the integrity of previously made measurements of special nuclear material within the container or vault; LBP-14-1, 79 NRC 56 n.81, 129 (2014)

"vault" means a windowless enclosure designed and constructed to delay penetration from forced entry; LBP-14-1, 79 NRC 56 n.80 (2014)
10 C.F.R. 74.51(a)
applicants applying to possess 5 or more formula kilograms of strategic special nuclear material must maintain alarm resolution capabilities designed to achieve the performance objectives of this section; LBP-14-1, 79 NRC 96 (2014)
NRC may issue a license to possess and use 5 or more formula kilograms of strategic special nuclear material only if applicant can establish, implement, and maintain a Commission-approved material control and accounting system that will achieve general performance objectives; LBP-14-1, 79 NRC 51 (2014)
section 74.55(b)(1) applies only to licensees that are authorized to possess 5 or more formula kilograms of strategic special nuclear material; LBP-14-1, 79 NRC 56 (2014)
10 C.F.R. 74.51(a)(1)
capability to resolve alarms within approved time periods is most clearly aimed at the prompt investigation of anomalies potentially indicative of SSNM losses; LBP-14-1, 79 NRC (2014)
capability to verify presence is most clearly aimed at ongoing confirmation of the presence of strategic special nuclear material in assigned locations; LBP-14-1, 79 NRC 56 n.84 (2014)
10 C.F.R. 74.51(a)(3)
capability to rapidly assess the validity of alleged thefts is aimed at the rapid determination of whether an actual loss of 5 or more formula kilograms occurred; LBP-14-1, 79 NRC 108 n.361 (2014)
rapid determination of SSNM theft assessment should be completed within an 8- or 72-hour timeline; LBP-14-1, 79 NRC 117 (2014)
10 C.F.R. 74.51(a)(4)
capability to verify integrity is most clearly aimed at the prompt investigation of anomalies potentially indicative of SSNM losses; LBP-14-1, 79 NRC 56 n.84 (2014)
10 C.F.R. 74.51(b)
to achieve strategic special nuclear material loss-related performance objectives, the material control and accounting system must provide the capabilities described in sections 74.55 and 74.57; LBP-14-1, 79 NRC 51 (2014)
10 C.F.R. 74.55
applicant's proposal to seal and design strategic special nuclear material item storage locations to be tamper-safed or equivalent to tamper-safing such that confirmation that the physical boundary of these locations has not been breached ensures the integrity of these items; LBP-14-1, 79 NRC 57 (2014)
regulation is not rendered superfluous by a reading that verifying the integrity of a storage area boundary will suffice to verify the integrity of the items contained therein; LBP-14-1, 79 NRC 76 (2014)
10 C.F.R. 74.55(a)
section 74.55(b)(1) applies only to licensees that are authorized to possess 5 or more formula kilograms of strategic special nuclear material; LBP-14-1, 79 NRC 56 (2014)
10 C.F.R. 74.55(b)
definition of "power of detection" does not explicitly require a demonstration of data accuracy; LBP-14-1, 79 NRC 77 n.198 (2014)
licensees must satisfy the regulation's detection requirements for tamper-safed strategic special nuclear material items in order to achieve the performance objectives set out in section 74.51(a); LBP-14-1, 79 NRC 56 (2014)
requirement for 99% power of detection means that there must be a 99% probability that a missing item will be included within the sample chosen for inspection and would thus be detected; LBP-14-1, 79 NRC 56 n.85 (2014)
requirements for performance of applicant's material control and accounting system neither prescribe nor proscribe any methodology for achievement of those performance requirements; LBP-14-1, 79 NRC 52 (2014)
statistical sampling is to be used to achieve verification of item presence and integrity but the regulation does not prescribe a particular method of sampling, only that statistical sampling must result in at least 99% power of detecting losses that total 5 formula kg or more; LBP-14-1, 79 NRC 56 (2014)

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10 C.F.R. 74.55(b)(1)
applicant has demonstrated that its program of automated equipment, computer systems (and their verification), and the use of secured and tamper-safed item storage area boundaries, satisfactorily demonstrates the ability to verify the presence and integrity of all strategic special nuclear material items in storage; LBP-14-1, 79 NRC 46, 50 (2014)
applicant satisfies the requirement to verify, on a statistical sampling basis, the integrity of SSNM items, with at least a 99% power of detecting losses totaling 5 formula kilograms or more, within 30 days for Category IA and 60 days for Category IB items; LBP-14-1, 79 NRC 70 (2014)
applicant's daily reconciliation of the MMIS Perpetual Inventory Report and PLC mapping, as supported by its various accuracy-related programs and the MMIS verification procedure, provides reasonable assurance that it can verify the presence of all SSNM items in storage within the required 30- and 60-day time frames; LBP-14-1, 79 NRC 117 (2014)
applicant's sampling method, which examines data representative of the entire set of SSNM items, and not a limited subset, samples 100% of SSNM items and thus complies with the requirement to sample a sufficient number of items to result in at least 99% power of detecting the specified losses; LBP-14-1, 79 NRC 70 (2014)
applicant's SSNM item monitoring approach, as enhanced by an item verification procedure, provides reasonable assurance that the quantitative accuracy of the MMIS/PLC data is sufficient to enable the procedures employing those data to meet the regulatory requirements; LBP-14-1, 79 NRC 92 (2014)
applicant's verification of the integrity of the SSNM vault boundaries on a daily basis exceeds the regulatory requirement to verify the integrity of the items every 30 or 60 days; LBP-14-1, 79 NRC 74 n.187 (2014)
by verifying integrity of storage area boundaries, applicant can verify the integrity of all SSNM items in storage within the required 30- and 60-day time frames; LBP-14-1, 79 NRC 117 (2014)
contention that revised application does not satisfy the material control and accounting requirements because it does not demonstrate that applicant's item monitoring program has the capability to verify, on a statistical sampling basis, the presence and integrity of strategic special nuclear material items is decided; LBP-14-1, 79 NRC 55-56 (2014)
determination regarding item integrity refers to the ability to determine that a container holding SSNM items has not been breached and that the amount of SSNM within has not been altered; LBP-14-1, 79 NRC 70 (2014)
intervenors fail to provide any information or support for their proposition that applicant's automated systems do not comply with the regulatory requirements and their challenges to applicant's item monitoring approach on these grounds fail; LBP-14-1, 79 NRC 70 (2014)
neither the plain language of this section nor its regulatory history suggests that verifications of item integrity must be in any way physical; LBP-14-1, 79 NRC 75 (2014)
no requirement to quantify the potential for an adversary to take measures to conceal any abnormalities in MMIS and PLC mapping can reasonably be found in (or implied by) the language of this rule; LBP-14-1, 79 NRC 93 (2014)
quantitative accuracy of the MMIS/PLC computer system data must be considered in determining whether requirements of this section are satisfied by applicant's plans; LBP-14-1, 79 NRC 81 (2014)
there is a general overarching requirement that applicant's SSNM item monitoring method be sufficiently accurate to provide reasonable assurance that the specific regulatory requirement is satisfied; LBP-14-1, 79 NRC 87 (2014)
10 C.F.R. 74.55(e)
requirements for performance of applicant's material control and accounting system neither prescribe nor proscribe any methodology for achievement of those performance requirements; LBP-14-1, 79 NRC 52 (2014)
10 C.F.R. 74.57(a)
applicants applying to possess 5 or more formula kilograms of SSNM must maintain alarm resolution capabilities designed to achieve the performance objectives of section 74.51(a); LBP-14-1, 79 NRC 96 (2014)
10 C.F.R. 74.57(b)
applicant provides reasonable assurance that it can normally resolve an alarm within 3 days, fully satisfying regulatory requirements; LBP-14-1, 79 NRC 117 (2014)

applicant's preliminary material control and accounting program satisfactorily demonstrates the ability to resolve the nature and cause of any MC&A alarm within approved time periods in each of the four storage areas at issue; LBP-14-1, 79 NRC 46, 50 (2014)
licensees shall resolve the nature and cause of any MC&A alarm within approved time periods; LBP-14-1, 79 NRC 96 (2014)
MC&A alarms are not required to be resolved within any particular time frame, only that a time period be approved by NRC Staff; LBP-14-1, 79 NRC 99 (2014)
petitioner provides no support for the proposition that applicant must demonstrate that each individual resolution method can be completed, by itself, within the approved time period; LBP-14-1, 79 NRC 99 (2014)
10 C.F.R. 74.57(c)
NRC must be notified within 24 hours of failure to resolve an alarm within the approved time period; LBP-14-1, 79 NRC 105 n.348 (2014)
10 C.F.R. 74.57(e)
applicant's preliminary material control and accounting program satisfactorily demonstrates the ability to rapidly assess the validity of alleged thefts; LBP-14-1, 79 NRC 46, 50 (2014)
contention challenging applicant's ability to rapidly assess the validity of alleged thefts is decided; LBP-14-1, 79 NRC 108 (2014)
contention questioning whether applicant's theft assessment commitment satisfies the regulatory requirements even though it relies on an underlying assumption of 100% accuracy of applicant's MMIS/PLC computer records system is decided; LBP-14-1, 79 NRC 109 (2014)
licensees are not required to conduct assessments of alleged thefts without the use of their records systems, or by first verifying the integrity and accuracy of those records systems; LBP-14-1, 79 NRC 116 (2014)
under this performance-based regulation, licensee is simply required to provide the capability to rapidly assess the validity of alleged thefts; LBP-14-1, 79 NRC 112 (2014)
using its MMIS and PLC mapping, applicant has capability to locate one SSNM item in 8 hours, and all SSNM items in vault storage in 72 hours and therefore provides reasonable assurance of its ability to rapidly assess the validity of an alleged theft; LBP-14-1, 79 NRC 117 (2014)
10 C.F.R. 100.23
investigation of geological, seismological, and engineering characteristics of a site is required; LBP-14-8, 79 NRC 525 (2014)
36 C.F.R. 800.1(a), 800.2(c)(2)(ii)
NRC Staff is required to consult with interested parties, including Indian Tribes, to identify historic properties, evaluate the potential effects of the project on those properties, and consider mitigation measures; CLI-14-2, 79 NRC 17 n.33 (2014)
40 C.F.R. 124.19
administrative challenges to EPA permits are to be filed 30 days after EPA's final permit decision; LBP-14-4, 79 NRC 373 n.66 (2014)
40 C.F.R. 1502.4
agencies shall use the criteria for scope in section 1508.25 to determine which proposals shall be the subject of a particular impact statement; LBP-14-6, 79 NRC 420 n.81 (2014)
NRC is directed to use the CEQ regulations in defining the scope of its impact statements; LBP-14-6, 79 NRC 420 n.81 (2014)
40 C.F.R. 1502.4(a)
proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement; LBP-14-6, 79 NRC 420 n.81 (2014)
40 C.F.R. 1508.7
"cumulative impact" is defined as the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions; LBP-14-6, 79 NRC 418, 420 (2014)
cumulative impacts include impacts resulting from individually minor but collectively significant actions taking place over a period of time; LBP-14-6, 79 NRC 420 (2014)

projects that are not connected actions, but are physically related to the system, are cumulative actions and are subject to an examination of cumulative impacts; LBP-14-6, 79 NRC 422 (2014)
40 C.F.R. 1508.25(a)(1)
environmental impact statements must include all connected actions; LBP-14-6, 79 NRC 420 (2014)
40 C.F.R. 1508.25(a)(1)(ii) and (iii)
separate actions are connected if, among other things, they cannot or will not proceed unless other actions have been taken previously or simultaneously, or they are interdependent parts of a larger action and depend on the larger action for their justification; LBP-14-6, 79 NRC 420-21, 423 (2014)
40 C.F.R. 1508.25(a)(2)
projects that are not connected actions, but are physically related to the system, are cumulative actions and are subject to an examination of cumulative impacts; LBP-14-6, 79 NRC 422 (2014)

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Administrative Procedure Act, 5 U.S.C. § 702
allegation that agency conduct amounts to a legal wrong is sufficient to establish union's right to judicial review; LBP-14-4, 79 NRC 354 (2014)
person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof; LBP-14-4, 79 NRC 354 (2014)
Atomic Energy Act, § 3d
the Purpose section specifically provides for creating a program to encourage widespread participation in order to achieve the policies set forth in the AEA; LBP-14-4, 79 NRC 372 n.60 (2014)
Atomic Energy Act, 57c(2), 42 U.S.C. § 2077(c)(2)
adequacy finding on applicant's material control and accounting program requires the board to make a case-by-case determination, guided by the AEA mandate that no license to possess special nuclear material may be issued if issuance would be inimical to the common defense and security or would constitute an unreasonable risk to the health and safety of the public; LBP-14-1, 79 NRC 51 (2014)
Atomic Energy Act, 102a, 42 U.S.C. § 2132(a)
licenses for utilization or production facilities for industrial or commercial purposes must comply with the terms of AEA § 103; LBP-14-3, 79 NRC 278-79 (2014)
Atomic Energy Act, 103d, § 2133(d)
contention alleging that statutory and regulatory prohibitions on foreign ownership, control, or domination forbid the licensing of proposed units is decided; LBP-14-3, 79 NRC 271, 272, 273, 278, 281, 300, 303-04, 314 (2014)
no license may be issued to any person within the United States if, in the opinion of the Commission, issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public; LBP-14-3, 79 NRC 279, 307 (2014)
perfection in plant construction and the facility construction quality assurance program is not a precondition for a license under either the Atomic Energy Act or the Commission's regulations; LBP-14-7, 79 NRC 471 (2014)
Atomic Energy Act, 104d, 42 U.S.C. § 2134(d) absent a transfer, license renewal application will be denied where licensee remains under foreign ownership, control, or domination; CLI-14-5, 79 NRC 256 (2014)
Atomic Energy Act, 42 U.S.C. § 2232(a)
perfection in plant construction and the facility construction quality assurance program is not a precondition for a license under either the Atomic Energy Act or the Commission's regulations; LBP-14-7, 79 NRC 471 (2014)
Atomic Energy Act, 42 U.S.C. § 2239(a)(1)(A)
Commission shall grant a hearing upon the request of any person whose interest may be affected; LBP-14-4, 79 NRC 341 (2014)
Bald and Golden Eagle Protection Act, 16 U.S.C. § 668-668c
contention that the final supplemental environmental impact statement violates the National Environmental Policy Act and implementing regulations by failing to conduct the required hard-look analysis of impacts of the proposed mine on species of birds and bats receiving special protection migrates as an admissible contention; LBP-14-5, 79 NRC 393-94 (2014)

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Michigan Natural Resources and Environmental Protection Act, Mich. Comp. Laws § 324.36501(f)
"take" is defined by Michigan law with respect to fish and wildlife as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct; LBP-14-7, 79 NRC 463 (2014)

Michigan Natural Resources and Environmental Protection Act, Mich. Comp. Laws § 324.36505(1)(a)
individuals are prohibited from taking wildlife indigenous to the state that have been determined to be endangered or threatened; LBP-14-7, 79 NRC 463 (2014)

Michigan Natural Resources and Environmental Protection Act, Mich. Comp. Laws § 324.36505(5)
upon good cause shown, endangered or threatened species found on the state list may be removed or captured, but only as authorized by a permit issued by the department; LBP-14-7, 79 NRC 463 (2014)

Migratory Bird Treaty Act, 16 U.S.C. § 703-711
contention that the final supplemental environmental impact statement violates the National Environmental Policy Act and implementing regulations by failing to conduct the required hard-look analysis of impacts of the proposed mine on species of birds and bats receiving special protection migrates as an admissible contention; LBP-14-5, 79 NRC 393-94 (2014)

National Historic Preservation Act, 16 U.S.C. § 470f
NRC Staff is required to consult with interested parties, including Indian tribes, to identify historic properties, evaluate the potential effects of the project on those properties, and consider mitigation measures; CLI-14-2, 79 NRC 17 n.33 (2014)

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OTHERS

Black's Law Dictionary 454 (6th ed. 1990)
"dicta" is a court's opinion that goes beyond the facts before court and therefore are individual views of the author of the opinion and not binding in subsequent cases as legal precedent; LBP-14-4, 79 NRC 360 n.39 (2014)

Black's Law Dictionary 329 (9th ed. 2009)
no bright line is established between control or domination, on the one hand, and their absence, on the other; LBP-14-3, 79 NRC 307 (2014)

Mandelker, Daniel R., NEPA Law & Litigation § 9:11 (2006)
connected actions are distinguished from cumulative impacts; LBP-14-6, 79 NRC 419-20 n.76 (2014)

Repka, David A., & Smith, Tyson R., *Proximity, Presumptions, and Public Participation: Reforming Standing at the Nuclear Regulatory Commission*, 62 Admin. L. Rev. 583, 590 (2010)
NRC's 50-mile proximity presumption is an example of NRC's great liberality in the arena of standing; LBP-14-4, 79 NRC 375 n.74 (2014)

U.S. Const. Art. III
case or controversy limitation does not apply to NRC; LBP-14-4, 79 NRC 350 (2014)
judicial concepts of standing limit the jurisdiction and power of federal courts to cases and controversies; LBP-14-4, 79 NRC 350 (2014)

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- as an exercise of its inherent supervisory authority over adjudications, the Commission directs that waste confidence contentions and any related contentions that may be filed in the near term be held in abeyance pending its further order; LBP-14-6, 79 NRC 404 (2014)
- contention concerning temporary storage and ultimate disposal of nuclear waste was held in abeyance pending further order from the Commission; LBP-14-7, 79 NRC 451 (2014)
- following issuance of the board's final dispositive decision on contentions held in abeyance, and consistent with NRC procedural rules, applicant and intervenor will have the opportunity to appeal the board's decisions; CLI-14-3, 79 NRC 31 (2014)
- in view of the special circumstances presented by waste confidence, the Commission directed that those contentions and any related contentions filed in the near term be held in abeyance pending our further order; CLI-14-3, 79 NRC 31 (2014); LBP-14-3, 79 NRC 267 (2014)
- NRC will not issue licenses dependent upon the Waste Confidence Decision or the Temporary Storage Rule until the District of Columbia Circuit's remand is appropriately addressed; LBP-14-3, 79 NRC 267 (2014)
- request for a protective stay to hold the proceeding in abeyance indefinitely pending potential future events is inconsistent with NRC's longstanding interest in sound case management and regulatory finality and would be unfair to the other parties; CLI-14-6, 79 NRC 445 (2014)
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- contention that NRC or licensee has abused or exceeded its lawful discretion with respect to nuclear safety programs is not admissible because it fails to provide sufficient information to show that a genuine dispute exists on a material issue of law or fact; LBP-14-4, 79 NRC 319 (2014)
- NRC Staff improperly discharges its duties with respect to the grading of an operating test if the grading is inappropriate or unjustified or if the grading strays too far afield of the twin goals of equitable and consistent examination administration, thus becoming arbitrary or an abuse of discretion; LBP-14-2, 79 NRC 131 (2014)

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if intervenors make reference to new material in the final supplemental environmental impact statement but do not address the six elements of 10 C.F.R. 2.309(f)(1), such references to new material do not give rise to either a new or an amended contention; LBP-14-5, 79 NRC 377 (2014)
new or amended contentions based on material information that has subsequently become available must meet the general contention admissibility requirements of 10 C.F.R. 2.309(f)(1) as well as the three requirements in section 2.309(c)(1); LBP-14-6, 79 NRC 404 (2014)
new or amended contentions must be based on information not previously available and materially different from previously available information and be submitted in a timely fashion based on the availability of the subsequent information; LBP-14-6, 79 NRC 404 (2014)
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following issuance of the board's final dispositive decision on contentions held in abeyance, and consistent with NRC procedural rules, applicant and intervenor will have the opportunity to appeal the board's decisions; CLI-14-3, 79 NRC 31 (2014)
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NRC Staff cannot defend its decision on a basis inconsistent with its own informal review; LBP-14-2, 79 NRC 131 (2014)
NRC Staff may not take a position or assert facts before the presiding officer contrary to a matter decided by the appeal board (i.e., the Staff itself) on applicant's informal appeal absent an explicit confession of error; LBP-14-2, 79 NRC 131 (2014)
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because the board granted a hearing request, its decision to reject some contentions may not be appealed until the end of the case; CLI-14-2, 79 NRC 11 (2014)
in light of the board's limited jurisdiction, it concludes that petitioner may appeal its decision immediately; LBP-14-8, 79 NRC 519 (2014)
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in context with the other provisions of AEA § 104d, the foreign control limitation should be given an orientation toward safeguarding the national defense and security; LBP-14-3, 79 NRC 267 (2014)
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no license may be issued to any person within the United States if, in the opinion of the Commission, issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public; LBP-14-3, 79 NRC 267 (2014)
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cask certification for transportation poses such a minimal environmental impact that it merits a categorical exclusion from NEPA; LBP-14-6, 79 NRC 404 (2014)
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any person except one excluded by section 50.38 may file an application for a COL for a nuclear power facility; LBP-14-3, 79 NRC 267 (2014)
applicant's negation action plan is part of its final safety analysis report and therefore part of the licensing basis of the facility; LBP-14-3, 79 NRC 267 (2014)
not all license commitments must be converted into license conditions to be enforceable; LBP-14-3, 79 NRC 267 (2014)
NRC Staff may not issue a notice of violation for failure to satisfy Appendix B requirements during the preapplication period, but it may deny a combined license for failure to satisfy the standards and requirements of the Commission's regulations; LBP-14-7, 79 NRC 451 (2014)
there is generally no specific ownership percentage above which the NRC Staff would conclusively determine that an applicant is per se controlled by foreign interests, but a 100% foreign ownership has formed the basis for the licensing board's grant of summary disposition in favor of the intervenors; LBP-14-3, 79 NRC 267 (2014)
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adequacy finding on applicant's material control and accounting program requires the board to make a case-by-case determination, guided by the Atomic Energy Act's mandate that no license to possess special nuclear material may be issued if issuance would be inimical to the common defense and security or would constitute an unreasonable risk to the health and safety of the public; LBP-14-1, 79 NRC 39 (2014)
in context with the other provisions of the Atomic Energy Act § 104d, the foreign control limitation should be given an orientation toward safeguarding the national defense and security; LBP-14-3, 79 NRC 267 (2014)
NRC's enforcement order does not state that any reportable illegal, unusual, or aberrant behavior must have a nexus to public health and safety or the common defense and security in order to be reportable; LBP-14-4, 79 NRC 319 (2014)
to be inimical to the common defense and security or to the health and safety of the public, control or domination must be of such a degree that the will of the licensee is subjugated to the will of the foreign entity, and the foreign entity must have the power to direct the actions of the licensee; LBP-14-3, 79 NRC 267 (2014)
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applicant's program for control and accounting of special nuclear material must show how compliance with the requirements of section 74.51 will be accomplished; LBP-14-1, 79 NRC 39 (2014)
comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine effectiveness of the program; LBP-14-7, 79 NRC 451 (2014)
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isssuance of a CAL is an enforcement process that does not allow for public intervention; LBP-14-1, 79 NRC 39 (2014)
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board finds that the terms endorsed in a confirmatory order provide more specificity than the applicable NRC regulation which rather broadly requires reporting of any questionable behavior patterns or activities; LBP-14-4, 79 NRC 319 (2014)
challenges to NRC enforcement orders are limited to whether the order should be sustained; LBP-14-4, 79 NRC 319 (2014)
contention that a confirmatory order should not be sustained because, without sufficient justification in the record, it imposes obligations on licensee's off-duty employees, not otherwise required by NRC, to observe and report offsite, off-duty conduct of fellow employees in inadmissible; LBP-14-4, 79 NRC 319 (2014)
contention that considers the terms of a confirmatory order warranted or unwarranted is irrelevant if they fall within NRC's authority to impose; LBP-14-4, 79 NRC 319 (2014)
hearing on a confirmatory order is limited solely to whether, on the basis of matters set forth in the order, the order should be sustained; LBP-14-4, 79 NRC 319 (2014)
if licensee or other person to whom an order is issued consents to its issuance, or the order confirms actions agreed to by the licensee or such other person, that consent or agreement constitutes a waiver by the licensee or such other person of a right to a hearing and any associated rights; LBP-14-4, 79 NRC 319 (2014)
it is unlikely that petitioners will often obtain hearings on confirmatory enforcement orders; LBP-14-4, 79 NRC 319 (2014)
nonlicensee with purely economic interest has an automatic right to demand a hearing under section 2.202(a)(3) without showing standing or proffering an admissible contention; LBP-14-4, 79 NRC 319 (2014)
nonparty petitioners may not challenge a confirmatory order embodying a settlement if the order improves the safety situation over what it was in the absence of the order; LBP-14-4, 79 NRC 319 (2014)
NRC's notice of opportunity for hearing on a confirmatory order provides the public a safety valve because conceivably the order might remove a restriction upon a licensee or otherwise have the effect of worsening the safety situation; LBP-14-4, 79 NRC 319 (2014)
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NRC regional office shall not assign an examiner who failed an applicant on an operating test to administer any part of that applicant's retake of the operating test; LBP-14-2, 79 NRC 131 (2014)
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when informed of a potential conflict, the supervisor of a reactor operator test examiner must apply sound judgment to the facts of each case and, if any doubt exists, consult with regional management and/or the NRR operator licensing program office to resolve the issue; LBP-14-2, 79 NRC 131 (2014)
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contention alleging that final supplemental environmental impact statement fails to consider connected actions is admissible; LBP-14-5, 79 NRC 377 (2014)

contention questioning whether future anticipated use of MOX fuel is sufficiently definite to constitute a proposal under the law, with a connection, cumulative impact, interdependence, or similar relationship to matters at issue in a license renewal proceeding to warrant being addressed in the supplemental environmental impact statement is admissible; LBP-14-6, 79 NRC 404 (2014)
cumulative impact analysis is required for reasonably foreseeable future actions and test for connected actions in CEQ regulation 40 C.F.R. 1508.25 need not be satisfied; LBP-14-6, 79 NRC 404 (2014)
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proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement; LBP-14-6, 79 NRC 404 (2014)
separate actions are connected if they cannot or will not proceed unless other actions are taken previously or simultaneously as well as when they are interdependent parts of a larger action and depend on the larger action for their justification; LBP-14-6, 79 NRC 404 (2014)
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contention that NRC has not fulfilled its trust responsibility in its analysis and conclusion of the cumulative impacts on historic and cultural resources from the reasonably foreseeable expansion of an independent spent fuel storage installation is admissible; LBP-14-6, 79 NRC 404 (2014)

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contentions must be based on a genuine material dispute, not the possibility that petitioners, if they perform their own additional analyses, may ultimately disagree with the application; LBP-14-6, 79 NRC 404 (2014)
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contentions must provide factual support for underlying claims and identify a genuine dispute with the applicant on a material issue; CLI-14-6, 79 NRC 445 (2014)
contentions must provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact, and must include references to specific portions of the application (including applicant's environmental report and safety report) that petitioner disputes and supporting reasons for each dispute; LBP-14-6, 79 NRC 404 (2014)
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good cause in 10 C.F.R. 2.307(a) does not share the same definition that is used for good cause in final 2.309(c); LBP-14-5, 79 NRC 377 (2014)
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if a party submits a proposed contention after the initial filing deadline announced in the applicable *Federal Register* notice for submitting a hearing petition, it will not be entertained absent a determination by the presiding officer that a participant has demonstrated good cause; LBP-14-5, 79 NRC 377 (2014)

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intervention petitioner need not discuss each and every portion of the application that bears any relation to the issue being contested, but but only provide a brief explanation of the argument and a concise statement of the relevant facts; CLI-14-2, 79 NRC 11 (2014)
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no one can challenge an enforcement order as long as the order, in any way, improves the safety situation over what it was in the absence of the order; LBP-14-4, 79 NRC 319 (2014)
nothing in NRC case law or regulations suggests that license renewal is an occasion for far-reaching speculation about unimplemented and uncertain plans; LBP-14-6, 79 NRC 404 (2014)
NRC Staff and licensee may file interlocutory appeals on the admission of a contention, but intervenors are prohibited from filing such appeals on the denial of a contention unless all contentions have been denied; LBP-14-4, 79 NRC 319 (2014)
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sources and documents on which it intends to rely to support its position; LBP-14-6, 79 NRC 404 (2014)
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possible future action must at least constitute a proposal pending before the agency to be ripe for adjudication, and to establish that cumulative impacts of the action must be addressed, petitioner must first show that any proposal applicant has made is so interdependent with the application at issue that it would be unwise or irrational to complete one without the other; LBP-14-6, 79 NRC 404 (2014)
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if a party submits a proposed contention after the initial filing deadline announced in the applicable *Federal Register* notice for submitting a hearing petition, it will not be entertained absent a determination by the presiding officer that a participant has demonstrated good cause; LBP-14-5, 79 NRC 377 (2014)

if attempting to raise a new issue based on new information in the final supplemental environmental impact statement, intervenor must file a new contention if information in the FSEIS is sufficiently different from the information in the DSEIS that supported the original contention's admission; LBP-14-5, 79 NRC 377 (2014)
if the reason a motion to admit a new or amended contention was filed after the initial deadline does not relate to the substance of the filing itself, the standard in 10 C.F.R. 2.307(a) applies in determining whether the motion can be considered timely; LBP-14-5, 79 NRC 377 (2014)
new contention must present a seriously different picture of the environmental impact of the proposed project; LBP-14-5, 79 NRC 377 (2014)
new or amended contentions based on material information that has subsequently become available must meet the general contention admissibility requirements of 10 C.F.R. 2.309(f)(1) as well as the three requirements in section 2.309(c)(1); LBP-14-6, 79 NRC 404 (2014)
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request to admit a new or amended contention requires petitioner to show that the information upon which it is based was not previously available and is materially different from information previously available; CLI-14-2, 79 NRC 11 (2014)
CONTRACTORS
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contention alleging failure to meet applicable legal requirements regarding protection of historical and cultural resources is admissible; LBP-14-5, 79 NRC 377 (2014)

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contention that draft environmental assessment fails to adequately address potential impacts of the reasonably foreseeable expansion of an independent spent fuel storage installation on cultural and historic resources is admissible; LBP-14-6, 79 NRC 404 (2014)
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federal law not only recognizes that Native American tribes have a protected interest in cultural resources found on their aboriginal land, but as well has imposed on federal agencies a consultation requirement under the National Historic Preservation Act to ensure the protection of tribal interests in cultural resources; CLI-14-2, 79 NRC 11 (2014)
Indian tribe has an organizational interest in protecting cultural artifacts connected with it; CLI-14-2, 79 NRC 11 (2014)
petitioner may claim deficiencies in the application's cultural resources discussion even though it is generally not expected that the applicant's cultural resources discussion will be comprehensive; CLI-14-2, 79 NRC 11 (2014)
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"cumulative impact" is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions; LBP-14-6, 79 NRC 404 (2014)
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NRC has expressly adopted, and is therefore bound by, the CEQ definition of cumulative impacts; LBP-14-6, 79 NRC 404 (2014)
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possible future action must at least constitute a proposal pending before the agency to be ripe for adjudication, and to establish that cumulative impacts of the action must be addressed, petitioner must

first show that any proposal applicant has made is so interdependent with the application at issue that it would be unwise or irrational to complete one without the other; LBP-14-6, 79 NRC 404 (2014)
projects that are not connected actions, but are physically related to the system, are cumulative actions and are subject to an examination of cumulative impacts; LBP-14-6, 79 NRC 404 (2014)
rather than being determinative, interdependence of proposed actions with potential future actions should be considered alongside other pertinent facts and circumstances to determine whether there is a sufficient likelihood that an action will occur to render that action foreseeable; LBP-14-6, 79 NRC 404 (2014)
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"connected actions" include those that lack independent utility; LBP-14-6, 79 NRC 404 (2014)
contention of omission alleges that an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues have been discussed in the application; LBP-14-5, 79 NRC 377 (2014)
"controlled access area" includes a permanently established place that is clearly demarcated, access to which is controlled, and which affords isolation of the material or persons within it; LBP-14-1, 79 NRC 39 (2014)
"cumulative impact" is defined as the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions; LBP-14-6, 79 NRC 404 (2014)
"dicta" is a court's opinion that goes beyond the facts before court and therefore represents individual views of the author of the opinion and is not binding in subsequent cases as legal precedent; LBP-14-4, 79 NRC 319 (2014)
failure to include all connected actions within the scope of the proposed action is generally referred to as segmentation; LBP-14-6, 79 NRC 404 (2014)

"item" means any discrete quantity or container of special nuclear material or source material, not undergoing processing, having a unique identity and also having an assigned element and isotope quantity; LBP-14-1, 79 NRC 39 (2014)
"power of detection" means the probability that the critical value of a statistical test will be exceeded when there is an actual loss of a specific quantity of strategic special nuclear material; LBP-14-1, 79 NRC 39 (2014)
"sealed source" means any special nuclear material that is physically encased in a capsule, rod, element, etc. that prevents the leakage or escape of the SNM and that prevents removal of the SNM without penetrations of the casing; LBP-14-1, 79 NRC 39 (2014)
segmentation or piecemealing occurs when an action is divided into component parts, each involving action with less significant environmental effects; LBP-14-6, 79 NRC 404 (2014)
"senior reactor operator" is any individual licensed under Part 55 to manipulate the controls of a facility and to direct the licensed activities of licensed operators; LBP-14-2, 79 NRC 131 (2014)
"tamper-safing" means the use of devices on containers or vaults in a manner and at a time that ensures a clear indication of any violation of the integrity of previously made measurements of special nuclear material within the container or vault; LBP-14-1, 79 NRC 39 (2014)
"vault" means a windowless enclosure designed and constructed to delay penetration from forced entry; LBP-14-1, 79 NRC 39 (2014)
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"demand" for a hearing is understood to confer a right to a hearing; LBP-14-4, 79 NRC 319 (2014)
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if an enforcement order blacklists a worker by name, under 10 C.F.R. 2.202(a)(3) he has the right to demand a hearing even though he may be motivated by purely economic concerns; LBP-14-4, 79 NRC 319 (2014)
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senior reactor operator license applicant who does not accept a proposed license denial may, within 20 days of the date of the denial letter, demand a hearing; LBP-14-2, 79 NRC 131 (2014)
subject of an enforcement order has an automatic right to demand a hearing without regard to satisfying section 2.309; LBP-14-4, 79 NRC 319 (2014)
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licensing boards have limited their review of NRC Staff reactor operator licensing decisions to those issues that were resolved against the license applicant in the Staff's informal review; LBP-14-2, 79 NRC 131 (2014)
NRC Staff cannot defend its decision on a basis inconsistent with its own informal review; LBP-14-2, 79 NRC 131 (2014)
NRC Staff may not issue a notice of violation for failure to satisfy Appendix B requirements during the preapplication period, but it may deny a combined license for failure to satisfy the standards and requirements of NRC regulations; LBP-14-7, 79 NRC 451 (2014)
NRC Staff's decision at the conclusion of its administrative reviews is the final Staff position and hence the only Staff position open to applicant's challenge before the presiding officer; LBP-14-2, 79 NRC 131 (2014)
senior reactor operator applicant who was denied a license after the first examination may elect to retake the tests; LBP-14-2, 79 NRC 131 (2014)

whatever the ground for the agency's departure from prior norms, it must be clearly set forth so that the reviewing court may understand the basis of the agency's action; LBP-14-2, 79 NRC 131 (2014)
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request that NRC order licensees to provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters from the control room is addressed; DD-14-2, 79 NRC 489 (2014)
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NRC Staff is obliged to lay all relevant materials before the board to enable it to adequately dispose of the issues before it; LBP-14-2, 79 NRC 131 (2014)
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parties, including NRC Staff, may be sanctioned for noncompliance with the disclosure regulations; LBP-14-2, 79 NRC 131 (2014)
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SUBJECT INDEX

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DEIS indicates what other interests and considerations of federal policy, including factors not related to environmental quality, if applicable, are relevant to the consideration of environmental effects of the proposed action; LBP-14-6, 79 NRC 404 (2014)
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- failure to have made any effort to evaluate the cumulative impact of the ISFSI expansion on archaeological sites has been held to be one of the most egregious shortfalls of the environmental assessment; LBP-14-6, 79 NRC 404 (2014)
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- NEPA does not impose a substantive obligation for a reviewing agency to require or enforce mitigation measures discussed in an EA; LBP-14-6, 79 NRC 404 (2014)
- NRC Staff's issuance of an environmental assessment under NEPA does not necessarily moot contentions challenging an applicant's environmental report; LBP-14-6, 79 NRC 404 (2014)
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- actions that the Commission, by rule or regulation, has declared to be a categorical exclusion do not individually or cumulatively have a significant effect on the human environment; LBP-14-6, 79 NRC 404 (2014)
- confinement of aquifers is material to the environmental impacts of the licensing action; CLI-14-2, 79 NRC 11 (2014)
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- if NRC Staff review reveals any new and significant information relating to environmental impacts of storage of high-burnup fuel, Staff will supplement its environmental analysis as required by the National Environmental Policy Act; LBP-14-6, 79 NRC 404 (2014)
- proposed mitigation measures are sufficient if they are supported by sufficient evidence, such as studies conducted by the agency, or are adequately policed; LBP-14-7, 79 NRC 451 (2014)
- when an environmental assessment is appropriate, it need only include a brief discussion of environmental impacts of the proposed action; LBP-14-6, 79 NRC 404 (2014)

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- agencies shall use the criteria for scope in 40 C.F.R. 1508.25 to determine which proposals shall be the subject of a particular impact statement; LBP-14-6, 79 NRC 404 (2014)
- all connected actions must be included; LBP-14-6, 79 NRC 404 (2014)
- although environmental contentions ultimately challenge the NRC's compliance with NEPA, applicant is free to support positions set forth in the environmental impact statement that are under challenge; LBP-14-7, 79 NRC 451 (2014)
- as a practical matter, NRC Staff typically relies on the applicant's environmental report in preparing the final environmental impact statement; LBP-14-7, 79 NRC 451 (2014)

discussion of mitigation measures is an important part of an agency's hard look at the environmental consequences of a proposed federal action; LBP-14-7, 79 NRC 451 (2014)
federal agencies may plan a number of related actions but may decide to prepare impact statements on each action individually rather than prepare an impact statement on the entire group, creating a segmentation or piecemealing problem; LBP-14-6, 79 NRC 404 (2014)
if the environmental impact statement addresses the concerns alleged in the contention, the original contention becomes moot and the intervenor must raise a new contention if it claims the EIS discussion is still inaccurate or incomplete; LBP-14-6, 79 NRC 404 (2014)
level of analysis required by NEPA in an environmental impact statement is more rigorous than is required when the agency has determined on the basis of its environmental assessment that the project as proposed will not result in significant environmental impact; LBP-14-7, 79 NRC 451 (2014)
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although environmental contentions ultimately challenge NRC's compliance with NEPA, applicant is free to support positions set forth in the environmental impact statement that are under challenge; LBP-14-7, 79 NRC 451 (2014)
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failure to include all connected actions within the scope of the proposed action is generally referred to as segmentation; LBP-14-6, 79 NRC 404 (2014)
flyspecking of environmental documents is inappropriate for environmental contentions; CLI-14-2, 79 NRC 11 (2014)
in certain instances, contentions challenging an environmental report are deemed to migrate from challenging applicant's ER to challenging NRC Staff's environmental assessment; LBP-14-6, 79 NRC 404 (2014)
migration tenet applies where information in the draft environmental impact statement is sufficiently similar to information in the environmental report; LBP-14-6, 79 NRC 404 (2014)
petitioner must base its environmental contentions on information available at the time its intervention petition is to be filed, including applicant's environmental report; CLI-14-2, 79 NRC 11 (2014)
rather than being determinative, interdependence of proposed actions with potential future actions should be considered alongside other pertinent facts and circumstances to determine whether there is a sufficient likelihood that an action will occur to render that action foreseeable; LBP-14-6, 79 NRC 404 (2014)
segmentation is to be avoided in order to insure that interrelated projects, the overall effect of which is environmentally significant, not be fractionalized into smaller, less significant actions; LBP-14-6, 79 NRC 404 (2014)
segmentation or piecemealing occurs when an action is divided into component parts, each involving action with less significant environmental effects; LBP-14-6, 79 NRC 404 (2014)
to bring NEPA into play, a possible future action must at least constitute a proposal pending before the agency (i.e., ripeness), and must be in some way interrelated with the action that the agency is actively considering (i.e., nexus); LBP-14-6, 79 NRC 404 (2014)
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admitted contentions challenging applicant's ER may, in appropriate circumstances, function as challenges to similar portions of NRC Staff's environmental impact statement; LBP-14-5, 79 NRC 377 (2014)
although a contention contesting applicant's ER generally may be viewed as a challenge to NRC Staff's subsequent draft environmental impact statement, new claims must be raised in a new or amended contention; LBP-14-5, 79 NRC 377 (2014)

applicant owes no duty to address the federal government's trust responsibility in its ER; LBP-14-6, 79 NRC 404 (2014)
as a practical matter, NRC Staff typically relies on applicant's ER in preparing the final environmental impact statement; LBP-14-7, 79 NRC 451 (2014)
license renewal applicants need not include a need-for-power discussion in their ER; CLI-14-6, 79 NRC 445 (2014)
NRC Staff's issuance of an environmental assessment under NEPA does not necessarily moot contentions challenging applicant's ER; LBP-14-6, 79 NRC 404 (2014)
petitioner may claim deficiencies in the application's cultural resources discussion even though it is generally not expected that applicant's cultural resources discussion will be comprehensive; CLI-14-2, 79 NRC 11 (2014)
reliance on mitigation to support findings with regard to environmental impacts of an activity is justified; LBP-14-7, 79 NRC 451 (2014)
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contention claiming that NRC Staff's consultation was inadequate does not ripen until issuance of the Staff's draft environmental review document; CLI-14-2, 79 NRC 11 (2014)
NEPA's hard-look requirement is tempered by a rule of reason that requires agencies to address only impacts that are reasonably foreseeable, not those that are remote and speculative; LBP-14-7, 79 NRC 451 (2014)
under NEPA, NRC is required to take a hard look at the environmental impacts of a proposed action; LBP-14-7, 79 NRC 451 (2014)
when conducting a NEPA-required environmental review, an agency may consider the ameliorative effects of mitigation in determining the environmental impacts of an activity; LBP-14-7, 79 NRC 451 (2014)
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request that NRC order licensees to ensure that emergency planning equipment and facilities are sufficient for dealing with multiunit and prolonged station blackout scenarios until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide reasonable protection for equipment from the effects of design-basis external events and to add equipment as needed to address multiunit events while other requirements are being revised and implemented is addressed; DD-14-2, 79 NRC 489 (2014)
EQUIPMENT, SAFETY-RELATED
request that NRC order licensees to provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters from the control room is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to reevaluate seismic and flooding hazards at their sites against current NRC requirements and guidance, and if necessary, update the design basis and structures, systems, and components important to safety to protect against the updated hazards is addressed; DD-14-2, 79 NRC 489 (2014)
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when considering stays or other forms of temporary injunctive relief, the Commission has applied the stay factors outlined in 10 C.F.R. 2.342(e), which restate commonplace principles of equity; CLI-14-6, 79 NRC 445 (2014)
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board decisions that have inferred additional bases for contentions beyond those supplied by the petitioner have been overturned; CLI-14-2, 79 NRC 11 (2014)
board decisions that have revised inadmissible contentions to render them admissible have been overturned; CLI-14-2, 79 NRC 11 (2014)
for a hearing petitioner to take an appeal pursuant to section 2.311(c), petitioner must claim that, after considering all pending contentions, the board has erroneously denied a hearing; CLI-14-3, 79 NRC 31 (2014)
in proving prejudicial error by a federal agency, it is sufficient that the agency's error may have affected the outcome; LBP-14-2, 79 NRC 131 (2014)
motions for reconsideration must demonstrate a compelling circumstance, such as the existence of a clear and material error in a decision, which could not have been reasonably anticipated, which renders the decision invalid; CLI-14-1, 79 NRC 1 (2014)

silence is not a confession of error, nor can there be an implied confession of error; LBP-14-2, 79 NRC 131 (2014)
See also Harmless Error
EVIDENCE
to meet the reasonable assurance standard, applicant must make a showing that meets the preponderance-of-the-evidence threshold of compliance with the applicable regulations; LBP-14-1, 79 NRC 39 (2014)
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in assessing whether applicant satisfies the burden of establishing that NRC Staff's determination of applicant's performance was inappropriate, unjustified, arbitrary, or an abuse of discretion, the board should consult NUREG-1021; LBP-14-2, 79 NRC 131 (2014)
NRC administrative proceedings have applied a "preponderance of the evidence" standard in reaching the ultimate conclusions after hearing in resolving a proceeding; LBP-14-2, 79 NRC 131 (2014)
NRC Staff is obliged to lay all relevant materials before the board to enable it to adequately dispose of the issues before it; LBP-14-2, 79 NRC 131 (2014)
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See Reactor Operator Examinations
EXAMINERS
if an examiner is assigned to a reactor operator examination that might appear to present a conflict of interest, the examiner shall inform his or her immediate supervisor of the potential conflict; LBP-14-2, 79 NRC 131 (2014)
NRC regional office shall not assign an examiner who failed an applicant on an operating test to administer any part of that applicant's operating test retake; LBP-14-2, 79 NRC 131 (2014)
when informed of a potential conflict, the supervisor of a reactor operator test examiner must apply sound judgment to the facts of each case and, if any doubt exists, consult with regional management and/or the NRR operator licensing program office to resolve the issue; LBP-14-2, 79 NRC 131 (2014)
EXEMPTIONS
electronic filing is required unless an exemption is granted permitting an alternative filing method for good cause shown, or unless the filing falls within the scope of the exception identified in this section; CLI-14-3, 79 NRC 31 (2014)
EXTENSION OF TIME
filing deadlines may be extended or shortened by either the Commission or the presiding officer for good cause, or by stipulation approved by the Commission or the presiding officer; LBP-14-5, 79 NRC 377 (2014)
health issues or an unexpected weather event might constitute good cause for purposes of requesting an extension; LBP-14-5, 79 NRC 377 (2014)
FAIRNESS
because applicant has not shown that it could not have addressed issues in its appeal, nor has presented genuinely new information in its reply, neither necessity nor fairness dictates that its reply should be permitted; CLI-14-3, 79 NRC 31 (2014)
NRC Staff improperly discharges its duties with respect to the grading of an operating test if the grading is inappropriate or unjustified or if the grading strays too far afield of the twin goals of equitable and consistent examination administration, thus becoming arbitrary or an abuse of discretion; LBP-14-2, 79 NRC 131 (2014)
NUREG-1021 is intended to ensure equitable and consistent administration of examinations for all applicants; LBP-14-2, 79 NRC 131 (2014)
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where seismic suitability of a site was evaluated at the early site permit stage, further litigation of a geologic fault issue is foreclosed at the combined license stage; LBP-14-8, 79 NRC 519 (2014)
FEDERAL REGISTER
NRC's notice of opportunity for hearing on a confirmatory order provides the public a safety valve because conceivably the order might remove a restriction upon a licensee or otherwise have the effect of worsening the safety situation; LBP-14-4, 79 NRC 319 (2014)

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administrative challenges to EPA permits are to be filed 30 days after EPA's final permit decision; LBP-14-4, 79 NRC 319 (2014)
there simply would be no end to NRC licensing proceedings if petitioners could disregard timeliness requirements; LBP-14-4, 79 NRC 319 (2014)
See also Briefs; Electronic Filing; Pleadings; Reply Briefs
FINAL ENVIRONMENTAL IMPACT STATEMENT
agency's procedural obligation to discuss mitigation in sufficient detail to ensure that environmental consequences have been fairly evaluated is distinguished from any substantive requirement to actually develop and adopt a detailed mitigation plan; LBP-14-7, 79 NRC 451 (2014)
because NEPA imposes no substantive requirement that mitigation measures actually be taken, it should not be read to require agencies to obtain an assurance that third parties will implement particular measures; LBP-14-7, 79 NRC 451 (2014)
board rules in favor of NRC Staff on contention challenging adequacy of assessment of impacts on the eastern fox snake contained within the FEIS; LBP-14-7, 79 NRC 451 (2014)
contention alleging that final supplemental environmental impact statement fails to include adequate hydrogeological information to demonstrate ability to contain fluid migration and assess potential impacts to groundwater is admissible; LBP-14-5, 79 NRC 377 (2014)
contention alleging that final supplemental environmental impact statement fails to include necessary information for adequate determination of baseline groundwater quality is admissible; LBP-14-5, 79 NRC 377 (2014)
contention questioning whether the final supplemental environmental impact statement's impact analyses relevant to greater sage grouse, whooping crane, and black-footed ferret are sufficient is admissible; LBP-14-5, 79 NRC 377 (2014)
contention that the final supplemental environmental impact statement violates the National Environmental Policy Act and implementing regulations by failing to conduct the required hard-look analysis of impacts of the proposed mine on species of birds and bats receiving special protection migrates as an admissible contention; LBP-14-5, 79 NRC 377 (2014)
if attempting to raise a new issue based on new information in the final supplemental environmental impact statement, intervenor must file a new contention if information in the FSEIS is sufficiently different from information in the DSEIS that supported the original contention's admission; LBP-14-5, 79 NRC 377 (2014)
if intervenors make reference to new material in the final supplemental environmental impact statement but do not address the six elements of 10 C.F.R. 2.309(f)(1), such references to new material do not give rise to either a new or an amended contention; LBP-14-5, 79 NRC 377 (2014)
migration tenet applies when the information in the final supplemental environmental impact statement is sufficiently similar to information in the draft SEIS; LBP-14-5, 79 NRC 377 (2014)
NEPA does not require a fully developed plan that will mitigate all environmental harm before an agency can act, only that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fully evaluated; LBP-14-7, 79 NRC 451 (2014)
FINAL SAFETY ANALYSIS REPORT
applicant's negation action plan is part of its FSAR and therefore is part of the licensing basis of the facility; LBP-14-3, 79 NRC 267 (2014)
combined license applicant's FSAR must describe the quality assurance program applied to the design and to be applied to the fabrication, construction, and testing of the structures, systems, and components of the facility; LBP-14-7, 79 NRC 451 (2014)
combined license applications must contain an FSAR that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components and of the facility as a whole; LBP-14-8, 79 NRC 519 (2014)
licensees may make changes in the procedures described in updated FSAR and conduct tests or experiments not otherwise described in the UFSAR, without obtaining a license amendment; CLI-14-4, 79 NRC 249 (2014)

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when promulgating Subpart M, the Commission was well aware that most license transfer issues would be financial in nature; CLI-14-5, 79 NRC 254 (2014)
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license conditions can be an acceptable method for providing reasonable assurance of financial qualifications; LBP-14-3, 79 NRC 267 (2014)
to be an acceptable method for providing reasonable assurance of financial qualifications, a proposed license condition must be ministerial and by its very nature require and be readily susceptible to post-licensing verification such that NRC Staff is not deferring its safety finding through the use of the license condition; LBP-14-3, 79 NRC 267 (2014)
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denial of license transfer applications typically is on grounds of operating costs and inability to pay the annual cost for spent fuel storage; CLI-14-5, 79 NRC 254 (2014)
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agency's reliance on mitigation in making a FONSI must be justified; LBP-14-7, 79 NRC 451 (2014)
level of analysis required by NEPA in an environmental impact statement is more rigorous than is required when the agency has determined on the basis of its environmental assessment that the project as proposed will not result in significant environmental impact; LBP-14-7, 79 NRC 451 (2014)
reliance on mitigation is justified if the proposed mitigation underlying the FONSI is more than a possibility in that it is imposed by statute or regulation or has been so integrated into the initial proposal that it is impossible to define the proposal without mitigation; LBP-14-7, 79 NRC 451 (2014)
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to determineh whether the record facts before it established the position being advocated, the court looked beyond the record by indicating that what everybody knows, the court must know; LBP-14-1, 79 NRC 39 (2014)
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absent a transfer, license renewal application will be denied where licensee remains under foreign ownership, control, or domination; CLI-14-5, 79 NRC 254 (2014)
although pertinent language of the AEA is written in present tense, a board's inquiry does not end with evaluating foreign ownership, control, or domination concerns posed only by the current corporate structure and financing; LBP-14-3, 79 NRC 267 (2014)
any person except one excluded by section 50.38 may file an application for a combined license for a nuclear power facility; LBP-14-3, 79 NRC 267 (2014)
applicant with foreign ownership can still be eligible for a license if certain conditions are imposed, such as requiring that officers and employees of applicant responsible for special nuclear material be U.S. citizens; LBP-14-3, 79 NRC 267 (2014)
commitments in the revised combined license application restrict foreign ownership share to no more than 10% and require NRC consent for any change in foreign ownership of 5% or more; LBP-14-3, 79 NRC 267 (2014)
contention alleging that statutory and regulatory prohibitions on foreign ownership, control, or domination forbid the licensing of proposed units is decided in applicant's favor; LBP-14-3, 79 NRC 267 (2014)

if allegations are accurate that applicant is subject to foreign direction, it would be reasonable to expect that there would be manifestations of this in the corporate organization and management and that there would be recognition of such circumstances by those corporate officers who must furnish the Commission with the sworn information prescribed by 10 C.F.R. 50.33; LBP-14-3, 79 NRC 267 (2014)
if applicant's negation action plan can successfully wall off the foreign entity from influencing applicant's decisionmaking regarding nuclear safety, security, and reliability concerns, then the AEA's prohibition on foreign control or domination will not stand in the way of the applicant seeking that license; LBP-14-3, 79 NRC 267 (2014)
in context with the other provisions of the Atomic Energy Act § 104d, the foreign control limitation should be given an orientation toward safeguarding the national defense and security; LBP-14-3, 79 NRC 267 (2014)
intent of Congress in the Atomic Energy Act is to prohibit relationships where an alien has the power to direct the actions of the licensee; LBP-14-3, 79 NRC 267 (2014)
no bright line is established between control or domination, on the one hand, and their absence, on the other; LBP-14-3, 79 NRC 267 (2014)
no license may be issued to any person within the United States if, in the opinion of the Commission, issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public; LBP-14-3, 79 NRC 267 (2014)
"owned, controlled, or dominated" in the Atomic Energy Act refers to relationships in which the will of one party is subjugated to the will of another; LBP-14-3, 79 NRC 267 (2014)
there is generally no specific ownership percentage above which the NRC Staff would conclusively determine that an applicant is per se controlled by foreign interests, but a 100% foreign ownership has formed the basis for the licensing board's grant of summary disposition in favor of intervenors; LBP-14-3, 79 NRC 267 (2014)
there is no blanket prohibition on indirect foreign ownership of an applicant or licensee; LBP-14-3, 79 NRC 267 (2014)
to be inimical to the common defense and security or to the health and safety of the public, control or domination must be of such a degree that the will of the licensee is subjugated to the will of the foreign entity, and the foreign entity must have the power to direct the actions of the licensee; LBP-14-3, 79 NRC 267 (2014)
where a foreign entity proposed to own 100% of the entire facility, a negation action plan was of no consequence; LBP-14-3, 79 NRC 267 (2014)
FUEL FABRICATION FACILITY LICENSING
adequacy finding on applicant's material control and accounting program requires the board to make a case-by-case determination, guided by the Atomic Energy Act's mandate that no license to possess special nuclear material may be issued if issuance would be inimical to the common defense and security or would constitute an unreasonable risk to the health and safety of the public; LBP-14-1, 79 NRC 39 (2014)
applicant bears the ultimate burden of proof in materials licensing proceedings; LBP-14-1, 79 NRC 39 (2014)
applicant has demonstrated that its program of automated equipment, computer systems (and their verification), and the use of secured and tamper-safed item storage area boundaries, satisfactorily demonstrates the ability to verify the presence and integrity of all strategic special nuclear material items in storage; LBP-14-1, 79 NRC 39 (2014)
applicant's preliminary material control and accounting program satisfactorily demonstrates the ability to rapidly assess the validity of alleged thefts; LBP-14-1, 79 NRC 39 (2014)
applicant's preliminary material control and accounting program satisfactorily demonstrates the ability to resolve the nature and cause of any MC&A alarm within approved time periods in each of the four storage areas at issue; LBP-14-1, 79 NRC 39 (2014)
applicant's proposal to seal and design strategic special nuclear material item storage locations to be tamper-safed or equivalent to tamper-safing such that confirmation that the physical boundary of these locations has not been breached ensures the integrity of these items; LBP-14-1, 79 NRC 39 (2014)
at the construction authorization request stage, the board dismissed a material control and accounting contention as moot, pending submittal of applicant's Fundamental Nuclear Material Control Plan which would require inclusion of a detailed MC&A program; LBP-14-1, 79 NRC 39 (2014)

licensing of a MOX facility has been governed by a two-part licensing process designed specifically for it; LBP-14-1, 79 NRC 39 (2014)
material control and accounting system is required for a fuel fabrication facility; LBP-14-1, 79 NRC 39 (2014)
NRC may issue a license to possess and use 5 or more formula kilograms of strategic special nuclear material only if applicant can establish, implement, and maintain a Commission-approved material control and accounting system that will achieve general performance objectives; LBP-14-1, 79 NRC 39 (2014)
quantitative accuracy of the MMIS/PLC computer system data must be considered in determining whether requirements of 10 C.F.R. 74.55(b)(1) are satisfied by applicant's plans; LBP-14-1, 79 NRC 39 (2014)
requirements for performance of applicant's material control and accounting system neither prescribe nor proscribe any methodology for achievement of those performance requirements; LBP-14-1, 79 NRC 39 (2014)
to meet the reasonable assurance standard, applicant must make a showing that meets the preponderance-of-the-evidence threshold of compliance with the applicable regulations; LBP-14-1, 79 NRC 39 (2014)
FUKUSHIMA ACCIDENT
request that NRC order licensees to comply with twelve specific recommendations in the Near-Term Task Force Report is addressed; DD-14-2, 79 NRC 489 (2014)
GENERIC ISSUES
consideration in adjudicatory proceedings of issues presently to be taken up by the Commission in rulemaking would be a wasteful duplication of effort; LBP-14-1, 79 NRC 39 (2014)
licensing proceedings are not the appropriate venue for generic issues, especially those that are about to become the subject of rulemaking; LBP-14-1, 79 NRC 39 (2014)
GEOLOGIC CONDITIONS
contention that materials license amendment application fails to provide sufficient information regarding the geological setting of the area to meet regulatory requirements is admissible; CLI-14-2, 79 NRC 11 (2014)
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confinement of aquifers is material to the environmental impacts of the licensing action; CLI-14-2, 79 NRC 11 (2014)
contention alleging that final supplemental environmental impact statement fails to adequately analyze groundwater quantity impacts is admissible; LBP-14-5, 79 NRC 377 (2014)
contention alleging that final supplemental environmental impact statement fails to include necessary information for adequate determination of baseline groundwater quality is admissible; LBP-14-5, 79 NRC 377 (2014)
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contention alleging that final supplemental environmental impact statement fails to include adequate hydrogeological information to demonstrate ability to contain fluid migration and assess potential impacts to groundwater is admissible; LBP-14-5, 79 NRC 377 (2014)
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if the agency error did not affect the outcome, it did not prejudice the petitioner; LBP-14-2, 79 NRC 131 (2014)
HEALTH AND SAFETY
NRC's enforcement order does not state that any reportable illegal, unusual, or aberrant behavior must have a nexus to public health and safety or the common defense and security in order to be reportable; LBP-14-4, 79 NRC 319 (2014)
to be inimical to the common defense and security or to the health and safety of the public, control or domination must be of such a degree that the will of the licensee is subjugated to the will of the foreign entity, and the foreign entity must have the power to direct the actions of the licensee; LBP-14-3, 79 NRC 267 (2014)
HEARING FILE
any correspondence between the applicant/licensee and the NRC that is relevant to the proposed action must be included; LBP-14-2, 79 NRC 131 (2014)

NRC Staff is under a special obligation in Subpart L proceedings to create, maintain, and update a hearing file; LBP-14-2, 79 NRC 131 (2014)
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absent a unanimous preference for a hearing consisting of written comments, the license transfer hearing will be an oral one; CLI-14-5, 79 NRC 254 (2014)
appeal of an order selecting a hearing procedure is permitted on the question as to whether the selection of the particular hearing procedure was in clear contravention of the criteria set forth in section 2.310; CLI-14-3, 79 NRC 31 (2014)
within 15 days from an order granting a hearing, each party must indicate what kind of hearing it prefers; CLI-14-5, 79 NRC 254 (2014)
HEARING REQUESTS
name and identity of requestor, nature of requestor's right to be a party, and nature and extent of the requestor's/petitioner's property, financial, or other interests in the proceeding must be stated; LBP-14-4, 79 NRC 319 (2014)
HEARING RIGHTS
allegation that agency conduct amounts to a legal wrong is sufficient to establish union's right to judicial review; LBP-14-4, 79 NRC 319 (2014)
Commission shall grant a hearing upon the request of any person whose interest may be affected; LBP-14-4, 79 NRC 319 (2014)
demand for a hearing by the subject of an enforcement order is automatic without regard to satisfying section 2.309; LBP-14-4, 79 NRC 319 (2014); LBP-14-4, 79 NRC 319 (2014)
"demand" for a hearing is understood to confer a right to a hearing; LBP-14-4, 79 NRC 319 (2014)
enforcement orders must inform licensee or any other person adversely affected by the order of his or her right to demand a hearing; LBP-14-4, 79 NRC 319 (2014)
general tendency of the law, when deciding which consequences give rise to actionable rights, is not to go beyond the first step; LBP-14-4, 79 NRC 319 (2014)
if an enforcement order blacklists a worker by name, under 10 C.F.R. 2.202(a)(3) he has the right to demand a hearing even though he may be motivated by purely economic concerns; LBP-14-4, 79 NRC 319 (2014)
if applicant subsequently wished to change its commitments to any significant extent, it would need to file a license amendment request, which could then be challenged by seeking a hearing; LBP-14-3, 79 NRC 267 (2014)
if licensee or other person to whom an order is issued consents to its issuance, or the order confirms actions agreed to by the licensee or such other person, that consent or agreement constitutes a waiver by the licensee or such other person of a right to a hearing and any associated rights; LBP-14-4, 79 NRC 319 (2014)
licensee and any other person adversely affected by an enforcement order have equal rights to a hearing; LBP-14-4, 79 NRC 319 (2014)
meaning of "other person adversely affected by the order" in 10 C.F.R. 2.202(a)(3) is discussed; LBP-14-4, 79 NRC 319 (2014)
nonlicensee with a purely economic interest has an automatic right to demand a hearing under section 2.202(a)(3) without showing standing or proffering an admissible contention; LBP-14-4, 79 NRC 319 (2014)
nonparty petitioners may not challenge a confirmatory order embodying a settlement if the order improves the safety situation over what it was in the absence of the order; LBP-14-4, 79 NRC 319 (2014)
NRC Staff's decision at the conclusion of its administrative reviews is the final Staff position and hence the only Staff position open to applicant's challenge before the presiding officer; LBP-14-2, 79 NRC 131 (2014)
person adversely affected by an enforcement order has a legal right to demand a hearing; LBP-14-4, 79 NRC 319 (2014)
person does not need to wait until being charged with a crime and in the dock before he can challenge an order that imposes new burdens and liabilities on him; LBP-14-4, 79 NRC 319 (2014)
person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof; LBP-14-4, 79 NRC 319 (2014)

senior reactor operator license applicant who does not accept a proposed license denial may, within 20 days of the date of the denial letter, demand a hearing; LBP-14-2, 79 NRC 131 (2014)
standing is refused only when congressional intent specifically precludes the party or issue from obtaining judicial review; LBP-14-4, 79 NRC 319 (2014)
union's argument that it may demand a hearing on a confirmatory order without complying with intervention requirements of section 2.309(a) is incorrect; LBP-14-4, 79 NRC 319 (2014)
when the police power of the federal government is deployed to order a person to perform certain actions, under pain of losing his or her livelihood, liberty, and/or property, then that person has a right to challenge the order, and have a hearing to determine what the order means and whether it comports with the law; LBP-14-4, 79 NRC 319 (2014)
where plaintiff is not itself the subject of the contested regulatory action, the zone-of-interests test denies a right of review if plaintiff's interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot be assumed that Congress intended to permit the suit; LBP-14-4, 79 NRC 319 (2014)
whether licensee employees, as represented by a union, have a right to demand a hearing because they are persons adversely affected by a confirmatory order is discussed; LBP-14-4, 79 NRC 319 (2014)
whether licensee or other person consents to an order, other persons adversely affected by an order issued under section 2.202 to modify, suspend or revoke a license will be offered an opportunity for a hearing consistent with current practice and the authority of the Commission to define the scope of the proceeding on an enforcement order; LBP-14-4, 79 NRC 319 (2014)
HIGH-BURNUP FUEL
if NRC Staff safety review reveals any new and significant information relating to the environmental impacts of storage of high-burnup fuel, Staff will supplement its environmental analysis as required by the National Environmental Policy Act; LBP-14-6, 79 NRC 404 (2014)
HISTORIC SITES
failure to have made any effort to evaluate the cumulative impact of the independent spent fuel storage installation expansion on archaeological sites has been held to be one of the most egregious shortfalls of the environmental assessment; LBP-14-6, 79 NRC 404 (2014)
HYDROGEOLOGY
confinement of aquifers is material to the environmental impacts of the licensing action; CLI-14-2, 79 NRC 11 (2014)
contention alleging that final supplemental environmental impact statement fails to include adequate hydrogeological information to demonstrate ability to contain fluid migration and assess potential impacts to groundwater is admissible; LBP-14-5, 79 NRC 377 (2014)
IMMEDIATE EFFECTIVENESS
licensee or other person to whom the Commission has issued an immediately effective order may move the presiding officer to set aside the immediate effectiveness of the order; LBP-14-4, 79 NRC 319 (2014)
IN SITU LEACH MINING
confinement of aquifers is material to the environmental impacts of the licensing action; CLI-14-2, 79 NRC 11 (2014)
section 40.31(h) applies to uranium mills, but not to in situ recovery facilities; LBP-14-5, 79 NRC 377 (2014)
INDEPENDENT SPENT FUEL STORAGE INSTALLATION
failure to have made any effort to evaluate the cumulative impact of the ISFSI expansion on archaeological sites has been held to be one of the most egregious shortfalls of the environmental assessment; LBP-14-6, 79 NRC 404 (2014)
INDEPENDENT SPENT FUEL STORAGE INSTALLATION PROCEEDINGS
contention that draft environmental assessment fails to adequately address potential impacts of the reasonably foreseeable expansion of an independent spent fuel storage installation on cultural and historic resources is admissible; LBP-14-6, 79 NRC 404 (2014)
INJUNCTIVE RELIEF
district court did not abuse its discretion in balancing the harms in favor of an injunction related to an electric utility's Clean Water Act permit for the construction of a new power plant; LBP-14-6, 79 NRC 404 (2014)

when considering stays or other forms of temporary injunctive relief, the Commission has applied the stay factors outlined in 10 C.F.R. 2.342(e), which restate commonplace principles of equity; CLI-14-6, 79 NRC 445 (2014)
See also Stay
INJURY IN FACT
increases in risk can at times be injuries in fact sufficient to confer standing; LBP-14-4, 79 NRC 319 (2014)
injury can result when the risk of encountering environmental harms prevents a plaintiff from taking an action; LBP-14-4, 79 NRC 319 (2014)
risk of future harm as an injury is both actual and imminent; LBP-14-4, 79 NRC 319 (2014)
See also Irreparable Injury
INSPECTION
request that NRC order licensees to perform seismic and flood protection walkdowns to identify and address plant-specific vulnerabilities and verify the adequacy of monitoring and maintenance for protection features such as watertight barriers and seals in the interim period until longer-term actions are completed to update the design basis for external events is addressed; DD-14-2, 79 NRC 489 (2014)
INSTRUMENTATION
request that NRC order licensees to provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters from the control room is addressed; DD-14-2, 79 NRC 489 (2014)
INTERPRETATION
NRC must consider varying interpretations and the wisdom of its policy on a continuing basis; LBP-14-4, 79 NRC 319 (2014)
See also Regulations, Interpretation
INTERVENORS
although applicant carries the burden of proof on safety issues, intervenors have the initial burden of going forward wth each contention and must provide sufficient evidence to support the claims made; LBP-14-1, 79 NRC 39 (2014)
NRC Staff and licensee may file interlocutory appeals on the admission of a contention, but intervenors are prohibited from filing such appeals on the denial of a contention unless all contentions have been denied; LBP-14-4, 79 NRC 319 (2014)
INTERVENTION
board determined that confirmatory action letter was a de facto license amendment, which allows for public intervention; LBP-14-1, 79 NRC 39 (2014)
Commission did not intend to relieve third-party individuals who are not the subject of an enforcement order, but who nonetheless seek a hearing on the order, from satisfying the requirements for a petition for intervention in section 2.309; LBP-14-4, 79 NRC 319 (2014)
confirmatory action letter is an enforcement process that does not allow for public intervention; LBP-14-1, 79 NRC 39 (2014)
court will examine a specific barrier to participation, in isolation, and generally conclude that it is not illegal; LBP-14-4, 79 NRC 319 (2014)
legal standards in sections 2.309(d) and (f) are relevant when evaluating a third-party petition for hearing on a confirmatory order; LBP-14-4, 79 NRC 319 (2014)
third-party requests for a hearing on an enforcement order have been treated as a petition for intervention under the Commission's generally applicable rules; LBP-14-4, 79 NRC 319 (2014)
to intervene as a party, a union must establish standing and proffer at least one admissible contention; LBP-14-4, 79 NRC 319 (2014)
too freely allowing third parties to contest enforcement settlements at hearings would undercut NRC's policy favoring enforcement settlements; LBP-14-4, 79 NRC 319 (2014)
INTERVENTION RULINGS
appeal as of right from a board's ruling on an intervention petition is permitted only upon denial of a petition to intervene and/or request for hearing, on the question as to whether it should have been granted or upon the granting of a petition to intervene and/or request for hearing, on the question as to whether it should have been wholly denied; CLI-14-3, 79 NRC 31 (2014)

board is free to decide contention admissibility on a theory different from those argued by the litigants, but only if it explains the specific basis of its ruling and gives litigants a chance to present arguments (and, where appropriate, evidence) regarding the board's new theory; LBP-14-4, 79 NRC 319 (2014)
board rulings on standing are given substantial deference on appeal; CLI-14-2, 79 NRC 11 (2014)
Commission generally prefers that licensing boards make initial factual determinations; CLI-14-2, 79 NRC 11 (2014)
for a hearing petitioner to take an appeal pursuant to section 2.311(c), petitioner must claim that, after considering all pending contentions, the board has erroneously denied a hearing; CLI-14-3, 79 NRC 31 (2014)
license applicant may take an appeal under 2.311(d)(1) if it contends that, after considering all pending contentions, the board has erroneously granted a hearing to the petitioner; CLI-14-3, 79 NRC 31 (2014)
limited interlocutory appeal right attaches only when the board has fully ruled on the initial intervention petition, that is, when it has admitted or rejected all proposed contentions; CLI-14-3, 79 NRC 31 (2014); LBP-14-8, 79 NRC 519 (2014)
NRC rules of practice provide for an automatic right to appeal a board decision on the question whether a petition to intervene should have been wholly denied; CLI-14-2, 79 NRC 11 (2014)
NRC Staff and licensee may file interlocutory appeals on the admission of a contention, but intervenors are prohibited from filing such appeals on the denial of a contention unless all contentions have been denied; LBP-14-4, 79 NRC 319 (2014)
to evaluate petitioner's standing, boards construe the petition in favor of petitioner; LBP-14-4, 79 NRC 319 (2014)
INTERVENTION, DISCRETIONARY
discretionary intervention is allowed only if some other person has established standing but only in very extraordinary situations; LBP-14-4, 79 NRC 319 (2014)
discretionary intervention may be considered only when at least one requestor/petitioner has established standing and at least one contention has been admitted so that a hearing will be held; LBP-14-4, 79 NRC 319 (2014)
licensing board rejected union's claim to standing, but the appeal board under the rules then in effect permitted discretionary intervention; LBP-14-4, 79 NRC 319 (2014)
six criteria have been articulated; LBP-14-4, 79 NRC 319 (2014)
IRREPARABLE INJURY
merely raising the specter of a nuclear accident does not demonstrate irreparable harm; CLI-14-4, 79 NRC 249 (2014)
See also Injury in Fact
JURISDICTION
National Labor Relations Board is the agency equipped to handle alleged violations of the National Labor Relations Act, including collective bargaining disputes; LBP-14-4, 79 NRC 319 (2014)
LABOR ISSUES
labor disputes are not within the scope of enforcement proceedings; LBP-14-4, 79 NRC 319 (2014)
National Labor Relations Board is the agency equipped to handle alleged violations of the National Labor Relations Act, including collective bargaining disputes; LBP-14-4, 79 NRC 319 (2014)
LABOR UNIONS
licensing board rejected union's claim to standing, but the appeal board under the rules then in effect permitted discretionary intervention; LBP-14-4, 79 NRC 319 (2014)
to establish representational standing, union must show that the interests it seeks to protect are germane to its own purposes, identify by name and address at least one member who qualifies for standing in his or her own right, show that it is authorized by that member to request a hearing on his or her behalf, and show that neither the claim asserted nor the relief requested requires that member's participation in the proceeding in an individual capacity; LBP-14-4, 79 NRC 319 (2014)
to intervene as a party, a union must establish standing and proffer at least one admissible contention; LBP-14-4, 79 NRC 319 (2014)
union's argument that it may demand a hearing on a confirmatory order without complying with intervention requirements of section 2.309(a) is incorrect; LBP-14-4, 79 NRC 319 (2014)

union's organizational standing argument was rejected in an indirect license transfer proceeding initiated before the Commission because it was merely the Local's representational standing argument dressed up in different clothes; LBP-14-4, 79 NRC 319 (2014)
whether licensee employees, as represented by a union, have a right to demand a hearing because they are persons adversely affected by a confirmatory order is discussed; LBP-14-4, 79 NRC 319 (2014)
LICENSE AMENDMENTS
board determined that confirmatory action letter was a de facto license amendment, which allows for public intervention; LBP-14-1, 79 NRC 39 (2014)
if applicant subsequently wished to change its commitments to any significant extent, it would need to file a license amendment request, which could then be challenged by seeking a hearing; LBP-14-3, 79 NRC 267 (2014)
See also Materials License Amendment Proceedings; Materials License Amendments; Operating License Amendments
LICENSE CONDITIONS
not all licensee commitments must be converted into license conditions in order to be enforceable; LBP-14-3, 79 NRC 267 (2014)
reasonable assurance of financial qualifications can be ensured through license conditions; LBP-14-3, 79 NRC 267 (2014)
to be an acceptable method for providing reasonable assurance of financial qualifications, a proposed license condition must be ministerial and by its very nature require and be readily susceptible to post-licensing verification such that the NRC Staff is not deferring its safety finding through the use of the license condition; LBP-14-3, 79 NRC 267 (2014)
LICENSE EXPIRATION
licensee may continue to operate a reactor under an expired license if a license renewal application is timely submitted; CLI-14-5, 79 NRC 254 (2014)
LICENSE RENEWAL APPLICATIONS
absent a transfer, license renewal application will be denied where licensee remains under foreign ownership, control, or domination; CLI-14-5, 79 NRC 254 (2014)
licensee may continue to operate a reactor under an expired license if a license renewal application is timely submitted; CLI-14-5, 79 NRC 254 (2014)
petitioner's request that the Commission defer a decision on the license renewal applications pending disposition of its forthcoming rulemaking and other potential events is premature and is therefore denied; CLI-14-6, 79 NRC 445 (2014)
LICENSE RENEWAL PROCEEDINGS
nothing in NRC case law or regulations suggests that license renewal is an occasion for far-reaching speculation about unimplemented and uncertain plans; LBP-14-6, 79 NRC 404 (2014)
LICENSE RENEWALS
in context of a renewal application, reasonable assurance is based on sound technical judgment of the particulars of a case and on compliance with NRC regulations; LBP-14-1, 79 NRC 39 (2014)
proceedings have been consolidated for the renewal of a materials license and to contest NRC Staff's denial of that renewal in order to, among other things, litigate a common issue only once; CLI-14-5, 79 NRC 254 (2014)
See also Operating License Renewal
LICENSE TRANSFER APPLICATIONS
denial of license transfer applications typically is on grounds of operating costs and inability to pay the annual cost for spent fuel storage; CLI-14-5, 79 NRC 254 (2014)
general information required for an application in provided in 10 C.F.R. 50.33; CLI-14-5, 79 NRC 254 (2014)
licensee is required to submit an application to NRC; CLI-14-5, 79 NRC 254 (2014)
when promulgating Subpart M, the Commission was well aware that most license transfer issues would be financial in nature; CLI-14-5, 79 NRC 254 (2014)
LICENSE TRANSFER PROCEEDINGS
absent a unanimous preference for a hearing consisting of written comments, the license transfer hearing will be an oral one; CLI-14-5, 79 NRC 254 (2014)

although NRC Staff is not required to be a party to a license transfer adjudication, the Commission directs the Staff to become a party; CLI-14-5, 79 NRC 254 (2014)

any discretionary diversion from the usual Subpart M procedural track will be rare, requiring extraordinary and unusual circumstances, and all requests to date to provide a non-Subpart M hearing in a license transfer case have been denied; CLI-14-5, 79 NRC 254 (2014)

Commission has authority to rule that a license transfer case be adjudicated under Subpart L; CLI-14-5, 79 NRC 254 (2014)

hearings are to be oral in nature unless the parties unanimously move for a hearing consisting of written comments; CLI-14-5, 79 NRC 254 (2014)

NRC Staff is not required to be a party to a license transfer adjudication; CLI-14-5, 79 NRC 254 (2014)

NRC Staff is required to notify the presiding officer and the parties whether it desires to participate as a party in a license transfer proceeding; CLI-14-5, 79 NRC 254 (2014)

once the nature of a license transfer hearing is settled, Subpart M and our NRC Model Milestones set a default schedule for the remainder of the proceeding; CLI-14-5, 79 NRC 254 (2014)

ordinarily, the Commission itself presides over license transfer hearings, but NRC rules allow the Commission to designate one or more Commissioners or any other person permitted by law to preside; CLI-14-5, 79 NRC 254 (2014)

procedural rules in Subpart M govern adjudications on transfer applications; CLI-14-5, 79 NRC 254 (2014)

scope of Subpart M proceedings covers all adjudicatory proceedings on an application for transfer of control of an NRC license, without distinction as to how the proceeding commences; CLI-14-5, 79 NRC 254 (2014)

Subpart M logically applies to all license transfer hearing requests, regardless of who files them, because the types of issues litigated (e.g., financial assurance, technical qualifications, foreign ownership, and staffing levels) are likely to be similar regardless of whether they are initiated by intervention petitions or by challenges to a Staff action; CLI-14-5, 79 NRC 254 (2014)

union's organizational standing argument was rejected in an indirect license transfer proceeding initiated before the Commission because it was merely the Local's representational standing argument dressed up in different clothes; LBP-14-4, 79 NRC 319 (2014)

upon completion of a license transfer hearing, the Commission will issue a written opinion including its decision on the license transfer application and the reasons for the decision; CLI-14-5, 79 NRC 254 (2014)

where the Commission does not preside over a license transfer proceeding, the presiding officer will certify the completed hearing record to the Commission, which may then issue its decision on the hearing or provide that additional testimony be presented; CLI-14-5, 79 NRC 254 (2014)

LICENSE TRANSFERS

absent a transfer, license renewal application will be denied where licensee remains under foreign ownership, control, or domination; CLI-14-5, 79 NRC 254 (2014)

LICENSEE EMPLOYEES

applicant with foreign ownership can still be eligible for a license if certain conditions are imposed, such as requiring that officers and employees of applicant responsible for special nuclear material be U.S. citizens; LBP-14-3, 79 NRC 267 (2014)

as de facto targets of an enforcement order, licensee employees have automatic standing if they are adversely affected by an enforcement order; LBP-14-4, 79 NRC 319 (2014)

boards lack authority to order NRC Staff to bring licensee employees into settlement negotiations; LBP-14-4, 79 NRC 319 (2014)

contention that a confirmatory order should not be sustained because, without sufficient justification in the record, it imposes obligations on the off-duty employees of licensee not otherwise required by the NRC to observe and report the offsite, off-duty conduct of fellow employees is inadmissible; LBP-14-4, 79 NRC 319 (2014)

employees are protected against unnecessary or excessive restrictions on their conduct; LBP-14-4, 79 NRC 319 (2014)

individuals who are subject to an access authorization program shall, at a minimum, report any concerns arising from behavioral observation and are individually liable if they fail to do so; LBP-14-4, 79 NRC 319 (2014)

whether licensee employees, as represented by a union, have a right to demand a hearing because they are persons adversely affected by a confirmatory order is discussed; LBP-14-4, 79 NRC 319 (2014)
LICENSEES
NRC Staff and licensee may file interlocutory appeals on the admission of a contention, but intervenors are prohibited from filing such appeals on the denial of a contention unless all contentions have been denied; LBP-14-4, 79 NRC 319 (2014)
LICENSES
applicants for utilization or production facilities for industrial or commercial purposes must comply with the terms of AEA § 103; LBP-14-3, 79 NRC 267 (2014)
LICENSING BOARDS, AUTHORITY
board decisions that have inferred additional bases for contentions beyond those supplied by the petitioner have been overturned; CLI-14-2, 79 NRC 11 (2014)
board decisions that have revised inadmissible contentions to render them admissible have been overturned; CLI-14-2, 79 NRC 11 (2014)
board is free to decide contention admissibility on a theory different from those argued by litigants, but only if it explains the specific basis of its ruling and gives the litigants a chance to present arguments (and, where appropriate, evidence) regarding the board's new theory; LBP-14-4, 79 NRC 319 (2014)
board may construe an admitted contention contesting the environmental report as a challenge to a subsequently issued draft environmental impact statement or final EIS without the necessity for Intervenors to file a new or amended contention; LBP-14-5, 79 NRC 377 (2014)
boards lack authority to order NRC Staff to bring licensee employees into settlement negotiations; LBP-14-4, 79 NRC 319 (2014)
guidance documents do not bind the board, and so applicant's compliance with guidance does not ensure grant of a license; LBP-14-1, 79 NRC 39 (2014)
licensing board opinion on appealability of an order does not bind the Commission, which will make its own decision whether an appeal may be filed; LBP-14-8, 79 NRC 519 (2014)
where the meaning of a regulation is clear and obvious, the regulatory language is conclusive, and the board may not disregard the letter of the regulation, but rather must enforce the regulation as written; LBP-14-7, 79 NRC 451 (2014)
LICENSING BOARDS, JURISDICTION
in light of the board's limited jurisdiction, it concludes that petitioner may appeal its decision immediately; LBP-14-8, 79 NRC 519 (2014)
LICENSING PROCEEDINGS
rulemaking petitioner may request a suspension of a licensing proceeding in which petitioner is a participant, pending disposition of the rulemaking petition; CLI-14-6, 79 NRC 445 (2014)
See also Combined License Proceedings; Independent Spent Fuel Storage Installation Proceedings; ; License Renewal Proceedings
LIMITED APPEARANCE STATEMENTS
board accepted written limited appearance statements from members of the public in connection with the hearing; LBP-14-3, 79 NRC 267 (2014)
MAINTENANCE PROGRAMS
request that NRC order licensees to perform seismic and flood protection walkdowns to identify and address plant-specific vulnerabilities and verify the adequacy of monitoring and maintenance for protection features such as watertight barriers and seals in the interim period until longer-term actions are completed to update the design basis for external events is addressed; DD-14-2, 79 NRC 489 (2014)
MATERIAL CONTROL AND ACCOUNTING
adequacy finding on applicant's program requires the board to make a case-by-case determination, guided by the Atomic Energy Act's mandate that no license to possess special nuclear material may be issued if issuance would be inimical to the common defense and security or would constitute an unreasonable risk to the health and safety of the public; LBP-14-1, 79 NRC 39 (2014)
alarms are not required to be resolved within any particular time frame, only that a time period be approved by NRC Staff; LBP-14-1, 79 NRC 39 (2014)
applicant has demonstrated that its program of automated equipment, computer systems (and their verification), and the use of secured and tamper-safed item storage area boundaries, satisfactorily

demonstrates the ability to verify the presence and integrity of all strategic special nuclear material items in storage; LBP-14-1, 79 NRC 39 (2014)
applicant's preliminary program satisfactorily demonstrates the ability to rapidly assess the validity of alleged thefts; LBP-14-1, 79 NRC 39 (2014)
applicant's preliminary program satisfactorily demonstrates the ability to resolve the nature and cause of any MC&A alarm within approved time periods in each of the four storage areas at issue; LBP-14-1, 79 NRC 39 (2014)
applicant's program must show how compliance with the requirements of section 74.51 will be accomplished; LBP-14-1, 79 NRC 39 (2014)
applicant's proposal to seal and design strategic special nuclear material item storage locations to be tamper-safed or equivalent to tamper-safing such that confirmation that the physical boundary of these locations has not been breached ensures the integrity of these items; LBP-14-1, 79 NRC 39 (2014)
applicant's sampling method, which examines data representative of the entire set of strategic special nuclear material items, and not a limited subset, samples 100% of SSNM items and thus complies with the requirement to sample a sufficient number of items to result in at least 99% power of detecting the specified losses; LBP-14-1, 79 NRC 39 (2014)
applicant's strategic special nuclear material item monitoring approach, as enhanced by an item verification procedure, provides reasonable assurance that the quantitative accuracy of the MMIS/PLC data is sufficient to enable the procedures employing those data to meet the regulatory requirements; LBP-14-1, 79 NRC 39 (2014)
applicant's verification of the integrity of the strategic special nuclear material vault boundaries on a daily basis exceeds the regulatory requirement to verify the integrity of the items every 30 or 60 days; LBP-14-1, 79 NRC 39 (2014)
applicants applying to possess 5 or more formula kilograms of strategic special nuclear material must maintain alarm resolution capabilities designed to achieve the performance objectives of section 74.51(a); LBP-14-1, 79 NRC 39 (2014)
at the construction authorization request stage, the board dismissed an MC&A contention as moot, pending submittal of applicant's Fundamental Nuclear Material Control Plan which would require inclusion of a detailed MC&A program; LBP-14-1, 79 NRC 39 (2014)
by verifying integrity of storage area boundaries, applicant can verify the integrity of all strategic special nuclear material items in storage within the required 30- and 60-day time frames; LBP-14-1, 79 NRC 39 (2014)
capability to rapidly assess the validity of alleged thefts is aimed at the rapid determination of whether an actual loss of 5 or more formula kilograms occurred; LBP-14-1, 79 NRC 39 (2014)
capability to resolve alarms within approved time periods is most clearly aimed at the prompt investigation of anomalies potentially indicative of strategic special nuclear material losses; LBP-14-1, 79 NRC 39 (2014)
capability under 10 C.F.R. 74.51(a)(1) to verify presence is most clearly aimed at ongoing confirmation of the presence of strategic special nuclear material in assigned locations; LBP-14-1, 79 NRC 39 (2014)
capability under 10 C.F.R. 74.51(a)(4) to verify integrity is most clearly aimed at the prompt investigation of anomalies potentially indicative of strategic special nuclear material losses; LBP-14-1, 79 NRC 39 (2014)
contention challenging applicant's ability to rapidly assess the validity of alleged thefts is decided; LBP-14-1, 79 NRC 39 (2014)
definition of "power of detection" does not explicitly require a demonstration of data accuracy; LBP-14-1, 79 NRC 39 (2014)
determination regarding item integrity under 10 C.F.R. 74.55(b)(1) refers to the ability to determine that a container holding strategic special nuclear material items has not been breached and that the amount of SSNM within has not been altered; LBP-14-1, 79 NRC 39 (2014)
if applicant decides to remove a method from the approved list of alarm resolution methods, it would have to follow the prescribed change process or the license amendment process; LBP-14-1, 79 NRC 39 (2014)
intervenors fail to provide any information or support for their proposition that applicant's automated systems do not comply with the regulatory requirements and their challenges to applicant's item monitoring approach on these grounds fail; LBP-14-1, 79 NRC 39 (2014)

licensees are not required to conduct assessments of alleged thefts without the use of their records systems, or by first verifying the integrity and accuracy of those records systems; LBP-14-1, 79 NRC 39 (2014)
licensees must satisfy 10 C.F.R. 74.55(b)'s detection requirements for tamper-safed strategic special nuclear material items in order to achieve the performance objectives set out in section 74.51(a); LBP-14-1, 79 NRC 39 (2014)
licensees shall resolve the nature and cause of any MC&A alarm within approved time periods; LBP-14-1, 79 NRC 39 (2014)
neither the plain language of 10 C.F.R. 74.55(b)(1) nor its regulatory history suggests that verifications of item integrity must be in any way physical; LBP-14-1, 79 NRC 39 (2014)
no requirement to quantify the potential for an adversary to take measures to conceal any abnormalities in MMIS and PLC mapping can reasonably be found in (or implied by) the language of 10 C.F.R. 74.55(b)(1); LBP-14-1, 79 NRC 39 (2014)
NRC may issue a license to possess and use 5 or more formula kilograms of strategic special nuclear material only if applicant can establish, implement, and maintain a Commission-approved MC&A system that will achieve general performance objectives; LBP-14-1, 79 NRC 39 (2014)
NRC must be notified within 24 hours of failure to resolve an alarm within the approved time period; LBP-14-1, 79 NRC 39 (2014)
Part 74 requires an MC&A system for a fuel fabrication facility; LBP-14-1, 79 NRC 39 (2014)
petitioner provides no support for the proposition that applicant must demonstrate that each individual resolution method can be completed, by itself, within the approved time period; LBP-14-1, 79 NRC 39 (2014)
"power of detection" means the probability that the critical value of a statistical test will be exceeded when there is an actual loss of a specific quantity of strategic special nuclear material; LBP-14-1, 79 NRC 39 (2014)
quantitative accuracy of the MMIS/PLC computer system data must be considered in determining whether requirements of 10 C.F.R. 74.55(b)(1) are satisfied by applicant's plans; LBP-14-1, 79 NRC 39 (2014)
rapid determination of strategic special nuclear material theft assessment should be completed within an 8- or 72-hour timeline; LBP-14-1, 79 NRC 39 (2014)
requirement in 10 C.F.R. 74.55(b) for 99% power of detection means that there must be a 99% probability that a missing item will be included within the sample chosen for inspection and would thus be detected; LBP-14-1, 79 NRC 39 (2014)
requirements for performance of applicant's material control and accounting system neither prescribe nor proscribe any methodology for achievement of those performance requirements; LBP-14-1, 79 NRC 39 (2014)
section 74.55 is not rendered superfluous by a reading that verifying the integrity of a storage area boundary will suffice to verify the integrity of the items contained therein; LBP-14-1, 79 NRC 39 (2014)
statistical sampling is to be used to achieve verification of item presence and integrity but 10 C.F.R. 74.55(b) does not prescribe a particular method of sampling, only that statistical sampling must result in at least 99% power of detecting strategic special nuclear material losses that total 5 formula kg or more; LBP-14-1, 79 NRC 39 (2014)
"tamper-safing" means the use of devices on containers or vaults in a manner and at a time that ensures a clear indication of any violation of the integrity of previously made measurements of special nuclear material within the container or vault; LBP-14-1, 79 NRC 39 (2014)
there is a general overarching requirement that applicant's strategic special nuclear material item monitoring method be sufficiently accurate to provide reasonable assurance that the specific regulatory requirement is satisfied; LBP-14-1, 79 NRC 39 (2014)
to achieve strategic special nuclear material loss-related performance objectives, the system must provide the capabilities described in sections 74.55 and 74.57; LBP-14-1, 79 NRC 39 (2014)
to meet the reasonable assurance standard, applicant must make a showing that meets the preponderance-of-the-evidence threshold of compliance with the applicable regulations; LBP-14-1, 79 NRC 39 (2014)

whether applicant's item monitoring program has the capability to verify, on a statistical sampling basis, the presence and integrity of strategic special nuclear material items is decided; LBP-14-1, 79 NRC 39 (2014)
MATERIAL FALSE STATEMENTS
information provided to NRC by license applicant shall be complete and accurate in all material respects; DD-14-4, 79 NRC 506 (2014)
request that NRC revoke license for falsification of information is addressed; DD-14-4, 79 NRC 506 (2014)
MATERIAL MISREPRESENTATIONS
petitioner's concern that information provided by licensee concerning training received by its employees was not accurate and in violation was not substantiated; DD-14-4, 79 NRC 506 (2014)
request that NRC shut down or prohibit restart of nuclear power plants until a criminal investigation of a licensee contractor is complete and everything has been verified safe is denied; DD-14-1, 79 NRC 7 (2014)
MATERIALITY
deference to board rulings on contention admissibility is appropriate even where the Commission may consider that the support for the contention is weak, or where the claim's materiality presents a close question; CLI-14-2, 79 NRC 11 (2014)
dispute at issue is material if its resolution would make a difference in the outcome of the licensing proceeding; CLI-14-2, 79 NRC 11 (2014)
new contentions must be based on information materially different than the information previously available; LBP-14-5, 79 NRC 377 (2014)
MATERIALS LICENSE AMENDMENT PROCEEDINGS
contention that application fails to provide sufficient information regarding the geological setting of the area to meet regulatory requirements is admissible; CLI-14-2, 79 NRC 11 (2014)
MATERIALS LICENSE AMENDMENTS
if applicant decides to remove a method from the approved list of alarm resolution methods, it would have to follow the prescribed change process or the license amendment process; LBP-14-1, 79 NRC 39 (2014)
MATERIALS LICENSE APPLICATIONS
applicants applying to possess 5 or more formula kilograms of strategic special nuclear material must maintain alarm resolution capabilities designed to achieve the performance objectives of section 74.51(a); LBP-14-1, 79 NRC 39 (2014)
MATERIALS LICENSE PROCEEDINGS
applicant bears the ultimate burden of proof in materials licensing proceedings; LBP-14-1, 79 NRC 39 (2014)
MATERIALS LICENSEES
adequacy finding on applicant's material control and accounting program requires the board to make a case-by-case determination, guided by the Atomic Energy Act's mandate that no license to possess special nuclear material may be issued if issuance would be inimical to the common defense and security or would constitute an unreasonable risk to the health and safety of the public; LBP-14-1, 79 NRC 39 (2014)
material control and accounting system is required for a fuel fabrication facility; LBP-14-1, 79 NRC 39 (2014)
NRC may issue a license to possess and use 5 or more formula kilograms of strategic special nuclear material only if applicant can establish, implement, and maintain a Commission-approved material control and accounting system that will achieve general performance objectives; LBP-14-1, 79 NRC 39 (2014)
section 74.55(b)(1) applies only to licensees that are authorized to possess 5 or more formula kilograms of strategic special nuclear material; LBP-14-1, 79 NRC 39 (2014)
MIGRATION TENET
admitted contentions challenging applicant's environmental report may, in appropriate circumstances, function as challenges to similar portions of NRC Staff's environmental impact statement; LBP-14-5, 79 NRC 377 (2014)

board may construe an admitted contention contesting the environmental report as a challenge to a subsequently issued draft or final environmental impact statement without the need for intervenors to file a new or amended contention; LBP-14-5, 79 NRC 377 (2014)
contention that the final supplemental environmental impact statement violates the National Environmental Policy Act and implementing regulations by failing to conduct the required hard-look analysis of impacts of the proposed mine on species of birds and bats receiving special protection migrates as an admissible contention; LBP-14-5, 79 NRC 377 (2014)
contentions migrate because the underlying issue and concern raised in response to the draft supplemental environmental impact statement remain, and because a motion for summary disposition has not been filed; LBP-14-5, 79 NRC 377 (2014)
in certain instances, contentions challenging an environmental report are deemed to migrate from challenging applicant's environmental report to challenging NRC Staff's environmental assessment; LBP-14-6, 79 NRC 404 (2014)
tenet applies where information in the draft environmental impact statement is sufficiently similar to information in the environmental report; LBP-14-6, 79 NRC 404 (2014)
when the information in the final supplemental environmental impact statement is sufficiently similar to information in the draft SEIS, the tenet applies; LBP-14-5, 79 NRC 377 (2014)
MIGRATORY BIRD TREATY ACT
contention that the final supplemental environmental impact statement violates the National Environmental Policy Act and implementing regulations by failing to conduct the required hard-look analysis of impacts of the proposed mine on species of birds and bats receiving special protection migrates as an admissible contention; LBP-14-5, 79 NRC 377 (2014)
MITIGATION PLANS
agency's procedural obligation to discuss mitigation in sufficient detail to ensure that environmental consequences have been fairly evaluated is distinguished from any substantive requirement to actually develop and adopt a detailed mitigation plan; LBP-14-7, 79 NRC 451 (2014)
agency's reliance on mitigation in making a finding of no significant impact must be justified; LBP-14-7, 79 NRC 451 (2014)
because NEPA imposes no substantive requirement that mitigation measures actually be taken, it should not be read to require agencies to obtain an assurance that third parties will implement particular measures; LBP-14-7, 79 NRC 451 (2014)
NEPA does not require a fully developed plan that will mitigate all environmental harm before an agency can act, only that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fully evaluated; LBP-14-7, 79 NRC 451 (2014)
proposed mitigation measures are sufficient if they are supported by sufficient evidence, such as studies conducted by the agency, or are adequately policed; LBP-14-7, 79 NRC 451 (2014)
reliance on mitigation is justified if the proposed mitigation underlying the finding of no significant impact is more than a possibility in that it is imposed by statute or regulation or has been so integrated into the initial proposal that it is impossible to define the proposal without mitigation; LBP-14-7, 79 NRC 451 (2014)
request that NRC order licensees to modify the technical guidelines to include emergency operations procedures, severe accident mitigation guidelines, and extensive damage mitigation guidelines in an integrated manner, specify clear command and control strategies for their implementation, and stipulate appropriate qualification and training for those who make decisions during emergencies is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
there must be some assurance that mitigation measures constitute an adequate buffer against the negative impacts that result from the authorized activity to render such impacts so minor as to not warrant an environmental impact statement; LBP-14-7, 79 NRC 451 (2014)
when conducting a NEPA-required environmental review, an agency may consider the ameliorative effects of mitigation in determining the environmental impacts of an activity; LBP-14-7, 79 NRC 451 (2014)
MONITORING
applicant's strategic special nuclear material item monitoring approach, as enhanced by an item verification procedure, provides reasonable assurance that the quantitative accuracy of the MMIS/PLC data is sufficient to enable the procedures employing those data to meet the regulatory requirements; LBP-14-1, 79 NRC 39 (2014)

comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine effectiveness of the program; LBP-14-7, 79 NRC 451 (2014)
request that NRC order licensees to complete the Emergency Response Data System modernization initiative by June 2012 to ensure multiunit site monitoring capability is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to perform seismic and flood protection walkdowns to identify and address plant-specific vulnerabilities and verify the adequacy of monitoring and maintenance for protection features such as watertight barriers and seals in the interim period until longer-term actions are completed to update the design basis for external events is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters from the control room is addressed; DD-14-2, 79 NRC 489 (2014)
there is a general overarching requirement that applicant's strategic special nuclear material item monitoring method be sufficiently accurate to provide reasonable assurance that the specific regulatory requirement is satisfied; LBP-14-1, 79 NRC 39 (2014)
MOOTNESS
at the construction authorization request stage, the board dismissed a material control and accounting contention as moot, pending submittal of applicant's Fundamental Nuclear Material Control Plan which would require inclusion of a detailed MC&A program; LBP-14-1, 79 NRC 39 (2014)
contention of omission that has been admitted may be rendered moot by subsequent license-related documents filed by NRC Staff that address the alleged omission; LBP-14-5, 79 NRC 377 (2014)
if a party believes an admitted contention is mooted by the inclusion of additional information, that party may file a motion for summary disposition; LBP-14-5, 79 NRC 377 (2014)
if the environmental impact statement addresses the concerns alleged in the contention, the original contention becomes moot and the intervenor must raise a new contention if it claims the EIS discussion is still inaccurate or incomplete; LBP-14-6, 79 NRC 404 (2014)
NRC Staff's issuance of an environmental assessment under NEPA does not necessarily moot contentions challenging an applicant's environmental report; LBP-14-6, 79 NRC 404 (2014)
petitioner's request for action relating to containment structural damage is mooted by licensee's decision to shut down and defuel the facility; DD-14-3, 79 NRC 500 (2014)
MOTIONS
NRC rules do not contemplate motions filed as placeholders for a further motion to be filed later; CLI-14-6, 79 NRC 445 (2014)
MOTIONS FOR RECONSIDERATION
motion should not include new arguments or evidence unless it relates to a board concern that applicant could not reasonably have anticipated; LBP-14-7, 79 NRC 451 (2014)
movant must demonstrate a compelling circumstance, such as the existence of a clear and material error in a decision, which could not have been reasonably anticipated, which renders the decision invalid; CLI-14-1, 79 NRC 1 (2014); LBP-14-7, 79 NRC 451 (2014)
MOTIONS TO REOPEN
mere mention of the future filing of an affidavit does not satisfy the requirement of section 2.326(b); LBP-14-8, 79 NRC 519 (2014)
motions must be supported by affidavit, be timely, address a significant safety or environmental issue, and demonstrate that a materially different result would have been likely if the evidence had been available; LBP-14-8, 79 NRC 519 (2014)
rule governing motions to reopen sets a high standard; LBP-14-4, 79 NRC 319 (2014)
MOTIONS TO STRIKE
motion to strike may be granted where a pleading or other submission contains information that is irrelevant; LBP-14-6, 79 NRC 404 (2014)
MULTIUNIT EVENTS
request that NRC order licensees to add guidance to emergency plans that documents how to perform a multiunit dose assessment (including releases from spent fuel pools) using licensee's site-specific dose

assessment software and approach until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to conduct periodic training and exercises for multiunit and prolonged station blackout scenarios until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to determine and implement required staff to fill all necessary positions for responding to a multiunit event until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to ensure that emergency planning equipment and facilities are sufficient for dealing with multiunit and prolonged station blackout scenarios until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide reasonable protection for equipment from the effects of design-basis external events and to add equipment as needed to address multiunit events while other requirements are being revised and implemented is addressed; DD-14-2, 79 NRC 489 (2014)
NATIONAL ENVIRONMENTAL POLICY ACT
because NEPA imposes no substantive requirement that mitigation measures actually be taken, it should not be read to require agencies to obtain an assurance that third parties will implement particular measures; LBP-14-7, 79 NRC 451 (2014)
cask certification for transportation poses such a minimal environmental impact that it merits a categorical exclusion from NEPA; LBP-14-6, 79 NRC 404 (2014)
Corps of Engineers improperly constrained NEPA analysis; LBP-14-6, 79 NRC 404 (2014)
discussion of mitigation measures is an important part of an agency's hard look at the environmental consequences of a proposed federal action; LBP-14-7, 79 NRC 451 (2014)
hard-look requirement is tempered by a rule of reason that requires agencies to address only impacts that are reasonably foreseeable, not those that are remote and speculative; LBP-14-7, 79 NRC 451 (2014)
if the NRC Staff safety review reveals any new and significant information relating to the environmental impacts of storage of high-burnup fuel, Staff will supplement its environmental analysis as required by the National Environmental Policy Act; LBP-14-6, 79 NRC 404 (2014)
level of analysis required in an environmental impact statement is more rigorous than is required when the agency has determined on the basis of its environmental assessment that the project as proposed will not result in significant environmental impact; LBP-14-7, 79 NRC 451 (2014)
NEPA does not impose a substantive obligation for a reviewing agency to require or enforce mitigation measures discussed in an environmental assessment; LBP-14-6, 79 NRC 404 (2014)
NEPA does not require a fully developed plan that will mitigate all environmental harm before an agency can act, only that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fully evaluated; LBP-14-7, 79 NRC 451 (2014)
NRC is required to take a hard look at the environmental impacts of a proposed action; LBP-14-7, 79 NRC 451 (2014)
NRC, not applicant, bears the ultimate burden of establishing compliance with NEPA; LBP-14-7, 79 NRC 451 (2014)
to bring NEPA into play, a possible future action must at least constitute a proposal pending before the agency (i.e., ripeness), and must be in some way interrelated with the action that the agency is actively considering (i.e., nexus); LBP-14-6, 79 NRC 404 (2014)
NATIONAL HISTORIC PRESERVATION ACT
federal law not only recognizes that Native American tribes have a protected interest in cultural resources found on their aboriginal land, but as well has imposed on federal agencies a consultation requirement under NHPA to ensure protection of tribal interests in cultural resources; CLI-14-2, 79 NRC 11 (2014)
NRC Staff is required to consult with interested parties, including Indian tribes, to identify historic properties, evaluate the potential effects of the project on those properties, and consider mitigation measures; CLI-14-2, 79 NRC 11 (2014)
petitioner should not wait for NRC Staff to perform its responsibilities under NHPA before it raises a claim that information is lacking; CLI-14-2, 79 NRC 11 (2014)
that NRC Staff will develop additional information relevant to cultural resources, as part of its NHPA review, does not preclude a challenge to the application's cultural resources discussion; CLI-14-2, 79 NRC 11 (2014)

SUBJECT INDEX

NATIVE AMERICANS
- contention alleging failure to involve or consult all interested tribes as required by federal law is admissible; LBP-14-5, 79 NRC 377 (2014)
- federal law not only recognizes that tribes have a protected interest in cultural resources found on their aboriginal land, but as well has imposed on federal agencies a consultation requirement under the National Historic Preservation Act to ensure the protection of tribal interests in cultural resources; CLI-14-2, 79 NRC 11 (2014)
- for federal agencies that do not manage, control, or supervise Indian affairs, unless there is a specific duty that has been placed on the agency with respect to Indians, this responsibility is discharged by the agency's compliance with general regulations and statutes not specifically aimed at protecting Indian tribes; LBP-14-6, 79 NRC 404 (2014)
- NRC Staff is required to consult with interested parties, including tribes, to identify historic properties, evaluate the potential effects of the project on those properties, and consider mitigation measures; CLI-14-2, 79 NRC 11 (2014)
- tribe has an organizational interest in protecting cultural artifacts connected with it; CLI-14-2, 79 NRC 11 (2014)

NEED FOR POWER
- license renewal applicants need not include a need-for-power discussion in their environmental reports; CLI-14-6, 79 NRC 445 (2014)

NEGATION ACTION PLAN
- applicant's plan addresses not only how it avoids foreign ownership, control, or domination now, but how it will continue to avoid foreign ownership, control, or domination throughout the entire license period; LBP-14-3, 79 NRC 267 (2014)
- applicant's plan is part of its final safety analysis report and therefore is part of the licensing basis of the facility; LBP-14-3, 79 NRC 267 (2014)
- if applicant's plan can successfully wall off the foreign entity from influencing applicant's decisionmaking regarding nuclear safety, security, and reliability concerns, then the AEA's prohibition on foreign control or domination will not stand in the way of the applicant seeking that license; LBP-14-3, 79 NRC 267 (2014)
- where a foreign entity proposed to own 100% of the entire facility, a negation action plan was of no consequence; LBP-14-3, 79 NRC 267 (2014)

NONPARTIES
- Commission did not intend to relieve third-party individuals who are not the subject of an enforcement order, but who nonetheless seek a hearing on the order, from satisfying the requirements for a petition for intervention in section 2.309; LBP-14-4, 79 NRC 319 (2014)
- nonparty petitioners may not challenge a confirmatory order embodying a settlement if the order improves the safety situation over what it was in the absence of the order; LBP-14-4, 79 NRC 319 (2014)
- third-party requests for a hearing on an enforcement order have been treated as a petition for intervention under the Commission's generally applicable rules; LBP-14-4, 79 NRC 319 (2014)
- too freely allowing third parties to contest enforcement settlements at hearings would undercut NRC's policy favoring enforcement settlements; LBP-14-4, 79 NRC 319 (2014)

NOTICE OF HEARING
- NRC's notice of opportunity for hearing on a confirmatory order provides the public a safety valve because conceivably the order might remove a restriction upon a licensee or otherwise have the effect of worsening the safety situation; LBP-14-4, 79 NRC 319 (2014)

NOTICE OF VIOLATION
- NRC Staff may not issue a notice of violation for failure to satisfy Appendix B requirements during the preapplication period, but may deny a combined license for failure to satisfy the standards and requirements of NRC regulations; LBP-14-7, 79 NRC 451 (2014)

NOTIFICATION
- enforcement orders must inform licensee or any other person adversely affected by the order of his or her right to demand a hearing; LBP-14-4, 79 NRC 319 (2014)
- NRC must be notified within 24 hours of failure to resolve an alarm within the approved time period; LBP-14-1, 79 NRC 39 (2014)

SUBJECT INDEX

NRC GUIDANCE DOCUMENTS
- although a standard review plan lacks the legal force of regulations, it is to be given special weight as a guidance document that has been approved by the Commission but is nonbinding guidance; LBP-14-3, 79 NRC 267 (2014)
- guidance documents do not bind the board, and so applicant's compliance with guidance does not ensure grant of a license; LBP-14-1, 79 NRC 39 (2014)
- in assessing whether applicant satisfies the burden of establishing that NRC Staff's determination of applicant's performance was inappropriate, unjustified, arbitrary, or an abuse of discretion, the board should consult NUREG-1021; LBP-14-2, 79 NRC 131 (2014)
- NRC regional office shall not assign an examiner who failed an applicant on an operating test to administer any part of that applicant's operating test retake; LBP-14-2, 79 NRC 131 (2014)
- NUREG-1021 criteria that apply to the preparation of written reactor operator examinations and operating tests are binding upon NRC Staff; LBP-14-2, 79 NRC 131 (2014)
- NUREG-1021 includes conflict of interest provisions that address the assignment of examiners to an examination team; LBP-14-2, 79 NRC 131 (2014)
- NUREG-1021 is intended to ensure equitable and consistent administration of examinations for all applicants; LBP-14-2, 79 NRC 131 (2014)
- NUREG-1021 provides that NRC's regional offices shall obtain approval from the Office of Nuclear Reactor Regulation operator licensing program office before knowingly deviating from the intent of any of the NUREG-1021 standards; LBP-14-2, 79 NRC 131 (2014)
- NUREG-1021 specifies NRC Staff policies, procedures, and practices for administering reactor operator initial and requalification written examinations and operating tests, listing goals and specific procedures for preparation, administration, and grading; LBP-14-2, 79 NRC 131 (2014)
- pursuant to 10 C.F.R. 55.40, NRC Staff shall use the criteria in NUREG-1021 in effect 6 months before the examination date to prepare written reactor operator examinations required by sections 55.41 and 55.43 and the operating tests required by section 55.45; LBP-14-2, 79 NRC 131 (2014)
- standard review plan does not in itself impose requirements on an applicant but provides guidance to NRC Staff in reviewing an application; CLI-14-2, 79 NRC 11 (2014)
- such documents describe particular means of satisfying regulatory requirements in ways acceptable to NRC Staff, but do not bind applicants, who remain free to choose different means; LBP-14-1, 79 NRC 39 (2014)
- under 10 C.F.R. 55.40, NRC Staff shall use NUREG-1021 to prepare and evaluate reactor operator licensing examinations; LBP-14-2, 79 NRC 131 (2014)

NRC POLICY
- Commission, like other adjudicatory bodies, looks with favor on settlements; LBP-14-4, 79 NRC 319 (2014)
- NRC has long preferred concentrating its resources on actual field inspections and related scientific and engineering work, as opposed to the conduct of legal proceedings; LBP-14-4, 79 NRC 319 (2014)
- NRC must consider varying interpretations and the wisdom of its policy on a continuing basis; LBP-14-4, 79 NRC 319 (2014)
- NRC's encouragement of settlements specifically recognizes that settlements are not inviolate, and the presiding officer or Commission may order adjudication of the issues that the presiding officer or Commission finds is required in the public interest to dispose of the proceeding; LBP-14-4, 79 NRC 319 (2014)
- too freely allowing third parties to contest enforcement settlements at hearings would undercut NRC's policy favoring enforcement settlements; LBP-14-4, 79 NRC 319 (2014)

NRC STAFF
- agencies of the government must scrupulously observe its rules, regulations, or procedures; LBP-14-2, 79 NRC 131 (2014)
- although NRC Staff is free to carry on internecine warfare, it is not free to wage it in an adjudicatory proceeding where all elements of the NRC Staff appear as a single party; LBP-14-2, 79 NRC 131 (2014)
- although Staff is not required to be a party to a license transfer adjudication, the Commission directs Staff to become a party; CLI-14-5, 79 NRC 254 (2014)

applicants may prevail against NRC Staff if they prove that a particular contested assessment of a deficiency was inappropriate, unjustified, arbitrary, or an abuse of discretion; LBP-14-2, 79 NRC 131 (2014)
board refused to let a matter turn on attempts by NRC Staff and applicant to label a controversial matter in a way that would avoid adjudication; LBP-14-1, 79 NRC 39 (2014)
boards lack authority to order NRC Staff to bring licensee employees into settlement negotiations; LBP-14-4, 79 NRC 319 (2014)
Commission has inherent authority to supervise both NRC Staff's work and adjudicatory proceedings relating to license applications; CLI-14-1, 79 NRC 1 (2014)
contents of licensee's behavioral observation program cannot substitute for the duty of NRC Staff to be reasonably clear as to what is required of workers who are trying to comply with their legal obligation to report on their co-workers; LBP-14-4, 79 NRC 319 (2014)
in Subpart L proceedings, Staff is under a special obligation to create, maintain, and update a hearing file; LBP-14-2, 79 NRC 131 (2014)
NRC, not applicant, bears the ultimate burden of establishing compliance with NEPA; LBP-14-7, 79 NRC 451 (2014)
NUREG-1021 criteria that apply to the preparation of written reactor operator examinations and operating tests are binding on NRC Staff; LBP-14-2, 79 NRC 131 (2014)
parties, including NRC Staff, may be sanctioned for noncompliance with the disclosure regulations; LBP-14-2, 79 NRC 131 (2014)
Staff and licensee may file interlocutory appeals on the admission of a contention, but intervenors are prohibited from filing such appeals on the denial of a contention unless all contentions have been denied; LBP-14-4, 79 NRC 319 (2014)
Staff is not required to be a party to a license transfer adjudication; CLI-14-5, 79 NRC 254 (2014)
Staff is obliged to lay all relevant materials before the board to enable it to adequately dispose of the issues before it; LBP-14-2, 79 NRC 131 (2014)
Staff is required to notify the presiding officer and the parties whether it desires to participate as a party in a license transfer proceeding; CLI-14-5, 79 NRC 254 (2014)
Staff will become a party to cases involving an application denial; CLI-14-5, 79 NRC 254 (2014)
when it denied a senior reactor operator license, Staff acted inconsistently with its own guidance and applied that guidance in an inconsistent manner; LBP-14-2, 79 NRC 131 (2014)
See also Discovery Against NRC Staff
NRC STAFF REVIEW
because agency practice is one indicator of how the agency interprets regulations, a consistently held NRC Staff view on an operator testing policy matter will not be disturbed; LBP-14-2, 79 NRC 131 (2014)
board rules in favor of NRC Staff on contention challenging adequacy of the assessment of impacts on the eastern fox snake contained within the final environmental impact statement; LBP-14-7, 79 NRC 451 (2014)
contention claiming that NRC Staff's consultation was inadequate does not ripen until issuance of the Staff's draft environmental review document; CLI-14-2, 79 NRC 11 (2014)
generalized grievances with sufficiency of NRC Staff's analysis or the adequacy of included documentation are not enough to raise a proposed contention to the level of admissibility; LBP-14-5, 79 NRC 377 (2014)
if the NRC Staff safety review reveals any new and significant information relating to the environmental impacts of storage of high-burnup fuel, Staff will supplement its environmental analysis as required by the National Environmental Policy Act; LBP-14-6, 79 NRC 404 (2014)
NEPA does not impose a substantive obligation for a reviewing agency to require or enforce mitigation measures discussed in an environment assessment; LBP-14-6, 79 NRC 404 (2014)
NRC Staff cannot defend its decision on a basis inconsistent with its own informal review; LBP-14-2, 79 NRC 131 (2014)
NRC Staff improperly discharges its duties with respect to the grading of an operating test if the grading is inappropriate or unjustified or if the grading strays too far afield of the twin goals of equitable and consistent examination administration, thus becoming arbitrary or an abuse of discretion; LBP-14-2, 79 NRC 131 (2014)

NRC Staff may not take a position or assert facts before the presiding officer contrary to a matter decided by the appeal board (i.e., the Staff itself) on applicant's informal appeal absent an explicit confession of error; LBP-14-2, 79 NRC 131 (2014)
NRC Staff's decision at the conclusion of its administrative reviews is the final Staff position and hence the only Staff position open to applicant to challenge before the presiding officer; LBP-14-2, 79 NRC 131 (2014)
petitioner should not wait for the Staff to perform its responsibilities under the National Historic Preservation Act before it raises a claim that information is lacking; CLI-14-2, 79 NRC 11 (2014)
Staff has conducted cumulative impact analyses of covered actions that were not interdependent with the proposed action; LBP-14-6, 79 NRC 404 (2014)
Staff is required to consult with interested parties, including Indian tribes, to identify historic properties, evaluate the potential effects of the project on those properties, and consider mitigation measures; CLI-14-2, 79 NRC 11 (2014)
standard review plan does not in itself impose requirements on an applicant but provides guidance to NRC Staff in reviewing an application; CLI-14-2, 79 NRC 11 (2014)
that NRC Staff will develop additional information relevant to cultural resources, as part of its National Historic Preservation Act review, does not preclude a challenge to the application's cultural resources discussion; CLI-14-2, 79 NRC 11 (2014)
under NEPA, NRC is required to take a hard look at the environmental impacts of a proposed action; LBP-14-7, 79 NRC 451 (2014)
whatever the ground for the agency's departure from prior norms, it must be clearly set forth so that the reviewing court may understand the basis of the agency's action; LBP-14-2, 79 NRC 131 (2014)
when conducting a NEPA-required environmental review, an agency may consider the ameliorative effects of mitigation in determining the environmental impacts of an activity; LBP-14-7, 79 NRC 451 (2014)
NUCLEAR REGULATORY COMMISSION, AUTHORITY
admissibility of contention questioning whether a confirmatory order imposes overly broad reporting obligations on licensee employees, e.g., that exceed NRC's authority under section 73.56(f)(3), is discussed; LBP-14-4, 79 NRC 319 (2014)
agencies must abide by their own regulations; LBP-14-4, 79 NRC 319 (2014)
although NRC Staff is not required to be a party to a license transfer adjudication, the Commission directs Staff to become a party; CLI-14-5, 79 NRC 254 (2014)
as an exercise of its inherent supervisory authority over adjudications, the Commission directs that waste confidence contentions and any related contentions that may be filed in the near term be held in abeyance pending its further order; LBP-14-6, 79 NRC 404 (2014)
Commission authority to reconsider or clarify a decision, if needed, is inherent in its authority to render the decision in the first instance; CLI-14-1, 79 NRC 1 (2014)
Commission has authority to rule that a license transfer case be adjudicated under Subpart L; CLI-14-5, 79 NRC 254 (2014)
Commission has authority to set the scope of its own hearings; LBP-14-4, 79 NRC 319 (2014)
Commission has inherent authority to supervise both NRC Staff's work and adjudicatory proceedings relating to license applications; CLI-14-1, 79 NRC 1 (2014)
contention that NRC or licensee has abused or exceeded its lawful discretion with respect to nuclear safety programs is not admissible because it fails to provide sufficient information to show that a genuine dispute exists on a material issue of law or fact; LBP-14-4, 79 NRC 319 (2014)
determination of what constitutes adequate protection under the Atomic Energy Act, absent specific guidance from Congress, is just such a situation in which NRC should be permitted to have discretion to make case-by-case judgments; LBP-14-1, 79 NRC 39 (2014)
if a party fails to file an answer or pleading within the time prescribed in 10 C.F.R. Part 2 or as specified in the notice of hearing or pleading, to appear at a hearing or prehearing conference, to comply with any prehearing order entered by the presiding officer, or to comply with any discovery order entered by the presiding officer, the Commission or the presiding officer may make any orders in regard to the failure that are just; CLI-14-2, 79 NRC 11 (2014)
in any enforcement action, especially one that has been settled to NRC's satisfaction without creating a formal record, NRC's choice of sanctions is quintessentially a matter of the Commission's sound discretion; LBP-14-4, 79 NRC 319 (2014)

it is well within NRC's discretion to impose specific requirements that clarify or go beyond those already established by regulations; LBP-14-4, 79 NRC 319 (2014)
NRC can issue an order suspending an individual from working anywhere in the nuclear industry who fails to report any concerns arising from behavioral observation; LBP-14-4, 79 NRC 319 (2014)
NRC regional office has discretion to grant a waiver for retesting on a passed test for a senior reactor operator applicant who has failed only one part of the test if it determines that sufficient justification is presented; LBP-14-2, 79 NRC 131 (2014)
NRC's ability to issue orders to unlicensed persons is limited; LBP-14-4, 79 NRC 319 (2014)
NRC's policy of encouraging settlements specifically recognizes that settlements are not inviolate, and the presiding officer or Commission may order adjudication of the issues that the presiding officer or Commission finds is required in the public interest to dispose of the proceeding; LBP-14-4, 79 NRC 319 (2014)
ordinarily, the Commission itself presides over license transfer hearings, but NRC rules allow the Commission to designate one or more Commissioners or any other person permitted by law to preside; CLI-14-5, 79 NRC 254 (2014)
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the Commission retained authority to provide ultimate direction on the waste confidence contentions being held in abeyance; LBP-14-8, 79 NRC 519 (2014)
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applicants need not include a need-for-power discussion in their environmental reports; CLI-14-6, 79 NRC 445 (2014)
OPERATING LICENSE RENEWAL PROCEEDINGS
Commission denies a request for a protective stay of the proceeding; CLI-14-6, 79 NRC 445 (2014)
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docketing of certifications of shutdown and defueling means that licensee's Part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel; DD-14-3, 79 NRC 500 (2014)
licensee may continue to operate reactor under an expired license if a license renew application is timely submitted; CLI-14-5, 79 NRC 254 (2014)
OPINIONS
"dicta" is a court's opinion that goes beyond the facts before court and therefore represents individual views of the author of the opinion and is not binding in subsequent cases as legal precedent; LBP-14-4, 79 NRC 319 (2014)
holding that "petitioner does not have standing is dispositive of this case and the board need not decide this issue" is dicta; LBP-14-4, 79 NRC 319 (2014)
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whether licensee or other person consents to an enforcement order, other persons adversely affected by an order issued under section 2.202 will be offered an opportunity for a hearing consistent with current practice and the authority of the Commission to define the scope of the proceeding on an enforcement order; LBP-14-4, 79 NRC 319 (2014)
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license transfer hearings are to be oral in nature unless the parties unanimously move for a hearing consisting of written comments; CLI-14-5, 79 NRC 254 (2014)
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NRC's ability to issue orders to unlicensed persons is limited; LBP-14-4, 79 NRC 319 (2014)
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although NRC Staff is not required to be a party to a license transfer adjudication, the Commission directs the Staff to become a party; CLI-14-5, 79 NRC 254 (2014)
NRC Staff is not required to be a party to a license transfer adjudication; CLI-14-5, 79 NRC 254 (2014)
NRC Staff is required to notify the presiding officer and the parties whether it desires to participate as a party in a license transfer proceeding; CLI-14-5, 79 NRC 254 (2014)
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burden of proving prejudicial error by a federal agency rests with the party challenging the agency's action, but this is not a particularly onerous requirement; LBP-14-2, 79 NRC 131 (2014)
if the agency error did not affect the outcome, it did not prejudice the petitioner; LBP-14-2, 79 NRC 131 (2014)
in proving prejudicial error by a federal agency, it is sufficient that the agency's error may have affected the outcome; LBP-14-2, 79 NRC 131 (2014)
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ordinarily, the Commission itself presides over license transfer hearings, but NRC rules allow the Commission to designate one or more Commissioners or any other person permitted by law to preside; CLI-14-5, 79 NRC 254 (2014)
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if a party fails to file an answer or pleading within the time prescribed in 10 C.F.R. Part 2 or as specified in the notice of hearing or pleading, to appear at a hearing or prehearing conference, to comply with any prehearing order entered by the presiding officer, or to comply with any discovery order entered by the presiding officer, the Commission or the presiding officer may make any orders in regard to the failure that are just; CLI-14-2, 79 NRC 11 (2014)
NRC's policy of encouraging settlements specifically recognizes that settlements are not inviolate, and the presiding officer or Commission may order adjudication of the issues that the presiding officer or Commission finds is required in the public interest to dispose of the proceeding; LBP-14-4, 79 NRC 319 (2014)

presiding officer may certify questions or refer rulings to the Commission for decision; CLI-14-5, 79 NRC 254 (2014)
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governmental officials, acting in their official capacities, are presumed to have properly discharged their duties and, to rebut this presumption, petitioner's burden of proof involves presentation of clear evidence to the contrary; LBP-14-2, 79 NRC 131 (2014)
presumption does not help to sustain an action that on its face appears irregular, and if it appears irregular, it is irregular, and the burden shifts to the proponent to show the contrary; LBP-14-2, 79 NRC 131 (2014)
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use of the past tense when referring to "quality assurance applied to the design" in 10 C.F.R. Part 50, App. B shows that safety-related design activities must have been performed under an acceptable QA program even though those activities were performed prior to the date on which the combined license application (which includes the FSAR) was filed with NRC; LBP-14-7, 79 NRC 451 (2014)
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comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine effectiveness of the program; LBP-14-7, 79 NRC 451 (2014)
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applicant's strategic special nuclear material item monitoring approach, as enhanced by an item verification procedure, provides reasonable assurance that the quantitative accuracy of the MMIS/PLC

data is sufficient to enable the procedures employing those data to meet the regulatory requirements; LBP-14-1, 79 NRC 39 (2014)
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contention concerning temporary storage and ultimate disposal of nuclear waste was held in abeyance pending further order from the Commission; LBP-14-7, 79 NRC 451 (2014)
regarding waste confidence, NRC failed to comply with the National Environmental Policy Act in issuing its 2010 update to the Waste Confidence Decision and accompanying Temporary Storage Rule; CLI-14-3, 79 NRC 31 (2014)
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goal of SRO tests is to determine whether applicant's level of knowledge and understanding meet the minimum requirements to safely operate the facility for which the license is sought; LBP-14-2, 79 NRC 131 (2014)
if an examiner is assigned to a reactor operator examination that might appear to present a conflict of interest, the examiner shall inform his or her immediate supervisor of the potential conflict; LBP-14-2, 79 NRC 131 (2014)
licensing boards have limited their review of NRC Staff reactor operator licensing decisions to those issues that were resolved against the license applicant in the Staff's informal review; LBP-14-2, 79 NRC 131 (2014)
NRC regional office has the discretion to grant a waiver for retesting on a passed test for a senior reactor operator applicant who has failed only one part of the test if it determines that sufficient justification is presented; LBP-14-2, 79 NRC 131 (2014)
NRC regional office shall not assign an examiner who failed an applicant on an operating test to administer any part of that applicant's retake operating test; LBP-14-2, 79 NRC 131 (2014)
NRC Staff acted inconsistently with its own guidance and applied that guidance in an inconsistent manner when it denied a senior reactor operator license; LBP-14-2, 79 NRC 131 (2014)
NRC Staff cannot defend its decision on a basis inconsistent with its own informal review; LBP-14-2, 79 NRC 131 (2014)
NRC Staff improperly discharges its duties with respect to the grading of an operating test if the grading is inappropriate or unjustified or if the grading strays too far afield of the twin goals of equitable and consistent examination administration, thus becoming arbitrary or an abuse of discretion; LBP-14-2, 79 NRC 131 (2014)
NRC Staff may not take a position or assert facts before the presiding officer contrary to a matter decided by the appeal board (i.e., the Staff itself) on applicant's informal appeal absent an explicit confession of error; LBP-14-2, 79 NRC 131 (2014)
NRC Staff's decision at the conclusion of its administrative reviews is the final Staff position and hence the only Staff position open to applicant to challenge before the presiding officer; LBP-14-2, 79 NRC 131 (2014)

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NUREG-1021 specifies NRC Staff policies, procedures, and practices for administering reactor operator initial and requalification written examinations and operating tests, listing goals and specific procedures for preparation, administration, and grading; LBP-14-2, 79 NRC 131 (2014)
pursuant to 10 C.F.R. 55.40, NRC Staff shall use the criteria in NUREG-1021 in effect 6 months before the examination date to prepare written reactor operator examinations required by sections 55.41 and 55.43 and the operating tests required by section 55.45; LBP-14-2, 79 NRC 131 (2014)
senior reactor operator applicant who has passed either the written examination or operating test and failed the other may request in a new application on Form NRC-398 to be excused from reexamination on the portions of the examination or test that the applicant has passed; LBP-14-2, 79 NRC 131 (2014)
senior reactor operator applicant who was denied a license after the first examination may elect to retake the tests; LBP-14-2, 79 NRC 131 (2014)
to obtain a senior reactor operator license, applicant must pass both a written test and an operating test and meet the other requirements specified in Part 55; LBP-14-2, 79 NRC 131 (2014)
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any individual who manipulates the controls of any facility licensed under Parts 50, 52, or 54 of NRC's regulations is required to have an operator's license; LBP-14-2, 79 NRC 131 (2014)
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any individual who manipulates the controls of any facility licensed under Parts 50, 52, or 54 of NRC's regulations is required to have an operator's license; LBP-14-2, 79 NRC 131 (2014)
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"senior reactor operator" is any individual licensed under Part 55 to manipulate the controls of a facility and to direct the licensed activities of licensed operators; LBP-14-2, 79 NRC 131 (2014)
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use of the past tense when referring to "quality assurance applied to the design" in 10 C.F.R. Part 50, App. B shows that safety-related design activities must have been performed under an acceptable QA program even though those activities were performed prior to the date on which the combined license application (which includes the FSAR) was filed with the NRC; LBP-14-7, 79 NRC 451 (2014)
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because applicant has not shown that it could not have addressed issues in its appeal, nor has presented genuinely new information in its reply, neither necessity nor fairness dictates that its reply should be permitted; CLI-14-3, 79 NRC 31 (2014)
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NRC's enforcement order does not state that any reportable illegal, unusual, or aberrant behavior must have a nexus to public health and safety or the common defense and security in order to be reportable; LBP-14-4, 79 NRC 319 (2014)
reporting of observed behavior is the core concept of the behavioral observation program; LBP-14-4, 79 NRC 319 (2014)
under an enforcement order, NRC requires that workers report any observed "illegal, unusual, or aberrant" behavior by their co-workers, words not appearing in 10 C.F.R. 73.56(f); LBP-14-4, 79 NRC 319 (2014)
REQUEST FOR ACTION
request relating to containment structural damage is mooted by licensee's decision to shut down and defuel the facility
request that licensees should be required to maintain Emergency Response Data System capability throughout an accident will be addressed by an advance notice of proposed rulemaking; DD-14-2, 79 NRC 489 (2014)
request that NRC modify the administrative controls section of the standard technical specifications for each operating reactor design to reference the approved EOP technical guidelines for that plant design is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to add guidance to emergency plans that documents how to perform a multiunit dose assessment (including releases from spent fuel pools) using licensee's site-specific dose

assessment software and approach until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to complete the Emergency Response Data System modernization initiative by June 2012 to ensure multiunit site monitoring capability is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to comply with twelve specific recommendations in the Near-Term Task Force Report is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to conduct periodic training and exercises for multiunit and prolonged station blackout scenarios until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to determine and implement required staff to fill all necessary positions for responding to a multiunit event until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to ensure that emergency planning equipment and facilities are sufficient for dealing with multiunit and prolonged station blackout scenarios until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to have an installed, seismically qualified means to spray water into the spent fuel pools, including an easily accessible connection to supply the water (e.g., using a portable pump or pumper truck) at grade outside the building is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to include a reliable hardened vent in boiling-water reactor Mark I and Mark II containments is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to modify the technical guidelines to include emergency operations procedures, severe accident mitigation guidelines, and extensive damage mitigation guidelines in an integrated manner, specify clear command and control strategies for their implementation, and stipulate appropriate qualification and training for those who make decisions during emergencies is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to perform seismic and flood protection walkdowns to identify and address plant-specific vulnerabilities and verify the adequacy of monitoring and maintenance for protection features such as watertight barriers and seals in the interim period until longer-term actions are completed to update the design basis for external events is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide means to power communications equipment needed to communicate onsite and offsite during a prolonged station blackout until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide reasonable protection for equipment from the effects of design-basis external events and to add equipment as needed to address multiunit events while other requirements are being revised and implemented is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide safety-related AC electrical power for the spent fuel pool makeup system is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters from the control room is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to reevaluate seismic and flooding hazards at their sites against current NRC requirements and guidance, and if necessary, update the design basis and structures, systems, and components important to safety to protect against the updated hazards is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to revise their technical specifications to address requirements to have one train of onsite emergency electrical power operable for spent fuel pool makeup and spent fuel pool instrumentation when there is irradiated fuel in the spent fuel pool, regardless of the operational mode of the reactor is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
request that NRC revoke license for falsification of information is addressed; DD-14-4, 79 NRC 506 (2014)
request that NRC shut down or prohibit restart of nuclear power plants until a criminal investigation of a licensee contractor is complete and everything has been verified safe is denied; DD-14-1, 79 NRC 7 (2014)

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RESEARCH REACTORS
licensee is required to submit a license transfer application to NRC; CLI-14-5, 79 NRC 254 (2014)
licensee may continue to operate reactor under an expired license if a license renewal application is timely submitted; CLI-14-5, 79 NRC 254 (2014)
RESPONSE TIME
applicant's preliminary material control and accounting program satisfactorily demonstrates the ability to resolve the nature and cause of any MC&A alarm within approved time periods in each of the four storage areas at issue; LBP-14-1, 79 NRC 39 (2014)
See also Time Limits
REVIEW
See Appellate Review; Environmental Review; NRC Staff Review; Standard of Review
REVOCATION OF LICENSES
request that NRC revoke license for falsification of information is addressed; DD-14-4, 79 NRC 506 (2014)
RULE OF REASON
NEPA's hard-look requirement is tempered by a rule of reason that requires agencies to address only impacts that are reasonably foreseeable, not those that are remote and speculative; LBP-14-7, 79 NRC 451 (2014)
RULEMAKING
consideration in adjudicatory proceedings of issues presently to be taken up by the Commission in rulemaking would be a wasteful duplication of effort; LBP-14-1, 79 NRC 39 (2014)
licensing proceedings are not the appropriate venue for generic issues, especially those that are about to become the subject of rulemaking; LBP-14-1, 79 NRC 39 (2014)
regarding waste confidence, NRC failed to comply with the National Environmental Policy Act in issuing its 2010 update to the Waste Confidence Decision and accompanying Temporary Storage Rule; CLI-14-3, 79 NRC 31 (2014)
request that licensees should be required to maintain Emergency Response Data System capability throughout an accident will be addressed by an advance notice of proposed rulemaking; DD-14-2, 79 NRC 489 (2014)
request that NRC modify the administrative controls section of the standard technical specifications for each operating reactor design to reference the approved EOP technical guidelines for that plant design is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to modify the technical guidelines to include emergency operations procedures, severe accident mitigation guidelines, and extensive damage mitigation guidelines in an integrated manner, specify clear command and control strategies for their implementation, and stipulate appropriate qualification and training for those who make decisions during emergencies is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to revise their technical specifications to address requirements to have one train of onsite emergency electrical power operable for spent fuel pool makeup and spent fuel pool instrumentation when there is irradiated fuel in the spent fuel pool, regardless of the operational mode of the reactor is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
rulemaking petitioner may request a suspension of a licensing proceeding in which petitioner is a participant, pending disposition of the rulemaking petition; CLI-14-6, 79 NRC 445 (2014)
section 2.802(d) suspension request is inapplicable where no petition for rulemaking has been filed before the Commission; CLI-14-6, 79 NRC 445 (2014)
sole remedy to challenge lawfulness of a regulation is to file a petition for rulemaking with the Commission; CLI-14-6, 79 NRC 445 (2014)
See also Denial of Rulemaking
RULES OF PRACTICE
all disclosures under section 2.336(c) must be accompanied by a certification (in the form of a sworn affidavit) that all relevant materials required by this section have been disclosed, and that the disclosures are accurate and complete as of the date of the certification; LBP-14-2, 79 NRC 131 (2014)
although NRC Staff is not required to be a party to a license transfer adjudication, the Commission directs the Staff to become a party; CLI-14-5, 79 NRC 254 (2014)

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appeal as of right from a board's ruling on an intervention petition is permitted only upon denial of a petition to intervene and/or request for hearing, on the question as to whether it should have been granted or upon the granting of a petition to intervene and/or request for hearing, on the question as to whether it should have been wholly denied; CLI-14-3, 79 NRC 31 (2014)

appeal of an order selecting a hearing procedure is permitted on the question as to whether the selection of the particular hearing procedures was in clear contravention of the criteria set forth in section 2.310; CLI-14-3, 79 NRC 31 (2014)

appeals from an order ruling on the admission of new or amended contentions is not permitted; LBP-14-5, 79 NRC 377 (2014)

because parties to a Subpart L proceeding may not seek discovery from the other parties to the proceeding, all such parties must make periodic mandatory disclosures; LBP-14-2, 79 NRC 131 (2014)

because the board granted a hearing request, its decision to reject some contentions may not be appealed until the end of the case; CLI-14-2, 79 NRC 11 (2014)

Commission did not intend to relieve third-party individuals who are not the subject of an enforcement order, but who nonetheless seek a hearing on the order, from satisfying the requirements for a petition for intervention in section 2.309; LBP-14-4, 79 NRC 319 (2014)

consolidating proceedings is the exception rather than the rule; CLI-14-5, 79 NRC 254 (2014)

contention admissibility rules are strict by design; LBP-14-4, 79 NRC 319 (2014); LBP-14-5, 79 NRC 377 (2014)

contention admissibility rules do not permit the filing of a vague, unparticularized contention, unsupported by affidavit, expert, or documentary support; LBP-14-5, 79 NRC 377 (2014)

contention relating to a matter not previously in controversy among the parties must satisfy the requirements of section 2.309(c) and (f); LBP-14-8, 79 NRC 519 (2014)

contentions must be based on a genuine material dispute, not the possibility that petitioners, if they perform their own additional analyses, may ultimately disagree with the application; LBP-14-6, 79 NRC 404 (2014)

contentions must demonstrate that the issue raised in the contention is within the scope of the proceeding; LBP-14-6, 79 NRC 404 (2014)

contentions must meet the six admissibility criteria of 10 C.F.R. 2.309(f)(1)(i)-(vi); LBP-14-6, 79 NRC 404 (2014)

contentions must provide a concise statement of the alleged facts or expert opinions that support petitioner's position on the issue and on which petitioner intends to rely at hearing, together with references to the specific sources and documents on which petitioner intends to rely to support its position; LBP-14-6, 79 NRC 404 (2014)

contentions must provide factual support for underlying claims and identify a genuine dispute with the applicant on a material issue; CLI-14-6, 79 NRC 445 (2014)

contentions will be ruled inadmissible if petitioner has offered no tangible information, no experts, no substantive affidavits, but instead only bare assertions and speculation; LBP-14-6, 79 NRC 404 (2014)

demands for a hearing by the subject of an enforcement order are automatic without regard to satisfaction of section 2.309(d) and section 2.309(f)(1); LBP-14-4, 79 NRC 319 (2014)

disclosure updates in Subpart L proceedings shall include any documents subject to disclosure that were not included in any previous disclosure update; LBP-14-2, 79 NRC 131 (2014)

discretionary intervention may be considered only when at least one requestor/petitioner has established standing and at least one contention has been admitted so that a hearing will be held; LBP-14-4, 79 NRC 319 (2014)

factual basis requirement for contention admission is intended to preclude contentions from being admitted where an intervenor has no facts to support its position and instead contemplates using discovery or cross-examination as a fishing expedition that might produce relevant supporting facts; LBP-14-6, 79 NRC 404 (2014)

failure to comply with any of the pleading requirements of 10 C.F.R. 2.309(f)(1) renders a contention inadmissible; LBP-14-5, 79 NRC 377 (2014); LBP-14-6, 79 NRC 404 (2014); LBP-14-8, 79 NRC 519 (2014)

filings not otherwise authorized by NRC rules are perrmitted only where necessity or fairness dictates; CLI-14-3, 79 NRC 31 (2014)

good cause exists when information on which the filing is based was not previously available and is materially different from information previously available and the filing has been submitted in a timely fashion based on the availability of the subsequent information; LBP-14-5, 79 NRC 377 (2014)
good cause in 10 C.F.R. 2.307(a) does not share the same definition that is used for good cause in section 2.309(c); LBP-14-5, 79 NRC 377 (2014)
health issues or an unexpected weather event might constitute good cause for purposes of requesting an extension; LBP-14-5, 79 NRC 377 (2014)
if a party fails to file an answer or pleading within the time prescribed in 10 C.F.R. Part 2 or as specified in the notice of hearing or pleading, to appear at a hearing or prehearing conference, to comply with any prehearing order entered by the presiding officer, or to comply with any discovery order entered by the presiding officer, the Commission or the presiding officer may make any orders in regard to the failure that are just; CLI-14-2, 79 NRC 11 (2014)
if the reason a motion to admit a new or amended contention was filed after the initial deadline does not relate to the substance of the filing itself, the standard in 10 C.F.R. 2.307(a) applies in determining whether the motion can be considered timely; LBP-14-5, 79 NRC 377 (2014)
individual member who qualifies an organization for standing must have suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action and the injury is likely redressable by a favorable decision; LBP-14-4, 79 NRC 319 (2014)
interlocutory review of decisions and actions of a presiding officer may be available under 10 C.F.R. 2.341(f)(2); LBP-14-5, 79 NRC 377 (2014)
intervention petitioner need not discuss each and every portion of the application that bears any relation to the issue being contested, but but only provide a brief explanation of the argument and a concise statement of the relevant facts; CLI-14-2, 79 NRC 11 (2014)
it is well within NRC's discretion to impose specific requirements that clarify or go beyond those already established by regulations; LBP-14-4, 79 NRC 319 (2014)
licensee or other person to whom the Commission has issued an immediately effective order may move the presiding officer to set aside the immediate effectiveness of the order; LBP-14-4, 79 NRC 319 (2014)
limited interlocutory appeal right attaches only when the board has fully ruled on the initial intervention petition, that is, when it has admitted or rejected all proposed contentions; CLI-14-3, 79 NRC 31 (2014)
mere mention of the future filing of an affidavit does not satisfy the requirement of section 2.326(b); LBP-14-8, 79 NRC 519 (2014)
motion to admit a new contention must be supported by an affidavit that separately addresses each of the 2.326(a) criteria; LBP-14-8, 79 NRC 519 (2014)
motion to strike may be granted where a pleading or other submission contains information that is irrelevant; LBP-14-6, 79 NRC 404 (2014)
motions for reconsideration must demonstrate a compelling circumstance, such as the existence of a clear and material error in a decision, which could not have been reasonably anticipated, which renders the decision invalid; CLI-14-1, 79 NRC 1 (2014)
motions for reconsideration should not include new arguments or evidence unless it relates to a board concern that applicant could not reasonably have anticipated; LBP-14-7, 79 NRC 451 (2014)
motions for summary disposition must contend that there are facts on which there is no genuine issue to be heard; LBP-14-5, 79 NRC 377 (2014)
motions to reopen must be supported by affidavit, be timely, address a significant safety or environmental issue, and demonstrate that a materially different result would have been likely if the evidence had been available; LBP-14-8, 79 NRC 519 (2014)
new contentions must be based upon information that was not previously available, is materially different from information previously available, and is timely filed; LBP-14-5, 79 NRC 377 (2014); LBP-14-6, 79 NRC 404 (2014); LBP-14-8, 79 NRC 519 (2014)
new or amended contention must satisfy the substantive contention admissibility standards set forth in 10 C.F.R. 2.309(f)(1); LBP-14-5, 79 NRC 377 (2014); LBP-14-8, 79 NRC 519 (2014)
new or amended contentions based on material information that has subsequently become available must meet the general contention admissibility requirements of 10 C.F.R. 2.309(f)(1) as well as the three requirements in section 2.309(c)(1); LBP-14-6, 79 NRC 404 (2014)

nonlicensee with a purely economic interest has an automatic right to demand a hearing under section 2.202(a)(3) without showing standing or proffering an admissible contention; LBP-14-4, 79 NRC 319 (2014)
NRC provides for an automatic right to appeal a board decision on the question whether a petition to intervene should have been wholly denied; CLI-14-2, 79 NRC 11 (2014)
NRC Staff is required to notify the presiding officer and the parties whether it desires to participate as a party in a license transfer proceeding; CLI-14-5, 79 NRC 254 (2014)
NRC Staff will become a party to cases involving an application denial; CLI-14-5, 79 NRC 254 (2014)
one demanding a hearing on a challenge to an enforcement order need not comply with the section 2.309(f)(1) requirements; LBP-14-4, 79 NRC 319 (2014)
parties to a Subpart L proceeding must update their disclosures every month after initial disclosures on a due date selected by the presiding officer in the order admitting contentions; LBP-14-2, 79 NRC 131 (2014)
person adversely affected by an enforcement order has a legal right to demand a hearing; LBP-14-4, 79 NRC 319 (2014)
petitioner must provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact, including references to specific portions of the application that petitioner disputes and the supporting reasons for each dispute; CLI-14-2, 79 NRC 11 (2014)
petitioner who satisfies the reopening standard must also show that its proposed new contention meets the standard for new or amended contentions in section 2.309(c) and the underlying admissibility standards of section 2.309(f)(1); LBP-14-8, 79 NRC 519 (2014)
presiding officer may certify questions or refer rulings to the Commission for decision; CLI-14-5, 79 NRC 254 (2014)
presiding officer may impose sanctions on a party that fails to provide any document required to be disclosed, unless the party demonstrates good cause for its failure to make the disclosure; LBP-14-2, 79 NRC 131 (2014)
proponent of a contention must provide sufficient information to show that a genuine dispute exists with applicant/licensee on a material issue of law or fact; CLI-14-2, 79 NRC 11 (2014)
reconsideration motion fails to identify a significant factual or legal matter that the board overlooked or provide compelling circumstances that render the board's decision invalid; LBP-14-7, 79 NRC 451 (2014)
relevant legal standards when evaluating a third-party petition for hearing on a confirmatory order; LBP-14-4, 79 NRC 319 (2014) are in section 2.309(d) and (f)
request for hearing must state name and identity of requestor, nature of requestor's right to be a party , and nature and extent of the requestor's/petitioner's property, financial, or other interests in the proceeding; LBP-14-4, 79 NRC 319 (2014)
request to admit a new or amended contention requires petitioner to show that the information upon which it is based was not previously available and is materially different from information previously available; CLI-14-2, 79 NRC 11 (2014)
section 2.311 does not provide for the filing of replies; CLI-14-3, 79 NRC 31 (2014)
section 2.311(a) is applicable to an appeal of a board decision rejecting an intervention petition and a hearing request; CLI-14-6, 79 NRC 445 (2014)
section 2.342(e) standards are applied to motion to stay issuance of a license; CLI-14-6, 79 NRC 445 (2014)
section 2.802(d) suspension request is inapplicable where no petition for rulemaking has been filed before the Commission; CLI-14-6, 79 NRC 445 (2014)
should the Commission determine at a future time that case-specific challenges to waste confidence are appropriate for consideration, normal procedural rules will apply; LBP-14-6, 79 NRC 404 (2014)
stay pursuant to 10 C.F.R. 2.342 is available only where a presiding officer or licensing board has issued a decision or taken action in a proceeding to which the movant is a party; CLI-14-4, 79 NRC 249 (2014)
to be considered under the motions rule, replies must satisfy the compelling circumstances standard; CLI-14-3, 79 NRC 31 (2014)

to intervene as a party, a union must establish standing and proffer at least one admissible contention; LBP-14-4, 79 NRC 319 (2014)
to make additional claims in a contention, intervenor must provide a sufficient explanation of its concern and a concise statement of the alleged facts supporting its position; LBP-14-5, 79 NRC 377 (2014)
to remove an admitted contention from the proceeding, a party must file, and a board must grant, a motion for summary disposition; LBP-14-5, 79 NRC 377 (2014)
unless the presiding officer otherwise orders, applicant or proponent of an order has the burden of proof; LBP-14-2, 79 NRC 131 (2014)
within 15 days from an order granting a hearing, each party must indicate what kind of hearing it prefers; CLI-14-5, 79 NRC 254 (2014)
RULES OF PROCEDURE
procedural rules in Subpart L govern most adjudicatory proceedings; CLI-14-5, 79 NRC 254 (2014)
procedural rules in Subpart M govern adjudications on transfer applications; CLI-14-5, 79 NRC 254 (2014)
separate hearings have been shown to be appropriate for cases governed by different procedural rules; CLI-14-5, 79 NRC 254 (2014)
Subpart M logically applies to all license transfer hearing requests, regardless of who files them, because the types of issues litigated (e.g., financial assurance, technical qualifications, foreign ownership, and staffing levels) are likely to be similar regardless of whether they are initiated by intervention petitions or by challenges to a Staff action; CLI-14-5, 79 NRC 254 (2014)
SAFETY
NRC's safety regulations cover a 50-mile planning area; LBP-14-4, 79 NRC 319 (2014)
SAFETY ISSUES
applicant bears the ultimate burden of proof in materials licensing proceedings; LBP-14-1, 79 NRC 39 (2014)
applicant has the burden of establishing that it is entitled to the applied-for license by a preponderance of the evidence; LBP-14-3, 79 NRC 267 (2014)
concern that involves safety will not support standing in an enforcement proceeding if petitioner seeks merely a better settlement, i.e., one that promises greater improvements to safety than the settlement that was actually negotiated; LBP-14-4, 79 NRC 319 (2014)
contention that NRC or licensee has abused or exceeded its lawful discretion with respect to nuclear safety programs is not admissible because it fails to provide sufficient information to show that a genuine dispute exists on a material issue of law or fact; LBP-14-4, 79 NRC 319 (2014)
no one can challenge an enforcement order as long as the order, in any way, improves the safety situation over what it was in the absence of the order; LBP-14-4, 79 NRC 319 (2014)
standing to challenge a confirmatory order exists only when a petitioner credibly alleges that a settlement somehow actually reduces safety; LBP-14-4, 79 NRC 319 (2014)
SANCTIONS
if a party fails to file an answer or pleading within the time prescribed in 10 C.F.R. Part 2 or as specified in the notice of hearing or pleading, to appear at a hearing or prehearing conference, to comply with any prehearing order entered by the presiding officer, or to comply with any discovery order entered by the presiding officer, the Commission or the presiding officer may make any orders in regard to the failure that are just; CLI-14-2, 79 NRC 11 (2014)
in any enforcement action, especially one that has been settled to NRC's satisfaction without creating a formal record, NRC's choice of sanctions is quintessentially a matter of the Commission's sound discretion; LBP-14-4, 79 NRC 319 (2014)
parties, including NRC Staff, may be sanctioned for noncompliance with the disclosure regulations; LBP-14-2, 79 NRC 131 (2014)
party who neglects to fully participate in a proceeding is subject to sanctions including dismissal of its contention; CLI-14-2, 79 NRC 11 (2014)
presiding officer may impose sanctions on a party that fails to provide any document required to be disclosed, unless the party demonstrates good cause for its failure to make the disclosure; LBP-14-2, 79 NRC 131 (2014)

SCHEDULING
once the nature of a license transfer hearing is settled, Subpart M and NRC Model Milestones set a default schedule for the remainder of the proceeding; CLI-14-5, 79 NRC 254 (2014)
SEALED SOURCES
any special nuclear material that is physically encased in a capsule, rod, element, etc. that prevents the leakage, escape, and removal of the SNM without penetrations of the casing is a sealed source; LBP-14-1, 79 NRC 39 (2014)
SECURITY
See Common Defense and Security; Physical Security
SECURITY PLANS
licensees are permitted to develop their own individual access authorization programs, provided they satisfy 10 C.F.R. 73.56; LBP-14-4, 79 NRC 319 (2014)
SEGMENTATION
cumulative effects and improper segmentation issues raise separate but similar questions; LBP-14-6, 79 NRC 404 (2014)
failure to include all connected actions within the scope of the proposed action is generally referred to as segmentation; LBP-14-6, 79 NRC 404 (2014)
federal agencies may plan a number of related actions but may decide to prepare impact statements on each action individually rather than prepare an impact statement on the entire group, creating a segmentation or piecemealing problem; LBP-14-6, 79 NRC 404 (2014)
piecemealing or segmentation occurs when an action is divided into component parts, each involving action with less significant environmental effects; LBP-14-6, 79 NRC 404 (2014)
segmentation is to be avoided in order to ensure that interrelated projects, the overall effect of which is environmentally significant, not be fractionalized into smaller, less significant actions; LBP-14-6, 79 NRC 404 (2014)
SEISMIC ANALYSIS
request that NRC order licensees to perform seismic and flood protection walkdowns to identify and address plant-specific vulnerabilities and verify the adequacy of monitoring and maintenance for protection features such as watertight barriers and seals in the interim period until longer-term actions are completed to update the design basis for external events is addressed; DD-14-2, 79 NRC 489 (2014)
where seismic suitability of a site was evaluated at the early site permit stage, further litigation of the geologic fault issue is foreclosed at the combined license stage; LBP-14-8, 79 NRC 519 (2014)
SENIOR REACTOR OPERATOR
any individual licensed under Part 55 to manipulate the controls of a facility and to direct the licensed activities of licensed operators is designated as an SRO; LBP-14-2, 79 NRC 131 (2014)
SENIOR REACTOR OPERATOR LICENSE
any individual who manipulates the controls of any facility licensed under Parts 50, 52, or 54 of NRC's regulations is required to have an operator's license; LBP-14-2, 79 NRC 131 (2014)
applicant who does not accept a proposed license denial may, within 20 days of the date of the denial letter, demand a hearing; LBP-14-2, 79 NRC 131 (2014)
applicant who was denied a license after the first examination may elect to retake the tests; LBP-14-2, 79 NRC 131 (2014)
licenses are subject to the satisfaction of other licensing requirements not considered in this proceeding, such as health, that the NRC Staff must assess before issuing a license; LBP-14-2, 79 NRC 131 (2014)
licenses shall be effective as of the date issued and shall be subject to the usual terms and conditions; LBP-14-2, 79 NRC 131 (2014)
NRC regional office has the discretion to grant a waiver for retesting on a passed test for a senior reactor operator applicant who has failed only one part of the test if it determines that sufficient justification is presented; LBP-14-2, 79 NRC 131 (2014)
NRC Staff acted inconsistently with its own guidance and applied that guidance in an inconsistent manner when it denied an SRO license; LBP-14-2, 79 NRC 131 (2014)
Part 55 of 10 C.F.R. establishes procedures and criteria for issuance of reactor operator licenses under the Atomic Energy Act or the Energy Reorganization Act; LBP-14-2, 79 NRC 131 (2014)

to obtain a license, applicant must pass both a written test and an operating test and meet the other requirements specified in Part 55; LBP-14-2, 79 NRC 131 (2014)
SETTLEMENT AGREEMENTS
if licensee or other person to whom an order is issued consents to its issuance, or the order confirms actions agreed to by the licensee or such other person, that consent or agreement constitutes a waiver by the licensee or such other person of a right to a hearing and any associated rights; LBP-14-4, 79 NRC 319 (2014)
in any enforcement action, especially one that has been settled to NRC's satisfaction without creating a formal record, NRC's choice of sanctions is quintessentially a matter of the Commission's sound discretion; LBP-14-4, 79 NRC 319 (2014)
nonparty petitioners may not challenge a confirmatory order embodying a settlement if the order improves the safety situation over what it was in the absence of the order; LBP-14-4, 79 NRC 319 (2014)
NRC's policy of encouraging settlements specifically recognizes that settlements are not inviolate, and the presiding officer or Commission may order adjudication of the issues that the presiding officer or Commission finds is required in the public interest to dispose of the proceeding; LBP-14-4, 79 NRC 319 (2014)
parties who choose to resolve litigation through settlement may not dispose of the claims of a third party and may not impose duties or obligations on a third party without that party's agreement; LBP-14-4, 79 NRC 319 (2014)
where a licensed and operating plant has been found unsafe, where the Commission has ordered some remedial amendment, and where the licensee has accepted that amendment, there is no public interest in the proceeding; LBP-14-4, 79 NRC 319 (2014)
SETTLEMENT NEGOTIATIONS
boards lack authority to order NRC Staff to bring licensee employees into settlement negotiations; LBP-14-4, 79 NRC 319 (2014)
SETTLEMENTS
Commission, like other adjudicatory bodies, looks with favor upon settlements; LBP-14-4, 79 NRC 319 (2014)
settlements may become illusory if licensees consent to confirmatory orders and are nonetheless subjected to formal proceedings, possibly leading to different or more severe enforcement actions; LBP-14-4, 79 NRC 319 (2014)
too freely allowing third parties to contest enforcement settlements at hearings would undercut the NRC's policy favoring enforcement settlements; LBP-14-4, 79 NRC 319 (2014)
SHUTDOWN
docketing of certifications of shutdown and defueling means that licensee's Part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel; DD-14-3, 79 NRC 500 (2014)
licensee must provide certifications to NRC Staff that it has permanently ceased power operations and that all fuel has been permanently removed from the reactor vessel; DD-14-3, 79 NRC 500 (2014)
petitioner's request for action relating to containment structural damage is mooted by licensee's decision to shutdown and defuel the facility; DD-14-3, 79 NRC 500 (2014)
SITE CHARACTERIZATION
investigation of geological, seismological, and engineering characteristics of a site is required; LBP-14-8, 79 NRC 519 (2014)
SITE REMEDIATION
contention alleging that final supplemental environmental impact statement fails to adequately describe or analyze proposed mitigation measures is admissible; LBP-14-5, 79 NRC 377 (2014)
SITE SUITABILITY
investigation of geological, seismological, and engineering characteristics of a site is required; LBP-14-8, 79 NRC 519 (2014)
where seismic suitability of a site was evaluated at the early site permit stage, further litigation of the geologic fault issue is foreclosed at the combined license stage; LBP-14-8, 79 NRC 519 (2014)

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SOURCE MATERIAL
"item" means any discrete quantity or container of special nuclear material or source material, not undergoing processing, having a unique identity and also having an assigned element and isotope quantity; LBP-14-1, 79 NRC 39 (2014)
SPECIAL NUCLEAR MATERIALS
"item" means any discrete quantity or container of SNM or source material, not undergoing processing, having a unique identity and also having an assigned element and isotope quantity; LBP-14-1, 79 NRC 39 (2014)
"sealed source" means any SNM that is physically encased in a capsule, rod, element, etc. that prevents the leakage, escape, and removal of the SNM without penetrations of the casing; LBP-14-1, 79 NRC 39 (2014)
See also Strategic Special Nuclear Material
SPENT FUEL POOLS
request that NRC order licensees to have an installed, seismically qualified means to spray water into the spent fuel pools, including an easily accessible connection to supply the water (e.g., using a portable pump or pumper truck) at grade outside the building is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide safety-related AC electrical power for the spent fuel pool makeup system is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters from the control room is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to revise their technical specifications to address requirements to have one train of onsite emergency electrical power operable for spent fuel pool makeup and spent fuel pool instrumentation when there is irradiated fuel in the spent fuel pool, regardless of the operational mode of the reactor is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
SPENT FUEL STORAGE
denial of license transfer applications typically is on grounds of operating costs and inability to pay the annual cost for spent fuel storage; CLI-14-5, 79 NRC 254 (2014)
if the NRC Staff safety review reveals any new and significant information relating to the environmental impacts of storage of high-burnup fuel, Staff will supplement its environmental analysis as required by the National Environmental Policy Act; LBP-14-6, 79 NRC 404 (2014)
SPENT FUEL STORAGE CASKS
certification for transportation poses such a minimal environmental impact that it merits a categorical exclusion from NEPA; LBP-14-6, 79 NRC 404 (2014)
STANDARD OF PROOF
if intervenors provide sufficient evidence to support the claims made, applicant has the burden of demonstrating by a preponderance of the evidence that it has met the relevant NRC regulations and that the board should therefore reject each contention on the merits; LBP-14-1, 79 NRC 39 (2014)
in proving prejudicial error by a federal agency, it is sufficient that the agency's error may have affected the outcome; LBP-14-2, 79 NRC 131 (2014)
NRC administrative proceedings have applied a "preponderance of the evidence" standard in reaching the ultimate conclusions after hearing in resolving a proceeding; LBP-14-2, 79 NRC 131 (2014)
NRC has never adopted a "clear and convincing" standard as the evidentiary yardstick in its enforcement proceedings, nor is it required to do so under the Atomic Energy Act or the Administrative Procedure Act; LBP-14-2, 79 NRC 131 (2014)
on safety issues, applicant has the burden of establishing that it is entitled to the applied-for license by a preponderance of the evidence; LBP-14-3, 79 NRC 267 (2014)
"preponderance of the evidence" standard is the one generally applied in proceedings under the Administrative Procedure Act; LBP-14-2, 79 NRC 131 (2014)
preponderance-of-the-evidence standard requires the trier of fact to believe that the existence of a fact is more probable than its nonexistence; LBP-14-3, 79 NRC 267 (2014)
to meet the reasonable assurance standard, applicant must make a showing that meets the preponderance-of-the-evidence threshold of compliance with the applicable regulations; LBP-14-1, 79 NRC 39 (2014)

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STANDARD OF REVIEW
board rulings on standing are given substantial deference on appeal; CLI-14-2, 79 NRC 11 (2014)
Commission defers to a board's contention admissibility rulings unless the appeal points to an error of law or abuse of discretion; CLI-14-2, 79 NRC 11 (2014)
deference to board rulings on contention admissibility is appropriate even where the Commission may consider that the support for the contention is weak, or where the claim's materiality presents a close question; CLI-14-2, 79 NRC 11 (2014)
for a hearing petitioner to take an appeal pursuant to section 2.311(c), petitioner must claim that, after considering all pending contentions, the board has erroneously denied a hearing; CLI-14-3, 79 NRC 31 (2014)
licensing boards have limited their review of NRC Staff reactor operator licensing decisions to those issues that were resolved against the license applicant in the Staff's informal review; LBP-14-2, 79 NRC 131 (2014)
NUREG-1021 provides that NRC's regional offices shall obtain approval from the Office of Nuclear Reactor Regulation operator licensing program office before knowingly deviating from the intent of any of the NUREG-1021 standards; LBP-14-2, 79 NRC 131 (2014)
STANDARD REVIEW PLANS
although an SRP lacks the legal force of regulations, it is to be given special weight as a guidance document that has been approved by the Commission but is nonbinding guidance; LBP-14-3, 79 NRC 267 (2014)
SRP does not in itself impose requirements on an applicant but provides guidance to NRC Staff in reviewing an application; CLI-14-2, 79 NRC 11 (2014)
STANDING TO INTERVENE
absent an obvious potential for harm, to obtain standing, it is petitioner's burden to show how harm will or may occur; LBP-14-4, 79 NRC 319 (2014)
as de facto targets of an enforcement order, licensee employees have automatic standing if they are adversely affected by an enforcement order; LBP-14-4, 79 NRC 319 (2014)
boards should determine whether plaintiff's grievance arguably falls within the zone of interests protected or regulated by the statutory provision invoked in the suit; LBP-14-4, 79 NRC 319 (2014)
both standing (redressability) and contention admissibility (scope) in the context of an NRC enforcement order are addressed; LBP-14-4, 79 NRC 319 (2014)
case or controversy limitation does not apply to NRC because it is not an Article III court; LBP-14-4, 79 NRC 319 (2014)
concern that involves safety will not support standing in an enforcement proceeding if petitioner seeks merely a better settlement, i.e., one that promises greater improvements to safety than the settlement that was actually negotiated; LBP-14-4, 79 NRC 319 (2014)
courts should not inquire whether there has been a congressional intent to benefit the would-be plaintiff; LBP-14-4, 79 NRC 319 (2014)
economic injuries suffered by ratepayers are not particularized or distinct to the extent required to support standing, but are instead generalized and shared by a large class; LBP-14-4, 79 NRC 319 (2014)
economic interest generally is not sufficient to afford standing in NRC licensing proceedings regarding health and safety; LBP-14-4, 79 NRC 319 (2014)
for an enforcement order, the threshold question, related to both standing and admissibility of contentions, is whether the hearing request is within the scope of the proceeding as outlined in the order; LBP-14-4, 79 NRC 319 (2014)
for constitutional standing, plaintiff must allege personal injury fairly traceable to the defendant's allegedly unlawful conduct and likely to be redressed by the requested relief; LBP-14-4, 79 NRC 319 (2014)
for prudential standing, plaintiff usually must show, in addition to constituional standing, that the interest sought to be protected by complainant is arguably within the zone of interests to be protected or regulated by the statute; LBP-14-4, 79 NRC 319 (2014)
in determining whether intervention petitioner has alleged an interest that may be affected by the proceeding within the meaning of section 189a of the Atomic Energy Act, contemporaneous judicial concepts of standing should be used; LBP-14-4, 79 NRC 319 (2014)

in the standing analysis, boards construe the petition in favor of the petitioner; CLI-14-2, 79 NRC 11 (2014)
increases in risk can at times be injuries in fact sufficient to confer standing; LBP-14-4, 79 NRC 319 (2014)
injury-in-fact can result when the risk of encountering environmental harms prevents a plaintiff from taking an action; LBP-14-4, 79 NRC 319 (2014)
intervenor is entitled to cure deficiencies with regard to standing when it files its reply; LBP-14-4, 79 NRC 319 (2014)
judicial concepts of standing limit the jurisdiction and power of federal courts to cases and controversies; LBP-14-4, 79 NRC 319 (2014)
judicial concepts of standing require that petitioner allege injury-in-fact, a causal connection, and redressability; LBP-14-4, 79 NRC 319 (2014)
NRC sometimes imposes standing requirements more stringent than those imposed in federal court; LBP-14-4, 79 NRC 319 (2014)
NRC's 50-mile proximity presumption is an example of NRC's great liberality in the arena of standing; LBP-14-4, 79 NRC 319 (2014)
proximity presumption is limited to reactor licensing proceedings and to other cases where there is an obvious potential for offsite radiological consequences; LBP-14-4, 79 NRC 319 (2014)
proximity presumption to establish standing is based on the finding that persons living within the roughly 50-mile radius of the facility face a realistic threat of harm if a release from the facility of radioactive material were to occur; LBP-14-4, 79 NRC 319 (2014)
risk of future harm as an injury is both actual and imminent; LBP-14-4, 79 NRC 319 (2014)
standing has been granted to a utilities commission based on injuries that would increase costs to regulated utilities; LBP-14-4, 79 NRC 319 (2014)
standing is refused only when congressional intent specifically precludes the party or issue from obtaining judicial review; LBP-14-4, 79 NRC 319 (2014)
standing to challenge a confirmatory order exists only when a petitioner credibly alleges that a settlement somehow actually reduces safety; LBP-14-4, 79 NRC 319 (2014)
taxpayer interest is too generalized and attenuated to support Article III standing; LBP-14-4, 79 NRC 319 (2014)
to be adversely affected or aggrieved within the meaning of a statute, plaintiff must establish that the injury complained of falls within the zone of interests sought to be protected by the statutory provision whose violation forms the legal basis for the complaint; LBP-14-4, 79 NRC 319 (2014)
to evaluate a petitioner's standing, boards construe the petition in favor of petitioner; LBP-14-4, 79 NRC 319 (2014)
where plaintiff is not itself the subject of the contested regulatory action, the zone-of-interests test for standing denies a right of review if plaintiff's interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot be assumed that Congress intended to permit the suit; LBP-14-4, 79 NRC 319 (2014)
whether plaintiff's interest is arguably protected by the statute within the meaning of the zone-of-interests test is to be determined not by reference to the overall purpose of the Act in question, but by reference to the particular provision of law upon which plaintiff relies; LBP-14-4, 79 NRC 319 (2014)
whether the zone-of-interests test has been satisfied does not depend on how concrete or speculative the threat of injury may be; LBP-14-4, 79 NRC 319 (2014)
zone-of-interests test is not meant to be especially demanding, there being no indication of congressional purpose to benefit the would-be plaintiff; LBP-14-4, 79 NRC 319 (2014)
STANDING TO INTERVENE, ORGANIZATIONAL
board based tribe's standing on the presence onsite of cultural resources that could be harmed as a result of mining activities; CLI-14-2, 79 NRC 11 (2014)
Indian tribe has an organizational interest in protecting cultural artifacts connected with it; CLI-14-2, 79 NRC 11 (2014)
licensing board rejected union's claim to standing, but the appeal board under the rules then in effect permitted discretionary intervention; LBP-14-4, 79 NRC 319 (2014)

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STANDING TO INTERVENE, REPRESENTATIONAL
- individual member who qualifies an organization for standing must have suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action and the injury is likely redressable by a favorable decision; LBP-14-4, 79 NRC 319 (2014)
- to establish representational standing, union must show that the interests it seeks to protect are germane to its own purposes, identify by name and address at least one member who qualifies for standing in his or her own right, show that it is authorized by that member to request a hearing on his or her behalf, and show that neither the claim asserted nor the relief requested requires that member's participation in the proceeding in an individual capacity; LBP-14-4, 79 NRC 319 (2014)
- union's organizational standing argument was rejected in an indirect license transfer proceeding initiated before the Commission because it was merely the Local's representational standing argument dressed up in different clothes; LBP-14-4, 79 NRC 319 (2014)

STATION BLACKOUT
- request that NRC order licensees to conduct periodic training and exercises for multiunit and prolonged station blackout scenarios until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
- request that NRC order licensees to ensure that emergency planning equipment and facilities are sufficient for dealing with multiunit and prolonged station blackout scenarios until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
- request that NRC order licensees to provide means to power communications equipment needed to communicate onsite and offsite during a prolonged station blackout until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)

STATUTORY CONSTRUCTION
- although pertinent language of the AEA is written in present tense, a board's inquiry does not end with evaluating foreign ownership, control, or domination concerns posed only by the current corporate structure and financing; LBP-14-3, 79 NRC 267 (2014)
- intent of Congress in the Atomic Energy Act is to prohibit relationships where an alien has the power to direct the actions of the licensee; LBP-14-3, 79 NRC 267 (2014)
- interpretation of regulations, like interpretation of a statute, begins with the language and structure of the provisions, and the entirety of each provision must be given effect; LBP-14-4, 79 NRC 319 (2014); LBP-14-7, 79 NRC 451 (2014)
- "owned, controlled, or dominated" in the Atomic Energy Act refers to relationships in which the will of one party is subjugated to the will of another; LBP-14-3, 79 NRC 267 (2014)
- plain language of enacted text is the best indicator of intent; LBP-14-4, 79 NRC 319 (2014)

STAY
- Commission denies a request for a protective stay of the license renewal proceeding; CLI-14-6, 79 NRC 445 (2014)
- Commission rarely grants an indefinite or very lengthy stay on the mere possibility of change; CLI-14-6, 79 NRC 445 (2014)
- merely raising the specter of a nuclear accident does not demonstrate irreparable harm; CLI-14-4, 79 NRC 249 (2014)
- request for a protective stay to hold the proceeding in abeyance indefinitely pending potential future events is inconsistent with NRC's longstanding interest in sound case management and regulatory finality and would be unfair to the other parties; CLI-14-6, 79 NRC 445 (2014)
- section 2.342(e) standards are applied to motion to stay issuance of a license; CLI-14-6, 79 NRC 445 (2014)
- under 10 C.F.R. 2.342, stay is available only where a presiding officer or licensing board has issued a decision or taken action in a proceeding to which movant is a party; CLI-14-4, 79 NRC 249 (2014)
- when considering stays or other forms of temporary injunctive relief, the Commission has applied the stay factors outlined in 10 C.F.R. 2.342(e), which restate commonplace principles of equity; CLI-14-6, 79 NRC 445 (2014)
- See also Injunctive Relief

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STAY OF EFFECTIVENESS
licensee or other person to whom the Commission has issued an immediately effective order may move the presiding officer to set aside the immediate effectiveness of the order; LBP-14-4, 79 NRC 319 (2014)

STORAGE CANISTERS
determination regarding item integrity under 10 C.F.R. 74.55(b)(1) refers to the ability to determine that a container holding strategic special nuclear material items has not been breached and that the amount of SSNM within has not been altered; LBP-14-1, 79 NRC 39 (2014)

STRATEGIC SPECIAL NUCLEAR MATERIAL
adequacy finding on applicant's material control and accounting program requires the board to make a case-by-case determination, guided by the Atomic Energy Act's mandate that no license to possess special nuclear material may be issued if issuance would be inimical to the common defense and security or would constitute an unreasonable risk to the health and safety of the public; LBP-14-1, 79 NRC 39 (2014)
applicant has demonstrated that its program of automated equipment, computer systems (and their verification), and the use of secured and tamper-safed item storage area boundaries, satisfactorily demonstrates the ability to verify the presence and integrity of all SSNM items in storage; LBP-14-1, 79 NRC 39 (2014)
applicant's preliminary material control and accounting program satisfactorily demonstrates the ability to rapidly assess the validity of alleged thefts; LBP-14-1, 79 NRC 39 (2014)
applicant's program for control and accounting of SSNM must show how compliance with the requirements of section 74.51 will be accomplished; LBP-14-1, 79 NRC 39 (2014)
applicant's proposal to seal and design strategic SSNM item storage locations to be tamper-safed or equivalent to tamper-safing such that confirmation that the physical boundary of these locations has not been breached ensures the integrity of these items; LBP-14-1, 79 NRC 39 (2014)
applicant's SSNM item monitoring approach, as enhanced by an item verification procedure, provides reasonable assurance that the quantitative accuracy of the MMIS/PLC data is sufficient to enable the procedures employing those data to meet the regulatory requirements; LBP-14-1, 79 NRC 39 (2014)
applicant's verification of the integrity of the SSNM vault boundaries on a daily basis exceeds the regulatory requirement to verify the integrity of the items every 30 or 60 days; LBP-14-1, 79 NRC 39 (2014)
applicants applying to possess 5 or more formula kilograms of SSNM must maintain alarm resolution capabilities designed to achieve the performance objectives of section 74.51(a); LBP-14-1, 79 NRC 39 (2014)
by verifying integrity of storage area boundaries, applicant can verify the integrity of all SSNM items in storage within the required 30- and 60-day time frames; LBP-14-1, 79 NRC 39 (2014)
capability to rapidly assess the validity of alleged thefts is aimed at the rapid determination of whether an actual loss of 5 or more formula kilograms occurred; LBP-14-1, 79 NRC 39 (2014)
capability to resolve alarms within approved time periods is most clearly aimed at the prompt investigation of anomalies potentially indicative of SSNM losses; LBP-14-1, 79 NRC 39 (2014)
capability under 10 C.F.R. 74.51(a)(1) to verify presence is most clearly aimed at ongoing confirmation of the presence of SSNM in assigned locations; LBP-14-1, 79 NRC 39 (2014)
capability under 10 C.F.R. 74.51(a)(4) to verify integrity is most clearly aimed at the prompt investigation of anomalies potentially indicative of SSNM losses; LBP-14-1, 79 NRC 39 (2014)
"Category IA material" is defined as SSNM directly usable in the manufacture of a nuclear explosive device; LBP-14-1, 79 NRC 39 (2014)
"Category IB material" is defined as all SSNM other than Category IA; LBP-14-1, 79 NRC 39 (2014)
determination regarding item integrity under 10 C.F.R. 74.55(b)(1) refers to the ability to determine that a container holding SSNM items has not been breached and that the amount of SSNM within has not been altered; LBP-14-1, 79 NRC 39 (2014)
licensees are not required to conduct assessments of alleged thefts without the use of their records systems, or by first verifying the integrity and accuracy of those records systems; LBP-14-1, 79 NRC 39 (2014)
licensees must satisfy 10 C.F.R. 74.55(b)'s detection requirements for tamper-safed SSNM items in order to achieve the performance objectives set out in section 74.51(a); LBP-14-1, 79 NRC 39 (2014)

no requirement to quantify the potential for an adversary to take measures to conceal any abnormalities in MMIS and PLC mapping can reasonably be found in (or implied by) the language of 10 C.F.R. 74.55(b)(1); LBP-14-1, 79 NRC 39 (2014)
NRC may issue a license to possess and use 5 or more formula kilograms of SSNM only if applicant can establish, implement, and maintain a Commission-approved material control and accounting system that will achieve general performance objectives; LBP-14-1, 79 NRC 39 (2014)
"power of detection" means the probability that the critical value of a statistical test will be exceeded when there is an actual loss of a specific quantity of SSNM; LBP-14-1, 79 NRC 39 (2014)
rapid determination of SSNM theft assessment should be completed within an 8- or 72-hour timeline; LBP-14-1, 79 NRC 39 (2014)
requirement in 10 C.F.R. 74.55(b) for 99% power of detection means that there must be a 99% probability that a missing item will be included within the sample chosen for inspection and would thus be detected; LBP-14-1, 79 NRC 39 (2014)
section 74.55(b)(1) applies only to licensees that are authorized to possess 5 or more formula kilograms of SSNM; LBP-14-1, 79 NRC 39 (2014)
statistical sampling is to be used to achieve verification of item presence and integrity but 10 C.F.R. 74.55(b) does not prescribe a particular method of sampling, only that statistical sampling must result in at least 99% power of detecting losses that total 5 formula kg or more; LBP-14-1, 79 NRC 39 (2014)
"tamper-safing" means the use of devices on containers or vaults in a manner and at a time that ensures a clear indication of any violation of the integrity of previously made measurements of SSNM within the container or vault; LBP-14-1, 79 NRC 39 (2014)
there is a general overarching requirement that applicant's SSNM item monitoring method be sufficiently accurate to provide reasonable assurance that the specific regulatory requirement is satisfied; LBP-14-1, 79 NRC 39 (2014)
to achieve SSNM loss-related performance objectives, the material control and accounting system must provide the capabilities described in sections 74.55 and 74.57; LBP-14-1, 79 NRC 39 (2014)
"vault" means a windowless enclosure designed and constructed to delay penetration from forced entry; LBP-14-1, 79 NRC 39 (2014)
whether applicant's item monitoring program has the capability to verify, on a statistical sampling basis, the presence and integrity of SSNM items is decided; LBP-14-1, 79 NRC 39 (2014)
SUBPART L PROCEDURES
Commission has authority to rule that a license transfer case be adjudicated under Subpart L; CLI-14-5, 79 NRC 254 (2014)
SUBPART L PROCEEDINGS
all disclosures under section 2.336(c) must be accompanied by a certification (in the form of a sworn affidavit) that all relevant materials required by this section have been disclosed, and that the disclosures are accurate and complete as of the date of the certification; LBP-14-2, 79 NRC 131 (2014)
because parties may not seek discovery from the other parties to the proceeding, all such parties must make periodic mandatory disclosures; LBP-14-2, 79 NRC 131 (2014)
disclosure updates shall include any documents subject to disclosure that were not included in any previous disclosure update; LBP-14-2, 79 NRC 131 (2014)
NRC Staff is under a special obligation to create, maintain, and update a hearing file; LBP-14-2, 79 NRC 131 (2014)
parties must update their disclosures every month after initial disclosures on a due date selected by the presiding officer in the order admitting contentions; LBP-14-2, 79 NRC 131 (2014)
procedural rules in Subpart L govern most adjudicatory proceedings; CLI-14-5, 79 NRC 254 (2014)
SUBPART M PROCEDURES
any discretionary diversion from the usual Subpart M procedural track will be rare, requiring extraordinary and unusual circumstances, and all requests to date to provide a non-Subpart M hearing in a license transfer case have been denied; CLI-14-5, 79 NRC 254 (2014)
license transfer hearings are to be oral in nature unless the parties unanimously move for a hearing consisting of written comments; CLI-14-5, 79 NRC 254 (2014)

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SUBPART M PROCEEDINGS
scope of Subpart M proceedings covers all adjudicatory proceedings on an application for transfer of control of an NRC license, without distinction as to how the proceeding commences; CLI-14-5, 79 NRC 254 (2014)
Subpart M logically applies to all license transfer hearing requests, regardless of who files them, because the types of issues litigated (e.g., financial assurance, technical qualifications, foreign ownership, and staffing levels) are likely to be similar regardless of whether they are initiated by intervention petitions or by challenges to a Staff action; CLI-14-5, 79 NRC 254 (2014)
SUMMARY DISPOSITION
if a motion for summary disposition is granted, then the party that filed the original contention of omission must file a new or amended contention if it wishes to challenge the adequacy or sufficiency of NRC Staff's treatment of the relevant issue; LBP-14-5, 79 NRC 377 (2014)
if a party believes an admitted contention is mooted by the inclusion of additional information, that party may file a motion for summary disposition; LBP-14-5, 79 NRC 377 (2014)
motions for summary disposition must contend that there are facts on which there is no genuine issue to be heard; LBP-14-5, 79 NRC 377 (2014)
to remove an admitted contention from the proceeding, a party must file, and a board must grant, a motion for summary disposition; LBP-14-5, 79 NRC 377 (2014)
SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
contention questioning whether future anticipated use of MOX fuel is sufficiently definite to constitute a proposal under the law, with a connection, cumulative impact, interdependence, or similar relationship to matters at issue in a license renewal proceeding to warrant being addressed in the supplemental environmental impact statement is admissible; LBP-14-6, 79 NRC 404 (2014)
migration tenet applies when the information in the final SEIS is sufficiently similar to the information in the draft SEIS; LBP-14-5, 79 NRC 377 (2014)
SUSPENSION OF LICENSE
NRC can issue an order suspending an individual from working anywhere in the nuclear industry who fails to report any concerns arising from behavioral observation; LBP-14-4, 79 NRC 319 (2014)
SUSPENSION OF PROCEEDING
because waste confidence undergirds certain agency licensing decisions, the Commission held that the NRC should not issue licenses affected by the Waste Confidence Decision until the remanded issues are resolved; CLI-14-3, 79 NRC 31 (2014)
rulemaking petitioner may request a suspension of a licensing proceeding in which petitioner is a participant, pending disposition of the rulemaking petition; CLI-14-6, 79 NRC 445 (2014)
section 2.802(d) suspension request is inapplicable where no petition for rulemaking has been filed before the Commission; CLI-14-6, 79 NRC 445 (2014)
TECHNICAL QUALIFICATIONS
request that NRC order licensees to revise their technical specifications to address requirements to have one train of onsite emergency electrical power operable for spent fuel pool makeup and spent fuel pool instrumentation when there is irradiated fuel in the spent fuel pool, regardless of the operational mode of the reactor is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
TECHNICAL SPECIFICATIONS
request that NRC modify the administrative controls section of the standard technical specifications for each operating reactor design to reference the approved EOP technical guidelines for that plant design is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
TERMINATION OF PROCEEDING
once all contentions have been decided, the adjudicatory proceeding is terminated; CLI-14-6, 79 NRC 445 (2014)
TERRORISM
only those NRC-regulated facilities located within the Ninth Circuit's jurisdictional boundaries are required to conduct environmental analyses of possible terrorist acts; LBP-14-6, 79 NRC 404 (2014)
TESTING
licensees may make changes in the procedures described in the updated final safety analysis report and conduct tests or experiments not otherwise described in the UFSAR, without obtaining a license amendment; CLI-14-4, 79 NRC 249 (2014)

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THEFT
applicant's preliminary material control and accounting program satisfactorily demonstrates the ability to rapidly assess the validity of alleged thefts; LBP-14-1, 79 NRC 39 (2014)
capability to rapidly assess the validity of alleged thefts is aimed at the rapid determination of whether an actual loss of 5 or more formula kilograms occurred; LBP-14-1, 79 NRC 39 (2014)
capability to resolve alarms within approved time periods is most clearly aimed at the prompt investigation of anomalies potentially indicative of SSNM losses; LBP-14-1, 79 NRC 39 (2014)
contention challenging applicant's ability to rapidly assess the validity of alleged thefts is decided; LBP-14-1, 79 NRC 39 (2014)
licensees are not required to conduct assessments of alleged thefts without the use of their records systems, or by first verifying the integrity and accuracy of those records systems; LBP-14-1, 79 NRC 39 (2014)
no requirement to quantify the potential for an adversary to take measures to conceal any abnormalities in MMIS and PLC mapping can reasonably be found in (or implied by) the language of 10 C.F.R. 74.55(b)(1); LBP-14-1, 79 NRC 39 (2014)
rapid determination of SSNM theft assessment should be completed within an 8- or 72-hour timeline; LBP-14-1, 79 NRC 39 (2014)
TIME LIMITS
licensees shall resolve the nature and cause of any MC&A alarm within approved time periods; LBP-14-1, 79 NRC 39 (2014)
material control and accounting alarms are not required to be resolved within any particular time frame, only that a time period be approved by NRC Staff; LBP-14-1, 79 NRC 39 (2014)
NRC must be notified within 24 hours of failure to resolve an alarm within the approved time period; LBP-14-1, 79 NRC 39 (2014)
petitioner provides no support for the proposition that applicant must demonstrate that each individual resolution method can be completed, by itself, within the approved time period; LBP-14-1, 79 NRC 39 (2014)
rapid determination of strategic special nuclear material theft assessment should be completed within an 8- or 72-hour timeline; LBP-14-1, 79 NRC 39 (2014)
TRAINING
license applications will be approved if, in addition to other requirements met, applicant is qualified by training and experience to use the material for the purpose requested in such manner as to protect health and minimize danger to life or property; DD-14-4, 79 NRC 506 (2014)
petitioner's concern that information provided by licensee concerning training received by its employees was not accurate and in violation was not substantiated; DD-14-4, 79 NRC 506 (2014)
request that NRC order licensees to conduct periodic training and exercises for multiunit and prolonged station blackout scenarios until rulemaking is complete is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to modify the technical guidelines to include emergency operations procedures, severe accident mitigation guidelines, and extensive damage mitigation guidelines in an integrated manner, specify clear command and control strategies for their implementation, and stipulate appropriate qualification and training for those who make decisions during emergencies is being addressed through rulemaking; DD-14-2, 79 NRC 489 (2014)
TRANSPORTATION OF SPENT FUEL
cask certification for transportation poses such a minimal environmental impact that it merits a categorical exclusion from NEPA; LBP-14-6, 79 NRC 404 (2014)
TRUST RELATIONSHIP DOCTRINE
applicant owes no duty to address the federal government's trust responsibility in its environmental report; LBP-14-6, 79 NRC 404 (2014)
contention that NRC has not fulfilled its trust responsibility in its analysis and conclusion of the cumulative impacts on historic and cultural resources from the reasonably foreseeable expansion of an independent spent fuel storage installation is admissible; LBP-14-6, 79 NRC 404 (2014)
for federal agencies that do not manage, control, or supervise Indian affairs, unless there is a specific duty that has been placed on the agency with respect to Indians, this responsibility is discharged by the agency's compliance with general regulations and statutes not specifically aimed at protecting Indian tribes; LBP-14-6, 79 NRC 404 (2014)

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VENTING
request that NRC order licensees to include a reliable hardened vent in boiling-water reactor Mark I and Mark II containments is addressed; DD-14-2, 79 NRC 489 (2014)
VERIFICATION
applicant's strategic special nuclear material item monitoring approach, as enhanced by an item verification procedure, provides reasonable assurance that the quantitative accuracy of the MMIS/PLC data is sufficient to enable the procedures employing those data to meet the regulatory requirements; LBP-14-1, 79 NRC 39 (2014)
applicant's verification of the integrity of the strategic special nuclear material vault boundaries on a daily basis exceeds the regulatory requirement to verify the integrity of the items every 30 or 60 days; LBP-14-1, 79 NRC 39 (2014)
by verifying integrity of storage area boundaries, applicant can verify the integrity of all strategic special nuclear material items in storage within the required 30- and 60-day time frames; LBP-14-1, 79 NRC 39 (2014)
neither the plain language of 10 C.F.R. 74.55(b)(1) nor its regulatory history suggests that verifications of strategic special nuclear material item integrity must be in any way physical; LBP-14-1, 79 NRC 39 (2014)
section 74.55 is not rendered superfluous by a reading that verifying the integrity of a storage area boundary will suffice to verify the integrity of the strategic special nuclear material items contained therein; LBP-14-1, 79 NRC 39 (2014)
VIOLATIONS
NRC Staff violated requirements for initial disclosure of all relevant documents; LBP-14-2, 79 NRC 131 (2014)
WAIVER
if licensee or other person to whom an order is issued consents to its issuance, or the order confirms actions agreed to by the licensee or such other person, that consent or agreement constitutes a waiver by the licensee or such other person of a right to a hearing and any associated rights; LBP-14-4, 79 NRC 319 (2014)
NRC regional office has the discretion to grant a waiver for retesting on a passed test for a senior reactor operator applicant who has failed only one part of the test if it determines that sufficient justification is presented; LBP-14-2, 79 NRC 131 (2014)
senior reactor operator applicant who has passed either the written examination or operating test and failed the other may request in a new application on Form NRC-398 to be excused from reexamination on the portions of the examination or test that the applicant has passed; LBP-14-2, 79 NRC 131 (2014)
WAIVER OF RULE
absent a rule waiver, NRC rules and regulations are not subject to attack in an adjudicatory proceeding; CLI-14-6, 79 NRC 445 (2014)
WASTE CONFIDENCE RULE
as an exercise of its inherent supervisory authority over adjudications, the Commission directs that waste confidence and any related contentions that may be filed in the near term be held in abeyance pending its further order; LBP-14-6, 79 NRC 404 (2014)
because waste confidence undergirds certain agency licensing decisions, the Commission held that the NRC should not issue licenses affected by the Waste Confidence Decision until the remanded issues are resolved; CLI-14-3, 79 NRC 31 (2014)
in view of the special circumstances presented by waste confidence, the Commission directed that those contentions and any related contentions filed in the near term be held in abeyance pending its further order; CLI-14-3, 79 NRC 31 (2014)
regarding waste confidence, NRC failed to comply with the National Environmental Policy Act in issuing its 2010 update to the Waste Confidence Decision and accompanying Temporary Storage Rule; CLI-14-3, 79 NRC 31 (2014)
waste confidence and similar contentions are held in abeyance pending further order from the Commission; LBP-14-8, 79 NRC 519 (2014)
WASTE STORAGE
See Radioactive Waste Storage

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WATER QUALITY
contention alleging that final supplemental environmental impact statement fails to include necessary information for adequate determination of baseline groundwater quality is admissible; LBP-14-5, 79 NRC 377 (2014)
WATER SUPPLY
contention alleging that final supplemental environmental impact statement fails to adequately analyze groundwater quantity impacts is admissible; LBP-14-5, 79 NRC 377 (2014)
request that NRC order licensees to have an installed, seismically qualified means to spray water into the spent fuel pools, including an easily accessible connection to supply the water (e.g., using a portable pump or pumper truck) at grade outside the building is addressed; DD-14-2, 79 NRC 489 (2014)
request that NRC order licensees to provide safety-related AC electrical power for the spent fuel pool makeup system is addressed; DD-14-2, 79 NRC 489 (2014)
ZONE OF INTERESTS
contention alleges errors by NRC Staff in implementation of 10 C.F.R. 73.56(f)(1)-(3) that fall within the zone of interests protected or regulated by those provisions; LBP-14-4, 79 NRC 319 (2014)
in determining standing, boards should determine whether plaintiff's grievance arguably falls within the zone of interests protected or regulated by the statutory provision invoked in the suit; LBP-14-4, 79 NRC 319 (2014)
test for standing is not meant to be especially demanding, there being no indication of congressional purpose to benefit the would-be plaintiff; LBP-14-4, 79 NRC 319 (2014)
to be adversely affected or aggrieved within the meaning of a statute, plaintiff must establish that the injury complained of falls within the zone of interests sought to be protected by the statutory provision whose violation forms the legal basis for the complaint; LBP-14-4, 79 NRC 319 (2014)
where plaintiff is not itself the subject of the contested regulatory action, the zone-of-interests test for standing denies a right of review if plaintiff's interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot be assumed that Congress intended to permit the suit; LBP-14-4, 79 NRC 319 (2014)
where plaintiff is not itself the subject of the contested regulatory action, the zone-of-interests test denies a right of review if plaintiff's interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot be assumed that Congress intended to permit the suit; LBP-14-4, 79 NRC 319 (2014)
whether plaintiff's interest is arguably protected by the statute within the meaning of the zone-of-interests test is to be determined not by reference to the overall purpose of the Act in question, but by reference to the particular provision of law upon which plaintiff relies; LBP-14-4, 79 NRC 319 (2014)
whether the zone-of-interests test has been satisfied does not depend on how concrete or speculative the threat of injury may be; LBP-14-4, 79 NRC 319 (2014)

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