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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Alex S. Karlin, Chairman
Nicholas G. Trikouros
Dr. Paul B. Abramson

In the Matter of	Docket Nos. 50-275-LR and 50-323-LR
PACIFIC GAS & ELECTRIC COMPANY	ASLBP No. 10-890-01-LR-BD01
(Diablo Canyon Nuclear Power Plant, Units 1 and 2)	August 4, 2010

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MEMORANDUM AND ORDER
(Rulings on Standing, Contention Admissibility, Waiver Petition, and Selection of Hearing Procedures)

This case arises from an application by Pacific Gas & Electric Company (PG&E) to the Nuclear Regulatory Commission (NRC) for renewal of licenses authorizing operation of its two nuclear power reactors at the Diablo Canyon Nuclear Power Plant (DCNPP) located near San Luis Obispo, California.[1] The proposed renewal would authorize PG&E to operate the DCNPP reactors for an additional twenty years after the current licenses expire in 2024 and 2025. Id. at 3493. The San Luis Obispo Mothers for Peace (SLOMFP), an organization whose members live and work within 50 miles of DCNPP, has challenged the application by filing a petition to intervene and request for a hearing.[2]

[1] Notice of Acceptance for Docketing of the Application, Notice of Opportunity for Hearing for Facility Operating License Nos. DPR-80 and DPR-82 for an Additional 20-Year Period; Pacific Gas & Electric Company, Diablo Canyon Nuclear Power Plant, Units 1 and 2, 75 Fed. Reg. 3493 (Jan. 21, 2010).

[2] Request for Hearing and Petition to Intervene by San Luis Obispo Mothers for Peace (Mar. 22, 2010) (Petition).

For the reasons set forth below, the Board concludes that SLOMFP has standing and has raised at least one admissible contention. Therefore, the Board grants SLOMFP's petition to intervene and request for hearing pursuant to 10 C.F.R. § 2.309(a).

Although the statement and details of each contention are provided later, the following summarizes the results of today's decision. The Board unanimously concludes that Contentions EC-1, EC-2 and EC-4, as narrowed by the Board, are admissible. With regard to Contention EC-2 (as narrowed) we also conclude that SLOMFP has provided a prima facie showing that the relevant regulations should be waived. 10 C.F.R. § 2.335(b)-(d). Therefore, the Commission must now decide whether the waiver should indeed be granted. 10 C.F.R. § 2.335(d). With regard to Contention EC-4 (as narrowed), we are referring it to the Commission pursuant to 10 C.F.R. § 2.323(f)(1) because it involves novel issues of law. With regard to Contention TC-1 (as narrowed) a majority of the Board (Judges Karlin and Trikouros) conclude that it is admissible. Thus, it is admitted. Judge Abramson has filed a dissent from this ruling. Finally, with regard to Contention EC-3, the Board unanimously concludes that SLOMFP failed to provide a prima facie showing that the relevant regulations should be waived, and therefore the Board will not consider it. 10 C.F.R. § 2.335(c). A list of the admitted contentions, as narrowed by this decision, is attached hereto as Appendix A.

I. BACKGROUND

On November 23, 2009, PG&E applied to the NRC to renew PG&E's licenses (DPR-80 and DPR-82) to operate its two nuclear power reactors, DCNPP Units 1 and 2. 75 Fed. Reg. at 3493. The current licenses expire on November 2, 2024 and August 26, 2025, respectively. Id. The renewed licenses would authorize operation for an additional twenty years beyond those dates. Id.

PG&E's application was submitted pursuant to NRC's license renewal regulations at 10 C.F.R. Part 54. Id. The general requirements regarding the contents of a license renewal application are set forth in 10 C.F.R. §§ 54.19-54.23. The environmental requirements

regarding the contents of a license renewal application are set forth in 10 C.F.R. § 51.53(c). The standard for issuance of a renewed license is set forth in 10 C.F.R. § 54.29.

On January 21, 2010, the NRC published a notice of opportunity for hearing in the DNCPP license renewal proceeding in the Federal Register. 75 Fed. Reg. at 3493. On March 22, 2010, SLOMFP filed its petition challenging the license renewal. See supra note 2. The Petition contained five contentions – one safety (TC-1) and four environmental (EC-1 through EC-4) – and was accompanied by a petition for a waiver of certain portions of 10 C.F.R. Part 51, Appendix B, and 10 C.F.R. § 51.53(c)(2) with regard to Contentions EC-2 and EC-3.[3]

On April 16, 2010, PG&E and the NRC Staff filed answers to the Petition, and the NRC Staff filed a separate response to the waiver petition.[4] SLOMFP filed its reply on April 23, 2010.[5] On April 8, 2010, the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel appointed this Board to preside over the adjudicatory proceeding concerning PG&E's license renewal application for DCNPP Units 1 and 2.[6]

In addition to its April 23 reply regarding the five contentions, SLOMFP filed a motion for leave to reply to PG&E's and the NRC Staff's responses to SLOMFP's waiver petition.[7] The

[3] San Luis Obispo Mothers for Peace's Petition for Waiver of 10 C.F.R. Part 51 Subpart A Appendix B and 10 C.F.R. § 51.53(c)(2) (Mar. 22, 2010) (Waiver Petition); Declaration by Diane Curran in Support of Petition for Waiver of 10 C.F.R. Part 51 Subpart A Appendix B and 10 C.F.R. § 51.53(c)(2) (Mar. 22, 2010) (Curran Decl.).

[4] Applicant's Answer to Petition to Intervene and Response to Requests for Waivers (Apr. 16, 2010) (PG&E Answer); NRC Staff's Answer to the San Luis Obispo Mothers for Peace Request for Hearing and Petition to Intervene (Apr. 16, 2010) (Staff Answer); NRC Staff's Response to the Petition for Waiver of Commission Regulations Filed by San Luis Obispo Mothers for Peace (Apr. 16, 2010) (Staff Waiver Response).

[5] San Luis Obispo Mothers for Peace's Reply to Oppositions to Request for Hearing, Petition to Intervene and Waiver Petition Regarding Diablo Canyon License Renewal Application (Apr. 23, 2010) (Reply).

[6] Pacific Gas & Electric Co., Diablo Canyon Units 1 and 2, Establishment of Atomic Safety and Licensing Board (Apr. 8, 2010); 75 Fed. Reg. 20,010 (Apr. 16, 2010).

[7] San Luis Obispo Mothers for Peace's Motion for Leave to Reply to Oppositions Waiver Petition (Apr. 23, 2010).

NRC Staff and PG&E opposed the motion.[8] On May 4, 2010, the Board denied SLOMFP's motion for reply.[9] However, in view of PG&E's and the NRC Staff's reliance on the Millstone case[10] in their responses to SLOMFP's waiver petition, the Board requested that SLOMFP file a brief addressing whether, and how, the Millstone ruling applies to its waiver petition. May 4, 2010 Order at 1-2. Accordingly, on May 13, 2010, SLOMFP filed a brief addressing the Millstone case.[11]

On May 26, 2010, the Board heard oral argument related to the admissibility of the proposed contentions from SLOMFP, PG&E, and the NRC Staff (the Parties). The oral argument was conducted in San Luis Obispo, California.

In order for a request for hearing and petition to intervene to be granted, a petitioner must (1) establish that it has standing and (2) propose at least one "admissible" contention. 10 C.F.R. § 2.309(a). We address each of these two requirements in turn.

II. STANDING

A. Standards Governing Standing

Under NRC regulations, a petitioner must demonstrate that it has standing to intervene in the licensing process. 10 C.F.R. § 2.309(a). The information required to show standing includes (1) the nature of the petitioner's right under a relevant statute to be made a party to the proceeding, (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding, and (3) the possible effect of any decision or order that might be issued in the

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[8] NRC Staff's Response to San Luis Obispo Mothers for Peace's Motion for Leave to Reply to Oppositions to Waiver Petition (Apr. 29, 2010); Applicant's Response to Motion for Leave to Reply to Oppositions to Waiver Petition (May 3, 2010).

[9] Licensing Board Order (Denying Motion for Leave to File a Reply to Waiver Petition and Directing the Filing of a Brief) (May 4, 2010) (unpublished) (May 4, 2010 Order).

[10] Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559-60 (2005).

[11] San Luis Obispo Mothers for Peace's Brief Regarding Waiver Standard (May 13, 2010) (SLOMFP Waiver Brief).

proceeding on the petitioner's interest. 10 C.F.R. § 2.309(d)(1)(ii)-(iv). Judicial concepts of standing are generally followed in NRC proceedings.[12] These require that a petitioner establish that "(1) it has suffered a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statute; (2) that the injury can fairly be traced to the challenged action; and (3) that the injury is likely to be redressed by a favorable decision." Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996).

In the context of a license renewal application, the Atomic Energy Act of 1954 (42 U.S.C. §§ 2011-2213 (1954)) (AEA) and the National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4335 (1969)) (NEPA) are the primary statutes establishing the appropriate "zone of interests" that the petitioners may assert. Once parties demonstrate that they have standing, the parties "will then be free to assert any contention, which, if proved, will afford them the relief they seek." Yankee Atomic, CLI-96-1, 43 NRC at 6. Thus, for example, if a petitioner is seeking the denial of the proposed license renewal, then once it has standing, it can pursue any other issue that, unless corrected, would prevent the issuance of the renewed license.

In determining whether a petitioner has established standing, the Commission has ruled that Boards may "construe the petition in favor of the petitioner."[13] In addition, in proceedings involving nuclear power reactors, the Commission has recognized a proximity presumption, whereby a petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if the petitioner lives within fifty miles of the proposed facility.[14]

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[12] Nuclear Mgmt. Co., LLC (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 163 (2006).

[13] Ga. Inst. of Tech. (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

[14] Calvert Cliffs 3 Nuclear Project, LLC (Combined License Application for Calvert Cliffs, Unit 3), CLI-09-20, 70 NRC __, __ (slip op. at 4-8) (Oct. 13, 2009); see also, e.g., Fla. Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989)

If the petitioner is an organization seeking to intervene in an NRC proceeding in its own right, it must allege that the challenged action will cause a cognizable injury to its interests or to the interests of its members.[15] Alternatively, when seeking to intervene in a representational capacity, as is the case here, an organization must identify (by name and address) at least one member who is affected by the licensing action and who qualifies for standing in his or her own right, and show that the member has authorized the organization to intervene on his or her behalf. Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000).

B. Ruling on Standing

Neither PG&E nor the NRC Staff challenges SLOMFP's standing. In fact, the NRC Staff concedes that SLOMFP has demonstrated standing. Staff Answer at 5.

SLOMFP identified four members who live within fifty miles of DCNPP. Petition at 1-2. By virtue of their proximity to the site, these members would have standing to participate in this proceeding in their own right. Each member has also submitted a declaration authorizing SLOMFP to represent her interests in this proceeding.[16] Therefore, we conclude that SLOMFP meets the requirements for representational standing.

III. STANDARDS GOVERNING CONTENTION ADMISSIBILITY

In order to become a party in an adjudicatory proceeding, a petitioner must submit at least one admissible contention. 10 C.F.R. § 2.309(a). The six basic requirements for an admissible contention are set forth in 10 C.F.R. § 2.309(f)(1)(i)-(vi), and can be summarized as follows:

(observing that the presumption applies in proceedings for nuclear power plant "construction permits, operating licenses, or significant amendments thereto").

[15] Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-94-3, 39 NRC 95, 102 n.10 (1994).

[16] See Petition, Exh. 1A, Declaration of Elizabeth Apfelberg ¶ 5 (Mar. 9, 2010); Petition, Exh. 1B, Declaration of Elaine E. Holder ¶ 5 (Mar. 8, 2010); Petition, Exh. 1C, Declaration of Lucy Jane Swanson ¶ 5 (Mar. 9, 2010); Petition, Exh. 1D, Declaration of Jill ZamEk ¶ 5 (Mar. 11, 2010).

(i) Specificity: Provide a specific statement of the issue of law or fact to be raised or controverted;

(ii) Brief Explanation: Provide a brief explanation of the basis for the contention;

(iii) Within Scope: Demonstrate that the issue raised in the contention is within the scope of the proceeding;

(iv) Materiality: 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) Concise Statement of Alleged Facts or Expert Opinion: 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) Genuine Dispute: 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.

See 10 C.F.R. § 2.309(f)(1).

The purpose of Section 2.309(f)(1) is to "focus litigation on concrete issues and result in a clearer and more focused record for decision." Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004). The Commission has stated that "the hearing process [is only intended for] issue[s] that [are] appropriate for, and susceptible to, resolution in an NRC hearing." Id. "While a board may view a petitioner's supporting information in a light favorable to the petitioner . . . the petitioner (not the board) [is required] to supply all of the required elements for a valid intervention petition."[17] The rules on contention admissibility are "strict by

[17] Amergen Energy Co. (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260 (2009).

design."[18] Further, absent a waiver, contentions challenging applicable statutory requirements or Commission regulations are not admissible in agency adjudications. 10 C.F.R. § 2.335(a). Failure to comply with any of these requirements is grounds for not admitting a contention. Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 636 (2004).

IV. PRIMA FACIE CASE FOR WAIVER

In addition to the six basic requirements for an admissible contention, no contention can be admitted if it attacks an NRC rule or regulation unless the Commission itself agrees to waive that rule or regulation. "Except as provided in [the waiver regulation] no rule or regulation of the Commission, or any provision thereof . . . is subject to attack by way of . . . any adjudicatory proceeding." 10 C.F.R. § 2.335(a). In this proceeding, two of the proposed contentions require such waivers. EC-2 and EC-3 assert that certain specified environmental impacts of the renewal should not be handled under NRC's generic regulations for such impacts (i.e., 10 C.F.R. Part 2 Subpart A, Appendix B and 10 C.F.R. § 51.53(c)(2)), but should instead be addressed on a site-specific basis. Petition at 16-19, 20-21. SLOMFP acknowledges that a waiver from the Commission is necessary in order for EC-2 and EC-3 to be admitted. Petition at 19, 21; Reply at 12; Tr. at 195-96, 281. Thus, SLOMFP has submitted a waiver petition. Waiver Petition at 1.

The regulation states that the "sole ground" for a "waiver or exception" from a regulation is that "special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or regulation (or a provision of it) would not serve the purposes for which the rule or regulation was adopted." 10 C.F.R. § 2.335(b)

[18] See, e.g., Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Unit 3), CLI-08-17, 68 NRC 231, 233 (2008); Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003); Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001); Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334-35 (1999).

(emphasis added). The petition for waiver must be accompanied by an affidavit that identifies the specific aspects of the subject matter of the proceeding to which the application of the regulation would not serve the purposes of the regulation and that states with particularity the special circumstances alleged to justify the waiver or exception. Id.

Despite the foregoing regulation, the Commission has stated that four factors must exist in order for a waiver to be granted. In Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551 (Millstone), the Commission stated

> For us to grant an exemption or waiver . . . we must first conclude under our regulations and case law that
> (i) the rule's strict application "would not serve the purposes for which [it] was adopted";
> (ii) the movant has alleged "special circumstances" that were "not considered, either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived";
> (iii) those circumstances are "unique" to the facility rather than "common to a large class of facilities"; and
> (iv) a waiver of the regulation is necessary to reach a "significant safety problem."

Millstone, 62 NRC at 559-60 (internal citations omitted).

The determination as to whether the foregoing criteria are met and a waiver is warranted is the sole province of the Commission. 10 C.F.R. § 2.335(d). The Board's role is limited to deciding whether the petitioner has made a prima facie showing concerning the foregoing criteria. 10 C.F.R. § 2.335(c), (d). This is a very limited role. If the Board rules that no prima facie showing has been made, then the Board "may not further consider the matter." 10 C.F.R. § 2.335(c). If the Board concludes that the petitioner has made a prima facie showing of special circumstances, then the Board "shall . . . certify the matter directly to the Commission," which may grant or deny the waiver or make whatever determination it deems appropriate. 10 C.F.R. § 2.335(d).

A prima facie showing is not a ruling on the merits, i.e. that special circumstances indeed exist and a waiver is warranted. Instead, a prima facie showing merely requires

the presentation of enough information to allow the Board to infer (absent disproof) that special circumstances exist.[19]

V. RULING ON CONTENTIONS

A. Contention EC-1

1. Statement of Contention EC-1

Proposed Contention EC-1, entitled "Failure of SAMA Analysis to Include Complete Information About Potential Environmental Impacts of Earthquakes and Related SAMAs," states:

> PG&E's Severe Accident Mitigation Alternatives ("SAMA") analysis fails to satisfy 40 C.F.R. § 1502.22 because it is not based on complete information that is necessary for an understanding of seismic risks to the Diablo Canyon nuclear power plant and because PG&E has failed to acknowledge the absence of the information or demonstrated that the information is too costly to obtain. As a result of PG&E's failure to use complete information, the SAMA analysis does not satisfy the requirements of the National Environmental Policy Act ("NEPA") for consideration of alternatives (see Idaho Conservation League v. Mumma, 956 F.2d 1508, 1519-20 (9th Cir. 1992)) or NRC implementing regulation 10 C.F.R. § 51.53(c)(3)(ii)(L).

Petition at 8.

2. Arguments Regarding Contention EC-1

This contention focuses on a newly discovered earthquake fault located approximately 600 meters from the DCNPP reactors.[20] It appears that on November 14, 2008, PG&E

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[19] Black's Law Dictionary defines "prima facie case" as "1. The establishment of a legally required rebuttable presumption. 2. A party's production of enough evidence to allow the fact-trier to infer the fact at issue and rule in the party's favor." Black's Law Dictionary 1310 (9th ed. 2009). This is consistent with Commission case law. Pacific Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, 16 NRC 55, 72 (1981) (Diablo Canyon) ("Prima facie evidence must be legally sufficient to establish a fact or case unless disproved."); Pub. Serv. Co. of N.H. (Seabrook Station, Units 1 and 2), ALAB-895, 28 NRC 7, 22 (1988) (Seabrook) ("We have found that a prima facie showing within the meaning of 10 C.F.R. § 2.758(d) is one that is 'legally sufficient to establish a fact or case unless disproved.'").

[20] Memorandum from Alan Wang, Project Manager, Plant Licensing Branch IV, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation, NRC, "Summary of January

informed NRC that it had identified "a zone of seismicity that may indicate a previously unknown fault located offshore" of the DCNPP.[21] SLOMFP states that PG&E reported that this fault (which came to be known as the "Shoreline Fault") was identified in the course of a "collaborative research program" by PG&E and the United States Geological Survey (USGS). Petition at 9. SLOMFP asserts that PG&E and NRC both "immediately took actions to address the significance of the newly discovered fault" including commencing a deterministic assessment of the risk based on preliminary information. Id. In addition, SLOMFP says, PG&E worked with the USGS to "reallocate resources" from its pre-existing Long Term Seismic Program (LTSP) to characterize the Shoreline Fault. Id. at 9-10. SLOMFP further asserts that PG&E developed an action plan that included (1) studying and issuing a report on some issues by the fourth quarter of 2010, and (2) performing an "updated evaluation of the seismic hazard at DCPP . . . to be completed in 2011." Id. at 10 (internal quotes omitted).

SLOMFP adds that, in April 2009, the NRC Staff issued regulatory information letter (RIL)-09-001 describing "PG&E's and the Staff's Preliminary Deterministic Analysis of the Shoreline Fault." Id. (citing RIL-09-001 at 1). The RIL recounts that PG&E had made a "preliminary assessment that the hazard potential of the Shoreline Fault is bounded by the current review ground motion spectrum for the facility." RIL-09-001 at 1. In the RIL, the NRC Staff agreed with this preliminary assessment, stating, "the NRC staff's assessment indicates that the best estimate 84th percentile deterministic seismic-loading levels predicted for a maximum magnitude earthquake on the Shoreline Fault are slightly below those levels for which the plant was previously analyzed" in the DCNPP LTSP. Id. at 10.

5, 2010, Meeting with Pacific Gas and Electric Company Regarding Shoreline Fault" (Jan. 20, 2010) at 1 (Meeting Summary).

[21] Petition at 9 (citing NRC, Research Information Letter 09-001: Preliminary Deterministic Analysis of Seismic Hazard at Diablo Canyon Nuclear Power Plant from Newly Identified "Shoreline Fault" (Apr. 8, 2009) at 10-11 (RIL-09-001)).

SLOMFP emphasizes that NRC normally uses a probabilistic risk analysis for such hazards (because it is more accurate), but that in this case NRC did a preliminary deterministic analysis, with the expressed intent to perform a probabilistic risk analysis later, as soon as the ongoing PG&E-USGS Collaborative Research and Development Agreement (CRADA) investigation produces the "expected . . . significant new information." Petition at 10-11. SLOMFP quotes the NRC report as saying:

> The CRADA program is expected to provide significant new information regarding the larger tectonic picture of this area. The NRC staff's initial assessment was deterministic, consistent with the design basis of the facility. Currently, probabilistic methods are available to more accurately characterize the hazard of the region surrounding the site. Further, regional moment balancing could also more accurately characterize the regional hazard, both independently and as a part of a probabilistic hazard assessment. As more information becomes available (such as the slip rate of the potential Shoreline Fault or any additional information about the Hosgri Fault), the NRC staff expects to evaluate the regional seismic hazard and perform a probabilistic study, when the available data is sufficient.

Id. at 11 (quoting RIL-09-001 at 10-11). SLOMFP also asserts that the RIL is "rife with disclaimers about the preliminary nature of the information relied on." Id. at 11 n.3.

SLOMFP next notes that, in January 2010, NRC and PG&E held a status conference regarding the efforts to estimate and constrain the newly identified Shoreline Fault. Id. at 11-12. NRC's memorandum summarizing the meeting reports that

> PG&E stated that the Shoreline fault studies were accelerated and the current schedule is to have the Shoreline fault study completed by the end of 2010. The rest of the tectonic modeling for the central California region is due to be complete in 2012. Barbara Byron from the California Energy Commission (CEC) asked if three-dimensional imaging studies as recommended by the CEC are going to be performed. PG&E stated it is looking into the funding for this project and, if funded, would extend the central California study until 2013.

Meeting Summary at 2.

SLOMFP notes that PG&E's severe accident mitigation alternatives (SAMA) analysis acknowledges that "'both fire and seismic contributors' are 'disproportionately dominant when

compared to all external events.'"[22] But, says SLOMPF, the SAMA analysis never even mentions the Shoreline Fault. Id. at 13. SLOMFP acknowledges that the "potential" Shoreline Fault and the CRADA study are mentioned elsewhere in PG&E's environmental report (ER) but maintains that the ER "never acknowledges that the collaborative study was accelerated and re-focused on the Shoreline Fault or that PG&E has an NRC approved Action Plan for completing the study." Id. at 13.

Thus, SLOMFP argues, PG&E's SAMA analysis is "inadequate to satisfy NEPA or its implementing regulations because PG&E's consideration of severe accident mitigation alternatives is based on incomplete information about earthquake risks at Diablo Canyon, and because PG&E fails to acknowledge that it can obtain complete information by simply waiting for the completion of the information." Id. at 14. PG&E cannot rely on the preliminary deterministic study in its SAMA analysis, says SLOMFP, because probabilistic risk assessment (PRA) is the Commission's "'accepted and standard practice in SAMA analyses.'"[23] SLOMFP focuses on Council on Environmental Quality (CEQ) regulation 40 C.F.R. § 1502.22 and asserts that "information sufficient to conduct a probabilistic analysis of the risks posed by the Shoreline Fault is 'essential' to the SAMA." Id. SLOMFP says that the cost of obtaining this information is not exorbitant, because it merely involves waiting for the completion of current studies that will be completed in 2010, 2011, and 2013 at the latest. Id. at 14-15. "Given that 2013 is more than ten years before PG&E's licenses are due to expire in 2024 and 2025, PG&E has ample time to conduct a SAMA analysis that is based on complete seismic information." Id. at 15. SLOMFP points to a letter from the California Public Utilites Commission (CPUC), which states that CPUC

[22] Petition at 12 (quoting PG&E, Diablo Canyon Power Plant License Renewal Application, Appendix E, Applicant's Environmental Report – Operating License Renewal Stage (Nov. 23, 2009) at F-65 (ER)).

[23] Id. (quoting Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 340 (2006)).

cannot conduct its license extension review for DCNPP without additional information on seismic risks, as support for NRC waiting for the completion of the seismic studies as well.[24]

PG&E interprets Contention EC-1 as asserting that its "SAMA analysis is necessarily incomplete so long as PG&E and the NRC continue their assessment of . . . the Shoreline Fault." PG&E Answer at 13-14. PG&E then argues that the contention is an "impermissible challenge to the [current licensing basis (CLB)], specifically to the adequacy of the Diablo Canyon seismic design." Id. at 14. PG&E asserts that "challenges to the CLB are outside the scope" of a license renewal proceeding.[25]

PG&E asserts that EC-1 is similar to contentions recently rejected by the Indian Point Board on the ground that the petitioners failed to explain why more recent information regarding earthquakes would "make a material change in the conclusions of the seismic SAMA" and failed to suggest feasible alternatives to address new risks or estimate costs of additional measures.[26] Specifically, PG&E notes that its analysis of SAMAs related to seismic risk included a sensitivity analysis that would be bounding even if seismic risk doubles and asserts that SLOMFP has not offered factual or expert support regarding either the expected increase in seismic risk from the Shoreline Fault or the costs and benefits of additional SAMAs. Id. at 17-18.

PG&E also argues that NRC is not bound by the CEQ regulation, 40 C.F.R. § 1502.22. Id. at 18. Even if it were, PG&E notes that 40 C.F.R. § 1502.22 only applies if the incomplete information "is essential to a reasoned choice among alternatives." Id. at 18-19 (quoting 40 C.F.R. § 1502.22(a)) (emphasis in PG&E Answer). PG&E asserts that SLOMFP has not shown that information regarding the Shoreline Fault is essential to the choice among alternatives

[24] Id. at 15 & Exh. 2, Letter from Michael R. Peevey, President, CPUC, to Peter A. Darbee, President & Chief Executive Officer, PG&E (June 25, 2009) (Peevey Letter).

[25] Id. (citing Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 8 (2001) (Turkey Point)).

[26] Id. at 15 (citing Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Station, Units 2 and 3), LBP-08-13, 68 NRC 43, 109-10 (2008) (Indian Point)).

because it has not provided a basis for concluding that the DCNPP SAMA analysis would change if the Shoreline Fault were considered, particularly in light of a conclusion by the NRC Staff that another fault near the site, the Hosgri Fault, bounds the Shoreline Fault. Id. at 19.

PG&E adds that "there is no basis to suspend the proceeding or the license renewal review" because "the nature of scientific research is that it is always ongoing" and because there "will always be more data that could be gathered." Id. at 20. PG&E argues that the issue of the Shoreline Fault is already being addressed under the ongoing regulatory process pursuant to the current license. Id. Finally, PG&E states that, to the extent that EC-1 asserts a violation of California law, it is outside the scope of an NRC proceeding. Id. at 21.

The NRC Staff supports the admission of EC-1 to the extent that it asserts that PG&E's SAMA analysis omits a discussion of the Shoreline Fault. Staff Answer at 28. At the outset, the NRC Staff notes that DCNPP has a "unique and complex seismic design and licensing basis." Id. at 27. Specifically, the current license for DCNPP Unit 1 includes condition 2.C.(7), under which PG&E developed the Long Term Seismic Program (LTSP) previously discussed above. Id. As part of the LTSP, PG&E performed a full seismic reevaluation of the DCNPP between 1985 and 1988. Id. The Staff also notes that the "safe shutdown earthquake (SSE) ground motion is based on the assumption of a magnitude 7.5 earthquake on the Hosgri Fault, which is located 5 km (3 mi) from the DCNPP." Id.

The Staff states that it "has no objection to admission of a limited part of proposed Contention EC-1" and that SLOMFP is "correct that the SAMA analysis omits information regarding the newly discovered Shoreline Fault." Id. at 28.

The NRC Staff states that its own SAMA review will require additional information regarding the fault:

> The Staff believes that, as to the discussion of the Shoreline Fault, the following has been omitted from the Environmental Report:
>
> (1) The potential impact of the Shoreline Fault on the seismic core damage frequency (CDF) and off-site consequences.

(2) If the revised CDF estimate and consequences are higher, how the use of the higher CDF affects the SAMA analysis.

(3) The Applicant's search for any equipment or structure failures not previously identified that relate specifically to mitigating the potential risk associated with the Shoreline Fault.

Id. at 29. The Staff views EC-1[27] as asserting omissions and proposes that the Board admit the following modified version of EC-1:

> The SAMA evaluation contained in the Environmental Report, at Attachment F to Appendix D omits a discussion of the impact, if any, the "Shoreline Fault" might have on the SAMA evaluation.

Id.

The Staff adds that "to the extent EC-1 contends that the ER must await the 'Shoreline Fault' study, EC-1 is inadmissible for lack of basis." Staff Answer at 30. The Staff says that PG&E "may be able to complete its analyses based on the information that is available today." Id. It adds that if PG&E "does not have a revised seismic PRA, a sensitivity analysis using a best estimate or conservative multiplier on the CDF would be sufficient for the purpose of completing the SAMA analysis." Id. The Staff asserts that "a conservative estimate of the impacts from the Shoreline Fault would suffice if it can be shown that this approximate analysis would serve to identify any potentially cost beneficial SAMAs that might be identified using a more precise estimate of the impacts from the Shoreline Fault on DCNPP." Id.

The Staff argues that SLOMFP has not shown how any of the documents it cites demonstrate why waiting for the results of those studies is necessary for an adequate SAMA analysis. Id. at 32-33. The Staff rejects the proposition that the SAMA analysis should include the information being gathered in the current and ongoing seismic studies cited by SLOMFP, quoting the Commission as stating, "while there 'will always be more data that could be gathered,' agencies 'must have some discretion to draw the line and move forward with

[27] The NRC Staff states that EC-1 reads as follows: "Failure of SAMA Analysis to Include Complete Information about Potential Environmental Impacts of Earthquakes and Related SAMAs." Staff Answer at 26. However, the foregoing quote is simply the heading of the portion of the Petition dealing with EC-1. The actual statement of EC-1 is quoted supra. See Petition at 8.

decisionmaking.'" Id. at 30, 33 (citing Energy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC __, __ (slip op. at 37) (Mar. 26, 2010)). The Staff asserts that SLOMFP has failed to offer any "facts or expert opinion in support of its rationale that waiting for a further study of this new fault is necessary or to demonstrate how such a report would change the SAMA analysis." Id. at 33. Finally, the Staff asserts that the fact that the CPUC may require additional studies under California law has no bearing on this proceeding. Id.

In its Reply, SLOMFP argues that the "only major disagreement that the Staff seems to have with SLOMFP is that the Staff would not hold out for a probabilistic analysis of the Shoreline Fault." Reply at 6. This, says SLOMFP, is a "radical departure" from the Staff's position in the Pilgrim license renewal proceeding, where the "Staff referred to the use of PRA in a SAMA analysis as 'an essential and widely accepted part of the cost-benefit methodology.'"[28] SLOMFP notes that the Board in Pilgrim agreed with the Staff's position and denied a SAMA-related contention, "on the ground that probabilistic analysis constitutes the 'accepted and standard practice in SAMA analyses.'"[29]

In response to PG&E's arguments, SLOMFP first states that nothing in Contention EC-1 challenges the CLB for Diablo Canyon and that instead, EC-1 challenges PG&E's SAMA analysis, which is within the scope of a license renewal proceeding. Reply at 7-8. SLOMFP then distinguishes Indian Point as dealing with already available information that the applicant chose not to include in its SAMA analysis whereas here, the missing information does not yet exist. Id. at 8. SLOMFP asserts that, in the case of information that does not yet exist, the test of compliance with NEPA and 40 C.F.R. § 1502.22 is "whether the analysis 'constitutes a reasonable, good faith presentation of the best information available under the circumstances.'" Id. (quoting Colo. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1172 (10th Cir. 1999)).

[28] Reply at 6-7 (quoting Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), NRC Staff's Response to Request for Hearing and Petition to Intervene Filed by Pilgrim Watch (June 19, 2006)).

[29] Id. at 7 (quoting Pilgrim, LBP-06-23, 64 NRC at 340).

SLOMFP asserts that it has presented sufficient facts to raise a genuine dispute with PG&E regarding whether it has met the Dombeck test and whether PG&E should have awaited the outcome of the probabilistic study of the Shoreline Fault before completing the SAMA analysis. Id. at 9. According to SLOMFP, these facts include: the proximity of the Shoreline Fault to the Hosgri Fault; the significance of NRC's decision to immediately perform a preliminary deterministic analysis of the Shoreline Fault; the fact that PG&E "accelerated and re-focused" an ongoing probabilistic study to provide earlier results related to the Shoreline Fault; the description in PG&E's SAMA of fire and seismic contributors as "disproportionately dominant when compared to all external events"; the "preliminary" nature of existing information; the fact that the licenses for DCNPP do not expire for another fourteen years; and the statement from the President of the CPUC. Id. at 9-10. These facts, says SLOMFP, provide sufficient information to show that it has raised a material dispute regarding whether it is reasonable for PG&E to submit a SAMA analysis without waiting for the results of the ongoing studies. Id. at 10.

SLOMFP argues that the 40 C.F.R. § 1502.22 cases cited by PG&E do not support its position. SLOMFP acknowledges that the cases hold that "while there will always be more data that could be gathered, agencies have some discretion to draw the line and move forward with decisionmaking," id. at 11 (quoting Town of Winthrop v. FAA, 553 F.3d 1, 11 (1st Cir. 2008)), but states that the "situation here is starkly different." Id. This is because, according to SLOMFP, "PG&E's SAMA analysis does not include any probabilistic information (or any information at all) about the Shoreline Fault, even though the potential significance of that fault for the safety of Diablo Canyon has been demonstrated by PG&E's and the NRC Staff's responses to the fault's discovery." Id. SLOMFP notes finally that it is not asking that PG&E use the "latest scientific methodology" but only a PRA, which is "standard" methodology for SAMA analyses. Id. at 11-12.

3. Analysis and Ruling Regarding Contention EC-1

The admissibility of Contention EC-1 is governed by a straightforward application of the six criteria of 10 C.F.R. § 2.309(f)(1)(i)-(vi). By that standard, we conclude that EC-1 is admissible.[30]

First, EC-1 is a "specific statement of the issue of law or fact" sought to be litigated, as required by 10 C.F.R. § 2.309(f)(1)(i). It asserts that PG&E's SAMA analysis fails to comply with 40 C.F.R. § 1502.22, NEPA, and 10 C.F.R. § 51.53(c)(3)(ii)(L), because it is "not based on complete information that is necessary . . . [and] failed to acknowledge the absence of the information or demonstrate[] that the information is too costly to obtain. Petition at 8.

Second, SLOMFP has provided a "brief explanation of the basis" for EC-1 as required by 10 C.F.R. § 2.309(f)(1)(ii). The explanation of the basis of EC-1 starts with the words of the contention itself. EC-1 states that the SAMA analysis is insufficient "because it is not based on complete information" and "because PG&E has failed to acknowledge the absence of the information." Petition at 8. SLOMFP quotes 40 C.F.R. § 1502.22 in support of this claim. Id. at 7-8. EC-1 states that the missing information is "necessary for an understanding of seismic risks to the Diablo Canyon nuclear power plant." Id. at 8. More specifically, SLOMFP asserts that "information sufficient to conduct a probabilistic analysis of the risks posed by the Shoreline

[30] The six admissibility criteria of 10 C.F.R. § 2.309(f)(1)(i)-(vi) are critical to our analysis. In the Petition each contention is presented and organized by subsections (i) to (v) (oddly, subsection (vi) is not expressly included). However PG&E (and to some extent the NRC Staff) rarely references what subsection it is relying upon. If a party asserts that a contention is, or is not, compliant with a certain subsection of 10 C.F.R. § 2.309(f)(1)(i)-(vi), it would assist us if the party would, at least occasionally, quote and/or cite the relevant subsection.

Fault is 'essential' to the SAMA, and must be included unless the cost is exorbitant." Id. at 14.[31] This satisfies the "brief explanation of the basis" requirement of 10 C.F.R. § 2.309(f)(1)(ii).

Third, it is clear to this Board that EC-1 is "within the scope" of this proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii). NRC regulations require that a license renewal ER include a SAMA analysis (if not previously considered by the Staff). 10 C.F.R. § 51.53(c)(3)(ii)(L). Thus, the adequacy, or inadequacy, of PG&E's SAMA analysis is certainly within the scope of this license renewal proceeding.

We reject PG&E's argument that EC-1 is an impermissible challenge to the CLB of DCNPP and therefore not within the scope of this license renewal proceeding. PG&E has confused the scope of the safety review and the scope of the NEPA review. As the Commission has clearly stated, in the context of license renewal, "[t]he Commission's AEA review under Part 54 does not compromise or limit NEPA." Turkey Point, CLI-01-17, 54 NRC at 13. Although the Part 54 review focuses on aging of a limited set of systems, structures, and components, rather than on the CLB, the NEPA review is not so restricted. "[T]he two inquiries are analytically separate: one (Part 54) examines radiological health and safety, while the other (Part 51) examines environmental effects of all kinds. Our aging-based safety review does not in any sense 'restrict NEPA' or 'drastically narrow[] the scope of NEPA.'" Id. The NEPA review in license renewal proceedings is not limited to aging-related issues. See Tr. at 152.

The fourth criterion of contention admissibility is that the petitioner 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." 10 C.F.R. § 2.309(f)(1)(iv). Inasmuch as the NRC regulations require that the ER and EIS include a SAMA analysis, see 10 C.F.R. §§ 51.53(c)(3)(ii)(L), 51.92(a)(2), the Board concludes that the adequacy of that analysis is material to the findings NRC must make in a license renewal proceeding.

[31] At bottom, SLOMFP asserts that there is a critical omission from the SAMA analysis – information regarding the Shoreline fault.

More particularly, the Board concludes that SLOMFP's assertion that the SAMA is incomplete because the analysis does not include the Shoreline Fault (and does not justify the omission of such information), raises a fair and material issue. PG&E's existing SAMA analysis acknowledges that "both fire and seismic contributors are disproportionately dominant" risk factors. ER at F-65. SLOMFP has identified a number of current and ongoing seismic studies concerning the Shoreline Fault that will apparently be completed in 2010, 2011, and at the latest 2013. Petition at 12; Reply at 9-10. SLOMFP notes that the license renewal is not needed until 2024. Petition at 15. Meanwhile, CEQ has stated that the term "cost" "encompasses . . . costs in terms of time (delay)."[32] Whether a probabilistic evaluation of the Shoreline Fault is "essential" to the SAMA analysis and whether the costs of obtaining it are "exorbitant," are material issues under 10 C.F.R. § 51.53(c)(2)(ii)(L) and 40 C.F.R. § 1502.22.[33] For the present, noting that there might well be other ways, such as bounding analyses, to examine mitigation alternatives associated with any seismic challenges associated with the Shoreline fault, we determine only that SLOMFP has raised a material issue under NEPA, not whether its position is correct.

Likewise, a petitioner need not submit a sensitivity analysis as a prerequisite to the admission of a SAMA-related contention. The November 2008 discovery of the Shoreline Fault is certainly significant new information. And although the NRC Staff's initial review of the Shoreline Fault accepts PG&E's "preliminary assessment that the hazard potential of the Shoreline Fault is bounded by the current review ground motion spectrum for the facility," RIL-09-001 at 1, that review is rife with disclaimers and limitations. For example, the first page of the RIL uses the term "preliminary" seven times, including once in the title. Id. And the Staff indicates that this limited and preliminary deterministic assessment concludes that the seismic

[32] National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 Fed. Reg. 15,618, 15,622 (Apr. 25, 1986).

[33] CEQ regulations are entitled to substantial deference by the NRC. San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016, 1032-33 (9th Cir. 2006), cert. denied 549 U.S. 1166 (2007).

loading levels from the Shoreline Fault are "slightly below those levels for which [DCNPP] was previously analyzed." Id. The use of the phrase "slightly below," when associated with the frequent characterization of those analyses as "preliminary," suggests a material qualification of the result, and casts a serious question regarding whether a more extensive analysis would conclude that the existing analyses indeed bound those which might separate out the impacts of the Shoreline fault. There is already available new information regarding the Shoreline fault, and the NRC clearly contemplates that additional information concerning the seismic situation of the Shoreline Fault will be forthcoming. See id. at 10-11. Furthermore, it appears that this further information will be generated in the relatively near future (2010-2013). Meeting Summary at 2. The NRC Staff agrees that the wholesale omission of any discussion of the implications of the Shoreline Fault in the SAMA analysis is not acceptable. Staff Answer at 28. We conclude that EC-1 raises a material issue, as required by 10 C.F.R. § 2.309(f)(iv).

Turning to the fifth admissibility criterion, the Board finds that SLOMFP has satisfied the requirement to "[p]rovide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position." 10 C.F.R. § 2.309(f)(1)(v). SLOMFP has alleged numerous facts to support its position that the SAMA analysis fails to satisfy 40 C.F.R. § 1502.22, NEPA, and 10 C.F.R. § 51.53(c)(3)(ii)(L). For example, SLOMFP alleges that PG&E discovered the Shoreline Fault in 2008; that the fault is located in close proximity to DCNPP; that the alacrity of the response by PG&E and the NRC Staff to the Shoreline Fault reveals that it is highly significant; that the deterministic assessment that the Shoreline Fault is bounded by the previously known Hosgri Fault is highly preliminary and will be subject to further probabilistic analysis; that PG&E immediately reacted to the discovery of the Shoreline Fault by accelerating and refocusing the LTSP studies; that under the Action Plan, such studies are expected to be complete in 2010, 2011, and 2013; that seismic contributors are "disproportionately dominant" according to the SAMA risk analysis for DCNPP; and that probabilistic risk assessment is the NRC's standard approach in SAMA analyses. Petition at 9-13. While none of these alleged

facts has been proven, they clearly constitute a "concise statement of the alleged facts . . . which support" SLOMFP's position. Under the plain language of the regulation ("alleged facts or expert opinion"), a petitioner does not need to provide, as the Staff suggests, an "expert opinion" or a "substantive affidavit" in order to satisfy subsection (v).[34] In addition, we note that SLOMFP has provided "references to the specific sources and documents on which [it] intends to rely to support its position" as required by 10 C.F.R. § 2.309(f)(1)(v). SLOMFP refers us to CEQ regulation 40 C.F.R. § 1502.22, PG&E's SAMA analysis (its omission of the Shoreline Fault), NRC's RIL-09-001, NRC's January 20, 2010 Meeting Summary, and the June 25, 2009 letter from the California Public Utilities Commission. Petition at 9-15. The Board concludes that SLOMFP has satisfied the requirements of 10 C.F.R. § 2.309(f)(1)(v).

In the context, apparently, of 10 C.F.R. § 2.309(f)(1)(v), the Staff acknowledges that EC-1 is an admissible contention of omission (i.e., the failure of the SAMA analysis to discuss the Shoreline Fault). Staff Answer at 28. But then the Staff informs us as to what, in its view, would satisfactorily cure the omission. Id. at 29. The Staff lists three items related to the Shoreline Fault that, it believes, if adequately provided, will suffice and states that "precise quantification using state-of-the-art PRA methods is not needed to complete a SAMA analysis." Id. at 29, 30.

But the Staff's propositions at this point regarding what would effectively cure the omission are matters for a merits decision, not for a determination of whether or not EC-1 presents an admissible contention. Similarly, SLOMFP indicates what it thinks is needed in order to cure the omission.[35] The determination of the sufficiency of any cure submitted by PG&E is a matter for a later day, once such a cure has been submitted to the Staff. For now, we conclude only that there is indeed an omission of consideration of the effects of the

[34] See Staff Answer at 31 ("Thus, '[a] petitioner's issue will be ruled inadmissible if the petitioner "has offered no tangible information, no experts, [or] no substantive affidavits"'" (citing Fansteel, Inc. (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003) (quoting GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-5, 51 NRC 193, 207 (2000))).
[35] In explaining the basis for EC-1, SLOMFP asserts, specifically, that the SAMA analysis should discuss the Shoreline Fault and that a PRA of this fault is needed. Petition at 14.

Shoreline fault and the cost/benefit analyses changes which that consideration might engender from the SAMA analyses. It is simply not appropriate for us to here decide what additional information (whether a PRA or the three items listed by the Staff), if any, is necessary to cure the alleged deficiency and to satisfy 40 C.F.R. § 1502.22, NEPA, and 10 C.F.R. § 51.53(c)(3)(ii)(L). We understand and admit EC-1 on the basis that there is an asserted omission; we do not address the merits of any party's proposition of what cure must be undertaken.

Finally, we turn to the sixth criterion for contention admissibility. The petitioner is required to "provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact." 10 C.F.R. § 2.309(f)(1)(vi). For the reasons set forth in our discussion of subsections (iv) and (v) above, the Board also concludes that SLOMFP has satisfied subsection (vi). In addition, to the extent that SLOMFP contends that "the application fails to contain information on a relevant matter" (e.g., information regarding the effects of the Shoreline Fault), the Petition discusses the "identification of each failure and the supporting reasons [e.g., 40 C.F.R. § 1502.22] for the petitioner's belief." 10 C.F.R. § 2.309(f)(1)(vi).

In this connection, the Board rejects the proposition that SLOMFP is asking the Board to "suspend the proceeding or the license renewal review."[36] PG&E Answer at 20. PG&E aptly notes that it is the Commission's general policy to expedite adjudicatory proceedings wherever possible, id. at 20 n.14, and we agree. EC-1 does not ask us to suspend the proceeding. Instead, it asserts that the SAMA analysis fails to satisfy certain legal requirements (i.e., where information is "essential" either include it within the environmental analysis or justify its absence). If EC-1 is admitted, the evidentiary hearing on it would proceed in the normal course, and the Board would decide the merits of the issue.

[36] It is unclear if PG&E is posing these arguments under 10 C.F.R. § 2.309(f)(1)(v) or (vi). It has not cited or quoted a particular subsection, and the language of the arguments could be read to implicate either or both subsections.

We agree that "the nature of scientific research is that it is always ongoing," that there "will always be more data that could be gathered," and that agencies "have some discretion to draw the line and move forward with decision-making." PG&E Answer at 20; see also Staff Answer at 30, 33. But those platitudes do not resolve this specific case. Here SLOMFP has alleged that there are several active studies that are aggressively being pursued by PG&E, USGS, and the NRC concerning a newly discovered earthquake fault located 600 meters from the Diablo Canyon nuclear reactors. SLOMFP alleges that the fruits of these studies will be available in 2010, 2011, and 2013. Meanwhile, SLOMFP points out that the current licenses for DCNPP do not expire until 2024 and 2025. SLOMFP refers us to the CEQ regulation that specifies how to deal with a NEPA situation where there is incomplete information (i.e., 40 C.F.R. § 1502.22), and asserts that, under the NEPA rule of reason, the ER does not comply with the CEQ regulation. All of those factors would enter into an eventual determination on the merits regarding the sufficiency of any cure to the omission.

We do not agree that the Petitioners are arguing that the SAMA analysis is "necessarily incomplete so long as PG&E and the NRC continue their assessment" of the Shoreline Fault. Instead, we see EC-1 as asserting that the SAMA analysis is incomplete because of the discovery of the Shoreline fault and the associated seismic effects. While SLOMFP also asserts that any examination would be insufficient until the results are available from several ongoing studies that are expected to be complete in the near term, that is not a matter to be determined at this stage of the proceeding. SLOMFP has raised a reasonable issue for litigation in this license renewal proceeding.

Accordingly, we conclude that EC-1 satisfies the contention admissibility criteria of 10 C.F.R. § 2.309(f)(1) and therefore admit the contention as a contention of omission. For clarity in the future litigation of this contention, we reformulate it as follows:

> PG&E's Severe Accident Mitigation Alternatives ("SAMA") analysis fails to satisfy 40 C.F.R. § 1502.22 because it fails to consider information regarding the Shoreline fault that is necessary for an understanding of seismic risks to the

> Diablo Canyon nuclear power plant. Further, that omission is not justified by PG&E because it has failed to demonstrate that the information is too costly to obtain. As a result of the foregoing failures, PG&E's SAMA analysis does not satisfy the requirements of the National Environmental Policy Act ("NEPA") for consideration of alternatives or NRC implementing regulation 10 C.F.R. § 51.53(c)(3)(ii)(L).

B. Contention EC-2

The admission of Contention EC-2 requires both that the Commission waive the application of certain regulations pursuant to 10 C.F.R. § 2.335(d) and that the contention meet the normal admissibility requirements of 10 C.F.R. § 2.309(f)(1). Authority for grant of a waiver rests singularly with the Commission. 10 C.F.R. § 2.335(d). At this juncture, the Board's role is to decide (a) whether SLOMFP's waiver request makes a prima facie showing, and (b) whether EC-2 is otherwise admissible. See supra Section IV. If both criteria are met, the matter is automatically referred to the Commission for a merits decision on the waiver. Id. If either criterion is not met, the contention is dismissed. We address both criteria below.

1. Statement of Contention EC-2 and Waiver Petition

a. Contention

Proposed Contention EC-2, entitled "Failure of SAMA Analysis to Address Environmental Impacts of Spent Fuel Pool Accidents," states:

> PG&E's Environmental Report is inadequate to satisfy NEPA because it does not address the airborne environmental impacts of a reasonably foreseeable spectrum of spent fuel pool accidents, including accidents caused by earthquakes.

Petition at 16.

b. Waiver Petition

SLOMFP acknowledges, ab initio, that 10 C.F.R. Part 51, Subpart A, Appendix B, and 10 C.F.R. § 51.53(c)(2), which are part of NRC's NEPA regulations, specify that, when a reactor licensee submits a license renewal application, it does not need to address the environmental impacts of the storage of spent (radioactive) fuel in its ER. See Waiver Petition at 1. SLOMFP further acknowledges that a waiver of that regulatory provision is necessary for this contention

to be admitted because, as a general rule, 10 C.F.R. § 2.335(a) precludes a contention from attacking an NRC regulation. Reply at 12; Tr. at 195-96. Therefore SLOMFP has, pursuant to 10 C.F.R. § 2.335(b), filed a request for a waiver of the foregoing regulations. Waiver Petition at 1. The waiver petition states:

> [T]he purpose of the regulations – to make a generic determination of environmental risk that can be applied in all license renewal proceedings – would not be served by their application in this case with respect[] to the consideration of the environmental impacts of an earthquake-caused pool fire or the environmental impacts of an attack on the spent fuel pool.

Id. The Waiver Petition is accompanied by a declaration by Diane Curran, counsel for the Petitioner.

2. Arguments Regarding Contention EC-2

a. Arguments Regarding Admissibility of Contention EC-2

According to SLOMFP, PG&E's ER for DCNPP "omits any discussion of spent fuel storage impacts because it is a Category 1 issue."[37] Petition at 16. SLOMFP notes that spent fuel storage impacts are discussed generically for all plants in the NRC's 1996 generic environmental impact statement for nuclear plant license renewals (1996 GEIS),[38] which forms the foundation for elimination of their consideration in license renewal proceedings. Id. Contention EC-2 focuses on asserted errors/omissions in, and recent new information regarding, the information developed in the 1996 GEIS. Id.

SLOMFP argues that the 1996 GEIS (which is NRC's most current GEIS for license renewal), "asserts, with very little discussion, that the environmental impacts of spent fuel storage are small." Id. To indicate the importance of this limited discussion, SLOMFP cites to a

[37] If an environmental impact is designated as a "Category 1" issue in Appendix B to Subpart A of Part 51, then the ER for a license renewal is not required to analyze that issue. See 10 C.F.R. § 51.53(c)(3)(1).

[38] Division of Regulatory Applications, Office of Nuclear Regulatory Research, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG-1437 (May 1996).

2009 Draft Revised License Renewal GEIS (2009 Draft GEIS), which represents the NRC's ongoing current effort to update the 1996 GEIS. Id. SLOMFP notes that the 2009 Draft GEIS includes more recent spent fuel pool (SFP) analyses (performed since 1996) and that the 2009 Draft GEIS states that "the 'key document in this regard' is NUREG-1738, Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants" (which was released in 2001).[39] SLOMFP further asserts that neither the 2009 Draft GEIS nor NUREG-1738 analyzes "spent fuel pool accidents outside the eastern and central United States" and that both specifically exclude Diablo Canyon from their conclusions. Id. at 17. SLOMFP quotes NUREG-1738 as stating that western nuclear reactor sites, like DCNPP, "would need to be considered on a site-specific basis because of important differences in seismically induced failure potential of the SFPs [spent fuel pools]. [NUREG-1738] at ix."[40] Additionally, SLOMFP notes that NUREG-1738 states that a SFP fire "could result in high consequences in terms of property damage and land contamination" and asserts that the economic consequences of a SFP fire could thus be especially high in California because it is the highest-earning agricultural state. Id. at 18 (quoting NUREG-1738 at A6-26). Based on these statements in NUREG-1738 and the fact that PG&E's SAMA analysis acknowledges that seismic accident risk contributors are "disproportionately dominant" compared to all external events at DCNPP, SLOMFP asserts that, in order to comply with NEPA, PG&E's ER "should consider a full spectrum of potential [SFP fire] causes, including seismic contributors." Id. at 17-18. The analysis, according to SLOMFP, should include the "economic and societal effects of widespread land contamination and the

[39] Id. (quoting Office of Nuclear Regulatory Research, Generic Environmental Impact Statement for License Renewal of Nuclear Plants – Draft Report for Comment, NUREG-1437, App. E, at E-33 (Rev. 1 July 2009) (2009 Draft GEIS)).

[40] Id. (quoting T.E. Collins & G. Hubbard, Division of Systems Safety & Analysis, Office of Nuclear Reactor Regulation, Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants, NUREG-1738, at ix (Feb. 2001) (NUREG-1738)).

need to relocate the population," as well as alternatives for avoiding and mitigating SFP fire impacts. Id. at 19.

SLOMFP asserts that the information in the 2009 Draft GEIS and NUREG-1738 constitutes "new and significant information" that is not generic and that needs to be considered in the Diablo Canyon ER. Id. SLOMFP recognizes, however, as we noted above, that in order for EC-2 to be "within the scope" of this proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii), a waiver of 10 C.F.R. Part 51, Subpart A, Appendix B, and 10 C.F.R. § 51.53(c)(2) is required. Id.

PG&E asserts that Contention EC-2 challenges a generic finding and is therefore outside the scope of a license renewal proceeding. PG&E Answer at 22-23. PG&E notes that 10 C.F.R. Part 51, Appendix B, Table B-1 states that spent fuel from an additional twenty years of operation can be stored safely, with small environmental effects, at all plants and classifies such impacts as "Category 1" issues that are not within the scope of individual license renewal proceedings. Id. at 22. PG&E also states that the 1996 GEIS contains multiple pages of analyses and justification for its spent fuel storage conclusions including spent fuel accidents and their mitigation alternatives. Id. As a result, PG&E asserts that EC-2, which challenges the environmental analysis of SFP accidents, is outside the scope of this proceeding and thus not admissible under 10 C.F.R. § 2.309(f)(1)(iii). Id. at 22-23.

In addition, PG&E argues that, even if a waiver were granted, EC-2 is not admissible because it is a challenge to the CLB, specifically to the adequacy of DCNPP's seismic design of the SFP. Id. at 30. PG&E asserts that challenges to the CLB are outside of the scope of the license renewal proceeding, referring to a statement by the Commission that "[i]ssues that have relevance during the term of operation under the existing operating license . . . would not be admissible . . . because there is no unique relevance of the issue to the renewal term."[41]

[41] Id. (referring to PG&E Answer at 25 (quoting Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943, 64,961(Dec. 13, 1991))).

Next, PG&E argues that EC-2 is not admissible because it lacks factual or expert support to show that the risk from a spent fuel accident at DCNPP is different from what was considered in the 1996 GEIS. Id. at 30-31. Also, asserts PG&E, SLOMFP fails to propose any plant-specific mitigation alternatives or provide the costs and benefits of such alternatives.[42] Further, says PG&E, the Petition does not reference any specific portions of the ER, including the SAMA analysis. Id. PG&E also notes that the Part 51 reference to SAMA analyses "applies only to nuclear reactor accidents, not to spent fuel storage accidents." Id. at 31 n.22 (citing Turkey Point, CLI-01-17, 54 NRC at 21).

The NRC Staff raises many of the same points as PG&E. The Staff asserts that Contention EC-2 is outside the scope of this proceeding because it addresses the Category 1 issue of spent fuel storage impacts. Staff Answer at 34-35. In addition, the Staff argues that EC-2 is inadmissible because it fails to provide sufficient information to show a genuine dispute with PG&E's license renewal application and lacks a factual basis. Id. at 35, 37. The Staff asserts that the 1996 GEIS is "the operative document in this proceeding, currently incorporated by the Commission's regulations, and referenced by the ER." Id. at 36. The Staff argues that SLOMFP misses the mark because it fails to claim any deficiency in the 1996 GEIS and instead focuses entirely on the 2009 Draft GEIS. Id. at 36. The Staff adds that the information SLOMFP cites in support of EC-2 does not demonstrate a deficiency in the 1996 GEIS but instead "demonstrates that the conclusions in the GEIS are more robust than originally thought." Id. at 37. In addition, the Staff asserts that SLOMFP has neither supported its claim that the almost sixteen pages of SFP impacts analysis in the 1996 GEIS amounts to "very little discussion" nor explained how the 2009 Draft GEIS's exclusion of DCNPP renders the 1996 GEIS inadequate, particularly given that the 2009 Draft GEIS states that the 1996 GEIS's impact conclusions bound SFP accident impacts. Id. at 38-39. Finally, the Staff asserts that

[42] Id. at 31 (citing Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 11-12 (2002) (McGuire)).

SLOMFP has not provided any information to suggest that the effects of a DCNPP spent fuel fire on farmland would differ from either the effects of a reactor accident or the generic findings in the GEIS. Id. at 39.

In its Reply, SLOMFP argues that the 1996 GEIS cannot be cast in stone and that the new information contained in the 2009 Draft GEIS "completely changes" the situation and must be considered under NEPA. Reply at 12. (The argument is discussed more fully in Section B.2.b below.) SLOMFP responds that PG&E and the NRC Staff have ignored the fact (alleged in the Curran Decl.) that NUREG-1738 does not address the social or economic effects of evacuation after an accident and have ignored SLOMFP's discussion of potential environmental impacts from an SFP fire, particularly impacts related to property damage and land contamination. Reply at 13.

SLOMFP also argues that, even if the impacts of reactor accidents and SFP accidents are similar, mitigation measures for the two types of accidents would be very different. Id. at 13-14. Additionally, SLOMFP asserts that, contrary to PG&E's position, Contention EC-2 need not relate to age-related degradation or issues unique to license renewal to be admissible because it is a NEPA contention and "[t]he NRC's 'aging-based safety review does not in any sense "restrict NEPA" or "drastically narrow the scope of NEPA."'" Id. at 14 (quoting Turkey Point, CLI-01-17, 54 NRC at 13).

b. Arguments Regarding Waiver Petition

SLOMFP concedes that a waiver of the agency's regulations implementing a generic environmental impact determination on spent fuel storage impacts is necessary in order for Contention EC-2 to be admissible. Reply at 12; see also Petition at 19; Tr. at 195-96. SLOMFP argues that a waiver is appropriate with respect to this contention because of significant new information in the 2009 Draft GEIS "demonstrating that DCNPP has unique seismic characteristics that resulted in its exclusion from the principal study on which the NRC relies for its conclusion that spent fuel storage impacts are small." Waiver Petition at 1. In the

declaration supporting the waiver petition, SLOMFP's counsel, Diane Curran, states that the 2009 Draft GEIS differs substantially from the 1996 GEIS in that the new draft contains information showing that the NRC "now relies on an entirely new set of risk analyses and mitigative measures than it did in the 1996 License Renewal GEIS" and the 2009 Draft GEIS "concedes, for the first time, that the NRC does not have an adequate technical basis for reaching any conclusions about the environmental impacts of an earthquake at DCNPP." Curran Decl. ¶¶ 5-6.[43] Ms. Curran emphasizes that the "key document" [NUREG-1738] on which the 2009 Draft GEIS says that it relies "contains a disclaimer . . . that its general conclusions about the risk of a pool fire do not apply to Diablo Canyon." Curran Decl. ¶ 7 (citing 2009 Draft GEIS at E-33 & n.(a)).

At oral argument, SLOMFP asserted that NUREG-1738 is the only study referenced in the 2009 Draft GEIS that addresses seismic risks to SFPs in California. See Tr. at 279. In addition, SLOMFP's counsel notes in her declaration that NUREG-1738 acknowledges that a pool fire "could result in high consequences in terms of property damage and land contamination" and argues that those impacts "could be particularly high for California as the highest-earning agricultural state in the union." Curran Decl. ¶ 8. She also asserts that the 2009 Draft GEIS's conclusion that "the risk of an SFP zirconium fire initiation is expected to be less than reported in NUREG-1738 . . . and previous studies" cannot be meaningfully applied to DCNPP because the analysis in NUREG-1738 does not include DCNPP. Id. ¶ 9. Thus, she asserts that, in order to comply with NEPA, PG&E's ER should "consider a full spectrum of potential causes, including seismic contributors" and "provide a complete analysis of the consequences," including "widespread land contamination," of an SFP accident. Id. ¶ 13-14.

[43] At oral argument, SLOMFP again asserted that although both the 1996 GEIS and the 2009 Draft Revised GEIS reach a conclusion that the risk of SFP fires is low, they do so for different reasons. See Tr. at 197-98.

PG&E asserts that the waiver requested by SLOMFP is not warranted. It cites the Millstone case as the controlling precedent for obtaining a waiver. PG&E Answer at 23-24. Under Millstone, a waiver may only be granted if:

> (i) the rule's strict application "would not serve the purposes for which [it] was adopted";
> (ii) the movant has alleged "special circumstances" that were "not considered, either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived";
> (iii) those circumstances are "unique" to the facility rather than "common to a large class of facilities"; and
> (iv) a waiver of the regulation is necessary to reach a "significant safety problem."

Id. (quoting Millstone, CLI-05-24, 62 NRC at 559-60).

PG&E asserts that SLOMFP has met none of the four Millstone factors. As to the first factor, PG&E agrees with SLOMFP's statement that the purpose of Part 51, Appendix B, is to "codify and apply a generic determination . . . that spent fuel may be safely stored at reactor sites . . . without imposing any significant environmental risk." PG&E Answer at 24 (quoting Curran Decl. ¶ 4). PG&E says that "precluding site-specific consideration of spent fuel storage issues in this licensing proceeding" would indeed serve this purpose. Id.

As to the second factor, PG&E argues that SLOMFP has not demonstrated "special circumstances" because the 1996 GEIS concluded that, "even under the worst probable cause of a loss of spent-fuel coolant (a severe seismic-generated accident causing a catastrophic failure of the pool), the likelihood of a fuel-cladding fire is highly remote." Id. at 24-25 (quoting 1996 GEIS at 6-72, 6-75). In addition, PG&E says that SLOMFP has not connected the spent fuel storage concerns with any age-related issues or "other issues unique to license renewal," thus reinforcing its assertion that this is a CLB matter that need not be considered here. Id. at 25. PG&E argues that the reasoning behind the conclusions in both the 1996 GEIS and the 2009 Draft GEIS makes them applicable to all nuclear plants, including DCNPP. Id. at 25-27. PG&E

states that the 1996 GEIS found the risk of a seismically induced SFP fire to be "no greater than the risk from core damage accidents due to seismic events beyond the safe-shutdown earthquake."[44] It notes that the 2009 Draft GEIS similarly concludes that "the environmental impacts from accidents at [SFPs] . . . can be comparable to those from reactor accidents at full power." Id. at 26 (quoting 2009 Draft GEIS at 4-156) (emphasis added). PG&E asserts that SLOMFP has not explained why this "bounding" approach is inadequate for DCNPP or under NEPA. Id. at 26-27. At oral argument, PG&E also asserted that the general conclusion in the Draft GEIS that the risk of an SFP fire is expected to be less than predicted in NUREG-1738 does not contain any exceptions. See Tr. at 238. PG&E further argues that SLOMFP has not explained why mitigation of SFP accidents must be addressed on a site-specific basis in light of the 2009 Draft GEIS's finding that the potential for cost-effective SAMAs related to those accidents is "substantially less than for reactor accidents." PG&E Answer at 27.

As to the third Millstone factor, PG&E asserts that SLOMFP has not demonstrated that SFP accident impacts[45] at DCNPP would be unique to that facility

[44] Id. at 26 (quoting E.D. Throm, Division of Safety Issue Resolution, Office of Nuclear Regulatory Research, Regulatory Analysis for the Resolution of Generic Issue 82, "Beyond Design Basis Accidents in Spent Fuel Pools," NUREG-1353 at ES-4 (Apr. 1989)) (emphasis added).

[45] At several places in this discussion, the Board has underlined the term "impacts" to highlight our perception that the parties are using this term in several different ways. Sometimes the term "impact" seems to be used as a synonym for the term "consequences" or "damages" (e.g. the "impact" of a meltdown of a spent fuel pool is the same, regardless of what caused the meltdown, or the "impact" of a meltdown caused by X is "no worse than" or "bounded by" the impact of a meltdown caused by Y). At other times, the term "impact" seems to include a probability component and is used as a synonym for the term "risk." As we discuss at page 49, infra, the NEPA requirement that the NRC consider the environmental "impact" of a proposed action includes consideration of the probability of the various environmental consequences of an action (and the exclusion of consequences that are too remote and speculative). Thus, even if the "consequences" of a meltdown of spent fuel in a spent fuel pool are the same, regardless of what initiated it, the NEPA assessment of the potential "environmental impact" of constructing or operating a spent fuel pool may be different if a new initiator is added to the environmental impact assessment, or the probability of a previously known initiator is increased. In short, if the

because (a) "many plants are located in large agricultural areas, near large populations, or adjacent to important fisheries or industries," and (b) SLOMFP has not alleged any "unique age-related issues at Diablo Canyon." Id. at 28.

As to the fourth Millstone factor, PG&E asserts that SLOMFP has not shown that a waiver is necessary to reach a significant safety problem because 1) SLOMFP has not identified an age-related safety issue and 2) previous NRC evaluations of spent fuel storage at DCNPP, including a hearing in which SFP performance during an earthquake at the Hosgri fault was specifically discussed, resulted in conclusions that the SFP would have no significant environmental impact. Id. at 28-29; see also Tr. at 250-53.

Finally, PG&E notes that the Commission has denied a petition for rulemaking asking it to re-evaluate spent fuel storage impacts on a site-specific basis and that decision was upheld by the Court of Appeals for the Second Circuit.[46] At oral argument, PG&E asserted that, in denying the rulemaking petition, the Commission found that subsequent studies on SFP risks show that NUREG-1738 is in fact "extremely conservative." Tr. at 233-34.

In contrast to PG&E, which focused exclusively on the merits of whether a waiver is warranted, the NRC Staff focused on whether SLOMFP has made a prima facie showing for waiver, as is required at this stage under 10 C.F.R. § 2.335. Staff Waiver Response at 1. The Staff evaluates whether the waiver request provides a prima facie showing for the four factors of Millstone. Id. at 4.

At the outset, the Staff acknowledges that Millstone is somewhat problematic. Id. at 4 n.3. Specifically, the Staff notes that the fourth factor in Millstone states that a

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probability of the adverse environmental consequence increases, then the risk increases and the NEPA environmental impact assessment may be different.

[46] PG&E Answer at 29-30 (citing The Attorney General of Commonwealth of Massachusetts, the Attorney General of California; Denial of Petitions for Rulemaking, 73 Fed. Reg. 46,204 (Aug. 8, 2008); New York v. NRC, 589 F.3d 551 (2d Cir. 2009)); see also Tr. at 228-29.

waiver will only be granted in order to reach a "significant safety problem." Id. (emphasis added). However, EC-2 is an environmental contention. The Staff rejects the proposition that waivers are limited to safety regulations and concludes that Millstone "should be liberally construed to also permit waiver of regulations to reach environmental issues, provided, of course, that those issues are significant." Id.

Turning to the EC-2 request for waiver from Appendix B of 10 C.F.R. Part 51, the Staff asserts that SLOMFP has not made a prima facie showing on the first ("not serve the purposes") or fourth ("significant safety [or environmental] problem") prongs of the Millstone test. Id. at 6. As to the first factor, i.e., that the rule's strict application would not serve the purposes for which it was adopted,[47] the Staff argues that the application of Appendix B's generic environmental determinations to DCNPP would serve the Appendix's purpose because the 2009 Draft GEIS "actually concludes that 'the environmental impacts stated in the 1996 GEIS bound the impact from [SFP] accidents.'" Staff Waiver Response at 7-8 (quoting 2009 Draft GEIS at E-37) (emphasis added). And the Staff asserted at oral argument that the fact that NUREG-1738 specifically excludes western reactors, including DCNPP, does not by itself say anything (pro or con) about the 1996 GEIS's conclusions because the 2009 Draft GEIS relies on other studies in addition to NUREG-1738 to reach its generic conclusions on SFP accidents. See Tr. at 258. The Staff emphasizes that the 2009 Draft GEIS is only a draft and that for now the 1996 GEIS remains the basis for the generic conclusion that reactor accident impacts bound SFP impacts. Staff Waiver Response at 8. The Staff asserts that SLOMFP has "not produced evidence that this [1996 GEIS] analysis is no longer valid" or that any assumptions made in the 1996 GEIS are "erroneous or unsafe." Id. Thus,

[47] At oral argument, the Staff agreed that the Applicant "perhaps stated the [purpose of the Appendix B to Part 51] too narrowly." See Tr. at 255.

SLOMFP has "not shown that application of the rule [10 C.F.R. Part 51, Appendix B] would prohibit the NRC from considering a significant issue."[48] Id. at 8.

In further support of its argument, the Staff cites the Commission's decision in Turkey Point, which discussed whether the "possibility of catastrophic hurricanes" at a nuclear power plant in Florida warranted a waiver.[49] Id. at 9. The Staff notes that, even though hurricanes were excluded from the 1996 GEIS because their risks to spent fuel pools were perceived as "very low or negligible," the intervenor in Turkey Point "if it had requested a waiver," had "not produced sufficient evidence to justify a waiver." Id. at 9 (citing Turkey Point, CLI-01-17, 54 NRC at 22-23) (emphasis added). This, the Staff asserts, shows that the fourth factor of Millstone – significance – was not satisfied. Id.

The NRC Staff also briefly addresses two other arguments SLOMFP makes in support of its waiver petition. First, the Staff asserts that SLOMFP has not provided information supporting the proposition that the environmental effects of a SFP fire on farmland near DCNPP would be different from the environmental effects of a reactor accident or the effects discussed in the GEIS. Id. at 9-10. Next, the Staff asserts that SLOMFP misreads the 2009 Draft GEIS's analysis of mitigation measures, which in fact "appears to focus on common features of all spent fuel pools," and that SLOMFP does not demonstrate "how the existence of site-specific mitigation measures at spent fuel pools would undermine the GEIS." Id. at 10. Thus, the Staff argues, SLOMFP has not shown how application of the rules would not serve the purpose for which they were adopted. Id. Additionally, the Staff asserts that the reference in the 2009 Draft GEIS to site-specific analyses is not "incompatible with a generic determination" because the

[48] As stated above, the Staff concedes that because the regulations at issue in SLOMFP's waiver petition are environmental, Millstone's "significant safety problem" prong does not literally apply. Instead, applying the rationale behind the fourth Millstone factor, the Staff posits that it should be construed in this instance to permit a waiver if it is necessary to reach a significant environmental issue. Staff Waiver Response at 4 n.3.

[49] No waiver was requested in Turkey Point. See CLI-01-17, 54 NRC at 22-23.

2009 document is not at issue in this case. Id. And even if the 2009 Draft GEIS were relevant here, the Staff argues that it relies on "rigorous accident progression analyses" and "recent mitigation enhancements" that support the conclusions of the 1996 GEIS. Id. at 10-11.

In its Reply, SLOMFP asserts that NEPA requires the 1996 GEIS to be updated if "new and significant information or changed circumstances would change the outcome of the environmental analysis." Reply at 12 (citing 10 C.F.R. §§ 51.53(c)(iv) and 51.92(a)(2)). SLOMFP asserts that the 2009 Draft GEIS completely changes the technical basis for the conclusions in the 1996 GEIS because "with respect to Diablo Canyon, the Draft Revised GEIS effectively withdraws the 1996 GEIS' statement of confidence that spent fuel pool fire impacts would be insignificant." Reply at 12, 13 n.13; see also Tr. at 197-98. SLOMFP also reiterates that NUREG-1738 specifically excludes DCNPP from its seismic analysis. Reply at 13. Thus, SLOMFP argues, "[t]o ignore this tremendous change in the reasoning behind the GEIS and its implications for Diablo Canyon in this licensing proceeding would constitute an extreme violation of NEPA and the NRC's implementing regulations." Id.

In its brief addressing the applicability of Millstone, SLOMFP asserts that, because it addressed a safety issue, Millstone is not completely applicable to SLOMFP's waiver request, which raises environmental issues. SLOMFP Waiver Brief at 2. When dealing with a request to waive an environmental regulation under 10 C.F.R. § 2.335(b), SLOMFP argues that, instead of applying the "significant safety issue" prong of Millstone, NRC should use the "significant new information" criterion of 10 C.F.R. § 51.92(a)(2) and Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371-72 (1989). Id.

Likewise, with regard to the first factor of Millstone, SLOMFP states, "In the context of a NEPA analysis, the question raised by § 2.335(b) of whether application of a

regulation would 'serve the purposes for which the rule or regulation was adopted' can be addressed by examining the continued viability of the environmental analysis on which the regulation is based." Id. (quoting Millstone, CLI-05-24, 62 NRC at 560). In addition, SLOMFP states that the "special circumstances" test, the second factor of Millstone, "is consistent with the 'new information or changed circumstances' standard of 10 C.F.R. § 51.92(a)(2)." Id. at 3. SLOMFP asserts that in applying Millstone factors (ii) and (iv) to environmental issues, NRC should consider not only special circumstances not considered in the rulemaking (i.e., of the regulation being challenged) but also special circumstances not considered in the GEIS supporting the regulation. Id.

Applying its modified version of the Millstone test, SLOMFP asserts that it has met all four factors. The first factor ("the rule's strict application would not serve the purposes for which [it] was adopted") is met, SLOMFP asserts, because the specific exclusion of nuclear plants in the western United States from the generic seismic environmental impact conclusions and the reliance on site-specific mitigation measures in the 2009 Draft GEIS constitute new information undermining the generic conclusions of the 1996 GEIS. Id. at 3-4. The second factor (special circumstances not considered) is met because the new information contained (and relied upon) in the 2009 Draft GEIS was not addressed in the 1996 GEIS. Id. at 4. SLOMFP adds that the third Millstone factor (the special circumstances are unique to the facility rather than common to a large class of facilities) is met because the seismic conclusions in the 2009 Draft GEIS and NUREG-1738 specifically exclude DCNPP and there is thus "no current technical basis" for the conclusion that continued spent fuel storage at DCNPP would have insignificant impacts. Id. at 5. Finally, SLOMFP states that the fourth Millstone factor (significance) is met because the environmental impacts of a SFP fire at DCNPP, including land contamination, would be significant, and the 2009 Draft GEIS "analysis is extremely

cursory and is also tainted by probability considerations that are concededly inapplicable to Diablo Canyon." Id.

3. Analysis and Ruling Regarding Waiver Petition

In order for EC-2 to be "within the scope" of this proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii), and not violate 10 C.F.R. § 2.335(a), SLOMFP must obtain a waiver under 10 C.F.R. § 2.335(d). Specifically, EC-2 requires the waiver of NRC's environmental regulations that state that, in a license renewal context, the ER does not need to address environmental impacts associated with spent fuel because NRC has already considered such issues on a generic and nationwide basis and has classified such impacts as Category 1. These regulations are 10 C.F.R. Part 51, Subpart A, Appendix B and 10 C.F.R. § 51.53(c)(2).[50] The Board finds, for the reasons discussed below, that SLOMFP has made a prima facie showing for such a waiver, i.e., a sufficient showing such that the waiver request should be certified to the Commission for full briefing and a merits decision as to whether a waiver is warranted.

As noted above, a prima facie case is defined as "1. The establishment of a legally required rebuttable presumption. 2. A party's production of enough evidence to allow the fact-trier to infer the fact at issue and rule in the party's favor."[51] Black's Law Dictionary 1310 (9th ed. 2009). The Appeal Board has stated that "[p]rima facie evidence must be legally sufficient to establish a fact or case unless disproved," Diablo Canyon, ALAB-653, 16 NRC at 72, and that, in the context of waiver petitions, "[w]e have found that a prima facie showing . . . is one that is 'legally sufficient to establish a fact or case unless disproved,'" Seabrook, ALAB-895, 28 NRC at 22 (quoting Diablo Canyon, ALAB-653, 16 NRC at 72). Thus, the existence (or not) of a prima facie case is determined based on the sufficiency of the movant's assertions and

[50] PG&E noted that this waiver request also implicates 10 C.F.R. § 51.23. PG&E Answer at 23 n.15. We agree that this regulation is related to SLOMFP's request, and our conclusions regarding the prima facie case apply to 10 C.F.R. § 51.23 as well.

[51] The NRC Staff agreed that the term "prima facie" in the context of the NRC's waiver rules is to be interpreted as it is normally interpreted in a legal context. See Tr. at 256-57.

informational/evidentiary support alone. See Tr. at 257 (prima facie showing is one that is sufficient to withstand a demurrer). We need not find that SLOMFP would ultimately prevail on the merits for a waiver, or whether the fact or case has been disproved, in order to certify its waiver petition to the Commission. Indeed, the issue of the merits of the waiver request is not before us. See 10 C.F.R. § 2.335(c)-(d). We only address whether SLOMFP has provided sufficient information in support of its waiver request to warrant requiring a substantive response and rebuttal by PG&E and the NRC Staff.[52]

We find, for the following reasons, that SLOMFP has made a prima facie showing with regard to earthquake risks at DCNPP, that satisfies 10 C.F.R. § 2.335(b) and each of the four waiver factors set forth in Millstone.

The first Millstone factor is that "the rule's strict application 'would not serve the purposes for which [it] was adopted.'" Millstone, CLI-05-24, 62 NRC at 559-60 (emphasis added). As we see it, a central purpose of Part 51 Appendix B and 10 C.F.R. § 51.53(c)(2) is to allow the NRC to comply with NEPA by identifying and evaluating certain environmental impacts (in this instance, relating to the storage of spent fuel) that are generic to reactor license renewal proceedings, and then allowing the Applicant and NRC to dispense with site-specific evaluations of such environmental impacts in situations covered by the generic analysis. See PG&E Answer at 24 (quoting and agreeing with Curran Decl. ¶ 4). We reject the implication that the sole purpose of the Part 51 rules is simply to expedite the NEPA process and to apply the generic determinations without exception. See id. Instead, as the NRC Staff stated, the purpose of these regulations is to apply generic determinations where the generic determinations are appropriate. See Tr. at 263.

[52] A prima facie case is one that is sufficient to withstand a demurrer. In this respect, it is akin to the Federal Rules that allow for the dismissal of a lawsuit (without ever getting to a trial or motion for summary judgment) "for failure to state a claim upon which relief can be granted." Fed. R. Civ. P. 12(b)(6).

We conclude that SLOMFP has made a prima facie showing that a "strict" application of Appendix B and 10 C.F.R. § 51.53(c)(2) would not serve the foregoing purpose. Compliance with NEPA requires that, if new and significant information arises between the issuance of the EIS and the Agency decision, then the Agency must revise its EIS and consider such information. Marsh v. Oregon Natural Resources Council, 490 U.S. at 371-72. Here, the GEIS, which is the foundation of the regulations from which waiver is sought, was issued in 1996. During the intervening 14 years, the NRC has conducted further analyses of the environmental impacts of spent fuel. These analyses include NUREG -1738 issued in 2001 and the 2009 Draft GEIS.[53] Each of these analyses notes that its assessment of the seismic risks and associated environmental impacts of spent fuel storage excludes western nuclear reactors and refers specifically to the exclusion of DCNPP. These new analyses, as discussed below, provide at least a prima facie showing that the "strict application" of the NRC regulations prohibiting the site-specific consideration of the environmental impacts of spent fuel would not serve the purpose of those regulations. In our view, SLOMFP has raised a material question as to whether, in light of current knowledge about the seismic risks at DCNPP, the generic treatment of spent fuel, as per the 1996 GEIS and the regulations based on it, should be strictly applied. We emphasize – we do not make a final determination that the first factor of Millstone has been met, only that a prima facie showing has been made.[54]

As to the second Millstone factor, we conclude that SLOMFP has made a prima facie showing that "the movant has alleged 'special circumstances' that were 'not considered . . . in the rulemaking proceeding leading to the rule sought to be waived,'" Millstone, CLI-05-24, 62 NRC at 560, with regard to the risks of seismically-induced SFP accidents at DCNPP. The Staff

[53] The fact that the 2009 Draft GEIS is not final is not crucial. The relevant point is that the 2009 Draft GEIS contains new and significant information, not that the document is labeled "draft."

[54] Whether or not the asserted effect upon the validity and applicability of the 1996 GEIS to Diablo Canyon of this "new information" is "disproved" is a matter for the Commission to weigh in examining the merits of the waiver petition.

points out that the 1996 GEIS is the controlling document analyzing generic environmental impacts for license renewal. See Staff Waiver Response at 10. We agree. However, SLOMFP has pointed to statements in the 2009 Draft GEIS suggesting that the SFP accident analysis in the 1996 GEIS no longer accurately reflects the seismic conditions known to exist at DCNPP. See, e.g., Petition at 16-17; Curran Decl. ¶ 7. As SLOMFP notes, the 2009 Draft GEIS states that the "key document" relied upon for its updated conclusion on spent fuel storage risks in the seismic context is NUREG-1738. See 2009 Draft GEIS at E-33 to 34. But both NUREG-1738 and the 2009 Draft GEIS state that seismic characteristics at DCNPP, as well as at two other nuclear plant sites, exclude it from the general conclusions reached in NUREG-1738. See id. at E-33 & n.(a); NUREG-1738 at A2B-4. We do not believe, as the Staff suggests, Tr. at 258-59, that the blunt exclusions of the 2009 Draft GEIS and NUREG-1738 are neutral with regard to whether NRC's 1996 GEIS covered, and still accurately covers, the seismic situation at DCNPP. In the absence of evidence that the 1996 GEIS relies on sufficient information to reach a conclusion applicable to DCNPP regarding the impacts of a seismically-induced SFP accident, we find that SLOMFP has made at least a prima facie showing that special circumstances exist at DCNPP that render the generic SFP conclusions inapplicable to DCNPP, but only with regard to seismically-induced SFP accidents.

Turning to the third Millstone factor we conclude, for reasons largely explained above, that SLOMPF has made a prima facie showing that the special circumstances that are the basis of the waiver request are "'unique' to the facility rather than 'common to a large class of facilities.'" Millstone, CLI-05-24, 62 NRC at 560. The entire premise of this waiver request is that the seismic risk factors at the Diablo Canyon facility are different. The 2009 Draft GEIS and NUREG-1738 contain new and significant information – that Diablo Canyon is not covered by the NRC's generic environmental analysis of seismic risks – that is unique to DCNPP. As stated above, absent concrete rebuttal, this unique problem can be fairly inferred to the 1996 GEIS. The existence of special seismic circumstances unique to DCNPP, and not considered in

the 1996 GEIS or the 2009 Draft GEIS (including NUREG-1738), is underscored by the recent discovery of the Shoreline fault that is the subject of Contention EC-1, which we admit in this proceeding. See supra section V.A. Both PG&E and the NRC Staff were questioned about the Shoreline fault in the discussion of EC-2. As the Staff acknowledged at oral argument, the Shoreline fault is not considered in either the 1996 GEIS or the 2009 Draft GEIS.[55] See Tr. at 269.

Finally, we conclude that SLOMFP has made a prima facie showing regarding the fourth Millstone factor – that EC-2 raises new and significant information that may constitute a "significant" NEPA-related issue.[56] SLOMFP has pointed to NRC regulations requiring the consideration of new and significant information that arises after the GEIS is issued. See Petition at 7 (citing 10 C.F.R. §§ 51.53(c)(iv), 51.92(a)(2)); Tr. at 221. These regulations are required by Marsh v. Oregon Natural Resources Council, 490 U.S. at 371-72. Because we find that SLOMFP has made a prima facie showing that the statements in the 2009 Draft GEIS, as well as the discovery of the Shoreline fault, undercut the applicability to DCNPP of the 1996 GEIS's generic findings regarding seismically induced SFP accidents, we find that SLOMFP has also made a prima facie case that new and significant information exists that needs to be considered under NEPA.[57] Thus, we conclude that SLOMFP has made a prima facie case that

[55] We recognize that the preliminary deterministic analysis by the NRC Staff indicates that the seismic impacts of the Shoreline Fault are already encompassed in the site-specific seismic analyses already done for the DCNPP, including the previously discovered Hosgri Fault. However, as those results are, at this point, neither before us nor indicated to have stronger bearing than their "preliminary" designation, they cannot be a factor in determining whether to grant the requested waiver.

[56] Because the rules in question, as well as the contention itself, address compliance with NEPA and not safety issues under the AEA, we agree with SLOMFP and the NRC Staff that SLOMFP must make a showing that, in this context, the waiver is needed to address a significant environmental issue instead of a significant safety issue. See Staff Waiver Response at 4 n.3; SLOMFP Waiver Brief at 3.

[57] This is in contrast to the Turkey Point case cited by the NRC Staff in which the petitioner never even asked for a waiver and does not appear to have provided any evidence of new and significant information calling into question the Commission's earlier determination that SFP risk

a waiver (limited to seismic issues) would be required to address a significant NEPA-related issue with respect to EC-2.

In sum, while not ruling on the merits of whether SLOMFP's waiver request should be granted, we find that SLOMFP has proffered sufficient information or evidence in favor of a waiver with respect to EC-2 to survive a demurrer (i.e., to warrant requiring that PG&E and the NRC Staff proffer information and/or evidence opposing such a waiver). We conclude that SLOMFP has made a prima facie case that there are special circumstances at DCNPP with regard to the environmental impacts and risks of earthquake-induced spent fuel pool accidents so as to warrant the waiver of those portions of 10 C.F.R. Subpart A, Appendix B and 10 C.F.R. §§ 51.53(c)(2) and 51.23 classifying such spent fuel impacts as Category 1, and to warrant that these impacts be assessed on a site-specific basis for DCNPP. In accordance with 10 C.F.R. § 2.335(d), this ruling is automatically certified to the Commission.[58]

4. Analysis and Ruling Regarding Contention EC-2

As stated at the outset, EC-2 must survive two hurdles. First, SLOMFP must make a prima facie showing for a waiver. Second, EC-2 must be otherwise admissible under the criteria specified in 10 C.F.R. § 2.309(f)(1)(i)-(vi). If EC-2 is not otherwise admissible, then the contention will be dismissed by the Board now, and the Commission need not decide the merits

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from hurricanes is very low for all plants. See Turkey Point, CLI-01-17, 54 NRC at 22-23; see also Staff Waiver Response at 9.

PG&E's references to the denial of the spent fuel rulemaking petition are similarly inapposite. See PG&E Answer at 29-30 (citing 73 Fed. Reg. 46,204). Whether the impacts of spent fuel storage may generally be addressed generically across nuclear plants in the United States does not speak conclusively to whether an exception might exist to one particular portion of the generic analysis at one or a limited number of plants. Additionally, as PG&E acknowledged at oral argument, the denial of the petition for rulemaking pre-dated the discovery of the Shoreline fault. See Tr. at 241.

[58] Given that the briefing before the Board addressed whether or not SLOMFP presented a prima facie case for a waiver, we urge the Commission to allow the parties to brief the merits of whether a waiver should be granted.

of the waiver request. As discussed below, the Board concludes that EC-2 meets all of the normal admissibility criteria.

The most hotly contested admissibility issue is whether EC-2 is within the scope of this license renewal proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii). As SLOMFP concedes, absent a waiver, EC-2 would be inadmissible as outside the scope of this proceeding. See Tr. at 195-96. Specifically, the assertion that the ER should contain a site-specific analysis of earthquake-induced environmental impacts of onsite spent fuel storage is contrary to the Part 51 regulations and requires that they be waived. That is the whole point of SLOMFP's waiver request. This Board concludes that, if the Commission grants the waiver, then EC-2 is within the scope of this proceeding as required by 10 C.F.R. § 2.309(f)(1)(iii).

We reject PG&E's argument that EC-2 is outside of the scope of this proceeding because it raises an impermissible challenge to the CLB and because it raises environmental issues that have "no unique relevance . . . to the [license] renewal term." PG&E Answer at 25, 30. As the Commission has taught, although the safety analysis in license renewals is restricted to certain aging management issues, the NEPA environmental analysis is not.[59]

We next turn to the proposition that EC-2 is a contention that seeks a SAMA analysis for spent fuel storage, and therefore is defective because the Commission has ruled that SAMA analyses apply "to nuclear reactor accidents, not spent fuel storage accidents." Turkey Point, CLI-01-17, 54 NRC at 21. Although the terms "severe accident," "severe accident mitigation alternatives" and "SAMA" are not defined in NRC's NEPA regulations, the NRC policy

[59] The Commission has clearly stated that, in the context of license renewal, "[t]he Commission's AEA review under Part 54 does not compromise or limit NEPA." Turkey Point, CLI-01-17, 54 NRC at 13. Although the Part 54 review focuses on aging of a limited set of systems, structures, and components, rather than on the CLB, the NEPA review is not so restricted. Indeed, the Commission's Part 51 regulations dealing with license renewal never even mention the term "CLB." The Commission has ruled: "the two inquiries are analytically separate: one (Part 54) examines radiological health and safety, while the other (Part 51) examines environmental effects of all kinds. Our aging-based safety review does not in any sense 'restrict NEPA' or 'drastically narrow[] the scope of NEPA.'" Id. The NEPA review in license renewal proceedings is not limited to issues outside the CLB. See Tr. at 152.

documents that originated these terms clearly limit them to nuclear reactors, and do not include spent fuel pools or storage.[60] The Commission has very recently reiterated that SAMA analyses are not required for the spent fuel storage impacts associated with license renewals.[61] We agree that, to the extent EC-2 is construed as a SAMA contention, it would not be admissible.

It is not clear whether EC-2 is a SAMA contention. On the one hand, the header for the EC-2 portion of the Petition states "Contention EC-2: Failure of SAMA Analysis to Address Environmental Impacts of Spent Fuel Pool Accidents." Petition at 16. But the "Statement of the Contention" (pursuant to 10 C.F.R. § 2.309(f)(1)(i)) never uses the term SAMA:

> PG&E's Environmental Report is inadequate to satisfy NEPA because it does not address the airborne environmental impacts of a reasonably foreseeable spectrum of spent fuel pool accidents, including accidents caused by earthquakes.

Petition at 16. The text of the Petition focuses on this "Statement of the Contention" and never mentions NRC's SAMA regulation – 10 C.F.R. § 51.53(c)(3)(ii)(L). The Petition's section entitled "Brief Summary of Basis for Contention" (pursuant to 10 C.F.R. § 2.309(f)(1)(ii)) focuses on the risk of earthquakes at DCNPP and the need for the ER to address the impacts that could result from such an accident to PG&E's spent fuel pool, mentioning the word SAMA only once. This reference is minor and incidental to EC-2. Petition at 17 ("This conclusion is consistent with PG&E's SAMA analysis."). The remainder of the EC-2 discussion, covering other

[60] Turkey Point, CLI-01-17, 54 NRC at 21 (citing Policy Statement on Severe Reactor Accidents Regarding Future Designs and Existing Plants, 50 Fed. Reg. 32,138 (Aug. 8, 1985)); see also Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 288-93 (2006); Progress Energy Fla., Inc. (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC 51, 106-07 (2009).

[61] Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC __, __ (slip op. at 29-36) (June 17, 2010) (affirming the denial of Contention 4 in LBP-06-23, 64 NRC at 288-93).

admissibility factors (scope, materiality, concise statement of alleged facts) never mentions the term SAMA.[62]

PG&E did not focus on the SAMA issue at all, only raising the issue (i.e., that the requirement to perform a SAMA analysis does not apply to SFP accidents) in a footnote at the end of an eleven-page discussion of EC-2 in its brief. PG&E Answer at 31 n.22. Likewise, the NRC Staff brief only raises this issue as a subsidiary clause (in a sentence dealing with the value of California farm land). Staff Answer at 39. This issue was substantively addressed by the parties during the oral argument, when counsel for PG&E pointed out that the SAMA requirement only applies to reactors and confusion ensued as to whether EC-2 is necessarily a SAMA contention.[63] Tr. at 245-249.

Based on the foregoing, we conclude that SLOMFP's "Statement of the Contention" for EC-2 is the best statement of what SLOMFP wants to put into contention in this proceeding. Throughout our discussion of all of SLOMFP's contentions, we use the "Statement of the Contention" as the contention. In the case of EC-2, this Statement does not refer to SAMA analysis. Inasmuch as EC-2 does not assert a SAMA contention it does not run afoul of the Turkey Point decision, which ruled that SAMA analyses only apply to nuclear reactors.[64]

[62] We note also that neither the Waiver Request relating to EC-2 nor the Curran Declaration supporting the request mentions the term SAMA.

[63] SLOMFP further clarified at oral argument that, in order to resolve EC-2, "the first step would be to look at the risk. You'd have to do the analysis." Tr. at 207. Similarly, while arguing that SAMA applies only to nuclear reactors and not to SFPs, PG&E acknowledged that "NEPA requires you to evaluate alternatives. That's the genesis of the requirement for a [SAMA]." Tr. at 250. Thus, the basis for EC-2, though it may have been incorrectly labeled as SAMA, appears to be the more general requirements of NEPA. And while the 1996 GEIS's analysis of spent fuel impacts would ordinarily satisfy NEPA, SLOMFP's waiver request, if granted, would allow it to argue that NEPA requires an additional, site-specific analysis of the impacts of an earthquake-induced SFP accident at DCNPP.

[64] Alternatively, if SLOMFP intended to raise a SAMA analysis issue via EC-2, we reject that portion of the contention as improper and narrow EC-2 to the non-SAMA scope set forth in the "Statement of the Contention."

EC-2 also satisfies 10 C.F.R. § 2.309(f)(1)(i) and (ii), as SLOMFP has provided both a statement of the contention and a brief explanation of the basis or theory of the contention. Neither PG&E nor the Staff argues that those portions of Section 2.309(f)(1) have not been met.

In addition, the Board concludes that EC-2 is material to the NEPA analysis for license renewal, as required by 10 C.F.R. § 2.309(f)(1)(iv). We reject the argument that the "impact" of a spent fuel pool accident caused by an earthquake at DCNPP can be disregarded under NEPA because that "impact" will be (a) "the same as," (b) "no worse than," or (c) "bounded by" the impact of a spent fuel pool accident caused by any other factor. While PG&E and the Staff assert that the environmental impacts of a SFP accident are no worse than those of the severe (reactor core) accidents already considered in the NEPA analysis, and therefore their "environmental impacts" have been considered, this does not eliminate the necessity for assessment of the likelihood of such incidents and their concomitant effect upon the overall likelihood of a radiation release of that magnitude.

NEPA requires the NRC to make an informed decision regarding the environmental consequences of the grant of this license renewal, and such a decision must either include consideration of the likelihood and consequences of such an event or indicate through reasonable analyses satisfactory under Ninth Circuit guidelines that the event is remote and speculative as the term is used in NEPA analyses. We believe that NEPA's duty to consider the environmental impacts of a proposed action incorporates, at least implicitly, considerations of the probability of a particular consequence occurring. Further, it seems clear that the measures available to mitigate against an earthquake-induced meltdown of spent fuel in a spent fuel pool are likely to vary significantly from the mitigation measures available for reactor core damaging events (severe accidents).

We also conclude that SLOMFP has provided sufficient "alleged facts or expert opinion" to support EC-2 as required by 10 C.F.R. § 2.309(f)(1)(v). The contention asserts that PG&E's ER lacks information that it should contain (if the waiver is granted), namely site-specific

information regarding the environmental impacts of an SFP accident caused by an earthquake. Thus, SLOMFP's support for why this information is required—i.e., Ms. Curran's affidavit in support of the waiver—and its identification of the absence of the information in PG&E's ER provide the requisite support for EC-2. No law or regulation requires the submission of an expert opinion at the contention admissibility stage.[65] See Staff Answer at 9-10; PG&E Answer at 32 n.24 (citing Fansteel, Inc. (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003)). Whether this supporting information is ultimately sufficient to show that the ER for DCNPP should not have relied on the GEIS's conclusions regarding SFP accidents caused by earthquakes goes to the merits of the contention and not to its admissibility.

EC-2 also satisfies 10 C.F.R. § 2.309(f)(1)(vi). Contrary to PG&E's assertion, see PG&E Answer at 31, SLOMFP does cite a particular portion of the ER, page 4-1, from which it asserts that the necessary information is missing. See Petition at 16. It then identifies the information it asserts is missing (an analysis of the potential for and consequences of an SFP fire at DCNPP that includes site-specific information on SFP fires caused by earthquakes) and states why it believes that information is required to be included in PG&E's ER. See id. at 16-19. Again, the necessity of this omitted information is dependent, in part, on the waiver request. However, because 10 C.F.R. § 2.309(f)(1)(vi) requires only an "identification of each failure [to include required information] and the supporting reasons for the petitioner's belief" that such a failure exists, EC-2 raises a genuine dispute with the application.[66]

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[65] In contrast, we note that the petition for waiver must be accompanied by an "affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule or regulation . . . would not serve the purposes for which the rule or regulation was adopted." 10 C.F.R. § 2.335(b). The affidavit must "state with particularity the special circumstances alleged to justify the waiver." Such an affidavit may involve the assertion of facts, and does not require the assertion of an expert opinion. The Curran Declaration recites and states facts, and meets the foregoing criteria, but we do not deem it to be a declaration by an "expert."

[66] Additionally, we note that SLOMFP's argument is that new information in the 2009 Draft GEIS undermines the conclusions of the 1996 GEIS regarding seismically-induced SFP accidents. See, e.g., Tr. at 198-99. Thus, contrary to the NRC Staff's position, EC-2 in fact challenges

The Board notes that, to the extent EC-2 challenges PG&E's reliance on the GEIS discussion of SFP accidents caused by anything other than earthquakes, it is inadmissible.[67] We found above that SLOMFP has made a prima facie case of special circumstances at DCNPP with respect to seismically-induced SFP accidents but not that it has made a prima facie case of special circumstances with respect to SFP accidents with other causes. Thus, to the extent that EC-2 raises the issue of SFP accidents not caused by earthquakes, it is outside the scope of this proceeding. Thus, we revise and restrict Contention EC-2 to the following:

> PG&E's Environmental Report is inadequate to satisfy NEPA because it does not address the airborne environmental impacts of a spent fuel pool accident caused by an earthquake adversely affecting DCNPP.

In conclusion, we rule that, as narrowed, EC-2 presents an admissible contention alleging that PG&E's ER fails to comply with 10 C.F.R. Part 51 because it fails to address the airborne environmental impacts of an SFP accident at DCNPP caused by an earthquake. The fate of EC-2 therefore rests with the Commission, which must determine whether to grant a waiver, i.e., whether the new information and earthquake situation at Diablo Canyon constitute special circumstances warranting site-specific consideration of these risks under NEPA. See 10 C.F.R. § 2.335(b), (d).

C. Contention EC-3

Contention EC-3 is similar to Contention EC-2 in that both of them require a waiver of NRC's Part 51 regulations in order to be admissible. Both contend that PG&E's ER should address environmental impacts associated with the onsite storage of spent fuel and therefore both run afoul of 10 C.F.R. Part 51, Appendix B (which classifies on-site spent fuel storage as a Category 1 issue) and 10 C.F.R. § 51.53(c)(2) (which specifies that "the environmental report

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PG&E's reliance on the 1996 GEIS, not the adequacy of the 2009 Draft Revised GEIS. See Staff Answer at 36-37.

[67] Indeed, SLOMFP agrees that EC-2 focuses on SFP accidents caused by earthquakes. See Tr. at 203.

need not discuss any aspect of spent fuel"). Thus, both require a waiver pursuant to 10 C.F.R. § 2.335. The key difference is that EC-2 deals with spent fuel pool incidents initiated by earthquakes and EC-3 deals with spent fuel pool incidents initiated by terrorist attacks. As discussed below, under the requirements related to waivers, this makes a crucial difference.

1. Statement of Contention EC-3

Proposed Contention EC-3, entitled "Failure to Address Environmental Impacts of an Attack on the Diablo Canyon Spent Fuel Pool," states:

> The Environmental Report fails to satisfy NEPA because it does not evaluate the environmental impacts of an attack on the Diablo Canyon spent fuel pool during the operating license renewal term.

Petition at 20.

SLOMFP requests a waiver of 10 C.F.R. Part 51, Appendix B, and 10 C.F.R. § 51.53(c)(2) in connection with EC-3. Waiver Petition at 1; see also supra section V.B.1.b. Without a waiver, EC-3 (a) contravenes these regulations and thus is inadmissible under 10 C.F.R. § 2.335(a) and (b) is not "within the scope" of this proceeding as required by 10 C.F.R. § 2.309(f)(1)(iii).

Our duty at this juncture is to decide whether SLOMFP's waiver request makes a prima facie showing under 10 C.F.R. § 2.335(c)-(d), and, if so, then to decide whether EC-3 is otherwise admissible under 10 C.F.R. § 2.309(f)(1).

2. Arguments Regarding Contention EC-3

a. Arguments Regarding Admissibility of Contention EC-3

Like Contention EC-2, Contention EC-3 focuses on the 1996 GEIS, wherein NRC evaluated the environmental impacts of spent fuel storage in the license renewal context. The difference between EC-2 and EC-3 is that the former focuses on earthquakes while the latter focuses on terrorist attacks. See Tr. at 281-82. SLOMFP's primary argument in support of EC-3 is that, subsequent to the 1996 GEIS, new and significant information has come to light that must be considered, and that warrants that the ER for DCNPP include a site-specific analysis of

the environmental impact of terrorist attacks on the spent fuel pool. Petition at 20. The crucial new information, according to SLOMFP, is the information contained in the 2009 Draft GEIS, which concludes that the environmental impacts of spent fuel storage are low "based on analyses and mitigation measures that [the NRC] has never mentioned before." Id. SLOMFP says that these mitigation measures relied on by NRC "include 'mitigation enhancements' and 'NRC site evaluations of every SFP in the United States.'" Id. (quoting 2009 Draft GEIS at E-36). Thus, SLOMFP argues, "the NRC appears to be relying on site-specific analyses and mitigation measures to reduce the environmental impacts of spent fuel pool attacks" and, therefore, the ER should also address these impacts on a site-specific basis. Id.; Tr. at 295. SLOMFP also asserts that NRC should provide citations to and disclose publicly releasable portions of the new references underlying the 2009 Draft GEIS. Petition at 21.

Both PG&E and the NRC Staff assert that EC-3 is outside the scope of this proceeding, in derogation of 10 C.F.R. § 2.309(f)(1)(iii), because it raises a Category 1 issue.[68] See PG&E Answer at 33; Staff Answer at 40.

In addition, PG&E argues that, even if a waiver were granted, EC-3 would be inadmissible – raising several defenses similar to those asserted for contention EC-2. PG&E says that even "if there were sabotage, the 'resultant core damage and radiological releases would be no worse than those expected from internally initiated events.'" PG&E Answer at 37 (quoting 1996 GEIS at 5-18). PG&E says that SLOMFP has not provided any factual or expert support to raise a genuine dispute with that conclusion. Id. PG&E also argues that SLOMFP has not suggested a nexus between sabotage and aging management and that SLOMFP has not suggested examples or costs and benefits of additional mitigation alternatives to address the impact of a terrorist attack on the DCNPP SFP. Id. Finally, PG&E asserts that SLOMFP's

[68] The argument that EC-3 is "outside of the scope" of a license renewal proceeding is the converse of the waiver petition. If the waiver is granted, then EC-3 is within the scope. If not, it is outside of the scope.

request for the NRC to disclose documents relied upon in the 2009 Draft GEIS is outside the scope of this proceeding. Id.

The NRC Staff asserts that EC-3 is inadmissible because it "lacks an adequate factual basis," Staff Answer at 40, and does not contain sufficient information to raise a genuine dispute with PG&E's application. Id. at 42-45. The Staff points out that the 1996 GEIS specifically discussed the risk from sabotage, id. at 40, and that it is the "operative document in this proceeding." Id. at 42. Thus, because SLOMFP focuses on the 2009 Draft GEIS, it does not raise a dispute with the 1996 GEIS, the document on which PG&E relies. Id. at 42-43. The Staff also asserts that SLOMFP has not explained how the 2009 Draft GEIS undermines the conclusions in the 1996 GEIS, particularly when the 2009 Draft GEIS states that studies performed since 2001 support the conclusion that the risk of an SFP fire from a terrorist attack is very low. Id. at 43-45.

SLOMFP asserts, in its reply, that the 1996 GEIS considered only sabotage against reactors and not sabotage against SFPs. Reply at 14-15. "Both the means of attack and the alternatives for avoiding or mitigating attacks would be different for a reactor than for a spent fuel pool, and thus the environmental analysis of those impacts would be different." Id. at 15. SLOMFP also claims that its assertion that "NRC relied on site-specific measures to evaluate the impacts of attacks on the Diablo Canyon spent fuel pools" is factually supported by NRC's own statement that it performed "'site evaluations of every SFP in the United States.'" Id. (quoting 2009 Draft GEIS at E-36).

b. Arguments Regarding Waiver Petition

SLOMFP requests a waiver in connection with Contention EC-3 because it raises a Category 1 issue. Reply at 14; see also Tr. at 281. SLOMFP asserts that the 2009 Draft GEIS "strongly indicates that in concluding that the environmental impacts of spent fuel storage are small, the NRC relied on analyses and mitigation measures that are site-specific" and that it does not provide adequate references to support its generic spent fuel storage conclusions.

Waiver Petition at 2. In the declaration attached to the Waiver Petition, SLOMFP's counsel asserts that the 2009 Draft GEIS "admits that to some extent, mitigation measures at all nuclear reactor spent fuel pools (including DCNPP) are site-specific" and that it "relies for its conclusions on 'NRC site evaluations of every SFP in the United States.'" Curran Decl. ¶¶ 5, 10 (quoting 2009 Draft GEIS at E-35 to -36). She argues that the reliance on individual site assessments "is not consistent with a generic risk determination" and that the individual site assessments and mitigation measures "undermine the NRC's claim that it can make a generic assessment of the environmental impacts of intentional attacks on the DCNPP spent fuel pools." Id. ¶¶ 10-11. At oral argument, SLOMFP's counsel added:

> It seems like the NRC is having it both ways. It's saying to the public . . . [t]he NRC takes spent fuel pool risk very seriously and, therefore, it has done a separate analysis of every single spent fuel pool in the country. Terrific. But if you're going to do that, you can't claim it's generic. If you're going to say to people, we're protecting you because we looked at your nuclear plant, you know, to the neighbors at Diablo Canyon, we're looking at Diablo Canyon but we're not going to tell you what we did because its generic. That's - - you can't have it both ways.

Tr. at 295.

When asked about the Millstone factor three (uniqueness), counsel for SLOMFP responded that the fact that NRC conducted a site-specific review of every site in the United States is a "way of saying each plant is unique." Tr. at 293.

Both PG&E and the NRC Staff assert that SLOMFP has not shown that it meets any of the four Millstone waiver factors with regard to EC-3. See PG&E Answer at 33-36; Staff Waiver Response at 11-13. PG&E asserts that SLOMFP has not satisfied the first Millstone factor (strict application of the regulation would not serve the purpose of the regulation) because applying 10 C.F.R. Part 51, Appendix B, Table B-1 would serve the purpose of the rule "by precluding site-specific consideration of spent fuel storage issues." PG&E Answer at 33.

PG&E also asserts that SLOMFP fails the second Millstone factor because there are no special circumstances that were not considered in the 1996 GEIS, which specifically considered sabotage. Id. The fact that NRC's 2009 Draft GEIS relied on site-specific analyses and

mitigation measures does not, according to PG&E, constitute a "special circumstance" related to DCNPP or mean that "NRC should waive its regulations to permit a site-specific challenge to the impacts of an attack on the spent fuel pool at Diablo Canyon." Id. at 34. PG&E argues that site-specific data and mitigation plans, instead of precluding a generic determination, actually enabled NRC to make a generic determination. Id. PG&E cites the Second Circuit's decision in New York v. NRC, noting that the NRC required the mitigation measures it studied to be implemented at all nuclear plants and that the site-specific studies demonstrated the effectiveness of those mitigation measures so that no additional plant-specific reviews were necessary. Id. at 34-35 (citing New York v. NRC, 589 F.3d at 555).

As to uniqueness, the third Millstone waiver factor, PG&E asserts that SLOMFP has not shown that any risk associated with an attack on SFPs is unique to DCNPP because 1) other plants are "located in agricultural areas, near larger populations, or adjacent to important fisheries or industries"; 2) SLOMFP has not identified any unique aspect of the DCNPP SFPs; and 3) SLOMFP has not shown that impacts from an attack on an SFP are aging-related. Id. at 35-36.

Focusing on the fourth Millstone factor, PG&E argues that, because the NRC has addressed and will continue to address safety-related aspects of mitigation measures for attacks on SFPs in other contexts, a waiver in this proceeding is not necessary to address any significant safety issue. Id. at 36.

The NRC Staff agrees with PG&E that SLOMFP has not shown that it satisfies the first Millstone factor because SLOMFP has not explained how the site-specific nature of SFPs would alter the conclusion that SFP accident impacts would be much less severe than reactor accident impacts. Staff Waiver Response at 11-12. Next, the Staff argues that SLOMFP has not shown special circumstances with regard to DCNPP because all SFPs will have "a unique location, design, and security program," and the Commission must have been aware of this circumstance when it promulgated the 1996 GEIS. Id. at 12. Third, the Staff asserts that the site-specific

nature of SFP analyses would apply to all nuclear facilities and that SLOMFP therefore has not shown that this issue is unique to DCNPP. Id. Fourth, the Staff argues that, because SLOMFP has not demonstrated how a site-specific analysis of attacks on the SFP would change the GEIS's conclusion that the environmental impact of continued on-site spent fuel storage would be small, EC-3 does not raise a significant problem. Id. at 12-13.

Additionally, the Staff cites the Commission's denial of the rulemaking petition underlying New York v. NRC, noting that the Commission concluded that the risk of a zirconium fire would be "'very low' in light of the 'physical robustness' of spent fuel pools, security measures, mitigation measures, and the NRC's site evaluations." Id. at 13 (quoting 73 Fed. Reg. at 46,208). Finally, the Staff again notes that the 1996 GEIS, not the 2009 Draft GEIS, is the controlling document in this proceeding and asserts that SLOMFP has not shown that the 1996 GEIS relies on insufficient information. Id. at 13.

In its reply, SLOMFP distinguishes New York v. NRC and the underlying denial of the rulemaking petition as not addressing "whether, in an individual licensing proceeding where the NRC relies on site-specific mitigation measures for a finding of no significant impact, NEPA requires disclosure and discussion of those site-specific impacts in the [ER] for the specific facility." Reply at 15. SLOMFP's brief of EC-3 regarding the Millstone test closely parallels its discussion of EC-2. See supra section V.B.2.b.

3. Analysis and Ruling Regarding Waiver Petition

In order for EC-3 to be "within the scope" of this proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii), and not violate 10 C.F.R. §2.335(a), SLOMFP must obtain a waiver under 10 C.F.R. § 2.335(d). Specifically, EC-3 requires the waiver of NRC's environmental regulations that provide, in a license renewal context, the ER does not need to address environmental impacts associated with the spent fuel because NRC has already considered such issues on a generic and nationwide basis and has classified such impacts as Category 1 (i.e., 10 C.F.R. Part 51, Subpart A, Appendix B, and 10 C.F.R. §§ 51.53(c)(2), 51.23). In the context of EC-3,

SLOMFP requests the waiver of these spent fuel pool regulations to require the site-specific consideration of environmental impacts caused by terrorist attacks.

The Board concludes that SLOMFP has failed to make a prima facie showing that there are "special circumstances with respect to the subject matter [of the Diablo Canyon license renewal] proceeding . . . such that the application of the [Part 51 regulations] would not serve the purposes for which the rule or regulation was adopted." 10 C.F.R. § 2.335(b). Specifically, SLOMFP has failed to make a showing that there is anything unique about the threat of a terrorist attack at the Diablo Canyon nuclear power plant or its spent fuel pool. Thus, the waiver petition fails the third prong of the Millstone test, i.e., a showing that the special circumstances at DCNPP are "unique to the facility rather than common to a large class of facilities." Millstone, CLI-05-24, 62 NRC at 560 (internal quotes omitted).

SLOMFP's principal argument in support of the waiver is that, subsequent to the 1996 GEIS (the basis for the Part 51 regulations) and the September 11, 2001 attacks, new and significant information has arisen that demonstrates that NRC has done a "more rigorous accident progression analyses," has taken into account "recent mitigation enhancements" at each site, and has done "site evaluations of every SFP in the United States" of the risk of a SFP fire. Curran Decl. ¶¶ 5, 9-10 (quoting 2009 Draft GEIS at E-35 to -36). SLOMFP claims that this new information represents special circumstances that support a waiver. Perhaps so.[69] But the same information that shows that NRC has done a site evaluation of every SFP in the United States contradicts the proposition that the need for a waiver is "unique to the [DCNPP] facility." Millstone, 62 NRC at 560. We reject the proposition that a review of every site in the

[69] We find PG&E's reference to the Second Circuit's decision in New York v. NRC to be of little relevance to SLOMFP's waiver request. First, that decision involved a petition challenging an NRC refusal to undertake a new rulemaking. And second, the standard of review of agency decisions in the Courts of Appeals is extremely deferential. See New York v. NRC, 589 F.3d at 555.

United States is a "way of saying each plant is unique." Tr. at 293. If this were true, then a "terrorist attack" waiver would be appropriate for every spent fuel pool site in the United States.

Our ruling that SLOMFP has not made a prima facie case for waiver to support EC-3 (impacts triggered by terrorist attacks) contrasts with our ruling that SLOMFP has made such a case to support EC-2, as narrowed (impacts triggered by earthquakes). This is because there is reasonable support for the EC-2 proposition that the risk of earthquake at Diablo Canyon is unique and different from the generic risk of earthquakes at other nuclear power plants (e.g., 2009 GEIS excluding western plants, NUREG-1738 excluding DCNPP, recent discovery of the Shoreline Fault). However, we have been given little or no reason to think that there is a unique risk of terrorist attack at DCNPP.[70]

Thus, because SLOMFP has not made a prima facie showing that a waiver is warranted with respect to EC-3, we may not further consider the issue of the waiver for this contention. See 10 C.F.R. § 2.335(c).

4. Analysis and Ruling Regarding Admissibility of Contention EC-3

SLOMFP agrees that absent a waiver, EC-3 is not admissible. See Tr. at 281. Because we find that SLOMFP has not made a prima facie showing that a waiver is justified with respect to EC-3, the contention is outside the scope of this proceeding under 10 C.F.R. § 2.309(f)(1)(iii) and is therefore inadmissible.

D. Contention EC-4

1. Statement of Contention EC-4

Contention EC-4, entitled "Failure to Address Environmental Impacts of Attack on Diablo Canyon reactor," states as follows:

[70] We reject the proposition that the valuable agricultural land in the vicinity of DCNPP changes this equation or creates a unique situation that supports a prima facie case for waiver. Many other nuclear power plants are located in proximity to more urban areas with much greater populations at risk.

> The Environmental Report fails to satisfy the National Environmental Policy Act (NEPA) because it does not discuss the cost-effectiveness of measures to mitigate the environmental impacts of an attack on the Diablo Canyon reactor during the license renewal term.

Petition at 22.

2. Arguments Regarding Contention EC-4

SLOMFP asserts that "a discussion of mitigative measures is required by NEPA and by NRC regulations that require the discussion of severe accident mitigation alternatives (SAMAs) in license renewal decisions." Petition at 23 (citing 10 C.F.R. § 51.53(c)(3)(ii)(L)). SLOMFP asserts that, as a result of the Court of Appeals for the Ninth Circuit's decision in San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016, 1030 (9th Cir. 2006) (SLOMFP), the NRC has conceded that it must address the environmental impacts of a terrorist attack on nuclear facilities located in the Ninth Circuit. Petition at 22 (citing 2009 Draft Revised GEIS at E-6 to 8). SLOMFP observes that although the ER references the 1996 GEIS for the conclusion that reactor core damage and radiological releases from sabotage would be "no worse than" those resulting from internally initiated events, the discussion in the 1996 GEIS does not address any cost-benefit analysis for measures intended to avoid or mitigate the effects of such an attack, and no such discussion is presented in the ER. Id. at 22-23. Therefore, SLOMFP asserts that the ER is deficient because it omits such a discussion. Id.

PG&E offers several reasons why it believes Contention EC-4 to be inadmissible.

First, PG&E asserts that the issue of attacks on reactors "has been conclusively addressed" by the NRC in its 1996 GEIS for license renewal. PG&E Answer at 38. PG&E notes that the 1996 GEIS states that "the risk from sabotage is small." Id. at 39 (quoting 1996 GEIS at 5-18). In this regard, PG&E observes that the NRC has found that the environmental effects of an aircraft attack would be "no worse than" those caused by an internally initiated severe accident. Id. at 39-40.

Following up the foregoing, PG&E argues that Contention EC-4 is in effect a challenge to the NRC's generic findings and is therefore inadmissible absent a waiver, which has not been requested. Id. at 40. Explaining its logic, PG&E asserts:

> The NRC has determined from this generic review that the risk of sabotage or other terrorist attack is small and is provided for in the consideration of internal severe accidents:
>
> > The regulatory requirements under 10 CFR part 73 [i.e., "Physical Protection of Plants and Materials"] provide reasonable assurance that the risk from sabotage is small. Although the threat of sabotage events cannot be accurately quantified, the Commission believes that acts of sabotage are not reasonably expected. Nonetheless, if such events were to occur, the Commission would expect that resultant core damage and radiological releases would be no worse than those expected from internally initiated events.
> >
> > Based on the above, the [C]ommission concludes that the risk from sabotage is small and additionally, that the risks f[ro]m other external events[] are adequately addressed by a generic consideration of internally initiated severe accidents.

Id. at 39 (quoting 1996 GEIS at 5-18).

Second, PG&E argues that there is a "critical difference" between the present application, which involves the renewal of a nuclear reactor license, and the independent spent fuel storage installation (ISFSI) at issue in the Ninth Circuit's SLOMFP decision: "Unlike for the ISFSI, the NRC has in fact already evaluated the terrorist issue in the [reactor] license renewal GEIS." Id. at 38-39. PG&E argues that the Third Circuit's decision in New Jersey Department of Environmental Protection v. NRC, 561 F.3d 132 (3d Cir. 2009), is "directly applicable" here. Id. at 40. In that case, PG&E states, the petitioner contended that the "supplement to the GEIS for Oyster Creek should have contained, within its SAMA analysis . . . an analysis of mitigation alternatives for core melt sequences likely to result from an aircraft attack." Id. at 39. The Oyster Creek Board ruled, based on clear Commission precedent, that terrorist attacks are outside of the scope of NEPA.[71] The Commission affirmed. CLI-07-8, 65 NRC 124 (2007).

[71] Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-7, 63 NRC 188, 199-201 (2006).

The Third Circuit affirmed the Commission, rejecting the Ninth Circuit's holding that NRC cannot categorically exclude terrorist attacks from NEPA, SLOMFP, 561 F.3d at 136-143, and adding that "[e]ven if NEPA required an assessment of the environmental effects of a hypothetical terrorist attack on a nuclear facility, the NRC has already made this assessment," citing the 1996 GEIS and a site-specific supplemental EIS. N.J. Dep't of Envtl. Prot., 561 F.3d at 143-44. PG&E asserts that this portion of the Third Circuit's decision should govern here and that we, too, should find that the 1996 GEIS adequately addresses terrorist attacks. PG&E Answer at 40.

Finally, PG&E asserts that SLOMFP has not provided any information to "call into question the costs or benefits of mitigation measures" or explain "how or why an aircraft attack on Diablo Canyon would produce impacts that are different from severe accidents." Id. at 40-41. Thus, according to PG&E, SLOMFP has not met its burden to demonstrate that additional analysis would allow the NRC to "evaluate risks more meaningfully than it has already done." Id. at 41.

The NRC Staff similarly argues that PG&E's "ER contains SAMA analyses for internally initiated events" and that, since the 1996 GEIS states that the "core damage and radiological releases from [sabotage] would be no worse than the damage and release to be expected from internally initiated events," the ER SAMA is satisfactory. Staff Answer at 45-46. The Staff agrees with PG&E that in the Oyster Creek proceeding the Third Circuit upheld the rejection of a similar terrorist attack contention on the ground that the 1996 GEIS already addressed sabotage and the petitioner therein had "never explained how or why an aircraft attack on Oyster Creek would produce impacts that are different from severe accidents."[72] Like PG&E, the Staff notes that the Ninth Circuit's SLOMFP decision is "limited by the facts before it," i.e., NRC's

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[72] Id. at 46-47 (citing Oyster Creek, CLI-07-8, 65 NRC at 128-32; N.J. Dep't of Envtl. Prot., 561 F.3d at 144).

categorical refusal to include terrorist attacks under NEPA, and did not address the adequacy of the 1996 GEIS analysis. Id. at 47. The Staff urges that this Board should therefore follow the Third Circuit's decision. Id.

Finally, the Staff notes that the Commission "is unwilling to throw open its hearing doors to petitioners who have done little in the way of research or analysis, provide no expert opinion, and rest merely on unsupported conclusions," id. at 48 (quoting McGuire, CLI-02-17, 56 NRC at 12), and places SLOMFP in this category. The Staff states: "As SLOMFP has not demonstrated how consideration of terrorist attacks would change the SAMA analyses or the environmental consequences of severe accidents, EC-4 is not admissible." Id. at 48. For the foregoing reasons, the Staff asserts that Contention EC-4 is inadmissible because it lacks an adequate factual basis. Id. at 45.

In its reply, SLOMFP repeats its observation that mitigative measures are specific both as to the types of severe accident and as to the types of attacks to which a particular reactor design and site are vulnerable. Reply at 16. For support, SLOMFP points to the ER, where PG&E analyzes twenty-five severe accident mitigation alternatives "each of which is specifically tailored to an internal event. For each SAMA, the table gives a detailed description of how it works to mitigate the effects of the event. Thus, the SAMA analysis takes into account the characteristics of the specific internal events." Id. Accordingly, SLOMFP argues, to say that the damage that might be caused by a terrorist attack is bounded by the damage that might be caused by internal events "does not tell anything about how the attack occurs or how it is most effectively mitigated." Id. at 16-17. Finally, SLOMFP rejects the assertion that a waiver under 10 C.F.R. § 2.335(b) is needed for contention EC-4, stating that the 1996 GEIS does not address SAMAs to mitigate the impacts of attacks. Id. at 17 n.16; see also Tr. at 316.

During the oral argument, SLOMFP and PG&E agreed that they understood EC-4 to be a SAMA contention, Tr. at 316-17, 342, and counsel for SLOMFP clarified that the nature of EC-4 is that "[h]ere, it's an entire field that's been neglected, just not addressed at all." Tr. at 326.

3. Analysis and Ruling Regarding Contention EC-4

To begin with, we see Contention EC-4 as a contention of omission – asserting that the Applicant's SAMA analysis fails to consider terrorist-attack-originated core damaging events, in contravention of Ninth Circuit law, which requires the NRC to consider terrorist attacks when fulfilling its NEPA obligations.[73] Under the Commission's regulations implementing NEPA, for license renewal applications, an applicant must provide a SAMA analysis for a plant for which such analysis has not been previously performed. 10 C.F.R. § 51.53(c)(3)(ii)(L).

Although the obligations under NEPA fall to the agency (and therefore the NRC Staff), petitioners are required to raise environmental objections based on the ER, 10 C.F.R. § 2.309(f)(2), and therefore the assertion that there is relevant required SAMA information missing from the ER is appropriate at this point.

As to the contention admissibility criteria of our regulations, the principal criterion governing contentions of omission is found in 10 C.F.R. § 2.309(f)(1)(vi), which requires that a contention asserting that "the application fails to contain information on a relevant matter as required by law" be supported by the petitioner through "identification of each failure and the supporting reasons for the petitioner's belief." We find that this criterion is satisfied in this instance. Petitioner has identified the absence of consideration of terrorist-originated core-damaging events from the Applicant's SAMA analysis, and supported that assertion with reference to the relevant law, i.e., SLOMFP and 10 C.F.R. § 51.53(c)(3)(ii)(L).

[73] We note that the Ninth Circuit's SLOMFP decision, though it concerned an ISFSI, does not limit itself to ISFSI proceedings. Contr. Staff Answer at 47 (describing SLOMFP decision as "limited by the facts before [the court]"). The Ninth Circuit held generally that NRC could not categorically refuse to consider terrorist attacks under NEPA. 449 F.3d at 1028. Thus, we understand PG&E's and the Staff's challenges to the admissibility of this contention, PG&E Answer at 38-39; Staff Answer at 47, not as assertions that NEPA does not require an analysis of terrorist attacks in a license renewal proceeding, but as assertions that the 1996 GEIS already adequately considers terrorist attacks for the purpose of NEPA without the need for their incorporation into a SAMA analysis. As we discuss, we find that SLOMFP has raised an admissible contention asserting that NEPA does, in the Ninth Circuit, require consideration of terrorist attacks in the SAMA analysis for a license renewal.

In addition, for such a contention to be admissible, as we discussed, supra Section III, it must satisfy the other criteria of 10 C.F.R. § 2.309(f)(1). Here SLOMFP has plainly stated the issue of law and fact raised (the omission from the ER of cost-benefit analysis regarding mitigation alternatives for terrorist attacks), thereby satisfying the requirements of 10 C.F.R. § 2.309(f)(1)(i). It has established that this information is missing (which is not disputed by Applicant or Staff) and asserted that it is required under NEPA and 10 C.F.R. § 51.53(c)(3)(ii)(L), thereby providing the required brief explanation of the basis for the contention and satisfying the requirements of 10 C.F.R. § 2.309(f)(1)(ii). And given that consideration of terrorist attacks is part of the NRC's NEPA obligations in the Ninth Circuit, the issue of whether terrorist attacks have been fully considered in the NEPA analysis for DCNPP is plainly material to the decision the NRC must make as it fulfills those obligations, thereby satisfying the requirements of 10 C.F.R. § 2.309(f)(1)(iv).

Additionally, because this is a contention of omission, and because Petitioner has supported its assertions by identification of relevant law, no further facts or expert opinion are necessary for EC-4 to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v).

In this regard, we distinguish the Commission's McGuire ruling. In McGuire, the Commission found a contention to be inadequately supported when it alleged the omission of a specific alternative from an applicant's SAMA analysis but lacked supporting information regarding the relative costs and benefits of that proposed alternative. See CLI-02-17, 56 NRC at 11-12. Moreover, the Commission noted that the applicant's ER did address SAMAs related to the severe accident sequence at issue in the contention. Id. at 12. Here, by contrast, SLOMFP has alleged that "it's an entire field that's been neglected, just not addressed at all." Tr. at 326. The Commission's concern in McGuire that, "[f]or any severe accident concern, there are likely to be numerous conceivable SAMAs and thus it will always be possible to come up with some type of mitigation alternative that has not been addressed by the Licensee," CLI-

02-17, 56 NRC at 11, therefore is inapplicable to the present situation because SLOMFP asserts the omission of an entire class of scenarios.

SLOMFP's assertion that terrorist-act-originated SAMA analysis is required by Ninth Circuit law also satisfies the requirements of 10 C.F.R. § 2.309(f)(1)(iii) that the issue be within the scope of this proceeding. We are not persuaded by the arguments of the Staff and Applicant to the effect that this issue has been generically addressed in the 1996 GEIS through a finding therein that the consequences of terrorist-act-initiated incidents would be no worse than those already considered in the ER and the GEIS resulting from other initiators. While it seems plausible to us that consequences of terrorist-act-originated core damaging events may well be no worse than those for severe accidents traditionally considered in SAMA analysis (because there are events considered in SAMA analysis which assume release from the containment into the environment of a substantial portion of the core fission product inventory), that fact has no bearing upon the potential cost-benefit analysis of various mechanisms to prevent such a release by a terrorist attack, and possibly none upon mechanisms which might ameliorate its consequences.[74] The referenced findings of the 1996 GEIS (insofar as they address terrorist-act-initiators) regard only the consequences aspects of a SAMA analysis, and address neither the impact of additional initiating events (terrorist attacks) upon the Core Damage Frequency, nor the cost-benefit analyses regarding mitigative (preventative as well as palliative) alternatives.[75] Thus we do not find this contention to challenge a generic finding of the NRC.

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[74] 10 C.F.R. § 51.71(d) requires the NRC Staff to consider "alternatives for reducing or avoiding" the potential adverse environmental effects of the events to be considered. Thus a fair reading of this regulation incorporates not only ameliorative alternatives, but preventative alternatives as well.

[75] Thus we find that the requirement of 10 C.F.R. § 51.71(d) that the draft supplemental environmental impact statement for license renewal rely upon the supporting information in the GEIS for Category 1 issues to have no bearing upon admissibility of EC-4 because the GEIS does not address the matters raised here.

Nor are we persuaded that the present contention and situation should be bound by the rulings in the Oyster Creek proceeding. Those rulings simply do not address the present inquiry regarding whether there is indeed information omitted from the application which is required by binding law within the Ninth Circuit. Thus we find Contention EC-4 to have fully satisfied the requirements of 10 C.F.R. § 2.309(f)(1).

Finally, we turn to some more general aspects of matters raised by EC-4.

a. SAMA analyses concern only severe accidents, i.e., those which cause such severe damage to the reactor core that all or part of the core fission product inventory might be released to the environment. Thus terrorist acts which do not cause that level of damage are not within the scope of SAMA analysis. Further, Petitioners agree that the scope of their contention EC-4 does not extend to such events. See Tr. at 315-17 (defining "accident" in the context of EC-4 as a "catastrophic release of radioactive material" and clarifying that EC-4 is a SAMA contention).

b. The NRC already addresses a spectrum of terrorist acts under its Design Basis Threat (DBT) programs, which have been found acceptable in the Ninth Circuit. See Public Citizen v. NRC, 573 F.3d 916 (9th Cir. 2009). While we expect that those programs address a wide spectrum of terrorist acts, we have no information (and the pleadings present none) regarding the extent to which such programs identify and address core-damaging events or reasonable preventative mechanisms for such events as would be required to be examined under NEPA (and therefore to be considered in SAMA analyses).[76] But it would not be possible to conduct a cost-benefit analysis of preventative and/or mitigative mechanisms as part of a SAMA analysis without the identification and knowledge of their costs of implementation.

[76] Further, events considered under the DBT programs of the NRC are considered within the context of the NRC's obligations regarding safety, not its NEPA obligations. Thus, even if the DBT programs examine terrorist acts and mitigative mechanisms, the cost-benefit analyses required under NEPA may well not have been performed.

Moreover, we expect that much of the relevant information regarding terrorist-act preventative and/or mitigative measures is national-security related, and, while it may already be in the Staff's possession, those analysts who have considered such information might not be (and, in our view, are unlikely to be) the same analysts who would perform the SAMA analyses for an individual license renewal. We expect the same is true for each individual licensee as to particular mechanisms applicable to it.

c. Historical data regarding terrorist acts is, at best, sparse; data regarding terrorist acts against industrial facilities more so; and against nuclear power plants in the U.S., even more so. Thus, as was plainly implied in the GEIS,[77] the generation of the probability distribution of a spectrum of terrorist acts which could cause the degree of core damage necessary to cause the release of core fission products to the environment would be difficult to base upon actual data. Therefore we would expect that any assessment of such events would of necessity rely upon both expert opinion and qualitative analysis.[78]

d. Nonetheless, even if the computed increases to the spectrum of CDFs are so miniscule as to have no measurable effect upon the benefit associated with severe accident mitigation mechanisms, prevention and mitigation of terrorist attacks which could cause core damage and offsite releases might suggest additional potential

[77] As the Applicant has called to our attention, the 1996 GEIS stated that "the threat of sabotage events cannot be accurately quantified." PG&E Answer at 39; see also 1996 GEIS at 5-18 ("With regard to sabotage, quantitative estimates of risk from sabotage are not made in external event analyses because such estimates are beyond the current state of the art for performing risk assessments.").

[78] See 10 C.F.R. § 51.71(d) ("To the extent that there are important qualitative considerations or factors that cannot be quantified, these considerations or factors will be discussed in qualitative terms"); cf. also SLOMFP, 449 F.3d at 1031 ("It is therefore possible to conduct a low probability-high consequence analysis without quantifying the precise probability of risk." (citing Proposed Commission Policy Statement on Severe Accidents and Related Views on Nuclear Reactor Regulation, 48 Fed. Reg. 16,014, 16,020 (Apr. 13, 1983)).

SAMAs. The aspects of SAMA analysis regarding the cost effectiveness of reasonable alternatives must still be addressed.

While we find Contention EC-4 to accurately assert an omission of analyses required by law, and thereby to be admissible, we expect that there are significant aspects of a SAMA analysis that would consider terrorist-act-originated core-damaging events which have been already addressed in the context of Design Basis Threat analysis, and believe that there are many aspects of EC-4 that might similarly be better resolved generically (at least for those plants within the Ninth Circuit for which SLOMFP applies). Additionally, in our view, the likelihood that terrorist attacks would be analyzed qualitatively, combined with the fact that SAMA analysis, which balances costs and benefits of alternatives, is inherently quantitative, creates some uncertainty as to what exactly the NRC Staff must do to satisfy NEPA in this instance under Ninth Circuit case law.

Because of the matters just discussed, EC-4 raises the questions of: (a) whether because of the quantitative nature of the cost-benefit analyses which are the end product of SAMA analyses, a quantitative, as opposed to qualitative, analysis of terrorist attacks and the alternatives for mitigation and prevention is necessary; (b) how staff should approach such an analysis when the data is, at best, sparse; and (c) the extent to which, and manner by which, SAMA analyses should consider matters and mechanisms already addressed by the NRC's Design Basis Threat programs. In our view, these are novel legal or policy issues that would benefit from Commission review. See 10 C.F.R. § 2.323(f)(1).

For the foregoing reasons, we find Contention EC-4 admissible, but hereby refer this portion of our decision to the Commission in accordance with 10 C.F.R. § 2.323(f)(1).

E. Contention TC-1

1. Statement of Contention TC-1

Proposed Contention TC-1, entitled "Failure to demonstrate adequacy of program for management of aging equipment," states:

> The applicant, Pacific Gas & Electric Company (PG&E), has failed to satisfy 10 C.F.R. § 54.29's requirement to demonstrate a reasonable assurance that it can and will "manage[e] [sic] the effects of aging" on equipment that is subject to the license renewal rule, i.e., safety equipment without moving parts. In particular, PG&E has failed to show how it will address and rectify an ongoing pattern of management failures with respect to the operation and maintenance of safety equipment.

Petition at 2.

2. Arguments Regarding Contention TC-1

SLOMFP begins its argument on TC-1 by focusing on 10 C.F.R. § 54.29(a), the legal criterion that must be met before the Commission can grant a renewal application. According to SLOMFP, the regulation requires that PG&E "demonstrate a reasonable assurance that it can and will 'manage the effects of aging'" during the period of extended operation. Petition at 2. Contention TC-1 claims that PG&E has not demonstrated that it will adequately manage aging because it has an "ongoing pattern of management failures with respect to the operation and maintenance of safety equipment," id., and "does not discuss how it will avoid repeating [such] chronic and significant errors" when it turns to managing the aging of safety equipment. Id. at 3.

SLOMFP provides copies of three recent NRC inspection reports of DCNPP as examples of the alleged "ongoing pattern" of management problems.[79] First, SLOMFP states that the NRC integrated inspection report (IIR) dated February 6, 2008 (IIR 08-05) concludes that the NRC found that PG&E had an "adverse trend in problem evaluation" which "began during the fourth quarter 2007 and continued through the fourth quarter 2008." Petition at 3-4 (quoting IIR 08-05 at 24). According to SLOMFP, the report documents eleven separate examples of this adverse trend. Id. at 4. Second, SLOMFP cites IIR 09-03, dated August 5,

[79] Petition at 3-5 (citing Letter from Vince G. Gaddy, Chief, Project Branch B, Division of Reactor Projects, NRC Region IV, to John T. Conway, Senior Vice President and Chief Nuclear Officer, PG&E (Feb. 6, 2009), Enclosure (IIR 08-05); Letter from Vince G. Gaddy, Chief, Project Branch B, Division of Reactor Projects, NRC Region IV, to John T. Conway, Senior Vice President and Chief Nuclear Officer, PG&E (Aug. 5, 2009), Enclosure (IIR 09-03); Letter from Geoffrey B. Miller, Chief, Project Branch B, Division of Reactor Projects, NRC Region IV, to John T. Conway, Senior Vice President – Energy Supply and Chief Nuclear Officer, PG&E (Feb. 3, 2010), Enclosure (IIR 09-05)).

2009, for the proposition that the NRC found that the "adverse trend" in problem evaluation "continued during the first two quarters of 2009." Id. (quoting IIR 09-03 at 21). SLOMFP also quotes the NRC inspection report as stating that the NRC "analyzed this trend and identified a common theme related to poor licensee management of the plant design/licensing bases and inconsistent implementation of regulatory administrative processes." Id. (emphasis added). SLOMFP states that the inspectors "identified thirteen separate examples of instances of 'poor licensing and design basis management.'"[80] Id. (emphasis added). SLOMFP then cites IIR 09-05, dated February 3, 2010, as concluding that the adverse trends found in the two prior inspections "continued through 2009." Id. at 5 (quoting IIR 09-05 at 35).

SLOMFP also notes that PG&E's license renewal application for DCNPP indicates that the same personnel currently managing its safety equipment will be responsible for managing the aging of safety equipment during the renewal period. Id. at 3. As a result, SLOMFP asserts, the inspection reports "raise a genuine and material dispute regarding PG&E's ability to manage the effects of aging into the renewal period" such that "[t]he public has no reason for confidence that a renewed Diablo Canyon licensee would reasonably ensure protection of public health and safety." Id. at 5.

PG&E asserts that Contention TC-1 is inadmissible because (a) it does not raise a genuine dispute with the application, and (b) it raises current operational issues that are outside the scope of a license renewal proceeding. PG&E Answer at 9.

First, PG&E argues that TC-1 fails to raise a "genuine dispute" (as required by 10 C.F.R. § 2.309(f)(1)(vi)) with the application because SLOMFP "does not even cite the application" and has "not identified any alleged deficiencies in PG&E's aging management plans." Id. PG&E asserts that TC-1 did not "link the trend [cited in the inspection reports] to aging-related mechanisms, programs, or analyses." Id. at 10.

[80] We emphasize these portions of the Petition because, as discussed below, the Majority only admits the portions of TC-1 dealing with PG&E's recognition, understanding and management of DCNPP's design/licensing basis. See infra page 91.

Second, PG&E's "scope" argument asserts that TC-1 raises "discrete performance and compliance matters that are applicable to current operations rather than to operations during the renewal term" and therefore TC-1 is not within the scope of the proceeding as required by 10 C.F.R. § 2.309(f)(1)(iii). Id. PG&E argues that the Commission "has confined Part 54 to those issues uniquely relevant to the public health and safety during the period of extended operations."[81] PG&E quotes the Commission as saying "license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to the Commission's ongoing oversight activity." Id. at 11 (quoting 56 Fed. Reg. at 64,952). PG&E argues that the violations identified in NRC's recent inspections relate to current operations, "will necessarily be addressed now" (rather than in the period of extended operations (PEO)), and "have no nexus to this proceeding." Id. at 12. PG&E argues that "failures to perform adequate evaluations under 10 C.F.R. 50.59" and "failure to recognize a condition outside of the plant design basis" implicate the CLB but are outside the scope of the license renewal review. Id. at 10. Likewise, PG&E says that TC-1 is really a challenge to PG&E's corrective action and quality assurance (QA) program which, it asserts, is outside of the scope of license renewal.[82] PG&E cites the Commission as stating "the portion of the CLB that can be impacted by the detrimental effects of aging is limited to the design-bases aspects of the CLB." Id. at 12 n.5 (quoting 60 Fed. Reg. at 22,475) (emphasis added).

Finally, PG&E adds that SLOMFP has not provided any factual or expert support showing that PG&E will be unable to reverse the adverse trend identified in the inspection reports or manage the effects of aging during the renewal term. Id. at 13. PG&E states,

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[81] Id. at 10-11 (citing the Board decision in Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4) LBP-01-06, 53 NRC 138, 152 (2001); Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461, 22,463 (May 8, 1995)).

[82] Id. at 12 (citing Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 253 (2006)).

"[u]nsupported speculation that PG&E will contravene the NRC rules at some point in the future is not an adequate basis for a contention."[83]

The NRC Staff, like PG&E, asserts that TC-1 is not admissible because it raises issues that are outside the scope of a license renewal proceeding. See Staff Answer at 15. The Staff notes that TC-1 does not contend that PG&E's aging management programs (AMPs) "if implemented, are inadequate," but rather challenges whether PG&E has demonstrated the ability to adequately implement its AMPs. Id. The Staff states that "the Commission has recognized that the regulations governing license renewal only require an applicant to demonstrate that, if implemented, an AMP will adequately manage aging effects on passive systems, structures and components." Id. at 16 (emphasis added). The Staff states that this approach "comports with the Commission's general policy of not assuming that licensees will violate NRC regulations." Id. (citing Oyster Creek, CLI-00-06, 51 NRC at 207).

The Staff points out that the NRC has issued NUREG-1801, the Generic Aging Lessons Learned (GALL) Report[84] dealing with license renewal under Part 54, and the Commission has said that an applicant may demonstrate reasonable assurance of adequate aging management by using AMPs that follow the GALL Report recommendations.[85] The Staff interprets this endorsement as proving that, in license renewal review, the Board is prohibited from considering whether the applicant actually has the managerial competence and/or ability to adequately implement the AMPs (e.g., that the Commission "does not contemplate a review to determine whether the applicant will comply" with its AMPs). Id. at 17 (emphasis added).

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[83] Id. at 13 (citing GPU Nuclear, Inc. (Oyster Creek Generating Station), CLI-00-06, 51 NRC 193, 207 (2000) (Oyster Creek)).

[84] Division of Regulatory Improvement Programs, Office of Nuclear Reactor Regulation, Generic Aging Lessons Learned (GALL) Report, NUREG-1801, vol. 1 (Rev. 1 Sept. 2005) (GALL Report).

[85] Staff Answer at 16-17 (quoting Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 468 (2008)).

Additionally, the Staff argues that admission of TC-1 would result in a "duplicative inquiry" that the Commission's license renewal rules were structured to avoid. See id. at 17, 19. "[A] speculative review in this proceeding of whether the Applicant will comply with the terms of its AMP in light of its prior compliance history would be precisely the type of duplicative inquiry the Commission sought to avoid." Id. at 18-19. The fact that a plant "might not operate in perfect compliance" does not support the admission of a contention. Id. at 19 (citations omitted). The Staff notes that the Commission has limited the license renewal review to "whether actions have been identified and have been or will be taken to address age-related degradation unique to license renewal." Id. at 18 (citations omitted). The Staff further argues that the limited scope of the license renewal review is "based on the assumption that the NRC's ongoing regulatory activities are sufficient to ensure licensee compliance with the plant's current licensing basis during the initial period of operation and the extended period of operation." Id. The Staff believes that, because the renewed license will incorporate the AMPs, "the extent to which a plant complies with the elements of its AMPs" will be "subject to the NRC's continuing oversight activities" during the PEO and therefore cannot be considered under 10 C.F.R. § 54.29(a). Id. at 18-19.

The Staff next raises a "floodgates" argument. It says that if TC-1 were admissible, "then any operating issue" could support a contention under 10 C.F.R. § 54.29 and that "this licensing proceeding would effectively become a wide ranging inquiry into PG&E's conformance with its licensing basis." Id. at 20. Admission of TC-1 "could result in an endless stream of contentions." Id.

The Staff further asserts that if it is true that PG&E has not demonstrated that there is reasonable assurance that it is capable of adequately managing aging during the PEO, then, necessarily, there is no reasonable assurance that PG&E is capable of adequately managing safety during the present. Id. at 21. If this is so, then PG&E must either rectify the IIR violations immediately or else shut down. Id. Given that the Staff has not ordered immediate rectification

or shutdown of DCNPP due to the recent violations, this, the Staff reasons, must mean that the Staff has affirmatively found that there is "reasonable assurance." Id. Thus, says the Staff, TC-1 is an impermissible "challenge to NRC's finding." Id.

The Staff also argues that TC-1 does not meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi) because it lacks sufficient information to demonstrate a genuine dispute on a material issue of law or fact. Id. at 22. The Staff states that "the quantity and magnitude of these inspections findings [from the 3 IIRs cited by SLOMFP] . . . are not the type of violations that can cause the NRC to be unable to find reasonable assurance." Id. According to the Staff, only violations that would require the immediate shutdown of DCNPP would meet this criterion. Id. at 22-23. The Staff reminds us that "perfect compliance" is not required and characterizes the violations alleged in the IIRs as "routine," "minor," and "green." Id. at 23-24. "Only instances of non-compliance that are of sufficient magnitude and pervasiveness could support an NRC finding of no reasonable assurance that an Applicant will comply with the terms of its CLB during the period of extended operation. Such instances have not been identified here." Id. at 23. Thus, the Staff asserts that SLOMFP has not provided sufficient information to demonstrate a genuine dispute. Id. at 25.

Finally, the Staff notes that "in the past, the Commission has considered contentions similar to TC-1," stating that "[s]uch contentions have focused on management integrity" and "involved allegations far more serious than those at issue here." Id. at 25 n.20. The Staff cites two "management integrity" decisions by the Commission.[86] In that same footnote, the Staff

[86] Ga. Inst. of Tech. (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111 (1995) (Georgia Tech); Ga. Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), CLI-03-16, 38 NRC 25 (1993). Strangely, both decisions affirmed that past management practices were admissible in determining whether an applicant would implement and comply with regulatory requirements or license conditions in the future, and both affirmed the admission of such contentions. Indeed, one of these cases involved a reactor license renewal. In it the Commission stated clearly,

> [i]n determining whether . . . to renew a license[], the Commission makes what is in effect predictive findings about the qualifications of an applicant. The past performance of management may help indicate whether a licensee will comply

acknowledges that an ASLB recently admitted a contention similar to TC-1[87] but notes that the Board decision is not binding and is under appeal. Staff Answer at 25 n.20.

In its reply, SLOMFP reiterates that the "license renewal application relies for the management of aging equipment on precisely the same organization that has had tremendous difficulty managing safety during the current license term." Reply at 2. The current "trend of management failures" is the link to PG&E's ability to manage aging in the future. Id. "PG&E's aging management program necessarily includes the organization that will carry it out." Id. at 3. "PG&E's ongoing problems in managing its current program presage problems with its aging management program, given that the very same people in the very same organization that now manages Diablo Canyon's safety equipment will be responsible in the future for PG&E's program for managing aging equipment during the license renewal term." Id. SLOMFP asserts that this raises a "reasonable inference" that PG&E will not adequately manage aging in the future. Id. at 4. SLOMFP asserts that "TC-1 presents a pattern of chronic and repetitive management problems which consistently recur" and thus "effectively rebutted the presumption that licensees will comply with NRC aging management regulations during the license renewal term." Id. at 4 & n.1 (referring to the Staff's citation of Oyster Creek, CLI-00-06, 51 NRC at 207). SLOMFP also argues that the Staff's interpretation of 10 C.F.R. § 54.29 "would render meaningless" the language of the rule requiring an applicant to show "the adequacy of an applicant's measures to manage aging equipment." Id. at 4. Finally, SLOMFP asserts that the Staff's argument regarding the magnitude of PG&E's documented violations goes to the merits of the contention and not to its admissibility. Id. at 5 n.2.

> with agency standards. . . Of course, the past performance must bear on the licensing action [renewal] currently under review.

Georgia Tech, CLI-95-12, 42 NRC at 120 (emphasis added).

[87] Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), Licensing Board Order (Narrowing and Admitting PIIC's Safety Culture Contention) (Jan, 28, 2010) (unpublished) (Prairie Island).

The oral argument on Contention TC-1 clarified and sharpened some of the issues. Counsel for SLOMFP noted that both 10 C.F.R. §§ 54.21 and 54.29 use the word "manage" and asserted that the way the Staff and PG&E read the regulations, the word "manage" "doesn't mean anything" because "if you have a program, then that's all you need" and "no party can raise a question about whether . . . the Applicant can actually manage" the program. Tr. at 48-49. SLOMFP acknowledged that it is not challenging any specific element of PG&E's AMP, Tr. at 55, 122, but is instead concerned about how PG&E implements the program. Tr. at 55. SLOMFP also declined to challenge the behavior of specific individuals in PG&E's management. Id. Likewise, SLOMFP declined to characterize PG&E's management as "bad actors" and denied that TC-1 focuses solely on PG&E's "commitment." See id. When pressed, SLOMFP argued,

> The word is "manage." . . . there are several ingredients that go into whether you do a good job of managing something, and one would be you've got the right instructions, you've got a good set of instructions, and one would be you've got an organization that can carry it out . . . . I just don't want to cut the contention short, because the contention focuses on the word "manage."

Tr. at 121. "I would say that [PG&E's and the Staff's] position would leave the word 'management' out of the regulation." Tr. at 127.

By contrast, PG&E asserted that the only thing that the NRC can consider when it determines whether the Applicant has demonstrated that it will adequately manage aging during the PEO is the adequacy of the Applicant's paper program. Tr. at 66. "The future implementation of the aging management programs . . . it's not part of the licensing review." Tr. at 83. PG&E took the position that whether or not the company has demonstrated that it will actually manage aging during the PEO or adequately implement the AMP is simply "outside the scope" of 10 C.F.R. § 54.29. Tr. at 66. In support, PG&E cited 10 C.F.R. § 54.30, which provides that the licensee's compliance with its CLB during the current licensing term is not within the scope of the license renewal review. Tr. at 67-68. PG&E noted the "second principle

of license renewal, that the reactor oversight processes and the other regulatory processes address" current compliance. Tr. at 70.

PG&E denied that its current violations and adverse trend (as shown by NRC's three recent inspection reports) undermine PG&E's assertion that TC-1 is based on "[u]nsupported speculation that PG&E will contravene the NRC rules at some point in the future." Tr. at 71. "[I]t's unsupported because you're making a leap into the future and assuming that it [the violations] will continue to exist through the current operating license term as well as into the future, into the extended operating license term." Tr. at 72. PG&E took the position that "the past is . . . never an indicator of future results," Tr. at 73, and that allegations of a pattern of serious noncompliance or a history of current violations are outside of the scope of license renewal review. Tr. at 83-84.

Ultimately, PG&E acknowledged that there is an overlap between design/licensing basis issues under the current license and under a renewal license, but said that since they are not "unique" to the PEO, these issues are not within the scope of license renewal.

> I think all of these programs undercut everything at the plant and relate to everything, including license renewal, so I've never said that there's no overlap. But what I have said is that implementation of those program is not a license renewal licensing issue. The trend related to design and licensing basis. . . . it's not an issue that's unique to license renewal. It's not an issue unique to age-related degradation.

Tr. at 88 (emphasis added).

During the oral argument, the NRC Staff agreed that the only thing it looks at when reviewing the adequacy of PG&E's AMP is the paperwork. Tr. at 97. The Staff said that PG&E's "aging management program is adequate if it adequately describes how the Applicant will manage the effects of aging during the period of extended operations." Id. According to the Staff, whether or not the applicant will actually be able to manage or implement the AMP is irrelevant. Tr. at 98, 111. Even if the licensee is having problems understanding its current licensing basis and implementing decisions associated with the design basis of the plant, none

of this is within the scope of license renewal. Tr. at 116. Strangely, at another point, the Staff contradicted itself: "The Staff focuses on what's in the license application and the program itself and whether or not that program will get implemented adequately and ensure the safe operation of the plant." Tr. at 108-109 (emphasis added).

In the alternative, the Staff argued that, even if past performance is relevant to license renewal review, the type and quantity of violations alleged in TC-1 are insufficient to form a basis for an NRC finding that PG&E has not demonstrated reasonable assurance, as required by 10 C.F.R. § 54.29(a). Tr. at 102-03.

3. Analysis and Ruling Regarding Contention TC-1

The admissibility of Contention TC-1 hinges, in the first instance, on whether NRC is prohibited from considering a licensee's current ongoing pattern of difficulties in managing its design basis programs and activities when NRC decides whether to allow that licensee to operate its nuclear power plant for an additional 20 years into the future. If so, then TC-1 is inadmissible.

The key license renewal regulation states that NRC must decide whether the applicant has demonstrated that actions "will be taken," with respect to "managing the effects of aging during the period of extended operation," such that there is "reasonable assurance" that activities that would be authorized by the renewed license will "continue to be conducted in accordance with the CLB [Current Licensing Basis]." 10 C.F.R. § 54.29(a). Thus, the question we must answer is whether NRC is barred from considering a past and continuing performance problem relating to a poor understanding and operational implementation of the CLB when it assesses and predicts a licensee's future performance under 10 C.F.R. § 54.29(a). Contention TC-1 alleges an "ongoing pattern" of managerial difficulties and says that this is relevant under Section 54.29(a). PG&E and the NRC Staff reject this position and say the Section 54.29(a) decision must be based solely on the adequacy of the applicant's written plan describing how it will comply, i.e., its aging management program (AMP). They assert that the fact that an

applicant might be experiencing a current and ongoing pattern of problems, violations, or other difficulties, regardless of how severe, cannot be considered under 10 C.F.R. § 54.29. They conclude that TC-1 is not within the scope of this proceeding and thus fails the test of 10 C.F.R. § 2.309(f)(1)(iii).

Resolution of this issue requires a careful reading of the relevant regulations and cases. But one legal point warrants clarification at the outset, to wit: "[a]djudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC Staff review." Turkey Point, CLI-01-17 54 NRC at 10. Stated conversely: If the ability of an applicant to actually manage and/or to adequately implement an AMP cannot be raised in a contention because it is outside of the scope of 10 C.F.R. § 54.29(a), then likewise, it cannot be considered by the NRC Staff when it decides whether to allow a company to operate a nuclear power reactor for an additional 20 years.

For the reasons set forth below, it is clear to this Board that, under narrowly limited circumstances, the 10 C.F.R. § 54.29(a) determination can be informed by the applicant's past performance if it is an ongoing pattern of difficulty in managing activities and compliance that have a direct link to the applicant's ability to implement the AMP in accordance with the CLB.

The key regulation, titled "Standards for issuance of a renewed license," states, in pertinent part, as follows:

> A renewed license may be issued . . . if the Commission finds that:
> (a) Actions have been identified and have been or will be taken with respect to the matters identified in paragraphs (a)(1) . . . of this section, such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB. . . . These matters are:
> 1. managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under §54.21(a)(1).

10 C.F.R. § 54.29(a) (emphasis added).

This regulation is closely related to 10 C.F.R. § 54.21(a)(3), which requires a license renewal applicant to "demonstrate that the effects of aging will be adequately managed so that

the intended function(s) will be maintained consistent with the CLB for the period of extended operation."

The elements of 10 C.F.R. § 54.29(a) seem relatively straightforward. Before it authorizes an existing nuclear power plant to operate for an additional 20 years, the NRC must make: (1) a finding (2) that actions (3) have been identified, (4) and have been or will be taken (5) to manage (6) the effects of aging during the PEO (7) on the functionality of specified structures and components, (8) such that there is reasonable assurance (9) that the activities authorized by the renewed license (10) will continue to be conducted (11) in accordance with the CLB.

As an initial matter, the plain language of the regulation states that the Commission must conclude that there is reasonable assurance that the required aging management activities have already "been taken" or "will be taken" [Element 4]. The wording of the regulation makes clear that the "identification" of the needed actions [Element 3], such as in an AMP, is not enough. There must be assurance that the actions will actually be taken [Element 4]. Further, the Commission must conclude that these actions "will continue to be conducted" [Element 10]. And the current licensing basis, or CLB, must be complied with in the PEO as well as now [Element 11]. These are predictive findings about what the NRC thinks the applicant will actually do in the future.

Nothing in 10 C.F.R. § 54.29(a) says that a licensee's current non-compliance history or patterns of management problems or difficulties cannot be considered. Nor does the regulation say that the only thing the NRC can consider in making the 10 C.F.R. § 54.29(a) determination is the adequacy of the paperwork, i.e., the AMP that states the applicant's plan for satisfying the regulation. Neither 10 C.F.R. § 54.29 nor any of the Part 54 regulations ever use the terms "aging management program," "aging management plan," or "AMP." The regulation does not say – submit an adequate AMP. The regulation says that the applicant must demonstrate that the "effects of aging will be adequately managed." 10 C.F.R. § 54.21(a)(3). The regulation says

that the NRC must determine, to a reasonable assurance, that such a demonstration has been made. 10 C.F.R. 54.29(a).

It is clear to the Majority that, under narrow and specific circumstances, the NRC can and should consider a licensee's past performance when deciding whether to allow that licensee to operate a nuclear reactor for another 20 years. The Commission dealt with this very question in 1995. The Commission rejected the applicant's "broad claim that a license renewal proceeding is per se an inappropriate forum" to consider the adequacy of the applicant's managerial performance, and stated:

> In determining whether . . . to renew a license[], the Commission makes what is in effect predictive findings about the qualifications of an applicant. The past performance of management may help indicate whether a licensee will comply with agency standards. . . . Of course, the past performance must bear on the licensing action [renewal] currently under review.

Georgia Tech, CLI-95-12, 42 NRC at 120 (emphasis added).[88]

It is not credible to argue, in the face of three current and consecutive NRC inspections finding numerous violations and a continuing "adverse trend" in such violations, that it is "unsupported speculation" that "PG&E will contravene the NRC rules in the future." NRC itself has said that PG&E is "contravening the NRC rules" now. To argue that "the past is never an indicator of future results," Tr. at 73, runs contrary to all experience when assessing or predicting future human or managerial performance, as well as to the Commission's reasoning in Georgia Tech. When determining whether a person, or corporation, will manage the effects of aging in the future or whether "actions will be taken," it is relevant to assess how they have managed similar activities in the past. The reasoning in Georgia Tech is unassailable.[89]

[88] Similarly, the Prairie Island licensing board admitted an aging management contention based on current noncompliances. See Prairie Island at 2-3, 11-14. Although that contention specifically challenged the applicant's safety culture, the decision further supports the relevance of current and continuing noncompliance to a license renewal applicant's ability to manage aging in the future.

[89] Equally unconvincing is PG&E's argument that violations documented in 2008 and 2009 cannot be used to predict how PG&E will manage aging in 2024 and 2025, when the current

The Staff is correct in reminding us of the Commission's "general policy of not assuming that licensees will violate NRC regulations." Staff Answer at 16 (citing Oyster Creek, CLI-00-06, 51 NRC at 207). But the assumption of compliance is only an assumption, and is rebuttable. Past performance, such as NRC inspection reports of current and continuing patterns of violations, can undermine and rebut that assumption. Likewise, data on past performance difficulties can undermine and/or rebut any presumption that a renewal applicant will actually be able to manage or implement an AMP in the future. We reject the notion that the presumption of compliance is irrebutable or that, despite evidence to the contrary, the NRC must blindly assume that an applicant will always comply and/or will always be able to adequately implement future programs under any and all circumstances. This is especially so if there is a narrow and specific concern that has existed for years and continues to exist regarding the ability of a license renewal applicant to properly understand the very same CLB that it must comply with during the PEO.

We acknowledge that perfect compliance is not required. As the Staff has stated, "the Commission foresaw that plants might not operate in 'perfect compliance with all NRC requirements' when it promulgated the license renewal rule." Staff Answer at 19 (quoting Turkey Point, CLI-01-17, 54 NRC at 10). Trivial and random noncompliances that have no link to the essential elements of implementing an AMP will not support the admission of a contention alleging that the applicant has failed to demonstrate a reasonable assurance that it will in fact (as opposed to on paper) adequately manage aging of passive safety equipment in the PEO. But even the Staff acknowledges (arguing in the alternative) that "instances of non-compliance that are of sufficient magnitude and pervasiveness could support an NRC finding of no

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operating licenses for DCNPP Units 1 and 2 expire. First, under 10 C.F.R. § 54.31, if a license is renewed, then the renewed license goes into effect immediately (and would not wait until 2024 or 2025). Second, it was PG&E's decision to apply for license renewal so far in advance of the DCNPP operating license expiration dates. PG&E cannot use its own early-application strategy as the vehicle to force the Board to ignore PG&E's (alleged) current and ongoing pattern of problems.

reasonable assurance" under 10 C.F.R. § 54.29(a). Staff Answer at 22. But such a finding – of no reasonable assurance – is for the merits, whereas here, we are only concerned with whether TC-1 is within the scope of this license renewal proceeding and admissible. The absence of "perfect compliance" does not rebut the presumption of compliance or support admission of a contention. But a consistent, long standing, and continuing pattern of problems in a specific area that is relevant to managing aging equipment, will.

We also reject the Staff's dire warnings that admission of TC-1 will open the litigation floodgates, allowing "any [current] operating issue" to support a "wide ranging inquiry into PG&E's conformance with its licensing basis" and resulting in an "endless stream of contentions." Id. at 20. Certainly, the Commission has said:

> [L]icense renewal should not include a new, broad scoped inquiry into compliance that is separate from and parallel to the Commission's ongoing compliance oversight activity. Noncompliances are generally independent of (in a [causal] sense) the renewal decision. However, allegations that the implementation of a licensee's proposed actions to address age-related degradation unique to license renewal has or will cause noncompliance with the plant's current licensing basis during the period of extended operation . . . would be valid subjects for contention."

56 Fed. Reg. at 64,952 (emphasis added and footnote omitted).

But where the noncompliances are indicative of an adverse trend and are linked to (rather than independent of) the renewal, are persistent and non-trivial, and are associated with a contention that is not "broad scoped" but instead focused on a narrow and specific aging issue, then we believe that this "would be [a] valid subject for contention" and the Staff's warnings are misplaced. Thus, we hold that a narrow and specific contention that alleges facts, with supporting documentation, of a longstanding and continuing pattern of noncompliance or management difficulties, that are reasonably linked to whether the licensee will actually be able to adequately "manage aging" in accordance with the current licensing basis during the PEO, can be an admissible contention under 10 C.F.R. § 54.29(a).

We likewise reject the proposition that the admission of a contention under 10 C.F.R. § 54.29 is permissible only if the current violations are so drastic and severe that the NRC would

have to order the immediate shutdown of the nuclear reactor. Staff Answer at 21-23. SLOMFP is not alleging that there is a lack of reasonable assurance that PG&E can comply with its current license. Maybe it can, and maybe it cannot. But that is not the point of TC-1. Current compliance with the CLB or license, or the shutdown of DCNPP is not the issue. SLOMFP is arguing that PG&E has not yet shown that there is reasonable assurance that it actually will adequately manage aging in accordance with the CLB in the future, during the PEO. Second, the existence of reasonable assurance, or not, is a merits decision. It would be premature to adjudicate the merits of TC-1 at the contention admissibility stage.

Next, we reject the Dissent's proposition that TC-1 is a "character" or "bad actor" contention and must be viewed as an attack on PG&E's management's "improprieties," "integrity" or "commitment." We recognize that the Atomic Energy Act requires that each application "shall specifically state such information as the Commission . . . may determine to be necessary to decide . . . the character of the applicant." 42 U.S.C. § 2232 (AEA § 182). The line of cases under AEA § 182 (often dealing with license transfers or initial applications) establish a relatively high threshold for the admission of contentions alleging that the applicant, or its management, lack integrity or are guilty of improprieties such that the license being sought should not be granted.[90] Indeed, Georgia Tech is such a case. CLI-95-12, 42 NRC at 120 ("As part of its licensing and oversight responsibilities, the Commission may consider the adequacy of a licensee's corporate organization and the integrity of its management." (citing Vogtle, CLI-93-16, 38 NRC at 30, a case under AEA § 182)).[91]

[90] See, e.g., Vogtle, CLI-93-16, 38 NRC at 32; Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 365-67 (2001).

[91] Even in a "bad actor" case such as Georgia Tech, the Commission affirmed the admission of the "management contention" because the petitioner "seeks assurance that the facility's current management encouraged a safety-conscious attitude," id. at 121, based on a single "cadmium - 115 contamination incident" that had occurred in 1987, id. at 118-19, seven years before the license renewal application was filed. Further, we disagree with the Dissent that Georgia Tech establishes a "bright line" test (even in the bad actor cases under AEA § 182 to which it applies). The decisions under the bad actor doctrine are generally quite fact specific.

But TC-1 is based on 10 C.F.R. § 54.29(a). It is not a "character" or "bad actor" contention.[92] Unlike Georgia Tech, it is not based on AEA § 182, which was never cited in any of the pleadings. SLOMFP never alleges that PG&E's management lacks the character or integrity necessary to be relicensed, or that it or its management is not committed to implementing the AMP. None of the parties, in any of the briefs, even mentions the "character" or "bad actor" theory.[93] Instead, SLOMFP alleges that PG&E has experienced an "ongoing pattern of management failures" associated with the design and licensing basis for its safety equipment, that these "chronic and significant" problems will affect its duty to manage aging, and thus that PG&E has not demonstrated reasonable assurance that it will adequately manage aging in accordance with this design/licensing basis during the PEO as required by 10 C.F.R. § 54.29(a). TC-1 does not focus on the character or integrity of the plant management. Especially as narrowed by the Majority, TC-1 focuses on whether PG&E has carried its burden of proving that it can and will be able to adequately implement the AMP in accordance with the CLB during the PEO, as is required under 10 C.F.R. § 54.29(a), because it alleges that PG&E has had, and continues to have, a poor understanding of this same CLB.

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[92] The Dissent asserts that we have ignored and replaced the standards established in Georgia Tech and have instead created a new threshold test. We disagree. The test we are applying is 10 C.F.R. § 54.29. This is the law in this reactor license renewal proceeding, which was never cited or applied in Georgia Tech (because, inter alia, it was a research reactor case). Georgia Tech never even mentioned 10 C.F.R. § 54.29. Thus, instead of creating a new and different standard, we are relying on the language of 10 C.F.R. § 54.29 and 10 C.F.R. § 54.30. Georgia Tech is a bad actor case under AEA § 182, whereas Contention TC-1 cites and is founded on 10 C.F.R. § 54.29.

[93] Although the parties did not brief, or otherwise identify the "bad actor" doctrine to be particularly relevant to 10 C.F.R § 54.29, it was raised by Judge Abramson during the oral argument. See e.g., Tr. at 55, 77, 79. In that context, counsel for SLOMFP, apparently surprised by this new issue, stated, "if the Board thinks that the bad actor doctrine could be applied here to deny the contention, we'd just like a chance to brief the question." Tr. at 128. No one else requested such briefing. Given that the Majority of the Board does NOT think that the bad actor doctrine applies here, the request by SLOMFP is moot and we see no reason to require additional briefing or to delay our ruling on the admissibility of this contention.

Turning to another key point, it is clear, as PG&E and the Staff assert, that 10 C.F.R. § 54.29 must be read in conjunction with 10 C.F.R. § 54.30. Section 54.29 sets the criteria that must be met before NRC will allow a company to operate a nuclear power plant for an additional 20 years. The Commission must find that actions will be taken, with respect to managing the effects of aging during the PEO, such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB. 10 C.F.R. § 54.29(a).

Meanwhile, 10 C.F.R. § 54.30 sets forth "matters not subject to a renewal review." 10 C.F.R. § 54.30 has two subparts. Subpart (a) states that if the license renewal reviews:

> [s]how that there is not reasonable assurance during the current licensing term that licensed activities will be conducted in accordance with the CLB, then the licensee shall take measures . . . to ensure [that compliance is maintained] throughout the term of its current license."

10 C.F.R. § 54.30(a) (emphasis added). Subpart (b) of this regulation states: "[t]he licensee's compliance with the obligation under Paragraph (a) of this section to take measures under its current license is not within the scope of the license renewal review." 10 C.F.R. § 54.30(b) (emphasis added).

In short, 10 C.F.R. § 54.30(a) says that the licensee is obliged to correct current non-compliances now, and § 54.30(b) says that whether or not the licensee complies with its obligation to correct current noncompliances now is not within the scope of license renewal review. That is all.

Nothing in 10 C.F.R. § 54.30 bars TC-1 as narrowed. This contention focuses on future compliance, i.e., whether PG&E has demonstrated, as required by 10 C.F.R. § 54.29(a), that it can and will adequately manage aging in accordance with the CLB during the PEO. SLOMFP cites an ongoing pattern of noncompliance with the current CLB as evidence in support of its assertion that PG&E has not shown reasonable assurance that it will adequately manage aging in accordance with the CLB during the PEO. Past performance is cited as a relevant indicator

of future performance, but it is not the focus of TC-1. Instead, TC-1, especially as narrowed by this Board, is focused squarely on PG&E's future performance during the PEO, not current conduct. And TC-1 is certainly not focused on whether or not PG&E restores current compliance. Thus, TC-1 does not run afoul of 10 C.F.R. § 54.30(b), which simply states that "[t]he licensee's compliance with the obligation, under [10 C.F.R. § 54.30(a)] to take measures under its current license is not within the scope of the license renewal review." (emphasis added).

This interpretation conforms to the "first principle of license renewal." See PG&E Answer at 11.

> The first principle of license renewal was that, with the exception of **age-related degradation unique to license renewal** and possibly a few other issues related to safety only during the period of extended operation of nuclear power plants, the regulatory process is adequate to ensure that the licensing bases of all currently operating plants provides and maintains an acceptable level of safety so that operation will not be inimical to public health and safety or common defense and security.

60 Fed. Reg. at 22,464 (emphasis added).

Basically, the current regulatory process, and compliance with the CLB, is not the primary focus of license renewal. We note however that there are exceptions. For example, the Commission states: "the portion of the CLB that can be impacted by the detrimental effects of aging is limited to the design bases aspects of the CLB." Id. at 22,475.

We note further that the phrase "age-related degradation unique to license renewal," or "ARDUTLR," was deleted from the regulation in 1995. Id. at 22,464. ARDUTLR was removed because it was difficult to identify aging issues that were unique to the PEO. The uniqueness concept

> caused significant uncertainty and difficulty in implementing the [license renewal] rule. A key problem involved how "unique" aging issues were to be identified and, in particular, how existing licensee activities and Commission regulatory activities would be considered in the identification of systems, structures, and components as either subject to or not subject to ARDUTLR. The difficulty in clearly establishing "uniqueness" in connection with the effects of aging is underscored by the fact that aging is a continuing process, the fact that many licensee programs and regulatory activities are already focused on mitigating the effects of aging to ensure safety in the current operating term

> of the plant, and the fact that no new aging phenomena have been identified as potentially occurring only during the period of extended operation.

Id. In short, although the license renewal review focuses on management of aging, aging is a continuous process and the aging in question does not need to be "unique" to the PEO to be relevant to 10 C.F.R. § 54.29(a).

Even NRC's GALL report, NUREG-1801, which provides guidance on how the NRC Staff will evaluate license renewal applications, implicitly rejects the proposition that past performance is outside of the scope of 10 C.F.R. § 54.29 when evaluating whether a renewal applicant has demonstrated that it will adequately manage aging in the future. The GALL Report specifies that each AMP should include ten elements, including action-oriented elements such as corrective actions and confirmation processes. The tenth element – "operating experience" – confirms the fundamental proposition that past performance is relevant to predictions of future performance. The GALL Report states:

> Operating experience involving the aging management program, including past corrective actions resulting in program enhancements or additional programs, should provide objective evidence to support a determination that the effects of aging will be adequately managed so that the structure and component intended functions will be maintained during the period of extended operation.

GALL Report at 3 (emphasis added). Thus, the GALL Report recognizes that past actions and performance provide "objective evidence" as to future performance and can be used in the 10 C.F.R. § 54.29 determination. We agree.

Having concluded that, under narrow and specific circumstances that have a link to the applicant's ability to implement the AMP and/or to manage aging in accordance with the CLB during the PEO, the 10 C.F.R. § 54.29(a) determination can be informed by the applicant's past performance, e.g., by an ongoing pattern of difficulty or violations in managing activities and compliance that have a link to the applicant's ability to implement the AMP and/or to manage aging during the PEO, we now must decide whether TC-1, as narrowed by this Board, fits within

this limited scope. We conclude that it does and that, properly limited, TC-1 is within the scope of license renewal review.

First, it is clear that TC-1 focuses on the future, i.e., whether PG&E "can and will 'manage the effects of aging' on . . . safety equipment without moving parts." Petition at 2. The focus is on aging of "plant systems, structures, and components" enumerated in 10 C.F.R. §54.4. And, while SLOMFP cites three recent NRC inspection reports in support of TC-1, current compliance is not the gist of TC-1. The alleged current violations, and NRC's findings that PG&E has a continuing adverse trend in violations, are referenced only as indicating "an ongoing pattern of management failures," Petition at 2, that provides "objective evidence" (in the words of the GALL Report at page 3) that PG&E may not, in fact, adequately manage aging in the future in accordance with this same licensing basis, as required by 10 C.F.R. § 54.29(a).

PG&E and the Staff assert that an ongoing pattern of management failures and/or past or current violations, however severe, cannot be the subject of an admissible contention and are outside of the scope of 10 C.F.R. § 54.29(a). This goes too far. For if this were so, then the NRC Staff also would be barred from considering any evidence of past performance or non-performance in deciding whether to allow a licensee to operate a nuclear power plant for an additional 20 years. This is because the scope of the Staff's review and the scope of adjudicatory review are the same. Turkey Point, CLI-01-17, 54 NRC at 10. We cannot agree that NRC's license renewal review is forbidden under all circumstances from considering past performance when evaluating whether the applicant will actually be able to manage aging in the future. That is not what 10 C.F.R. § 54.29(a) says. That is not what Section 54.30(a) says. We do not believe that NRC's license renewal review is limited to evaluating whether a piece of paper, i.e., the AMP, conforms to another piece of paper, i.e., the GALL Report. Compliance with 10 C.F.R. § 54.29(a) is not achieved simply via a Xerox machine. It is more than just a paperwork determination.

Here, where the Petitioner cites highly credible "objective evidence" (i.e. findings by NRC itself that DCNPP has a continuing adverse trend) of an ongoing pattern of difficulties involving the plant design/licensing basis, the presumption articulated in Oyster Creek, CLI-00-06, 51 NRC at 207 – that the applicant will be able to comply in the future – is sufficiently rebutted to allow, at least, the admission of a contention. Whether or not these alleged problems mean that PG&E is unable to satisfy the requirements of 10 C.F.R. § 54.29 is a merits determination for a later stage of this proceeding.

As we see it, the key link between the alleged "ongoing pattern of management failures" and the ability, or not, of PG&E to manage age related degradation of relevant systems, structures and components, relates to "poor licensee management of plant design/licensing basis." IIR 09-03 at 21. NRC's findings that PG&E has violated 10 C.F.R. § 50.59 illustrate, according to the report, "the failure of the licensee to recognize a condition outside of the plant design basis." Id. at 22. Likewise, the failure of PG&E to maintain adequate capacity of the emergency diesel generators illustrates the "failure of the licensee to understand and apply the plant design and licensing basis." Id. The NRC IIR findings of PG&E's (alleged) failure to understand its licensing/design basis are cited by SLOMFP, Petition at 4-5, and are part of its allegation that there is an "ongoing failure of PG&E to properly identify, evaluate and resolve problems and manage safety equipment." Id. at 3. These problems fit precisely within the Commission's statement that "allegations that the implementation of a licensee's proposed actions to address age-related degradation unique to license renewal has or will cause noncompliance with the plant's current licensing basis during the period of extended operation . . . would be valid subjects for contention." 56 Fed. Reg. at 64,952 n.1 (emphasis added).

The Majority believes that this specific alleged failure of PG&E to properly understand its design/licensing basis and its inability to correct this problem over several years would be a serious factor in determining whether there is reasonable assurance that it will adequately

manage aging in accordance with this licensing basis in the future, and that this is the admissible core of TC-1. Thus, we will narrow TC-1 as follows:

> The applicant, Pacific Gas & Electric Company (PG&E), has failed to satisfy 10 C.F.R. § 54.29's requirement to demonstrate a reasonable assurance that it can and will "manage the effects of aging" in accordance with the current licensing basis. PG&E has failed to show how it will address and rectify an ongoing adverse trend with respect to recognition, understanding, and management of the Diablo Canyon Nuclear Power Plant's design/licensing basis which undermines PG&E's ability to demonstrate that it will adequately manage aging in accordance with this same licensing basis as required by 10 C.F.R. § 54.29.

As so narrowed, and as concretely supported by recent NRC inspection reports, TC-1 will not open the floodgates to "an endless stream of contentions." NRC Answer at 20. As so narrowed, we conclude that TC-1 is within the scope of license renewal review and, accordingly, satisfies 10 C.F.R. § 2.309(f)(1)(iii).[94]

Before closing on TC-1, we turn to the only other significant argument presented against its admission. Both PG&E and the NRC Staff assert that TC-1 "lacks sufficient information to demonstrate a genuine dispute on a material issue of law or fact" as is required by 10 C.F.R. § 2.309(f)(1)(vi). PG&E Answer at 9-10, NRC Answer at 22. "Given the quantity and magnitude of these inspection findings, they are not the type of violations that can cause the NRC to be unable to find reasonable assurance." NRC Answer at 22. For reasons stated above and the narrowed contention, we disagree. The specific NRC inspection finding that PG&E has a poor understanding of its design/licensing basis, the longstanding (and continuing) duration of this

[94] We disagree with the Dissent that we are recasting TC-1 outside of its original scope. TC-1, as originally submitted, was broader, alleging a general "ongoing pattern of management failures with respect to the operation and maintenance of safety equipment." Petition at 2. TC-1, as we have reformulated it, focuses on a narrower (but we believe crucially important) subset of such "management failures," to wit: "an ongoing adverse trend with respect to recognition, understanding and management of Diablo Canyon Nuclear Power Plant's design/licensing basis." SLOMFP cited to a broad array of issues and findings of violations identified in NRC's three recent inspection reports. But we have not admitted such a broad contention. However, in the five pages devoted to TC-1, SLOMFP quoted the IIR's findings that PG&E's poor management of its plant design/licensing basis three times. Petition at 4, 5. Focusing TC-1 on poor management of its design/licensing basis is narrower than, but still within the ambit of, the original TC-1.

problem, and the NRC conclusion that "the licensee's causal analysis was narrowly focused on the NRC rather than addressing the broader issue of organizational barriers to effective problem evaluation," IIR 09-05 at 35, provide sufficient information for the admission of this narrowed contention under 10 C.F.R. § 2.309(f)(1)(vi).

VI. SELECTION OF HEARING PROCEDURES

A. Legal Standards

As required by 10 C.F.R. § 2.310, upon admission of a contention, the Board must identify the specific hearing procedures to be used. NRC regulations provide for a number of different hearing procedures, two of which are relevant here.[95] First, Subpart G of 10 C.F.R. Part 2, which is mandated for certain proceedings, see, e.g., 10 C.F.R. § 2.310(d), establishes NRC "Rules for Formal Adjudications," where parties are permitted to "propound interrogatories, take depositions, and cross-examine witnesses without leave of the Board."[96] Second, Subpart L of 10 C.F.R. Part 2 provides for more "informal" proceedings where discovery is prohibited (except for (1) specified mandatory disclosures under 10 C.F.R. § 2.336(f), (a), and (b); and (2) the mandatory production of the hearing file under 10 C.F.R. § 2.1203(a)). 10 C.F.R. § 2.1203(d). Under Subpart L, the Board has the principal responsibility to question the witnesses. 10 C.F.R. § 2.1207(b)(6).

The standard for allowing the parties to conduct cross-examination is the same under Subparts G and L, to wit – the Administrative Procedure Act (APA) standard for cross-examination in formal administrative proceedings as set forth in 5 U.S.C. § 556(d) ("A party is entitled . . . to conduct such cross examination as may be required for a full and true disclosure

[95] If the hearing on a contention is "expected to take no more than two (2) days to complete," 10 C.F.R. § 2.310(h)(1), the Board can impose the Subpart N procedures for "Expedited Proceedings with Oral Hearings" specified at 10 C.F.R. §§ 2.1400-2.1407. These procedures are highly truncated, but may prove appropriate for certain contentions at a later stage.

[96] Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131, 201-02 (2006).

of the facts."). See Citizens Awareness Network, Inc. v. NRC, 391 F.3d 338, 351 (1st Cir. 2004); see also 69 Fed. Reg. at 2195-96. This is a liberal standard, but even under the APA § 556(d) there is no absolute right to cross-examination. Seacoast Anti-Pollution League v. Costle, 572 F.2d 872, 880 (1st Cir. 1978). And even though the APA § 556(d) substantive standard is the same under Subpart G and L, NRC's procedures differ. Cross-examination occurs virtually automatically in Subpart G hearings, subject to normal judicial management and the requirement to file a cross-examination plan. See 10 C.F.R. §§ 2.319, 2.711(c). In contrast, under Subpart L, a party seeking to conduct cross-examination must file a written motion and obtain leave of the Board. 10 C.F.R. § 2.1204(b).

The Board determines which hearing procedure to use on a contention-by-contention basis.[97] The key regulation enumerates specific situations where a certain procedure is mandated or available, 10 C.F.R. § 2.310(b)-(h), and states that if a contention does not fall within one of those categories, "proceedings . . . may be conducted under the procedures of Subpart L of this part." 10 C.F.R. § 2.310(a) (emphasis added). Thus, if no particular procedure is compelled, the Board must exercise its discretion and select the hearing procedure most appropriate for the newly admitted contentions.[98] A general discussion of this issue is found in Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-04-31, 60 NRC 686, 704-06 (2004).

Under 10 C.F.R. § 2.309(g), if a petitioner relies upon 10 C.F.R. § 2.310(d) in requesting a Subpart G proceeding, then the petitioner must demonstrate, by reference to the contention,

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[97] See, e.g., 10 C.F.R. §§ 2.309(g) and 2.310(d) (Subpart G used if the "resolution of the contention" meets specified criteria); Vermont Yankee, LBP-06-20, 64 NRC at 202.

[98] While the first section in each Subpart addresses the "Scope" of the Subpart, these are not consistent with 10 C.F.R. § 2.310, and are mutually contradictory. For example 10 C.F.R. § 2.1200, "Scope of subpart L," and 10 C.F.R. § 2.1400. "Purpose and scope of subpart N," both state that "The provisions of this subpart . . . govern all adjudicatory proceedings" with an identical list of exceptions. This is not what § 2.310 states, and is simply not possible (e.g., Subpart L and Subpart N cannot simultaneously govern license renewal proceedings for materials licensees).

that its resolution "necessitates resolution of material issues of fact which may best be determined through the use of the identified procedures." See also id. § 2.310(d) (Subpart G will be used where resolution of a contention "necessitates resolution of material issues of fact relating to the occurrence of a past activity where the credibility of an eyewitness may reasonably be expected to be at issue and/or issues of the motive or intent of the party or eyewitness material to the resolution of the contested matter.").

B. Ruling

None of the parties has addressed the issue as to which hearing procedures should apply to the contentions. In these circumstances, the Board concludes that, for the time being, the Subpart L hearing procedures will be used to adjudicate each of the admitted contentions. We reach this result as follows. First, we find that there has been no showing under 10 C.F.R. § 2.310(d) that the Subpart G procedures are mandated for any of the admitted contentions. Second, exercising our discretion under 10 C.F.R. § 2.310(a), we have seen no reason or need to apply the Subpart G procedures to any of the admitted contentions. Cross-examination is equally available under Subparts L and G. We therefore rule that, for the time being, the procedures of Subpart L will be used for the adjudication of each of the admitted contentions.[99]

VII. CONCLUSION AND ORDER

For the reasons set forth above, the Board rules as follows:

A. Petitioner San Luis Obispo Mothers for Peace (SLOMFP) has standing as required by 10 C.F.R. § 2.309(a) and (d);

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[99] The selection of hearing procedures for contentions at the outset of a proceeding is not immutable because, inter alia, the availability of Subpart G procedures under 10 C.F.R. § 2.310(d) depends critically on whether the credibility of eyewitnesses is important in resolving a contention, and witnesses relevant to each contention are not identified, under 10 C.F.R. § 2.336(a)(1), until after contentions are admitted. See Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-07-15, 66 NRC 261, 272 (2007); see also 10 C.F.R. § 2.1402(b).

B. Petitioner has propounded at least one admissible contention as required by 10 C.F.R. § 2.309(f)(1)(i)-(vi);

C. Therefore, the request for hearing and petition to intervene by SLOMFP is granted;

D. Contention EC-1, as narrowed and restated on Appendix A, is admitted;

E. SLOMFP has made a prima facie showing, pursuant to 10 C.F.R. §2.335(b), supporting the waiver request relating to Contention EC-2;

F. Contention EC-2, as narrowed and restated on Appendix A, is admitted, subject to the Commission ruling on the merits of the SLOMFP request for waiver;

G. Contention EC-4, as narrowed and restated on Appendix A, is admitted and is referred to the Commission pursuant to 10 C.F.R. § 2.323(f)(1); and

H. SLOMFP has failed to make a prima facie showing, pursuant to 10 C.F.R. § 2.335(b), supporting the waiver request relating to Contention EC-3 and therefore it will not be considered further.

In addition, a majority of the Board concludes that Contention TC-1, as narrowed and restated on Appendix A, is admissible. Therefore it is admitted.

Finally, in light of the fact that Contention EC-2 requires a ruling by the Commission with regard to the waiver request, the Board suspends the duty of the parties and the NRC Staff to make mandatory disclosures (pursuant to 10 C.F.R. § 2.336(a) and (b)) and the duty of the Staff to produce the hearing file (pursuant to 10 C.F.R. § 2.1203(a)), concerning EC-2 until thirty (30) days after the Commission rules on the waiver request. Likewise, we suspend the duties to make mandatory disclosures and to produce the hearing file with regard to EC-4 until thirty (30) days after the Commission rules on the referral. The mandatory disclosures and production of hearing file with regard to Contention EC-1 and TC-1 are not suspended and are due thirty (30) days after today's decision. See 10 C.F.R. §§ 2.336(a)-(b) and 2.1203(a).[100]

[100] The filing of a motion for reconsideration or an interlocutory appeal is not a basis for suspending mandatory disclosures or production of the hearing file.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD[101]

/RA/
Alex S. Karlin, Chairman
ADMINISTRATIVE JUDGE

/RA/
Nicholas G. Trikouros
ADMINISTRATIVE JUDGE

Rockville, Maryland
August 4, 2010

[101] The separate opinion of Judge Abramson, concurring in part and dissenting in part, is attached.

SEPARATE OPINION BY JUDGE ABRAMSON

CONCURRING IN PART AND DISSENTING IN PART

I agree with my colleagues regarding the disposition of Contentions EC-1 through EC-4, but in my view, the Majority's decision regarding TC-1 is based upon a series of fundamental flaws, leading to an erroneous result. TC-1 is inadmissible.

As submitted, Contention TC-1, entitled "Failure to demonstrate adequacy of program for management of aging equipment," is as follows:

> The applicant, Pacific Gas & Electric Company (PG&E), has failed to satisfy 10 C.F.R. § 54.29's requirement to demonstrate a reasonable assurance that it can and will "manage[e] the effects of aging" on equipment that is subject to the license renewal rule, i.e., safety equipment without moving parts. In particular, PG&E has failed to show how it will address and rectify an ongoing pattern of management failures with respect to the operation and maintenance of safety equipment.

Petition at 2.

The Majority recasts TC-1, to find it admissible, as follows:

> The applicant, Pacific Gas & Electric Company (PG&E), has failed to satisfy 10 C.F.R. § 54.29's requirement to demonstrate a reasonable assurance that it can and will "manage the effects of aging" in accordance with the current licensing basis. PG&E has failed to show how it will address and rectify an ongoing adverse trend with respect to <u>recognition, understanding, and management of the Diablo Canyon Nuclear Power Plant's design/licensing basis</u> which undermines PG&E's ability to demonstrate that it will adequately manage aging in accordance with this same licensing basis as required by 10 C.F.R. § 54.29.

(emphasis added).

For a number of reasons, I disagree with the Majority's treatment of Contention TC-1. To begin with, the Majority recasts TC-1 to address an issue not argued by SLOMFP, and in so doing treads upon fundamental principles regarding the latitude of licensing boards to read missing information into a contention. In addition, I believe the Majority has misinterpreted our regulations and Commission precedent to enable a challenge to management. Finally, the Majority has developed its view of what should be admissible based upon the foregoing errors

and an interpretation of the applicable regulation in a vacuum – resulting in both (a) ignoring the principles of the only Commission case addressing the circumstances under which a challenge to management might be found to present sufficient foundation for an admissible contention, as well as the Commission's explicit discussion in the rulemaking proceeding regarding license renewals, and (b) a wholly new criterion for admissibility which vitiates our "strict by design" principles, instead admitting a contention which does nothing more than provide "notice" of issues it intends to raise and deferring all the relevant threshold matters to hearing on the merits. I address these flaws below.

A. The Majority Impermissibly Recasts TC-1 Well Outside its Original Scope.

My colleagues' first error lies in their recasting of contention TC-1 using information not argued by Petitioner but obtained from the Majority's detailed review of the copies of three recent NRC inspection reports of DCNPP provided by Petitioner as attachments to its pleadings as examples of the asserted "ongoing pattern of management failures." The Majority itself finds in those inspection reports, with no intimation from SLOMFP that it intends to assert it, "a past and continuing performance problem relating to a poor understanding and operational implementation of the CLB." Majority Opinion at 79 (emphasis added). But Petitioner nowhere mentions any failure to "understand" the CLB, its only expansion on the generalized assertion of the contention itself being the assertion that "PG&E's aging management program is deficient because it does not discuss how it will avoid repeating the chronic and significant errors it is currently committing in the management of safety equipment at DCNPP." Petition at 3.

The Majority characterizes this as "an ongoing pattern of difficulty in managing activities and compliance that have a direct link to the applicant's ability to implement the AMP in accordance with the CLB." Majority Opinion at 80. Acknowledging that perfect compliance with the CLB is not required, the Majority asserts that a perfect plan in-and-of itself is insufficient, and that the presumption that an Applicant will indeed properly implement the "perfect plan" can be rebutted (a principle which makes some sense to me, under appropriate circumstances –

circumstances which must be, but are not, adequately defined by the Majority and are not present in this case). The Majority holds that "a consistent, long standing, and continuing pattern of problems in a specific area that is relevant to managing aging equipment, will" rebut a presumption of compliance and support admission of a contention. Id. at 83. Without addressing the boundaries of its criteria, and based upon its own detailed review of the inspection reports, and for all practical purposes unsupported by the explicit pleadings of SLOMFP, the Majority recasts the contention to become admissible under its newly constructed admissibility criteria.[1]

But Petitioner never suggests any failure to "recognize or understand" the design basis or CLB (which are, as I see it, the principal reasons for the Majority's finding of admissibility of TC-1),[2] only mentioning the CLB once in its pleadings as it recites the relevant portion of 10 C.F.R. § 54.29[3] and mentioning the design basis generally in a series of references to the inspection reports, beginning with describing one of the inspection reports in which "[t]he

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[1] The Majority's admissibility criterion is

> that a narrow and specific contention that alleges facts, with supporting documentation, of a longstanding and continuing pattern of noncompliance or management difficulties, that are reasonably linked to whether the licensee will actually be able to adequately "manage aging" in accordance with the current licensing basis during the PEO, can be an admissible contention under 10 C.F.R. § 54.29(a).

Id. at 84. Going on, the majority finds

> TC-1 . . . as narrowed by the Majority, . . . focuses on whether PG&E has carried its burden of proving that it can and will be able to adequately implement the AMP in accordance with the CLB during the PEO, as is required under 10 C.F.R. § 54.29(a**), because it alleges that PG&E has had, and continues to have, a poor understanding of this same CLB**.

Id. at 86 (emphasis added).

[2] Further, had Petitioner intended to make, or made, such an assertion, it must be more than a bare assertion – it must be supported by reasoning explaining just what elements of the design basis or CLB are not understood or recognized and, probably, by an expert opinion supporting the assertion as was provided in the Georgia Tech case discussed below. See infra section C.

[3] "A renewed license may be issued . . . if the Commission finds that (a) actions have been identified and have been or will be taken with respect to the matters identified in paragraphs (a)(1) and (a)(2) of this section, such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB."

inspectors then identified thirteen separate examples of instances of 'poor licensing and design basis management.'" Petition at 4. Petitioner simply never made any assertion resembling the assertions the Majority interprets to be contained in the generalized claim of TC-1.[4] Instead, in my view, the Majority has scoured the inspection reports and seized upon the issues it finds therein to justify recasting TC-1 as an assertion that the Licensee fails to have an adequate recognition and understanding of the CLB and "has failed to show how it will address and rectify an ongoing adverse trend with respect to recognition, understanding, and management of the Diablo Canyon Nuclear Power Plant's design/licensing basis." Majority Opinion at 91. While it may well be true that these explicit failures the Majority finds to have been raised by their interpretation of these inspection reports[5] should give rise to concern, they have not been raised by SLOMFP and, further, seem to me to be matters for current enforcement.[6] This recasting

[4] The closest SLOMFP comes to such an assertion is its "wrap-up" sentence in its discussion of TC-1, stating "PG&E has shown that it cannot adequately identify, evaluate, and resolve maintenance problems involving safety equipment and systems," Petition at 5, a statement addressing, in my view, matters of current, not future, compliance.

[5] That this is the case is apparent from the inquiry by the Majority at the oral argument: "Those inspection reports that you chose -- chose them well -- but maybe not for the reasons that you originally -- that you were thinking. But they bring out a concern that I'd like to get resolved here." Tr. at 58.

[6] In this sense, I agree with the Staff and Applicant that matters raised here, absent satisfaction of definitive criteria regarding admissibility of such a contention in a license renewal case, are outside the scope of this proceeding. As the Applicant succinctly put it:

> To the extent that the Petitioners are attempting to rely on the trend identified in the various inspection reports that they cite, they do not link the trend to aging-related mechanisms, programs, or analyses. In fact, the examples cited by Petitioners involve discrete performance or compliance issues — that is, issues that are not within the scope of the limited license renewal review. For example, Petitioners cite several instances of failures to perform adequate evaluations under 10 C.F.R. § 50.59, including an evaluation of containment sump modifications. Pet. at 4. The inspection reports cited by Petitioners also mention PG&E's failure to recognize a condition outside of the plant design basis relating to a potentially explosive mixture of oxygen and hydrogen and a failure to maintain design control for emergency diesel generators. *Id*. at 4-5. But sump modifications and design control failures do not implicate age-related

goes, in my view, far afield of what is permissible adjudicatory latitude in interpreting generalized assertions, amounting to the Board itself creating an admissible contention where none was asserted. The Board may not make assumptions of fact that favor the petitioner or rewrite the contention using information and arguments that were lacking from the Petition.[7]

B. The Majority Fails to Properly Apply Relevant Precedent

The Majority refers us to two precedents (the Commission's ruling in Georgia Tech, CLI-95-12, 42 NRC at 120, and the Commission's final rulemaking for license renewal, 56 Fed. Reg. 64,943 (Dec. 13, 1991), for its view that past performance of this licensee indicating a pattern of similar management failures is sufficient to form the basis of an admissible contention. But neither of those precedents supports the Majority's legal analysis or proposition.

First, the Majority refers us to the Commission's holding in Georgia Tech, which appears to be the seminal precedent for establishment of criteria for admissibility of a contention challenging management in a license renewal. But the Majority on one hand uses this case to support their proposition that management is challengeable, and on the other hand disclaims the analysis that the Commission laid out therein regarding the level of management problems which are sufficient to permit admissibility of such a challenge. The Majority would have us distinguish Georgia Tech from the present case because, it asserts, it is a "bad actor"

> degradation. Instead, such modifications implicate the CLB, which, as discussed above, is outside the scope of the license renewal review. 56 Fed. Reg. at 64946. The NRC's ongoing regulatory processes are adequate to ensure compliance with the CLB during both the current and renewed license terms. . . . License renewal focuses on aging issues, not on everyday operating issues.

PG&E Answer at 9-11.

[7] See, e.g., Crow Butte Res., Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 552-53 (2009); Andrew Siemaszko, CLI-06-16, 63 NRC 708, 720-21 (2006); see also Georgia Tech, LBP-95-6, 41 NRC at 305; Ariz. Pub. Serv. Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991), Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 422 (2001).

(management integrity) case challenging compliance with AEA requirements.[8] But Georgia Tech is not entirely about management integrity – it is also about the corporate management structure, which certainly is an integrity-neutral structural matter regarding which employees have what responsibilities. And even if we are to accept the Majority's argument that Georgia Tech should not be binding precedent for the present case, it lucidly sets forth a well reasoned threshold which the Commission has established for admissibility of a management challenge, and that threshold must not be ignored and replaced, as the Majority has done, with a new threshold sewn from whole cloth without foundation and without establishing definitive criteria which have guided it in finding satisfaction of our "strict by design" criteria for contention admissibility. From my perspective, a licensing board cannot ignore the analysis of, and threshold established by, the Commission in what I perceive as plainly relevant circumstances, whether that case regarded a challenge raised under the AEA or 10 C.F.R. Part 54. The distinction is illusory.

To begin with, the Majority recites a portion of the Georgia Tech holding to support its proposition that challenges to whether management will actually implement its AMPs are admissible:

> the Commission stated clearly "In determining whether . . . to renew a license, the Commission makes what is in effect predictive findings about the qualifications of an applicant. The past performance of management may help indicate whether a licensee will comply with agency standards. . . Of course, the past performance must bear on the licensing action [renewal] currently under review

Majority Opinion at 75 n.86 (quoting Georgia Tech, CLI-95-12, 42 NRC at 120), and repeated in the body at 82.

But the Majority takes that quotation out of context. The Commission qualified the quoted statement in the very next sentence to indicate it had in mind some sort of threshold of

[8] SLOMFP stated at oral argument that it does not question management integrity itself, but questions whether management will actually live up to its commitments to implement the AMPs discussed in its license renewal application. Tr. at 55-56.

"proof" (support) which it would find necessary for admissibility: "If GANE can prove that the GTRR's current management either is unfit or structured unacceptably, it would be cause to deny the license renewal or condition renewal upon modifications." Georgia Tech, CLI-95-12, 42 NRC at 121 (emphasis added). And, in fact, there is much more to that portion of the Georgia Tech ruling.[9]

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[9] The following is, in my view, the relevant text from Georgia Tech describing the two management-related issues (commencing at 119):

> GANE's central concern appears to be that there is a need to restructure the GTRR's management to make radiation safety personnel "independent" of the director, and to ensure independent oversight over the director's office. GANE believes that the GTRR director withheld safety-related information from the NRC, and was responsible for alleged retaliation against radiation safety personnel who reported the cadmium-115 contamination incident to the NRC in the late 1980s. GANE alleges that management changes after the 1987 incident further "consolidat[ed] the power under the harasser," making it less likely that radiation safety personnel would feel free to report safety concerns. GANE also questions the effectiveness of the Nuclear Safeguards Committee, a committee of twelve safety experts tasked with monitoring the GTRR's operations. Because the GTRR's management is now "being put forth again to be re-okayed," GANE requests that the current structure not be reapproved. . . . At the outset, the Commission rejects Georgia Tech's broad claim that a license renewal proceeding is per se an inappropriate forum in which to raise management allegations**. As part of its licensing and oversight responsibilities, the Commission may consider the adequacy of a licensee's corporate organization and the integrity of its management. When relevant, the Commission has evaluated whether a licensee's management displays the "climate," "attitude," and "leadership" expected. In determining whether to grant a license (or, by logical extension, to renew a license)**, the Commission makes what is in effect predictive findings about the qualifications of an applicant. The past performance of management may help indicate whether a licensee will comply with agency standards. **When a licensee files a license renewal application, it represents "an appropriate occasion for apprais[ing] . . . the entire past performance of [the] licensee." Of course, the past performance must bear on the licensing action currently under review. Moreover, the NRC Staff conclusion in 1988 that Georgia Tech had corrected all deficiencies and could be permitted to restart operations is not itself enough to preclude GANE from raising questions about the GTRR's management, particularly in the absence of any clear prior opportunity for GANE to pursue claims at a hearing. A Staff conclusion alone does not defeat the right to litigate a contention.** . . . Allegations of management

improprieties or poor "integrity," of course, must be of more than historical interest: they must relate directly to the proposed licensing action. **Accordingly, this proceeding cannot be a forum to litigate whether Georgia Tech made mistakes in the past, but must focus on whether the GTRR as presently organized and staffed can provide reasonable assurance of candor and willingness to follow NRC regulations. Here, while the question is a close one, the Commission declines to disturb the Board's finding that GANE's management allegations are relevant to the proposed license renewal.** This is a proceeding to extend a license for 20 years. GANE seeks assurance that the facility's current management encourages a safety-conscious attitude, and provides an environment in which employees feel they can freely voice safety concerns. GANE's allegations bear directly on the Commission's ability to find reasonable assurance that the GTRR facility can be safely operated. **If GANE can prove that the GTRR's current management either is unfit or structured unacceptably, it would be cause to deny the license renewal or condition renewal upon modifications.**

CLI-95-12, 42 NRC at 119-21 (emphasis added) (internal citations omitted). And, the holding goes on to state:

> But as required by the Commission's contention rule, GANE at this stage has presented "alleged facts or expert opinion" and made a "minimal showing" that material facts about the GTRR's management organization are in dispute and that further inquiry may be appropriate. GANE refers not just to the 1987 cadmium incident, but also to the NRC inspection and investigation reports on the incident, the GTRR's own SAR in support of its license renewal request, newspaper articles, **and, significantly, to at least one expert witness in support of the contention**. **Although the cadmium-115 incident that GANE highlights is far from recent, it was a significant Severity Level III violation that resulted in two immediately effective suspension orders, an NRC investigation, an enforcement conference, and a civil penalty, and ultimately was attributed to management failures that "could have resulted in very serious safety consequences." The incident involved allegations of harassment and reprisals by Georgia Tech management against employees who reported safety concerns to the NRC. These allegations led to an extensive NRC Office of Investigations (OI) review that proved inconclusive.** GANE takes the view that the management problems leading to the 1987 incident remain and indeed have been exacerbated by more recent changes in the GTRR management structure. The 1987 incident is not one in which all of the principal individuals alleged to have played a role have since left the facility or moved to positions unassociated with day-to-day operations.

Id. at 121-22 (emphasis added) (internal citations omitted).

What is more, the Commission then established the requisite extent of support for admissibility of such a contention, finding, in deciding not to disturb the licensing board's admission of a contention, three fundamental factors: (a) that the incidents referred to had been of such severity level that they resulted in two immediately effective suspension orders; (b) that civil penalties were also assessed; and (c) that it was significant that there had been an expert report supporting the petition to intervene.

None of those factors are mentioned by the Majority, and none are present in the circumstances asserted in TC-1. Plainly and objectively viewed, Georgia Tech regards a challenge to a license renewal based upon a challenge to two distinct facets of management – one regarding character,[10] and one not regarding character - founded in severe security level violations, suspension orders and civil penalties, and even supported by an expert opinion. Even with this support, the Commission described its decision as a close one, thereby providing clear guidance to a threshold (bright line) regarding the level of management problems during the current operational term which may be sufficient to permit a challenge to management in the PEO. It establishes a line for admissibility much more clear, and plainly consistent with its principles that contention admissibility criteria are strict by design, than the Majority's view here – that a consistent, long standing, and continuing pattern of problems in a specific area that is relevant to managing aging equipment and which are found to be failures to comply with the current licensing basis provides sufficient support for admission of such a contention.

In an effort to avoid being bound by those criteria, the Majority characterizes Georgia Tech as an attack upon management character under requirements of the AEA and attempts to distinguish it from the challenges under our own regulations presented by SLOMFP.[11] But even

[10] The line of cases regarding this sort of challenge was discussed briefly by the Board with SLOMFP, Tr. at 55-56, and extensively with the Applicant at oral argument, Tr. at 76-81.

[11] In this regard, when asked at oral argument about "bad actor" cases and their precedential effect in this instance, the Parties acknowledged that they had not addressed such cases and requested the opportunity to brief the Board if they were to be relevant to our decision. See Tr.

if I were to accept the distinction (which I do not), the difference of the nature of the legal assertion cannot serve to justify the wholesale replacement of the explicit standards established in Georgia Tech with an entirely new vague criterion. Further, there is a plain link between the type of assertions sufficient to bring a contention under the AEA and under our regulations: continuity of the offending management - which is a necessary, but not sufficient, condition to success of an assertion of failure to demonstrate management will indeed carry out its plans for aging management, whether made under a claimed failure to comply with the AEA or 10 C.F.R. Part 54. And that fact was recognized by SLOMFP, which explicitly links the past performance of management to the expected performance of management during the PEO by asserting that the current management will be managing aging during the PEO.[12]

The Majority's efforts to ignore the analyses and strict admissibility criteria (amounting to a bright line threshold)[13] established by the Commission in Georgia Tech must fail. The Majority offers no other binding precedent regarding a challenge to whether current management will indeed live up to its commitment during the PEO,[14] instead referring us to a recent licensing board ruling (currently being appealed) admitting a similar contention based upon an asserted

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at 79-80 (counsel for PG&E citing a case "based on my own experience" rather than cited in PG&E's Answer), 128.

[12] "As explained on page B-4, during the license renewal term, PG&E will use the same personnel to manage aging equipment that are described in the Final Safety Analysis Report for DCNPP, i.e., that PG&E currently uses." Petition at 3.

Indeed SLOMFP's explicit reference to continuity of management is a much more direct and explicit link to this factor than any link found in their pleadings to an assertion that the Applicant fails to comprehend its CLB.

[13] The Commission found that decision a "close call"; i.e. a lesser set of circumstances would likely have resulted in reversal – thus establishing a set of minima amounting to a bright line.

[14] Indeed, although the Majority avers there is some distinction between challenging management's character and challenging its willingness or desire or ability to carry out the commitments undertaken by even a "perfect plan," I fail to see any substantive difference between a challenge to management character and a challenge in effect asserting that management will not live up to its commitment embodied in such a "perfect plan."

absence of a current adequate safety culture.[15] For these reasons, I find inappropriate and insufficient the Majority's newly created threshold test, which entirely ignores the much more stringent bright line test of Georgia Tech.

Second, and as its only other legal authority for the position it propounds, the Majority finds, buried in a footnote in the nearly forty page 1991 final rule of the Commission regarding license renewal, 56 Fed. Reg. 64,943, the same principle that it wishes to deploy to support its conclusion. The Majority refers us to the following excerpt of a footnote:

> However, allegations that the implementation of a licensee's proposed actions to address age-related degradation unique to license renewal has or will cause noncompliance with the plant's current licensing basis during the period of extended operation . . . would be valid subjects for contention.

Majority Ruling at 83 (citing 56 Fed. Reg. at 64,952 n.1).

To begin with, the Majority misinterprets the meaning of this footnote, which merely advises that an assertion that the actual implementation of the letter of an applicant's plan would cause non-compliance with the CLB is a "valid subject for contention" under the appropriate circumstances, a view no one could question. It does not focus upon management at all – it focuses upon the plan – saying the Commission sees a valid contention in a challenge that the plan itself, when implemented, would result in non-compliance with the CLB. And, of equal import, by so editing and parsing this latter quotation from the footnote, the Majority omits the material qualifier in that particular footnote – which is "since the claim essentially questions the adequacy of the licensee's program to address age-related degradation unique to license renewal." 56 Fed. Reg. at 64,952 n.1 (emphasis added). Thus, not only does that footnote not support the new test for contention admissibility the Majority creates,[16] but it focuses upon the

[15] Majority ruling at 75 n.87 (citing Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), Licensing Board Order (Narrowing and Admitting PIIC's Safety Culture Contention) (Jan, 28. 2010) (unpublished)).

[16] In point of fact, the relevant text surrounding the referenced portion of the 1991 Federal Register notice is as follows:

"program" and its adequacy, and simply states that there could be circumstances in which allegations that the actual future implementation of the specific actions set out in the program would, in and of themselves, cause non-compliance with the CLB.[17] That footnote, taken in

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> The inspection program, as discussed in NRC Inspection Manual Chapter **(IMC)** 2500, Reactor Inspection Program, and IMC-2515; Light-Water Reactor Inspection Program- Operations Phase, and as implemented, provides reasonable assurance that conditions adverse to quality and safe operation are identified and corrected and that a formal review of compliance by a plant with its licensing basis is not needed as part of the review of that plant's renewal application. Both the licensees' programs for ensuring safe operation and the Commission's regulatory oversight program have been effective in identifying and correcting plant-specific noncompliance with the licensing bases. These programs will continue to be implemented throughout the remaining, term of the operating license, as well as the term of any renewed license. In view of the comprehensiveness, effectiveness, and continuing nature of these programs, the Commission concludes that license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to the Commission's, ongoing compliance oversight activity. Noncompliances are generally independent of (in a casual sense) the renewal decision. [FN1] For example, failures to comply with station blackout requirements are not "caused" by the impending expiration of an operating license.
>
> FN1 However, allegations that the implementation of a licensee's proposed actions to address age-related degradation unique to license renewal has or will cause noncompliance with the plant's current licensing basis during the period of extended operation, or that the failure of the licensee to address age-related degradation unique to license renewal in a particular area has or will cause such noncompliance during the period of extended operation would be valid subjects for contention, <u>since the claim essentially questions the adequacy of the licensee's program to address age-related degradation unique to license renewal</u>.

56 Fed. Reg. at 64,952 (emphasis added).

[17] And it seems to me that this is precisely what SLOMFP was asserting. When discussing this in the oral argument, counsel for SLOMFP stated

> Well, I -- we weren't contemplating challenging the behavior of individuals because it seems -- well, the -- we distinguish between the program, which is a written thing, like this is instructions for how you do it, and the execution. Where a company has repeated problems with the execution, perhaps that's a problem with the program. I'm not sure what it is. At this point, we see the pattern. Perhaps it's a problem with the description of the program or some instruction in the program that's overlooked.

context, simply does not stand for the principle that assertions that the management will not carry out its program would be a basis for an admissible contention.[18] Further, the Majority fails

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> Perhaps it's a problem with training. Perhaps -- I don't know what causes this. It just keeps repeating itself. And that is -- that is the question. If it's repeating itself now under these circumstances, will it not repeat itself under more -- under the greater duress of the license renewal term?

Tr. at 55-56. She then said, "[i]n terms of the admissibility of the contention, no. We are not challenging any element of the program," Tr. at 122, and finally, requested the opportunity to brief the issue of "bad actor" cases, if the Board finds them relevant, Tr. at 128.

Further, this is not dissimilar to the Staff's view that "I think those situations would be when the challenge focused on the elements of the aging management program and how those elements did not guarantee the safe operation of the plant during the periods of extended operation." Tr. at 113.

[18] The Staff aptly describes, I believe, the proper view of challenges of this sort when it says,

> [t]hus, TC-1 rests on an interpretation of 10 C.F.R. § 54.29(a) that would require an applicant to not only provide an AMP for an in-scope system, structure, or component, but also to prove that the applicant will comply with the terms of the AMP. Petition at 2, 5. . . . [T]his interpretation contravenes Commission precedent, undermines the carefully-structured scope of license renewal proceedings, and is contrary to the Commission's regulations. . . . The Commission has never found that an applicant for license renewal must prove that it will implement the terms of its AMP's during the period of extended operation. Rather, in describing Part 54 generally, the Commission has stated, "Part 54 requires renewal applicants to demonstrate how their programs will be effective in managing the effects of aging during the proposed period of extended operation."

Staff Answer at 15-16 (quoting Nuclear Mgmt. Co., LLC (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 733-34 (2006)).

If 10 C.F.R. § 54.29(a) is to be interpreted as the Majority suggests, we and the parties are left with the task of establishing the level of information/proof required to establish the Majority's reasonable assurances of expected management behavior during the PEO and establishing what sort of evidence (i.e., speculation) would provide reasonable support for projections of future management behavior. No such information is suggested by the Majority, nor is there any intimation in our regulations or in relevant Commission rulings. Undertaking a hearing in these circumstances will necessarily result in examination of current management practices – a task outside the scope of this proceeding – and involve speculation about how such current performance can be projected to the PEO – which involves psychology, and other human behavioral sciences not amenable to definitive assessment, and will, of necessity, require a non-scientific evaluation of testimony and evidence; it is likely to be an exercise in futility.

to recognize the underlying premise of the Commission's statements (leading up to that footnote) to the effect that the current operational safety is ensured by the current oversight programs (which is the reason this sort of challenge is outside the scope of a license renewal proceeding absent more). Finally, in this regard, even if we accept the quoted statement on its own and out of context, it does not stand for the principle that a licensing board is free to make up its own test for when such a challenge might be admissible; it simply states that such considerations are relevant.

It is plain that neither of the legal authorities upon which the Majority opinion rests can be read, without straining credulity, to permit an admissible contention based singularly upon findings by the NRC Staff inspectors embodied in annual inspection reports presented here that there have been, and remain, ongoing non-compliances with the CLB during the current license term.

The Majority's conclusion that "[t]he absence of 'perfect compliance' does not rebut the presumption of compliance or support admission of a contention. But a consistent, long standing, and continuing pattern of problems in a specific area that is relevant to managing aging equipment, will," Majority Ruling at 83, fails to establish, despite our "strict by design" criterion for contention admissibility, and ignoring the detailed analysis and explicit language of Georgia Tech and the particularly egregious circumstances present there which became the Commission's bright line for admissibility, any reasonably definitive criteria for a determination regarding what sort of "pattern of problems" in what sort of "specific area" are sufficient and what timeframe is sufficiently "long standing" to present an adequate basis upon which a contention should be admitted. Instead, it seems to me, the Majority is "kicking the can down the road" by finding that such matters go to the merits and must, therefore, be dealt with in a hearing on the merits. By creating a vague threshold and casting its analysis as it has, the Majority ruling would result in virtually every instance in admission of each contention in which there is such an allegation, because, in the Majority's view, any determination regarding the

level of "problems" is for the merits, not for contention admissibility.[19] The Majority's approach is, for all practical purposes, identical to acceptance of notice pleading, which has been roundly rejected by the Commission,[20] for all a petitioner would need to do to create an admissible contention on these premises would be, as SLOMFP has done here, to identify a series of reports of noncompliance and couple those with an assertion that the noncompliances are in a specific area important to managing aging of safety related equipment and indicative of significant managerial difficulties.[21]

Setting aside for a moment the fact that matters of current compliance with the CLB are outside the scope of any license renewal proceeding, the Board must consider what the single case relied upon (and, at the same time, distinguished so that its principles regarding contention admissibility need not be accepted) by the Majority advises might be the sort of historical performance failures by management which could rise to the level sufficient to form the basis for an admissible contention regarding the expectations of management failures during the PEO. All licensees receive periodic inspection reports and many of those reports point out flaws in current programs or the application of those programs. As Staff is charged with assurance of the public health and safety, I cannot imagine that any violation or non-compliance would be

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[19] The Majority finds

> SLOMFP is not alleging that there is a lack of reasonable assurance that PG&E can comply with its current license. Maybe it can, and maybe it cannot. But that is not the point of TC-1. Current compliance with the CLB or license, or the shutdown of DCNPP is not the issue. SLOMFP is arguing that PG&E has not yet shown that there is reasonable assurance that it actually will adequately manage aging in accordance with the CLB in the future, during the PEO. Second, the existence of reasonable assurance, or not, is a merits decision. It would be premature to adjudicate the merits of TC-1 at the contention admissibility stage.

Majority Ruling at 84.

[20] See, e.g., Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-15, 71 NRC __, __ (slip op. at 5) (June 17, 2010); Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 120 (2009); Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118-19 (2006).

[21] The Majority attempts to minimize this effect by asserting that its admission is "narrow," but its logic vitiates that assertion.

permitted to go on unchecked if it could reasonably be expected to endanger the public health and safety. And, the logical corollary is that if such an ongoing unchecked non-compliance is considered to do so, the Staff would enforce the regulatory requirements, eventually leading, if the problems remain unchecked, to actual enforcement actions.[22] Thus the absence of any enforcement actions by the NRC would plainly indicate that the circumstances are not serious enough, in the eyes of the responsible agency, to create the sort of health or safety problem which would give rise to admissible challenges to expectations of future management behavior. Georgia Tech advises that, at the very minimum, for a series of historical violations of the CLB to be serious enough to form the basis for a contention challenging whether or not the actual aging management program at issue in a license renewal case will be carried out by the licensee's management during the PEO such that the program is implemented in the form in which it has been accepted by the Commission, there must at least be evidence that the NRC staff charged with assurance of compliance with the CLB found those violations so serious that they took enforcement action against the licensee.[23] In the present circumstance, there is no assertion that the Staff believed the noted non-compliances rise to that level, and there is no assertion of, or reference to, any enforcement action. Thus, it is plain to me that objective interpretation of our regulatory requirements and the legal authority to which the Majority itself refers, advises that the information contained in the IIRs upon which SLOMFP relies and the assertions of SLOMFP based thereupon simply do not form the basis for an admissible contention such as the Majority would find in SLOMFP's allegations and, as the Majority would reformulate it, admit.

[22] The NRC's records are replete with enforcement activities against licensees, and not a single enforcement action against this licensee was cited by Petitioner in this instance.

[23] Further, I would not take lightly that the Commission in Georgia Tech found it significant that there was at least one expert witness in support of the contention.

C. Contention TC-1 is Inadmissible

For the foregoing reasons, I would find TC-1 inadmissible.

_____***/RA/***_____
Dr. Paul B. Abramson
ADMINISTRATIVE JUDGE

ATTACHMENT A

LIST OF ADMITTED CONTENTIONS (AS NARROWED)

CONTENTION EC-1: PG&E's Severe Accident Mitigation Alternatives ("SAMA") analysis fails to satisfy 40 C.F.R. § 1502.22 because it fails to consider information regarding the Shoreline fault that is necessary for an understanding of seismic risks to the Diablo Canyon nuclear power plant. Further, that omission is not justified by PG&E because it has failed to demonstrate that the information is too costly to obtain. As a result of the foregoing failures, PG&E's SAMA analysis does not satisfy the requirements of the National Environmental Policy Act ("NEPA") for consideration of alternatives or NRC implementing regulation 10 C.F.R. § 51.53(c)(3)(ii)(L).

CONTENTION EC-2: PG&E's Environmental Report is inadequate to satisfy NEPA because it does not address the airborne environmental impacts of a spent fuel pool accident caused by an earthquake adversely affecting DCNPP.

CONTENTION EC-4: The Environmental Report fails to satisfy the National Environmental Policy Act (NEPA) because it does not discuss the cost-effectiveness of measures to mitigate the environmental impacts of an attack on the Diablo Canyon reactor during the license renewal term.

CONTENTION TC-1:[125] The applicant, Pacific Gas & Electric Company (PG&E), has failed to satisfy 10 C.F.R. § 54.29's requirement to demonstrate a reasonable assurance that it can and will "manage the effects of aging" in accordance with the current licensing basis. PG&E has failed to show how it will address and rectify an ongoing adverse trend with respect to recognition, understanding, and management of the Diablo Canyon Nuclear Power Plant's design/licensing basis which undermines PG&E's ability to demonstrate that it will adequately manage aging in accordance with this same licensing basis as required by 10 C.F.R. § 54.29.

[125] This contention was held to be admissible by a majority of the Board.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
PACIFIC GAS AND ELECTRIC COMPANY	)	Docket Nos. 50-275-LR
	)	and 50-323-LR
(Diablo Canyon Nuclear Power Plant, Units 1 and 2)	)	
	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing MEMORANDUM AND ORDER (RULINGS ON STANDING, CONTENTION ADMISSIBILITY, WAIVER PETITION, AND SELECTION OF HEARING PROCEDURES) have been served upon the following persons by the Electronic Information Exchange.

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[Original signed by Christine M. Pierpoint]
Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 4th day of August 2010.