UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
Ann Marshall Young, Chair
Anthony J. Baratta
Thomas S. Elleman

In the Matter of DUKE ENERGY CORPORATION (Catawba Nuclear Station, Units 1 and 2)	Docket No's. 50-413-OLA, 50-414-OLA ASLBP No. 03-815-03-OLA April 12, 2004 (Sealed as Safeguards; Redacted Public Version Issued May 28, 2004)

MEMORANDUM AND ORDER
(Ruling on Security-Related Contentions)

This proceeding involves the February 2003 application of Duke Energy Corporation (Duke), to amend the operating license for its Catawba Nuclear Station to allow the use of four mixed oxide (MOX) fuel[1] lead test assemblies (LTAs) at the station. Letter from M.S. Tuckman, Executive Vice President, Duke Power, to NRC (Feb. 27, 2003) [hereinafter LAR]. Blue Ridge Environmental Defense League (BREDL) was admitted as a party intervenor on March 5, 2004, with three admitted non-security-related contentions. Memorandum and Order (Ruling on Standing and Contentions), LBP-04-04, 59 NRC ___ [hereinafter LBP-04-04]. Petitioner Nuclear Information and Resource Service (NIRS) was found to have standing, but not to have filed any admissible contentions, and was therefore not admitted as a party. *Id.* We address herein five security-related contentions submitted by BREDL on March 3, 2004. [BREDL]'s Contentions on Duke's Security Plan Submittal (Mar. 3, 2004) [hereinafter BREDL Security Contentions].

We make two preliminary procedural observations at the outset. First, as indicated above, the original version of this Memorandum and Order was issued on April 12, 2004, and was sealed as Safeguards Information. This document is a redacted version of the original. These redactions are made, based on the definition of "Safeguards Information" found at 10 C.F.R. § 73.2, namely:

> information not otherwise classified as National Security Information or Restricted Data which specifically identifies a licensee's or applicant's detailed, (1) security measures for the physical protection of special nuclear material, or (2) security measures for the physical protection and location of certain plant equipment vital to the safety of production or utilization facilities.

In compliance with this definition and the requirements for the protection of safeguards information found at 10 C.F.R. § 73.21, and in consultation with Mr. Robert B. Manili, the security representative appointed by the Commission pursuant to 10 C.F.R. § 2.904 to advise and assist the Licensing Board with respect to security classification of information and the

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[1]MOX fuel contains "a mixture of plutonium and uranium oxides (PuO_2 and UO_2) with plutonium providing the primary fissile isotopes." LAR, Attachment 3 at n.1.

safeguards to be observed in this proceeding, *see* Order (Feb. 2, 2004), the Board has redacted material that could in some way identify Duke's detailed security measures as specified in § 73.2, whether now or in the future, after final action on Duke's current LAR. All parties agree with many of these redactions; BREDL objects to some of them. In making these redactions we wish to emphasize that BREDL may revisit the appropriateness of redacting references to various information, if any dispute then remains or arises, at the time we issue an Initial Decision on the merits of BREDL's security contentions.

Second, we note the recent receipt of a new BREDL filing. [BREDL]'s Amended Contentions on Duke's Security Plan Submittal (April 8, 2004) [hereinafter BREDL Amended Security Contentions]. This document, despite its title, concerns certain additional information BREDL wishes to include in three specific parts of the basis for one contention — Security Contention 5, filed as part of its March 3 Security Contentions. *Id.* at 2. This additional information is based on Duke's March 1, 2004, response to the NRC Staff's January 30, 2004, Requests for Additional Information (RAIs), which BREDL indicates became available to it during the 30 days prior to April 8, 2004. *Id.* at 5. We expect that Duke and the Staff will file timely responses to this document, and we will rule on it as soon as possible after receipt of such responses and any appropriate oral argument. We have considered whether to defer issuing this Memorandum and Order until such time, and find that such a course of action would cause undue and unnecessary delay. Because BREDL in this new filing essentially raises additional information, and in no way withdraws any portion of its March 3 Security Contentions or bases therefor, we find no reason to hold up issuance of this decision on BREDL's March 3, 2004, Security Contentions.

I. Background

License Amendment Request

As previously noted in LBP-04-04, Duke sought the original license amendment at issue, relating to both the McGuire Nuclear Station, Units 1 and 2, and the Catawba Nuclear Station, Units 1 and 2, in February 2003, but subsequently revised its license amendment request (LAR) to restrict it to the Catawba facility. LAR; 68 Fed. Reg. 44,107 (July 25, 2003); Letter from M.S. Tuckman to NRC (Sept. 23, 2003). In the LAR Duke seeks to modify certain technical specifications (TSs) to enable the use of four MOX fuel lead test assemblies in the Catawba plant, and also requests exemption from certain NRC regulations. The LAR is "part of [a U.S.] – Russian Federation . . . nuclear nonproliferation program . . . to dispose of surplus plutonium from nuclear weapons by converting [it] into MOX fuel and using that fuel in nuclear reactors," in which Duke, as part of the consortium, Duke Cogema Stone and Webster (DCS), has contracted with the Department of Energy (DOE) to perform various functions. LAR at 2; *id.*, Attachment 3 at 3-2. DCS is to "provide for the design, construction, operation, and deactivation of a [MOX] Fuel Fabrication Facility (MFFF)," in which DCS "will process PuO_2 powder supplied by [DOE], blend it with depleted UO_2 powder, and fabricate it into MOX fuel pellets," which would then be "loaded into MOX fuel assemblies." LAR, Attachment 3 at 3-2. Duke states that, "[f]ollowing NRC approval of required license amendments, the fuel assemblies will be used in the McGuire and Catawba Nuclear Stations with core fractions up to 40% MOX fuel." *Id.* The latter are referred to as "batch" quantities of MOX fuel.

The four lead test assemblies at issue in this proceeding will, assuming approval of the LAR at issue herein, be manufactured, not in the planned MFFF, but "under the direction of Framatome ANP." *Id.* Duke's plans:

> . . . call for [the] four lead assemblies to be irradiated for a minimum of two cycles to confirm acceptability of the planned MOX fuel assembly design, verify the validity of Duke's models to predict fuel assembly performance, and confirm the applicability of the European database to Duke's use of MOX fuel. Poolside

> post-irradiation examination (PIE) is planned to verify selected mechanical properties of the lead assemblies. In addition, some or all of the lead assemblies will undergo a third cycle of irradiation to assure that the lead assembly burnup bounds the planned batch fuel burnup. Examination of one or more fuel rods in a hot cell is planned at the completion of the lead assembly irradiation program.

Id. at 3-2 – 3-3.

The technical specification sections that would be modified if the LAR is approved include the following: two relating to storage of the MOX fuel lead test assemblies in the spent fuel storage racks (Section 3.7.15, "Spent Fuel Assembly Storage," and Section 4.3, "Fuel Storage"); one that would be revised to allow the use of MOX fuel in addition to the currently-specified slightly-enriched uranium dioxide fuel, as well as the use of fuel rod cladding with an "M5^{TM} zirconium alloy that has a different material specification than the materials currently referenced in the TS" (Section 4.2, "Reactor Core"); one that would be revised to include additional methodologies that would be used to develop the limits included in the Core Operating Limits Report (Section 5.6.5, "Core Operating Limits Report"); and, finally, the TS Bases section, for which certain associated changes have been proposed. 68 Fed. Reg. 44,107 (July 25, 2003).

Reference may be made to LBP-04-04 for detailed background information on most of the proceedings in this matter from the date of the LAR through the March 5, 2004, issuance date of LBP-04-04, and we see no need to repeat all of this information here. Because, however, the parties in their arguments on the current contentions make various references to certain specifically security-related issues not addressed in great detail in LBP-04-04, we provide herein the following additional, more detailed background information on these issues.

On October 8, 2003, Duke and the Staff filed a Motion for Protective Order, relating to certain material deemed by the Staff to constitute Safeguards Information (SGI). Motion for Protective Order (Oct. 8, 2003) [hereinafter 10/8/03 Motion for Protective Order]. Based on certain security concerns relating to the Motion for Protective Order, the Board on October 9 issued an Order scheduling a telephone conference for October 10 to address these concerns.

Order (Addressing Certain Security Issues and Scheduling Telephone Conference) (Oct. 9, 2003). During the October 10 conference, Tr. 1-46, the Staff indicated that, despite the October 8 motion, "there may be some concern" such that the Staff was "not ready to give . . . a final decision" on certain issues relating to the proposed protective order. Tr. 6-7. This related to the possibility of applying Category I facility standards to Catawba with regard to the LAR, which the Staff was not ready to decide at that point, and which, according to Staff counsel, "could cause a delay in the proceedings." Tr. 12-15.

Staff counsel indicated that it would try to provide notification of the relevant classification by October 23, and that "the 30th of October would probably be the latest date [the Staff] anticipate[d] . . . getting back to the Board." Tr. 42-44. Counsel agreed to notify the Board and all participants, no later than October 15, of when the Staff expected to make a determination on the classification level of the material in question. Tr. 36. Two tentative dates were set for another telephone conference — October 23 and 30 — the final scheduling of which would depend on when the Staff made its determination. Tr. 43-44; *see* Order (Confirming Matters Addressed at October 10, 2003, Telephone Conference) (Oct. 10, 2003). On October 15, 2003, Staff counsel sent the Board a letter, stating that the Staff expected to make its determination as to the classification level of the material in question "on or about December 5, 2003." Letter from Antonio Fernández, Counsel for NRC Staff, to Administrative Judges (Oct. 15, 2003).

Thereafter, the Board issued an Order on October 16, 2003, setting the next telephone conference for October 23, the earlier of the two tentative dates,[2] and indicating that the schedule for the Staff's classification level determination, and its impact on the conduct of this

[2]The Board chose the earlier of the two tentative dates previously considered, based on the absence of any reason to add to the delay already occasioned by the filing of the Motion for Protective Order without first assuring that all matters addressed therein had been adequately addressed by appropriate security personnel, and by the failure to provide the classification determination in question any earlier than December 5, when this had been expected in October 2003. 10/16/03 Order at 2.

proceeding, along with any other appropriate matters, would be addressed at this conference. Order (Scheduling October 23, 2003, Telephone Conference) (Oct. 16, 2003) [hereinafter 10/16/03 Order]. At the October 23 conference, various scheduling matters, including those related to security issues, were addressed. Tr. 47-70.

On November 26, 2003, after various issues relating to the original proposed order had been addressed as discussed above, the Staff filed a new motion for a protective order. *See* NRC Staff's Motion for Protective Order (Nov. 26, 2003) [hereinafter Staff 11/26/03 Motion for Protective Order]. On December 1, the Board informed the participants that it would hear argument on the proposed order to the extent possible within the time available during the December 3-4 prehearing conference, at the conclusion of oral argument on the petitioners' contentions. *See* Order (Regarding Motion for Protective Order and General Conduct of Oral Argument) (Dec. 1, 2003) at 1.

The Staff's new motion and proposed protective order addressed the same material as the earlier proposed order did — primarily, a September 15, 2003, document submitted by Duke in support of its LAR, describing additional security measures it proposes to implement relating to the anticipated presence and irradiation of the MOX lead test assemblies at the Catawba plant. Staff 11/26/03 Motion for Protective Order at 1; *see* 10/8/03 Motion for Protective Order. Duke's September 15 submittal, most of which has been designated by the Staff as containing Safeguards Information, consists of a transmittal letter and 7 attachments, including a proposed revision to Duke's existing Nuclear Security and Contingency Plan (also referred to by Duke as its physical security plan), and a related request for exemptions from certain NRC regulations. *See* Staff 11/26/03 Motion for Protective Order at 1; Letter from M.S. Tuckman, Duke Energy Corporation, to Document Control Desk, NRC (Sept. 15, 2003) [hereinafter Duke 9/15/03 Security Submittal]; *see* Duke 9/15/03 Security Submittal at 1, Attachment 7.

In its December 8, 2003, Order, the Board directed the participants to try to work out by agreement a schedule for a number of anticipated activities and filings, including among other things any remaining matters relating to the Staff's Motion for Protective Order, a schedule for the filing of any security-related contentions and responses thereto, and oral argument on security-related contentions. Order (Regarding Telephone Conference, Deadlines and Scheduling Issues) (Dec. 8, 2003) at 1-2. On December 10 BREDL filed an Objection to the Staff's proposed protective order, stating its concern that the proposed order did not contain a procedure for redacting pleadings so that they can be released to BREDL members and the public. [BREDL]'s Objection to Proposed Protective Order (Dec. 10, 2003), at 2. During the December 11 telephone conference, in addition to addressing various scheduling matters, the Board heard argument on the proposed protective order, BREDL's objection thereto, and related matters. Tr. 577-614.

On December 15, the Board issued two orders: One approved a schedule of various deadlines and dates for further proceedings (including deadlines for security-related contentions and dates for oral argument on them), noting that the proposed protective order would be issued the same date with certain proposed revisions, and addressing the matter of assistance with security issues for the Board and participants. The second was the revised Protective Order itself, with an attached Nondisclosure Affidavit to be signed by all persons to be granted access to Safeguards Information under the protective order. *See* Order (Regarding Deadlines and Scheduling Issues) (Dec. 15, 2003) [hereinafter 12/15/03 Scheduling Order]; Memorandum and Order (Protective Order Governing Duke Energy Corporation's September 15, 2003 Security Plan) (Dec. 15, 2003) [hereinafter 12/15/03 Protective Order]. The information covered by the Protective Order and Nondisclosure Affidavit includes "(1) the September 15, 2003 Security Plan Submittal or any supplements or amendments thereto, including Requests for Additional Information (RAIs) or responses to RAIs relating to that submittal; and (2) any information obtained, developed, or created by virtue of these proceedings, in any form, that is

not otherwise a matter of public record and that deals with or describes details of the Security Plan Submittal." 12/15/03 Protective Order at 2. Also under the Protective Order, any individual must have a "need to know" any protected information that he or she may be shown, and any disputes regarding any "need to know" determinations are to be resolved by determination of the Licensing Board. *Id.* at 3-4.

On January 13, 2004, after failing to obtain from the Staff access to certain Safeguards Information in regard to which BREDL asserted a "need to know," BREDL filed a request and motion with the Licensing Board, relating to this issue and seeking an extension of the previously-set deadline for the filing of security-related contentions. [BREDL]'s Request for Need to Know Determination and Motion for Extension of Deadline for Filing Security Contentions (Jan. 13, 2004) (designated as "May Contain Safeguards Information") [hereinafter BREDL 1/13/04 Motion]. BREDL's counsel, Ms. Curran, and expert, Dr. Lyman, have obtained from the NRC, after undergoing appropriate investigation, "L" level security clearances that allow them access to certain safeguards and classified information in regard to which they have a "need to know." *See Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility) (Dec. 18, 2002) (unpublished) (hereinafter Duke Cogema 12/18/02 Order).

Some discussion of the issues raised by BREDL's motion was held during the January 15 oral argument on late-filed non-security-related contentions. *See, e.g.*, Tr. 621-43, 746-63. At that time it was decided to hold oral argument on BREDL's motion insofar as it related to Safeguards Information on January 21 before Administrative Judges Young and Baratta (Administrative Judge Elleman being unavailable because of previously-made plans), Tr. 756, and to hear further argument on the motion, insofar as it relates to Classified Information on a date in February 2004 that had already been set for oral argument on security-related contentions, Tr. 748. Thereafter, on January 20, the Board issued an Order formally scheduling an *in camera* session for January 21, which would be closed to all who had not received clearance under 10 C.F.R. § 73.21(c). Order (Scheduling *In Camera* Oral Argument on Blue

Ridge Environmental Defense League's Request for Need to Know Determination and Motion for Extension of Deadline for Filing Security Contentions) (Jan. 20, 2004).

After hearing the participants' arguments on January 21, the Board requested that the Commission designate a representative to advise and assist the Board (as well as the participants, to a limited extent) with respect to security classification of information and the safeguards to be observed in this proceeding. Request to Commission (Seeking Designation of Representative to Advise and Assist Licensing Board With Respect to Classification of Information and Safeguards to Be Observed) (Jan. 23, 2004). Then, on January 29, Administrative Judges Young and Baratta, acting as a quorum of the Licensing Board in Administrative Judge Elleman's absence, granted BREDL's 1/13/04 Motion in part, in a sealed Memorandum and Order [hereinafter Board 1/29/04 Safeguards Memorandum and Order]. Public notice of this decision was provided in a Memorandum issued the same day. Memorandum (Providing Notice of Granting BREDL Motion for Need to Know Determination and Extension of Deadline for Filing Security-Related Contentions) (Jan 29, 2004) [hereinafter Board 1/29/04 Public Memorandum].

On January 30 the Staff filed a petition for stay to preserve the status quo pending review by the Commission of its petition for interlocutory review to be filed later the same day. NRC Staff's Motions for Temporary Stay to Preserve the Status Quo and for Stay Pending Interlocutory Review of the Licensing Board's January 29, 2004 Order Regarding Access to NRC Documents Containing Safeguards Information (Jan. 30, 2004). Later the same day, the Staff filed its petition for review by the Commission. NRC Staff's Motion for Interlocutory Review of the Licensing Board's January 29, 2004 Order Finding a Need-to-Know and Ordering NRC Staff to Provide Petitioner with Access to Documents Containing Safeguards Information (Jan. 30, 2004). This Motion was subsequently withdrawn and a substitute motion, with one

portion from the original motion removed, filed on February 2, 2004.[3] On January 30, 2004, the Commission granted a "housekeeping" stay, "until February 13, 2003." Order (Jan. 30, 2004) at 1-2. In this Order the Commission set a deadline of February 6 for Duke and BREDL to respond to the Staff's pleadings. *Id.* at 2.

On February 2 the Commission appointed Mr. Robert B. Manili, of the Materials, Transportation and Waste Security Division, Division of Nuclear Security, Office of Nuclear Security and Incident Response (NSIR), to be the "representative to advise and assist the Atomic Safety and Licensing Board with respect to security classification of information and the safeguards to be observed in this proceeding, pursuant to 10 C.F.R. § 2.904." Order (Feb. 2, 2004).

On February 3, BREDL filed an "Emergency Motion" seeking access to a February 6 meeting the NRC Staff had scheduled with Duke to discuss requests for additional information on Duke's September 15, 2003, request for exemptions from certain regulatory requirements. [BREDL]'s Emergency Motion for Access to NRC Staff Meeting on February 6, 2004 (Feb. 3, 2004); *id.*, Exhibit 2 at 4. BREDL counsel had previously requested to attend the meeting and, upon not receiving a favorable response to its letter to such effect, had filed its motion. *Id.* at 2-3; *id.*, Exhibit 1. A telephone conference was held February 4 to address BREDL's motion. Tr. 947-1010. Later that day Administrative Judges Young and Baratta, as a quorum of the Board, issued a Memorandum and Order ruling on the motion, finding that BREDL had a need to know with regard to the February 6 meeting and information to be discussed therein, but providing in the alternative that, given the pending appeal of the Board's January 29 ruling by the Staff, the

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[3]According to Staff Counsel Fernández, the Staff's new filing "supercede[d] the Staff's previous request for interlocutory review." 2/2/04 E-mail from Antonio Fernández, Subject: Letter to Commission; *see* NRC Staff's Motion for Interlocutory Review of the Licensing Board's January 29, 2004 Order Finding a Need-to-Know and Ordering NRC Staff to Provide Petitioner with Access to Documents Containing Safeguards Information (Feb. 2, 2004). In the letter accompanying the new filing, counsel explained that the January 30 filing contained references to information protected by the December 15, 2003, Protective Order in this proceeding, and that the new filing did not contain such references. Letter to Annette L. Vietti-Cook, Secretary of the Commission, from Antonio Fernández (Feb. 2, 2004).

Staff could elect to have the meeting in question transcribed in lieu of BREDL attending, in order that the status quo could be preserved pending a final Commission ruling on the Staff's appeal of the Board's January 29 rulings, and any guidance the Commission might have to offer in deciding these security-related matters. Memorandum and Order (Ruling on BREDL Motion Regarding Staff February 6, 2004, Meeting with Duke Energy and Request for Need to Know Determination (Feb. 4, 2004) [hereinafter Board 2/4/04 Memorandum and Order].

On February 5, 2003, the Staff notified counsel for Duke and BREDL that the February 6 meeting had been "postponed pending resolution of the issues raised by the Licensing Board's February 4, 2004 Order." Letter from Susan Uttal, Counsel for NRC Staff, to Diane Curran, Counsel for BREDL, and David Repka, Counsel for Duke (Feb. 5, 2004). On February 11, the Staff filed a petition for review of the Board's February 4 Order with the Commission. NRC Staff's Petition for Review of the Licensing Board's February 4, 2004 Order Relating to BREDL's Request to Attend a Closed Meeting (Feb. 11, 2004). On February 12 the Commission issued an Order extending the stay it had previously ordered on January 30 until 5:00 p.m. February 18, 2004. Order (Feb. 12, 2004).

The Board heard oral argument on February 13, 2004, in a closed session, on that part of BREDL's 1/13/04 request for need to know determination relating to classified information, as well as on other pending security-related issues in the proceeding, including the impact of the current Staff appeals to the Commission on this proceeding, pending the Commission's ruling on the appeals. Tr. 1011-1163. On February 17, 2004, Judges Young and Elleman, acting as a quorum of the Board,[4] issued a Memorandum and Order denying BREDL's motion, finding no "need to know" with regard to the classified information at issue at that time. Memorandum and

[4]Administrative Judges Young and Elleman ruled on the request for classified information, because Administrative Judge Baratta, being relatively newly appointed to the Atomic Safety and Licensing Board Panel, had not, as of the issuance date of the Memorandum and Order, received his clearance for access to classified information.

Order (Ruling on BREDL Motion for Need to Know Determination Regarding Classified Documents) (Feb. 17, 2004) [hereinafter Board 2/17/04 Memorandum and Order].

On February 18, 2004, the Commission issued a Memorandum and Order reversing the Board's January 29 and February 4, 2004, decisions, finding, among other things, no showing that BREDL had a "need to know" the information in question, and that the Board lacked authority to order access to a meeting closed by the Staff, disputes on which, the Commission stated, should be handled outside the adjudication. Memorandum and Order, CLI-04-06, 59 NRC __ (slip op. at 10-11) (Feb. 18, 2004). The Commission also stated that "[m]ore general security information related to the Catawba plant-at-large," than that provided in Duke's September 15, 2003, Security Submittal, was not, in the Commission's judgment "'necessary' to allow BREDL to participate meaningfully in this license amendment proceeding." *Id.* at 8-9. In the way of providing general guidance, the Commission stated that licensing boards should give "considerable deference to the Staff's judgments" on "need to know" decisions and that any access granted should be as narrow as possible. *Id.* at 11-12.

On March 3, 2004, BREDL filed a Safeguards document containing its security-related contentions. [BREDL]'s Contentions on Duke's Security Plan Submittal (March 3, 2004) [hereinafter BREDL Security Contentions]. Thereafter, on March 16, Duke and the NRC Staff filed their responses to BREDL's security contentions, also each designated as Safeguards Information. Answer of Duke Energy Corporation to the "Blue Ridge Environmental Defense League's Contentions on Duke's Security Plan Submittal" (March 16, 2003) [hereinafter Duke Response]; [NRC] Staff's Response to [BREDL]'s Contentions Regarding Duke's Security Plan Submittal (March 16, 2004) [hereinafter Staff Response]. Oral argument was heard on the security contentions on March 18, 2004, in a hearing closed to all except those with appropriate clearance and need to know. Tr. 1263-1513.

II. Analysis

A. Standards for Admissibility of Contentions

To intervene in an NRC proceeding, a Petitioner must, in addition to demonstrating standing, submit at least one contention meeting the requirements of 10 C.F.R. § 2.714(b),(d).[5] *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333 (1999); *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248 (1996). The failure of a contention to comply with any one of these requirements is

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[5]The citation to 10 C.F.R. § 2.714 is to the former section number that was in effect prior to a significant revision to the agency's 10 C.F.R. Part 2 rules of practice and procedure, which became effective February 13, 2004. Under part of this revision, the provisions of § 2.714 were moved to a new section, § 2.309. *See* 69 Fed. Reg. 2182, 2220-22 (Jan. 14, 2004). Because this proceeding commenced prior to the effective date of the revision, the former Part 2 rules still apply here, and we use the former numbering throughout this Memorandum and Order.

The former § 2.714 provides in relevant part as follows:

> (b)(2) Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide the following information with respect to each contention:
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> (i) A brief explanation of the bases of the contention.
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> (ii) A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing, together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion.
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> (iii) Sufficient information (which may include information pursuant to paragraphs (b)(2)(i) and (ii) of this section) to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the 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. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report. The petitioner can amend those contentions or file new contentions if there are data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's document.
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> (d) . . . [A] ruling body or officer shall, in ruling on--
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> (2) The admissibility of a contention, refuse to admit a contention if:
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> (i) The contention and supporting material fail to satisfy the requirements of paragraph (b)(2) of this section; or
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> (ii) The contention, if proven, would be of no consequence in the proceeding because it would not entitle petitioner to relief.

grounds for dismissing the contention. *Arizona Public Service Company* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991). In LBP-04-04, slip op. at 16-17, we provided the following summary of the contention requirements:

> To be admissible, a contention must:
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> A. under section 2.714(b)(2), consist of a *specific* statement of the issue of law or fact the petitioner wishes to raise or controvert; and
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> B. under subsection 2.714(b)(2)(i), be supported by a brief *explanation* of the factual and/or legal basis or bases of the contention, which goes beyond mere allegation and speculation, is *not* open-ended, ill-defined, vague or unparticularized, and *is* stated with reasonable specificity; and
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> C. under subsection 2.714(b)(2)(ii), include a statement of the alleged facts or expert opinion (or both) that support the contention and on which the petitioner intends to rely to prove its case at a hearing, which must also be stated with reasonable specificity; and
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> D. also under subsection 2.714(b)(2)(ii), include references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish the facts it alleges and/or the expert opinion it offers, which must also be stated with reasonable specificity and, at a minimum, consist of a fact-based argument sufficient to demonstrate that an inquiry in depth is appropriate, and illustrate that the petitioner has examined the publicly available documentary material pertaining to the facility(ies) in question with sufficient care to uncover any information that could serve as a foundation for a specific contention; and
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> E. under subsection 2.714(b)(2)(iii), provide sufficient information to show that a *genuine dispute* exists with the applicant on a *material* issue of law or fact (i.e., a dispute that actually, specifically, and directly challenges and controverts the application, with regard to a legal or factual issue, the resolution of which "would make a difference in the outcome of the licensing proceeding"), 54 Fed. Reg. at 33,172), which includes either:
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> 1. *references to the 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
>
> 2. 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 Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2, Catawba Nuclear Station, Units 1 and 2), LBP-02-4, 55 NRC 49, 67-68 (2002); *see also* LBP-03-03, 57 NRC at 64.

Also, as indicated in the text of subsection 2.714(b)(2)(iii), for issues arising under NEPA, contentions must be based on the applicant's environmental report, and the petitioner can amend such contentions or file new contentions "if there are data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's document." And finally, under subsection 2.714(d)(2)(ii), in ruling on a contention a Licensing Board must refuse to admit a contention if, assuming the contention were proven, it would be of no consequence in the proceeding because it would not entitle the petitioner to specific relief.

B. Discussion and Rulings on Contentions

We address BREDL's security-related contentions in light of the preceding discussion. We first note BREDL's prefatory statement, applicable to all its contentions, that the contentions are supported by the expert declaration of Dr. Edwin S. Lyman.[6] BREDL Security Contentions at 1. BREDL states further that the contentions are based on the following portions of Duke's September 15, 2003, Security Plan Submittal: Attachment 1, Revision 16 to Duke Energy Corporation Nuclear Security and Contingency Plan (Physical Security Plan); Attachment 2, Description and Rationale for MOX Fuel-related Nuclear Security and Contingency Plan; Attachment 6, Physical Security Plan Comparisons to 10 C.F.R. § 73.46; and Attachment 7, Request for Exemptions from Selected Regulations in 10 C.F.R. Parts 11 and 73. *Id.*[7]

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[6]In his declaration Dr. Lyman, a Senior Staff Scientist at the Union of Concerned Scientists, describes some of his qualifications as an expert and states that he assisted in the preparation of BREDL's contentions, that the factual assertions contained in them are true and correct to the best of his knowledge, and that the opinions expressed in them are based on his best professional judgment, BREDL Security Contentions, Exhibit 1.

[7]BREDL also states that it is "unable to fully evaluate whether the Security Plan Submittal, together with the security plan for protection against radiological sabotage that will be in effect at the time that the plutonium MOX lead test assemblies (LTAs) are received at the Catawba site, is adequate to meet NRC security regulations for the physical protection against theft of formula quantities of strategic special nuclear material (SSNM)," because it has not been granted access to "confidential NRC guidance documents and post-9/11 enforcement orders regarding security requirements for nuclear power plants and Category I facilities." *Id.* at 2. BREDL goes on to state that it is "handicapped in its

We turn now to BREDL's first security-related contention.

Security Contention 1. **Failure to address revised design basis threat.**

Duke's revisions to its security plan and its exemption application are deficient because they fail to address the post-9/11 revised design basis threat for Category I nuclear facilities.

Security Contention 1 - Basis

BREDL in Security Contention 1 relies on the Commission's post-9/11 "'top-to-bottom' review of its security-related regulations for all licensed facilities," which "resulted in the issuance of enforcement orders imposing security upgrades at all operating nuclear power plants and Category I facilities," for the latter of which the NRC "explicitly declared that the revised design basis threat 'supercedes [sic] the Design Basis Threat (DBT) specified in 10 CFR 73.1.'" *Id.* at 3 (citing the Matter of Nuclear Fuel Services, Inc., Erwin, TN; Order Modifying License (Effective Immediately), 68 Fed. Reg. 26,676 (May 16, 2003) [hereinafter NFS Order]). Arguing that before Duke's amendment application can be granted it must be determined that the amendment poses "no undue risk to public health and safety or the common defense and security" under 42 U.S.C. § 2077, BREDL contends that the Commission in the post-9/11 NFS Order "changed the concept of what constitutes 'no undue risk' to public health and safety and the common defense and security, such that mere compliance with NRC regulations will not suffice." *Id.* at 4. Thus, asserts BREDL, even if Duke could demonstrate compliance with published regulations on maintaining security of formula quantities of strategic special nuclear material (SSNM) at Catawba, "Duke still would not be entitled to a license,

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ability to evaluate whether Duke has demonstrated that the exemptions it seeks are 'authorized by law and will not endanger life or property or the common defense and security,'" citing 10 C.F.R. § 73.5, and that because "the Commission revised and replaced the regulatory definition of the design basis threat in 10 C.F.R. § 73.1 in enforcement orders issued to nuclear power plant and Category I facility licensees," it is "not possible to determine whether Duke's application satisfies the Commission's current concept of adequate protection against the design basis threat, without access to these confidential standards." BREDL Security Contentions at 2-3.

unless it could demonstrate compliance with the no undue risk standard as it is currently conceived by the Commission." *Id.*

Security Contention 1 - Duke and Staff Responses

Duke

Prior to addressing any of BREDL's contentions individually, Duke provides certain "general considerations" relating to all of the contentions. First, it points out that it currently maintains a physical security plan and implementing procedures for Catawba that "meet the requirements of 10 C.F.R. § 73.55 for physical protection of licensed activities at a Part 50 power reactor." Duke Response at 3. The plan and procedures also, according to Duke, "specifically address the Part 50 [DBT] for radiological sabotage established in accordance with 10 C.F.R. § 73.1(a)(1)." *Id.*

Further, Duke states, the physical security plan and procedures "either already meet the additional requirements imposed on Catawba (and all other power reactors) by NRC orders following the terrorist attacks of September 11, 2001, or will do so by the applicable compliance date." *Id.* at 3-4. Citing the Commission's ruling in CLI-04-06, Duke states that these requirements and Duke's compliance with them are "not at issue in this proceeding." *Id.* at 4. Duke quotes the following statement from CLI-04-06:

> All parties to this adjudication, including BREDL, may safely assume, as a baseline, that Duke's Catawba facility will comply with all applicable general security requirements, both those prescribed in NRC rules and those prescribed by NRC order.

Id. (quoting CLI-04-06, slip op. at 10). Rather, Duke urges, again quoting from CLI-04-06, what is at issue in this case "is the appropriate increment -- the appropriate heightening of security measures -- necessitated by the proposed presence of MOX fuel assemblies at the Catawba reactor site." *Id.* (quoting CLI-04-06, slip op. at 10).

Duke agrees that there is "no dispute that the presence of MOX fuel assemblies at Catawba brings into consideration the additional DBT related to potential theft or diversion of

special nuclear material ('SNM') under 10 C.F.R. § 73.1(a)(2)," and that, at least "until such time as the MOX fuel assemblies are inserted into the reactor core and irradiation has begun, the NRC's requirements in 10 C.F.R. §§ 73.45 and 73.46 and in 10 C.F.R. Part 11 potentially apply, at least absent an exemption." Duke Response at 4. Accordingly, Duke states, its Security Submittal "carefully outlines the incremental security measures that Duke would implement — in addition to the security measures to be implemented by [DOE] during delivery before Duke accepts possession — to address the threat of theft of MOX fuel assemblies." *Id.* As well as identifying in its submittal "those specific regulatory requirements normally applicable to a Category I facility that it would meet," Duke states that it has identified "those for which compliance would not be necessary and for which an exemption is therefore warranted." *Id.* at 4-5.

Arguing that the Commission in CLI-04-06 "gives further clarity to the specificity and basis requirements of Section 2.714(c) in the current context," Duke asserts that the burden on BREDL in proffering proposed security contentions in this proceeding includes not only satisfying the requirements of 10 C.F.R. § 2.714, but also "review[ing] the Security Submittal and 'identify[ing] *credible* vulnerabilities, if any.'" *Id.* at 5 (quoting CLI-04-06, slip op. at 10 (emphasis supplied by Duke)). Duke argues that all of BREDL's contentions, including Contention 1, fail because they identify no such "credible vulnerabilities." Duke Response at 5. According to Duke, BREDL's contentions "boldly attempt to shift to Duke the petitioner's burden to demonstrate credible theft scenarios and vulnerabilities or challenge Duke to prove that none exists." *Id.*

Duke suggests that CLI-04-06 mandates that BREDL identify a "credible vulnerability — consistent with the theft DBT in 10 C.F.R. § 73.1(a)(2) — by which a small group of adversaries could enter the Protected Area by violent, external assaults or by stealth or deceptive actions, obtain access to the Fuel Building, identify the storage locations of the MOX fuel, obtain access to the relevant fuel handling equipment or otherwise remove the MOX fuel assemblies,

separate that material from the fuel assembly matrix, and leave the site with the MOX fuel pellets." *Id.* at 6. Having failed to do this, or otherwise to address or engage the specifics of Duke's Security Submittal, Duke argues, BREDL's contentions are inadmissible. *Id.* at 6-7.

Duke specifies what it asserts are "[s]everal errors and inadequacies — when judged against 10 C.F.R. § 2.714 and CLI-04-06 — [that] are repeated throughout BREDL's discussion of individual contentions." Duke Response at 7. Duke enumerates the following asserted errors:

- BREDL fails to identify specific and credible vulnerabilities, or to explain how an attacker would exploit those vulnerabilities to achieve its goal.
- To be credible, any scenario suggested as the basis for a security contention would require the identification of a timeline demonstrating that the threat can be accomplished in such a timeframe, so as to avoid capture. BREDL has not done this.
- The hypothetical attack suggested as the basis for a security contention would be required to be by a "small group" with the attributes described in 10 C.F.R. § 73.1(a)(2), the only applicable regulatory standard for the theft DBT.
- BREDL's proposed contentions fail to accept as a baseline that the Catawba facility will comply with all applicable general security requirements, both those prescribed in NRC rules and those prescribed by NRC order, and that such compliance gives Catawba a significant ability to counter an attack for purposes of theft as well as sabotage.
- BREDL cannot justify a contention by attempting to shift to Duke the burden of demonstrating that no credible scenario could exist that would allow theft of the MOX fuel.

Id. Duke counsel explained during oral argument that Duke did not intend by the statement at the fourth bullet to "talk about any particular requirement," but only to make a "very general point about the environment" of a "Part 50 facility that has an existing security force that meets as a baseline the post-9/11 Part 50 Security Orders." Tr. 1309-10. Counsel also stated that "all we're trying to say . . . is that in the context of a Part 50 facility that meets the revised post-9/11 requirements, there is a significant capability with respect to sabotage as well as theft," and that this is "not a measurement against old requirements, that's really just a truism that that is, again, the context you have to look at." Tr. 1325.

Duke argues more specifically with regard to Contention 1 that it is not admissible "because it fails to specifically identify and support the existence of a genuine dispute on a material issue of law or fact." Duke Response at 8 (citing 10 C.F.R. § 2.714(b)(2)(iii)). In addition, Duke argues that the contention does not "identify any 'credible vulnerability' with respect to theft of the MOX fuel assemblies from the Catawba facility, contrary to CLI-04-06." *Id.* (citing CLI-04-06, slip op. at 10). Duke characterizes BREDL's reference to the Commission's post-9/11 "'top-to-bottom' review of its security-related regulations for all licensed facilities" as "merely allud[ing] to the NRC's ongoing assessment of security requirements." *Id.* Duke describes the NFS Order to which BREDL refers as "a plant-specific order issued post-9/11 by the NRC to a Category I facility," citing in addition another, "similar order" — specifically, an Order issued to BWX Technologies for its Lynchburg, Virginia, facility. *Id.*; *id.* n.13 (citing In the Matter of BWX Technologies, Lynchburg, Va; Order Modifying License (Effective Immediately), NRC Docket No. 70-27, 68 Fed. Reg. 26,675 (May 16, 2003) [hereinafter BWXT Order]).

Duke argues that BREDL's failure to address specifically in Contention 1 Duke's security submittal, as well as, among other things, its failure to explain why the enhancements identified in the submittal are insufficient, render the contention inadmissible for failing to meet the specificity and basis requirements of the contention rule and "the Commission's expectations as reflected in CLI-04-06." Duke Response at 8.

Duke argues further that the Commission's "no undue risk" standard has not changed, and that this continues to apply as before, "under the Commission's general performance objectives and requirements for physical security established in 10 C.F.R. § 73.20(a)," which require a licensee to establish and maintain a physical protection system that has as its objective "to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security, and do not constitute a[n] unreasonable risk to the public health and safety," and that is "designed to protect against the design basis threats of

theft or diversion of strategic special nuclear material and radiological sabotage as stated in § 73.1(a)." *Id.* at 9. BREDL does not establish with specificity and basis, Duke argues, how Duke will fail to meet that standard. *Id.*

Duke also asserts as error BREDL's "assumption that there are some generally applicable post-9/11 requirements for Category I facilities that Duke will not meet." *Id.* Duke argues that such an assumption is incorrect and "simply speculation," and cites "several" statements of the NRC Staff that "there are no such requirements." *Id.* (citing Tr. 1056, 1066). Citing as well a document issued by the Staff on January 29, 2004, Duke argues that the "NRC Staff has clearly laid out the scope and standard for its review" of Duke's request for exemption from various provisions of 10 C.F.R. Parts 11 and 73. *Id.* (citing Memorandum to Glenn M. Tracy, Director, NRC Division of Nuclear Security, from Joseph W. Shea, Director, Nuclear Security Policy Project Directorate, re "Review Plan for Evaluating the Physical Security Protection Measures Needed for Mixed Oxide Fuel and Its Use in Commercial Nuclear Power Reactors" (Jan. 29, 2004) [hereafter NRC MOX Security Review Plan]). Finally, citing 10 C.F.R. § 2.758 (which provides that Commission rules are not subject to attack in any adjudicatory proceeding), Duke argues that "[i]f BREDL believes that additional requirements must apply to Catawba, it must ask the Commission to impose them," and that it is "BREDL's burden to identify [any asserted additional required] measures and justify their applicability to Catawba." Duke Response at 10.

Staff

The NRC Staff argues that BREDL's contention is inadmissible because it raises issues regarding documents that are beyond the scope of this proceeding and therefore cannot be said to raise an issue of law or fact that is material to the proceeding "or required by 10 C.F.R. § 2.714 (b)(2)." Staff Response at 5. The Staff quotes in support of its argument the following language from CLI-04-06 (which includes the language quoted by Duke, as indicated above):

> The current proceeding has *nothing to do* with the NRC's post-September 11 general security orders. It is not these orders, but Duke's MOX-related security submittal, that details the particular security measures that will be taken as a consequence of the presence of MOX fuel assemblies at issue here.
> . . . .
> All parties to this adjudication, including BREDL, may safely assume, as a baseline, that Duke's Catawba facility will comply with all applicable general security requirements, both those prescribed in NRC rules and those prescribed by NRC order. That's not at issue in this MOX license amendment case.

Id. at 5-6 (quoting from CLI-04-06, slip op. at 9-10) (emphasis supplied by NRC Staff). The Staff asserts that the Commission's "finding that the security orders issued post-September 11 are not material to this proceeding is unambiguous," and that in light of this Contention 1 "cannot be admitted in this proceeding." Staff Response at 6. We should, the Staff urges, "reject BREDL's Security Contention 1 as failing to meet the requirements of 10 C.F.R. § 2.714(b)(2) that a contention must raise an issue of law or fact that is *material* to the proceeding." *Id.* (emphasis in original).

Security Contention 1 - Licensing Board Analysis

In addressing BREDL's first contention, we note initially that the Commission has indeed indicated, in the above quotations from CLI-04-06 provided by Duke and the Staff, that the post-9/11 security orders that were issued to various licensees are not relevant in this proceeding. We note also, however, that CLI-04-06 dealt with an appeal *not* relating specifically to any post-9/11 orders issued to Category I facilities, but relating, rather, to the post-9/11 orders issued to reactors — specifically, to orders issued for Catawba (and related documents). *See* CLI-04-06, slip op. at 1, 4, 5; *see also* Tr. 1334. In CLI-04-06, the Commission reversed a ruling by a quorum of this Board finding a "need to know" with regard to the post-9/11 orders for Catawba and related documents, as well as an additional ruling related to a Staff-Duke meeting to discuss Staff requests for additional information (RAIs).[8] *See* CLI-04-06, slip op. at 5, 10;

[8]A different quorum of the Board had, one day prior to issuance of CLI-04-06, issued a Memorandum and Order finding no "need to know" with regard to the two security orders issued to the two Category I fuel fabrication facilities (NFS and BWXT) as of the time of the ruling. *See* Board 2/17/04 Memorandum and Order.

Board 1/29/04 Memorandum and Order (Safeguards); Board 1/29/04 Public Memorandum; Board 2/4/04 Memorandum and Order.

Thus, it might be found that CLI-04-06 does not apply to the Category I facility post-9/11 security orders, thereby possibly leaving open the questions raised in the contention (on which the parties are in obvious and genuine dispute) concerning a change in the concept of "undue risk to the public health and safety" — which BREDL asserts to be a material issue of fact, *see* Tr. 1377-78 — and concerning Duke's alleged failure to address any *de facto* revised DBT found in these orders, which might arguably be applied to Catawba if not exempted from relevant Category I requirements for possessing formula quantities of SSNM.

We note with respect to the latter concern BREDL's statement in oral argument that, even if granted any exemptions from the provisions in Part 73 from which Duke seeks exemption, "Duke is still going to be a Category I facility . . . still . . . subject to the Category I design-basis threat," the content of which BREDL argues has been "redefined" by the Commission. Tr. 1376. We also note that the actual possibility that an order or orders similar to those issued to NFS and BWXT might be issued with regard to Catawba in the future appears not to be foreclosed. The Staff, in response to a question to the effect of whether, if the requested exemptions are not granted, an order similar to the NFS and BWXT ones might be issued for Catawba, stated that it did not know "when and if Duke will ever have MOX onsite, and at the time that they will receive MOX, or that the MOX process, if it goes forward [sic], *the Staff would have to reassess what the threat conditions are at that time.*" Tr. 1315 (emphasis added); *see* Tr. 1314.[9] In addition, when asked about this, Duke counsel stated that Catawba

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[9]We also note Staff's argument through counsel to the effect that, without any such reassessment:

> . . . to reach the conclusion that the Intervenor suggests, which is that the Category I DBT should apply to Catawba, would require [the Licensing Board] to find that that order modified the regulatory requirements in 73.1 and therefore that order should apply in this case. And to make that particular finding, [the Licensing Board] would have to find that the Commission, in violation of the Administrative Procedures Act, promulgated an order which applies prospectively and rescinded a promulgated regulation.

could, "[b]y virtue of having the MOX fuel, . . . become[ ] potentially subject to the generic Category I requirements," both those in the regulations as well as, "potentially and in the abstract, . . . additional requirements . . . [including] whatever additional requirements were imposed upon BWXT and NFS." Tr. 1290; *see* Tr. 1297-98. (Counsel for Duke indicated that Duke has no actual knowledge of what is contained in the NFS and BWXT post 9/11 security orders. Tr. 1299.)

Notwithstanding, however, that the matters specifically at issue in CLI-04-06 did not include the post-9/11 security orders issued to the two Category I fuel facilities, and that both the Staff and Duke argue that the Category I facility security orders do *not* now apply to Catawba, some of the *principles* discussed by the Commission in CLI-04-06 would seem, to the effect argued by Duke and the Staff, *see, e.g.*, Tr. 1286, 1334, to relate also to the post-9/11 orders issued to the Category I fuel facilities.

The question thus arises: to what extent do the principles of CLI-04-06 relate to the post-9/11 Category I fuel facility security orders, in the context of the issue posed by BREDL in Contention 1?

The Commission's statement, quoted above by the Staff, that "[t]he current proceeding has nothing to do with the NRC's post-September 11 general security orders" would lead to one conclusion. However, another statement of the Commission in CLI-04-06, quoted by both the Staff and Duke, is not so clear with regard to the Category I fuel facility orders — i.e., the statement that all parties to this adjudication "may safely assume, as a baseline, that Duke's Catawba facility will comply with all applicable general security requirements, both those

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Tr. 1349. The Licensing Board obviously makes no such finding herein as suggested by Staff counsel, nor do we speak to the correctness of counsel's premise, or to whether the ultimate conclusion suggested by counsel necessarily follows from such premise. To the contrary, what the Board attempts to do in its discussion of Security Contention 1 is to highlight some of the questions, issues and implications — both legal and practical — relating to and arising out of the contention and the parties' arguments on it, so as to clarify as much as possible, in a somewhat complex context of interrelated issues, some of the more significant aspects of the questions we herein certify to the Commission.

prescribed in NRC rules and those prescribed by NRC order," would not appear to apply to the Category I fuel facility orders under the theories posed by Duke and the Staff, given that both have stated through counsel that these do not apply to Catawba at this time. *See, e.g.*, Duke Response at 9-10; Tr. 1290, 1314-15.

Whether the Staff's potential future assessment of Catawba with regard to the issuance of any security order similar to the NFS and BWXT orders might at some point render these Category I facility orders (or their provisions) relevant and/or warrant making them accessible to BREDL would seem to be an open question, given that the Commission in CLI-04-06, in addition to making the statements quoted above, also stated the following:

> . . . . the touchstone for a demonstration of "need to know" is whether the information is indispensable. Here, as the pleadings before us represent, neither Duke nor the NRC staff has any intention of measuring Duke's security arrangements for MOX against last year's general security orders issued to reactors. . . .

CLI-04-06, slip op. at 9-10. Thus the indispensability (and, implicitly, the relevance) of the post-9/11 orders issued to reactors is tied to whether or not either Duke or the Staff has "any intention of measuring Duke's security arrangements . . . against [these orders]." Logically, the same principle could be applied to the post-9/11 Category I facility orders — i.e., if either Duke or the Staff has any "intention of measuring Duke's security arrangements for MOX against last year's general security orders" issued to Category I facilities, this would very arguably make them relevant and indispensable to BREDL such that it might have a "need to know" with regard to them.

We make these observations both in the context of the possible future Staff assessment (as discussed above) of any need for the issuance of an order regarding Catawba similar to the two Category I post-9/11 security orders cited by BREDL and Duke — which arguably indicates some level of intention that the Staff might in the future assess, or "measure," Duke's security arrangements for MOX against the types of requirements contained in such orders; as well as in light of certain statements of Duke, through counsel, which could be taken as an indication of

Duke's intention that *the Licensing Board* measure Duke's proposed security arrangements against the post-9/11 orders issued to reactors.

Duke counsel first addressed the "measurement" issue in response to questioning about its arguments on the specificity requirements for contentions as well as about its assertion made in the fourth bulleted item quoted above, in which Duke states:

> • BREDL's proposed contentions fail to accept as a baseline that the Catawba facility will comply with all applicable general security requirements, both those prescribed in NRC rules and those prescribed by NRC order, and that such compliance gives Catawba a significant ability to counter an attack for purposes of theft as well as sabotage.

Duke Response at 7. Upon being asked how this assertion should be considered in light of the Commission's statement that "neither Duke nor the NRC staff has any intention of measuring Duke's security arrangements for MOX against last year's general security orders," Counsel first argued that no "measurement" was involved, stating:

> . . . all we're trying to say, as we say there, is that in the context of a Part 50 facility that meets the revised post-9/11 requirements, there is a significant capability with respect to sabotage as well as theft. That's not a measurement against old requirements, that's really just a statement of a truism that that is, again, *the context you have to look at.* If you are going to steal the material, you have to be able to get to the material, so the baseline is the Commission's baseline, the existing requirements.

Tr. 1325 (emphasis added); *see* Tr. 1304-11, 1318-26.[10]

Additional statements, made by Duke co-counsel in oral argument on other security contentions, go more directly to the "measurement" issue. One, made with regard to Security Contention 3, arose as follows:

> MR. WETTERHAHN: Because of safeguards limitations, the only thing I can ask you because you've seen it in the past, to *take a look at the radiological DBT, as revised,* and determine whether Catawba as well as anyone else we see in that order would have to defend [redacted].

[10]Counsel had earlier, in contrast, stated that "[i]f there is something new that we're proposing to rely upon to address this additional threat to theft of the MOX fuel assemblies, that could be an issue in this proceeding [but] this contention doesn't address any specific new proposed addition." Tr. 1286.

> JUDGE YOUNG: So are you at this point measuring your security arrangements against the general security orders that are safeguards[,] which is the door that the Commission seems to be leaving open by basing its decision on the fact that neither Duke nor the NRC staff has any intention of measuring Duke's security arrangements for MOX against last year's general security orders?
>
> MR. WETTERHAHN: We are using that as a baseline to look at the increment necessitated by the receipt of MOX fuel. *If the baseline is that we have to defend against more than one team, then we take that as a baseline and proceed from there*, whether or not the Commission orders require that it is a safeguards issue.

Tr. 1447 (emphasis added).

Another of Duke counsel's statements made in oral argument concerned Security Contention 5, and was actually raised in the context of a discussion of, among other things, what the Commission intended in CLI-04-06, which was initiated by Staff counsel. Tr. 1485; *see* Tr. 1486-87. Duke co-counsel stated that the Board in reaching our rulings might look not only at the incremental additional aspects to the DBT for theft found at 10 C.F.R. § 73.1(a)(2) (as compared to the DBT for sabotage specified at 10 C.F.R. § 73.1(a)(1)), but also, as in the above-quoted statement, at " ... the revised design basis threat." Tr. 1487.[11]

Finally, another, similar statement is found in Duke's written response to BREDL's security contentions:

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[11] Counsel's actual words were, " . . . the Board, which has access to the revised design basis threat – " Tr. 1487. (Counsel's statement was interrupted by a person coming into the room, necessitating a pause to assure the person's security status vis a vis the proceeding.) Counsel later clarified upon questioning that he *did* intend by this statement to refer to "last year's general security orders issued to reactors," Tr. 1490. In this instance counsel explained that he was making the statement at issue in the context of the Commission's statement in CLI-04-06 (slip op. at 10) that all parties could "assume . . . that Duke's Catawba facility will comply with all applicable general security requirements, both those prescribed in NRC rules and those prescribed by NRC order," and did not mean to imply that Duke intended that the Board "measure [Duke's] security arrangements against the revised [DBT] in the post-9/11 orders." Tr. 1488; *see also* Tr. 1324-26. We must, however, deal with the reality of the situation — however it is characterized — and given that the statement obviously evidences some intention that the Board look at the "revised DBT" in the post-9/11 orders issued to Catawba and consider this in our determinations relative to Duke's security proposals, it is hard to see how this does not in actual effect involve some "measurement" of the proposals against the orders. Indeed, the Staff, perhaps implicitly recognizing that in making such a suggestion Duke was coming close to (if not actually) stating its "intention" that we "measur[e] Duke's security arrangements for MOX against last year's general security orders [issued to reactors]," expressly disagreed with Duke on this. Tr. 1492.

> Whether or not the radiological DBT for nuclear power plants under the post-9/11 orders considers [redacted] would be Safeguards Information. However, the Board, which is privy to such information, may consider this matter in its deliberations as a basis in rejecting this contention. If the Board has any doubt, it should refer the matter to the Commission for its determination.

Duke Response at 27 n.38.

In these statements counsel quite obviously, in the end, ask us to look at, and consider, the post-9/11 security orders as we weigh BREDL's contentions and the parties' arguments on them. Counsel does not use the word "measure," using instead another term used in CLI-04-06, i.e., "baseline," arguing that BREDL "fail[s] to accept as a baseline that the Catawba facility will comply with all applicable general security requirements," *including* "those prescribed by NRC order," which are asserted to "give[ ] Catawba a significant ability to counter an attack for purposes of theft as well as sabotage." *See supra* at 20, 27 (quoting from Duke Response at 7). Counsel does not explain how the intervenor (or, more pertinently, its counsel and expert) *could* with any specificity in writing contentions "accept as a baseline" any information of which it has no knowledge — and this question goes to the applicability of the "indispensability" principle established by the Commission in CLI-04-06. Nor does counsel explain how *this Licensing Board* could "look at" and "consider" such information *without*, in real practical effect, "measuring Duke's security arrangements for MOX against" it.

As indicated above, some of counsel's statements were addressed to other contentions than Contention 1. The overall question that they address, however, arose in argument on Contention 1, to which the bulleted language quoted above is in part directed. In addition, the broader question, or issue — which we will call the "indispensability/measurement" issue for ease of reference at this point — comes most into focus in discussion of Contention 1. This issue, moreover, arises out of CLI-04-06, on which both Duke and the Staff have relied in their responses to Contention 1; and it is in Contention 1, the responses thereto, and argument thereon that related questions addressed in CLI-04-06, concerning the post-9/11 orders, access

to them, and their relevance, are most directly engaged. In view of these factors as well as the efficiency value of considering these related issues and questions together, we find that the subject matter of the statements of counsel noted above, as well as the various related issues, warrant attention here.

Considering, then, the issues surrounding counsel's statements, in light of the Commission's statement that "neither Duke nor the NRC staff has any intention of measuring Duke's security arrangements for MOX against last year's general security orders issued to reactors," as well as the Commission's statement (made in a context of discussing a party's "wants" versus "needs" for any given information) that "a party's need to know may be different at different stages of an adjudicatory proceeding, depending on the purpose of the request for information," *see* CLI-04-06, slip op. at 8-10, we are led to a number of combined legal and practical questions. These circumstances might, for example, lead to a possible finding that Duke's indication of intention that *we* in effect measure its proposal against the post-9/11 reactor security orders, effectively distinguishes the current situation from the situation considered by the Commission in CLI-04-06 — and that this effectively bring us, under the Commission's analysis, to a *new stage* of this proceeding with regard to the post-9/11 reactor orders, at which access to these on the part of BREDL could arguably be viewed as now being "indispensable." There appears to be at least some possibility that the same question might arise as well with regard to the post-9/11 Category I facility security orders, given the Staff's indication of a possible reassessment of the situation with regard to this at some point.

We highlight these questions not lightly, but rather to illuminate and underscore the significance of the questions raised and argued by the parties with regard to Contention 1 and related issues — which might well extend, in various forms, beyond Contention 1 and our current rulings herein and into the future, in various contexts.

The controlling authority of the Commission's decision in CLI-04-06 is without question, and how it is interpreted and applied with regard to these questions is pivotal. Specifically with

regard to Security Contention 1, although the post-9/11 reactor orders addressed in CLI-04-06 are not at issue in this contention, *both* Duke and the Staff rely on CLI-04-06 in their arguments on this contention, as indicated above, with Duke relying on it both in its general "Overview of Proposed Security Contentions" as well as in its specific arguments on Contentions 1, 2, 3, and 4. Staff Response at 5-6; Duke Response at 8; *see id.* at 3 n.7; 4; 5; 6; 12; 16 and n.21; 20. And Security Contention 1, in addition to the questions it explicitly and specifically raises, also goes to the heart of both those issues considered by the Commission in CLI-04-06 and those related issues that are the subject of BREDL's continuing arguments that access to both the reactor and Category I facility post-9/11 orders by its counsel and expert is and will be effectively "indispensable" to it in the preparation and litigation of its case at this and future stages of this proceeding.[12] *See, e.g.*, Tr. 1279, 1361-62; note 7 above. Moreover, Staff counsel indicated in response to questioning that it would make the same arguments it makes on Contention 1 with regard to other contentions. Tr. 1329.

In light of all these considerations, we find that the wisest course of action with regard to Contention 1 is to seek further guidance from the Commission on what appears to us to be a rather significant coalescence of several pertinent related questions, at this critical stage of this proceeding in which we rule on the admissibility of the intervenor's security contentions, thus determining its right to a hearing on the issues presented therein. We therefore, under 10 C.F.R. § 2.718(i), herein certify to the Commission for its consideration these questions,

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[12]With regard to the post-9/11 reactor orders generally and BREDL's arguments regarding them, we would note that, without affording BREDL or its representatives access to information that Duke would urge us to consider in making our rulings, any actual consideration of such information by us would result in our decision being based on matters outside the record available to all parties (or their representatives with appropriate clearance), thus depriving BREDL of an arguable due process right to notice of and opportunity to respond to any information that might be used against it in this proceeding. Unlike some other (non-NRC) cases where it may be argued (sometimes with notable attendant controversy) that adjudicatory decisions may or should be based on secret information, this case involves no suggestion of untrustworthiness on the part of those persons from whom the information is withheld, who have undergone investigations leading to the issuance of "L"-level security clearances, *see* CLI-04-06 at 7-8, 13 n.27, and who as BREDL's counsel and expert would seem to have obvious ground for access at least to material *now actually proposed to be considered by us in reaching our decision.*

both those specifically raised in Security Contention 1, and those that arise out of and relate to it, the responses to it, and also to issues addressed in CLI-04-06, as discussed above. We have attempted herein to provide what elucidation we can on these questions, and leave it to the Commission in its discretion to provide whatever further elucidation and guidance it wishes to provide on them.

Security Contention 2. Failure to describe perceived danger of theft of SSNM and how it will be handled.

> The Security Plan Revision fails to satisfy Appendix C of 10 C.F.R. Part 73 or the Standard Review Plan, because it does not contain a statement of the perceived danger with respect to theft of [SSNM], or how that threat will be handled.

Security Contention 2 - Basis

BREDL in Security Contention 2 challenges Duke's security submittal in two particulars: first, that it fails to describe perceived dangers, and second, that it fails to describe means of handling perceived dangers. BREDL Security Contentions at 5, 9. BREDL cites Appendix C's requirement that a safeguards contingency plan must:

> identify and define the perceived dangers and incidents with which the plan will deal and the general way it will handle these . . .
>
> a. Perceived Danger – A statement of the perceived danger to the security of special nuclear material, licensee personnel, and licensee property, including covert diversion of special nuclear material, radiological sabotage, and overt attacks. The statement of danger should conform with that promulgated by the [NRC]. (The statement contained in 10 C.F.R. § 73.55(a) or subsequent Commission statements will suffice.)

Id. at 5 (quoting 10 C.F.R. Part 73, Appendix C, § 1. Background).

BREDL notes that § 73.55(a) describes the perceived threat to nuclear power plants as one of sabotage alone, but that this has been described as out of date, and that according to a relevant guidance document, "[t]he 1979 physical security upgrade rule replaced the reactor threat definition in Section 73.55(a) with design basis threats for radiological sabotage in 10

CFR 73.1(a)(01) [sic] and for theft or diversion of formula quantities of SSNM in 10 CFR 73.1(a)(2)." BREDL Security Contentions at 5 n.2 (quoting Standard Review Plan for Safeguards Contingency Response Plans for Category I Fuel Facilities (NUREG/CR-6667) (2000) [hereinafter Standard Review Plan or SRP] at 19. BREDL further cites the Standard Review Plan for the principles that a Category I applicant "must commit to a statement of perceived danger," and may not exclude a threat of theft. BREDL Security Contentions at 6 (citing Standard Review Plan at 19).

Noting that both theft and sabotage threats have their own unique challenges, BREDL refers to the 9/11 terrorist attacks as making it clear that "determination is another factor distinguishing the severity of the theft threat from the sabotage threat." BREDL Security Contentions at 6-7. Quoting the Director of the Central Intelligence Agency (CIA), BREDL points out that acquiring chemical, biological, radiological and nuclear weapons constitutes a "religious obligation" in the eyes of Osama bin Laden, "al-Qa'ida and more than two dozen other terrorist groups" that are pursuing such weapons. *Id.* at 7 (quoting from George J. Tenet, Statement before the Senate Select committee on Intelligence, *The Worldwide Threat 2004: Challenges in a Changing Global Context* (February 24, 2004)).

BREDL argues that, although Duke counsel has assured that Duke does not seek exemption from the DBT for theft or diversion, it has not described or even referenced a DBT for theft in its security submittal. BREDL Security Contentions at 7. Citing a reference by Duke to its own approach being to continue with a DBT for sabotage, and challenging Duke's statements that "the existing armed responders are capable of dealing with attempts at radiological sabotage since this is the design basis threat," and that "because of the form of the SSNM (fuel assemblies), the current armed responders are also capable of deterring any attempted theft," BREDL asserts that there is no evidence to support Duke's claim. *Id.* at 8 (citing Duke 9/15/03 Security Submittal, Attachment 2 at 3; Attachment 7 at 14). BREDL argues that Duke does not appear to appreciate the "important point" that a "terrorist plot to

seize SSNM and successfully remove it to a secure location for production of nuclear weapons would require significantly greater planning, resources and firepower than a plot to conduct a suicidal sabotage attack, where escape would not be necessary." BREDL Security Contentions at 8.

BREDL also cites subsections 1(b) and 1(c) of Appendix C for its argument that Duke must describe the means of handling perceived dangers, and quotes the Standard Review Plan in support of its argument that the safeguards contingency plan must:

> contain a delineation of the types of incidents covered in the plan. If addressed in this module, this discussion can be of a general nature, so long as the discussion of events in the Generic Planning Base is sufficiently specific to meet the requirements of 10 CFR 73 Appendix C, contents of the Plan, Section 2. Alternatively, this section may cross-reference the discussion in the Generic Planning Base. The listing of incident types addressed in the plan must include all types that must be protected against in order to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to public health and safety. (See 10 CFR 73.20).

Id. at 9-10 (quoting Standard Review Plan at 21). BREDL argues that the security submittal fails to describe the types of incidents covered by Duke's revisions to its security plan or identify or evaluate credible theft scenarios under the theft DBT, such as, for example, a small group of attackers with the ability to operate as two or more teams, as provided at 10 C.F.R. § 73.1(a)(2). BREDL Security Contentions at 10.

Security Contention 2 - Duke and Staff Responses

Duke

Duke argues that in Security Contention 2 BREDL is attempting "to shift to Duke the burden of identifying a credible vulnerability with respect to theft of the MOX fuel assemblies," and that the contention "does not articulate a genuine dispute on a material issue of law or fact, or establish a basis for meaningful relief in this proceeding." Duke Response at 10. Duke notes the statement in Appendix C that "[t]he statement [of perceived danger] contained in 10 C.F.R. § 73.55(a) or subsequent Commission statements will suffice," which, Duke says,

"indicates that, to the extent there is some formalistic requirement to be fulfilled, it is not an elaborate requirement." *Id.* at 11. In addition, Duke states that "no genuine dispute exists as to the 'perceived danger' addressed by Duke's Security Submittal. The perceived incremental danger is theft of the MOX fuel assemblies." *Id.* (citing Security Submittal, Attachment 2 at 2-3). According to Duke, "[t]he enhancements to the security plan address precisely that threat, and BREDL does not identify any specific perceived vulnerability in this contention." Duke Response at 11.

Duke counters BREDL's arguments about terrorism threats of theft by stating that the submittal "is specifically intended to address attempts at theft," and arguing that BREDL does not engage the information in that Submittal in any substantive way. *Id.* at 11-12. In response to BREDL's argument that Duke does not describe the threat, Duke refers to the DBT for theft at 10 C.F.R. § 73.1(a)(2). *Id.* at 12. Duke states that "the strategy employed in the Security Submittal is premised upon, and credits, the existing security capabilities at Catawba to address the DBT for sabotage at a Part 50 facility — as one part of protecting against the DBT for theft." *Id.* Referencing the statement in the submittal that "because of the form of the SSNM (fuel assemblies), the current armed responders are also capable of deterring any attempted threat," Duke argues that "[l]ogic dictates that those armed responders can prevent external attackers from ever reaching the MOX fuel [and] . . . can also respond to attempts to assault the facility for the purposes of theft, or respond to attempts to steal the fuel from the inside." *Id.* at 12-13. BREDL fails, Duke asserts, to offer "anything to suggest how Duke's approach is specifically inadequate." *Id.* at 13.

In Duke's eyes, BREDL's assertions, that Duke does not know the specific capabilities of a Category I adversary, and that the security plan based on a sabotage threat "will be utterly inadequate to protect against the considerably more severe threat of theft of SSNM," beg many questions, such as "why is the plan inadequate? why is the threat of theft considerably more severe than the threat of sabotage? what adversary characteristics does BREDL believe are

sufficient to overcome the security plan as revised? how are those characteristics consistent with 10 C.F.R. § 73.1(a)(2)?" *Id.* at 13. Duke says it "inherently recognizes in the Security Submittal that protecting against the threat of theft may have nuances different than protecting against radiological sabotage," and that it has accordingly proposed "extensive additional actions to protect the MOX fuel from theft, while concurrently maintaining existing measures to protect the facility against the threat of sabotage." *Id.* The "totality of these measures," Duke argues, "provides the protection against sabotage to the facility *and* theft of the MOX fuel." *Id.* (emphasis in original). Regarding BREDL's criticism of Duke for failing to "identify or evaluate credible theft scenarios," Duke argues that this task belongs to BREDL, and that it does not establish a genuine dispute on a material issue of law or fact, as required by Section 2.714(b)(2)(iii). *Id.* at 14.

Staff

The Staff argues that BREDL's contention is inadmissible, stating that the Standard Review Plan does not establish any regulatory requirements with which a licensee must comply, but that it, like other guidance documents, "merely provide[s] guidance to the Staff in performing its review of a licensee's request." Staff Response at 7; *see also* Tr. 1317, 1338-39. The Staff also argues that "the SRP that BREDL refers to applies to fuel facilities, not nuclear reactors," and "did not contemplate a nuclear reactor licensee utilizing its guidance," which is "apparent from the fact that there is a separate SRP that specifically addresses a nuclear power reactor irradiating MOX fuel—the very situation that arises in the instant case." *Id.* (citing Memorandum from J. Shea to G. Tracy Re. Protection Measures Needed for Mixed Oxide Fuel and its Use in Commercial Nuclear Power Reactors (Jan. 29, 2004) (ADAMS Accession No. ML0335605320)).

With regard to BREDL's arguments based on Appendix C, the Staff argues that Duke "has not submitted its Appendix C safeguards contingency plan, and the pertinent regulations do not require that it do so." *Id.* at 8 (citing 10 C.F.R. § 50.54(p)). Instead, the Staff states,

"Duke has submitted a revision to its physical security plan to account for the presence of MOX LTAs on site," and "[t]he physical security plan and the safeguards contingency plan are two separate documents that address separate regulatory requirements." Staff Response at 8. The Staff urges us to compare 10 C.F.R. § 50.34(c) (describing the requirements of a physical security plan) and 10 C.F.R. § 50.34(d) (detailing the requirements of a safeguards contingency plan). *Id.* "Even assuming *arguendo* that there is adequate legal basis for BREDL's contention that Duke's submittal failed to address Appendix C," the Staff argues, " there is insufficient factual basis for BREDL's assertion that Duke did not address the security measures that it will take while fresh MOX LTAs are present at its facility." *Id.* The Staff notes Duke's proposed [redacted]. *Id.* Therefore, the Staff argues, "to the extent that the contention alleges that Duke did not identify the security measures that it would use to address contingencies while MOX LTAs are present, the contention should be rejected." *Id.*

Security Contention 2 - Licensing Board Ruling

With regard to the requirement in Appendix C for a statement of perceived danger, we find, after considering the arguments of all parties, that although BREDL raises some good points, Duke in its Response in effect adopts as its statement of perceived danger the provisions of 10 C.F.R. § 73.1(a)(2), the DBT for theft for SSNM. Given that the provision in Appendix C requiring a statement of perceived danger permits reference to a regulatory provision, which BREDL agrees has been replaced with the provisions of 10 C.F.R. § 73.1(a)(2), we find this adoption of the provisions to be sufficient to meet the requirement.

Regarding BREDL's arguments that Duke has failed to describe the means of handling perceived dangers, we note that subsections 1(b) and 1(c) of Appendix C do state that the contents of the Safeguards Contingency Plan include:

b. Purpose of the Plan—A discussion of the general aims and operational concepts underlying implementation of the plan.

c. Scope of the Plan—A delineation of the types of incidents covered in the plan.

10 C.F.R. Part 73, Appendix C.

Insofar as the "general aims and operational concepts underlying implementation" of any portions of Duke's Safeguards Contingency Plan (at any time at which it may be required to address the use of MOX fuel in the Catawba plant) and any "delineation of the types of incidents covered in the plan" are concerned, we find that evidence on these matters may well be relevant to the question of whether Duke should be granted the exemptions it requests — without regard to when the plan should be amended to address any use of MOX fuel. Many of the parties' arguments on Contention 2 concern this latter issue of timing, which involves not only legal questions but practical ones relating to the Staff's oversight function and Duke's responsibilities in that regard. We see no need, however, either to rule on these legal issues here or to delve into these sorts of practical questions relating to the Staff's functions. We find that the underlying factual issues may be addressed more effectively, in this adjudicatory proceeding, in the context of our ruling below on what we consider to be the core issue in this proceeding: whether Duke should be granted the exemptions it requests in its LAR. We thus leave any further comments on Contention 2 to our discussion and rulings on Contention 5, below.

Security Contention 3. **Failure to provide information about the generic and licensee planning bases for protection against theft of SSNM.**

Duke's Security Plan Submittal is deficient because it fails to provide adequate information required by Sections 2 and 3 of Appendix C to 10 C.F.R. Part 73, regarding the generic and licensee planning bases for protection against theft of SSNM.

Security Contention 3 - Basis

BREDL in Security Contention 1 challenges Duke's failure to comply with requirements found in sections 2 and 3 of Appendix C. BREDL relies on the following portions of section 2:

> 2. Generic Planning Base. Under the following topics, this category of information shall define the criteria for initiation and termination of responses to safeguards contingencies together with the specific decisions, actions, and supporting information needed to bring about such responses:
>
> a. Identification of those events that will be used for signaling the beginning or aggravation of a safeguards contingency according to how they are perceived initially by licensee's personnel. Such events may include alarms or other indications signaling penetration of a protected area, vital area, or material access area; material control or material accounting indications of material missing or unaccounted for; or threat indications; either verbal, such as telephone threats, or implied, such as escalating civil disturbances.
>
> b. Definition of the specific objectives to [be] accomplished relative to each identified event. The objective may be to obtain a level of awareness about the nature and severity of the safeguards contingency in order to prepare for further responses; to establish a level of response preparedness; or to successfully nullify or reduce any adverse safeguards consequences arising from the contingency.

BREDL Security Contentions at 10-11. BREDL also relies on portions of Section 3 of Appendix C that require the applicant to describe the "Licensee Planning Base, including "the factors affecting contingency planning that are specific for each facility," and a "listing of available local law enforcement agencies and a description of their response capabilities and their criteria for response." *Id.* at 11.

BREDL also cites the SRP here for requirements that a contingency response plan provide "enough information to demonstrate that the [Tactical Response Team] and other armed responders can interdict armed attackers or an insider attempting to flee with SSNM in time and with appropriate weapons to prevent theft or sabotage." *Id.* (quoting SRP at 30). BREDL notes that [redacted], noting that it opposes this request (in Contention 5), and arguing that "[e]ven if the request were

granted, this would not exempt Duke from addressing the means by which the existing security force will respond to the design basis threat." *Id.* at n.5.

BREDL argues that Duke's security plan revision is "fundamentally inadequate to satisfy Sections 2 and 3 of Appendix C" because it hasn't "demonstrated that its strategy for responding to the sabotage threat is adequate to protect against the swifter and more deadly and more complex threat posed by those who would steal or otherwise divert the plutonium." *Id.* at 11. Asserting that this is "a very significant omission," BREDL argues that "[i]f the security force is not adequate to defeat the adversary, then the adversary can gain control of the site." *Id.*

BREDL offers as an example "a small group of attackers with the ability to operate as two or more teams," which it states "would involve an overt attack in which one group of attackers stages a diversion, while the other group kills all the guards and disrupt[s] communications with local law enforcement agencies." *Id.* at 12. This, according to BREDL, "[redacted] and the form of the SSNM." *Id.* at 12. BREDL cites recent Congressional testimony by an official of the General Accounting Office that "DOE and NNSA [National Nuclear Security Administration] site official[s] anticipate that terrorist attacks on their facilities will be short and violent affairs, and will be over before any external responders can arrive on the site." *Id.* (citing Nuclear Security: DOE Faces Security Challenges in the Post-September 11, 2001 environment – statement of Robin M. Nazarro (June 24, 2003)).

BREDL argues that, "[i]f Duke were to actually address the Category I design basis threat in the Security Plan Submittal, it would require a major overhaul of the document." BREDL Security Contentions at 12. "The threat of theft or diversion is so fundamentally different from the threat of sabotage that the security plan for the Catawba plant would have to be completely re-evaluated," BREDL asserts, stating that the "mere assumption that there is

more than one team of adversaries, for example, would have a profound effect on the security analysis." *Id.*

BREDL contends that:

> Duke must evaluate response strategies for all current, credible scenarios for theft or diversion of Category I quantities of SSNM from Catawba, including scenarios contained in or suggested by classified NRC guidance documents that pre-date the terrorist attacks of September 11, 2001, as well as scenarios contained in or suggested by post-9/11 enforcement orders which purport to upgrade the design basis threat in 10 C.F.R. § 73.1. As part of this evaluation, Duke needs to consider how the requirements for local law enforcement capabilities, the criteria for their response, and arrangements for communication may need to be modified to respond to the [alleged] higher level of threat posed by theft or diversion of formula quantities of SSNM.

Id. at 12-13 (citing In the Matter of Nuclear Fuel Services, Inc., Erwin,TN; Order Modifying License (Effective Immediately), 68 Fed. Reg. 26,676 (May 16, 2003)). BREDL argues that Duke should consult various unclassified studies published by the NRC's Threat Assessment Team, such as "Generic Adversary Characteristics Summary Report," "Potential Threat to Licensed Nuclear Activities from Insiders," "Development and Maintenance of a Design Basis Threat for Use in Designing Nuclear Safeguards," and the "Safeguards Summary Event List," which chronicles security-related incidents occurring at NRC licensed facilities. *Id.* at 13 n.6 (citing NRC fact sheet, Threat Assessment, www.nrc.gov/what-we-do/safeguards/threat.html).

BREDL concludes its arguments supporting Contention 3 by stating that "Duke will be required to conduct [redacted] for Part 50 facilities, [redacted]," and arguing that Duke "must explicitly acknowledge this and must commit to utilizing the full spectrum of Category I adversary threat characteristics during such force-on-force testing." *Id.* at 13 (citing Transcript of Commission Meeting With Nuclear Reactor Industry on Security Force Work Hour Limitations at 15 (September 25, 2003)). BREDL argues that because Duke has "failed to identify any and all additional threat-specific types of incidents in its security plan revision, as required by Section 1,

[it] is not in a position to provide the additional detail required by Section 2 and 3." BREDL Security Contentions at 13.

Security Contention 3 - Duke and Staff Responses

Duke

Duke makes the same argument as it makes against Contention 2, namely that BREDL in this contention inappropriately attempts to shift the burden of posing detailed scenarios to Duke "to demonstrate that the strategy is adequate for its purpose." Duke Response at 15. Duke asserts that BREDL thus "fails to meet its obligation as the proponent of a contention in an NRC licensing proceeding," to "demonstrate that a genuine dispute on a material issue exists, backed by sufficient facts and expert opinion or by reference to specific sources and documents that establish the facts or expert opinions." *Id.* (citing 10 C.F.R. § 2.714(b)(2)(iii)).

Arguing that a "generalized claim of overall deficiency will not suffice," that a licensing board "is not to accept uncritically the assertion that a document or other factual information or an expert opinion supplies the basis for a contention," and that a "petitioner cannot simply refer to voluminous reports, but rather is obligated to provide the analysis as to why particular sections of a document provide a basis for a proposed contention," Duke asserts the contention is inadmissible. *Id.* at 15 and n.20 (citing *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003); *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), LBP-98-10, 47 NRC 288, 298 (1998); *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998), *reconsideration granted in part and denied in part on other grounds*, LBP-98-10, *aff'd on other grounds*, CLI-98-13, 48 NRC 26 (1998)). Duke also asserts that the Standard Review Plan cited by BREDL is not applicable to Catawba because it applies only to fuel facilities — "which are completely different than a nuclear reactor," arguing as well the principle that NRC Staff regulatory guides are not, and do not have the force of, regulations. Duke Response at 15 n.19.

With regard to BREDL's reliance on Appendix C, Section 3, and the need for information on law enforcement agencies, Duke states that it is already required as a power reactor licensee to have safeguards contingency plans for Catawba in accordance with Appendix C to 10 C.F.R. Part 73, under 10 C.F.R. § 73.55(h)(1), and that to address the issue of a listing of local law enforcement contacts, 10 C.F.R. § 73.55(h)(2) already requires the establishment of a liaison with local law enforcement authorities. *Id.* at 16. Relying on CLI-04-06, Duke argues that its "compliance with these existing NRC security requirements is not at issue in this proceeding." *Id.* (citing CLI-04-06, slip op. at 10). Therefore, Duke argues, BREDL's reliance on this argument fails to support an admissible contention. *Id.*

Duke refers to its "existing plan which, consistent with CLI-04-06, must be credited with meeting existing requirements (including liaison with local law enforcement officials and the ability to deal with threats)." *Id.* In light of this, Duke argues, its "detailed Security Submittal provid[es] only the additional, *incremental* measures it is taking to address potential theft of the MOX fuel on site," in regard to which BREDL has not identified "credible vulnerabilities" in proposed Contention 3. *Id.* (emphasis in original). BREDL provides "no support for th[e] generality" that the theft threat is "more deadly and more complex," nor, Duke argues, does it "address the specific DBT standard 10 C.F.R. § 73.1(a)(2)." *Id.* at 16-17.

Duke asserts that BREDL has merely:

> . . . raise[d] a vague "bogeyman" scenario of a "small group of attackers" who "operate as two or more teams," in which one group (which, to be consistent with Section 73.1(a)(2), must be a subset of a "small group" *i.e.*, an even smaller group) creates a diversion, while the other group (also a smaller subset of a "small group") manages to kill all the plant guards and completely disrupt communications with local law enforcement agencies.

Id. at 17. Arguing that "BREDL's hypothetical must further assume that this small group will defeat all the barriers, retrieve the MOX fuel, and successfully transport it outside the station," Duke argues that, "absent a definite scenario and realistic timeline, BREDL has not posited the 'credible vulnerability' envisioned by the Commission that would support admission of a security

contention." *Id.* Duke goes on to critique BREDL's example as "naively assum[ing] that, when responding to a threat, a licensee's security force would not anticipate a diversion as a prelude to an attack." *Id.* It also assumes, Duke asserts, " without basis, that this licensee would expose its entire, relatively large force of response personnel to a single attack, which would subject them all to be killed by an attacking subset of a small group, *i.e.*, an even smaller group." *Id.*

Duke relies on 10 C.F.R. § 73.55 (e) and (f)(1)-(3) for requirements that each facility must have "diverse secure locations, with multiple communications capabilities, and the ability to monitor the Protected Areas to determine whether an attack is underway." *Id.* and 17 n.23. "Given a realistic context," Duke argues, "there is nothing in this proposed contention to support a genuine dispute on a material issue of law or fact." *Id.* at 17-18 (citing 10 C.F.R. § 2.714(b)(2)(iii)).

Duke argues that BREDL's reliance on the NFS and BWXT orders mischaracterizes these orders, which are "particular to two specific licensees," and have "no generic application, particularly to a non-fuel facility such as Catawba." *Id.* at 18. Duke challenges BREDL's references to the various "unclassified studies" as lacking sufficient specificity "as to how the documents allegedly support admission of this contention," and suggests that "to the extent these documents apply to nuclear power plants, the Commission took them into account before promulgating its post-9/11 orders." *Id.* (citing *Fansteel*, CLI-03-13, 58 NRC at 195, 203; *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 212-13 (2003)). With respect to any requirement that Duke should conduct an annual

force-on-force exercise, Duke states that if this is a requirement of an NRC order (that "might be Safeguards Information"), Duke "would be required to fully comply with it." Duke Response at 18.[13]

Staff

The Staff asserts that BREDL has not supported this contention with an adequate legal basis, arguing that, as with Contention 2, Duke has not submitted its safeguards contingency plan and so the requirements of Appendix "simply do not apply," and therefore the contention "does not meet the requirements in 10 C.F.R. § 2.714(b)(2)." Staff Response at 9.

Security Contention 3 - Licensing Board Ruling

As with the second part of Contention 2, we find that BREDL raises some issues in Contention 3, evidence on which may well be relevant to the question of whether Duke should be granted the exemptions it requests in its LAR — without regard to when its Safeguards Contingency Plan should be amended to address any use of MOX fuel. Again, most of the parties' arguments on Contention 3 concern this timing issue, which involves not only legal questions but also practical ones relating to the Staff's oversight function and Duke's responsibilities in that regard. And again, we see no need either to rule on these legal issues here or to delve into these sorts of practical questions relating to the Staff's functions, and find that the underlying factual issues raised in Contention 3 may be addressed more effectively, in this adjudicatory proceeding, in the context of our ruling below on what we consider to be the core issue in this proceeding: whether Duke should be granted the exemptions it requests in its LAR. We thus, as with the second part of Contention 2, leave any further comments on Contention 3 to our discussion and rulings on Contention 5, below.

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[13]We note in this regard Duke's argument, again, that we should "assume that Catawba will comply with all applicable general security requirements, both those prescribed in NRC rules and orders," and that BREDL must "focus on the increment — the additional security measures proposed by Duke," and "identif[y] credible vulnerabilities." *Id.* at 16 n.21 (citing CLI-04-06, slip op. at 10).

Security Contention 4. **Failure to discuss policy constraints on the use of deadly force.**

The Security Plan Revision fails to demonstrate that security for the Catawba nuclear plant will be adequate during use of plutonium MOX fuel, because it fails to discuss policy constraints on the use of deadly force.

Security Contention 4 - Basis

BREDL in Security Contention 4 relies on the requirement in § 3(e) of Part 73, Appendix C, that the licensee's Safeguards Contingency Plan Licensee Planning Base include a "discussion of State laws, local ordinances, and company policies and practices that govern licensee response to incidents." BREDL Security Contentions at 14. Referencing one of the examples the rule states "may be discussed" (that regarding the use of "deadly force"), BREDL states that the "state law criteria for the use of deadly force by private security forces are generally different for sabotage than for theft and diversion." *Id.* In support of the contention BREDL provides, as an exhibit to its contentions, a paper entitled *State Law Limits on the Use of Deadly Force By Facility Security Forces*, arguing on the basis of this document that "many state laws prohibit the use of deadly force to protect property," and noting that "South Carolina law, for example, allows deadly force in response to imminent threat of death or serious bodily injury," but "to protect property only if the trespasser resists attempts to eject him/her with the threat of death or serious bodily harm." *Id.* (citing Sean Barnett and Robert Haemer, *State Law Limits on the Use of Deadly Force By Facility Security Forces* (2003) at 7 [hereinafter BREDL Exhibit 2]).

Thus, BREDL argues, while the use of deadly force in defense of a nuclear power plant against an overt armed attack would appear to be justified under South Carolina state law, "the use of deadly force to protect people against ambiguous or less capable attacks or in defense of nuclear materials facilities or radioactive materials shipments would depend on the nature of

the material being defended and the precise circumstances surrounding the attack," according to the authors of this paper. BREDL Security Contentions at 14 (quoting Exhibit 2 at 7). Specifically, BREDL asserts, "it is not clear whether security guards could fire on thieves who were posing unarmed as a ruse." BREDL Security Contentions at 14 (citing Exhibit 2 at 2). Asserting further that "Duke's revision to its security plan for Catawba completely fails to address the impact of this state law policy constraint on Duke's proposed measures for protecting plutonium fuel from theft or diversion," BREDL contends that Duke's proposal "fails to satisfy Appendix C or its implementing guidance." *Id.* at 14-15.

Security Contention 4 - Duke and Staff Responses

Duke

Duke responds to Contention 4 by stating that, "[c]ontrary to BREDL's assertion, Duke's security plan, procedures, and training already address the use of escalating force, including deadly force." Duke Response at 19. Noting that 10 C.F.R. § 73.55(h) requires that a licensee "establish, maintain and follow an NRC-approved safeguards contingency plan for responding to threats, thefts and radiological sabotage," and that "[s]afeguards contingency plans must be in accordance with the criteria in Appendix C to this part, Licensee Safeguards Contingency Plans," Duke argues that this created a "preexisting requirement for Duke to have addressed Appendix C (and the specific matters enumerated therein) in its security plan" — compliance with which, Duke asserts, "is to be assumed," under CLI-04-6, absent some showing by BREDL of a "specific vulnerability." *Id.* at 19-20 (citing CLI-04-06, slip op. at 10). Also, Duke says, § 73.55(h)(5), which is applicable to Catawba as a Part 50 facility, requires as follows:

> (5) The licensee shall instruct every guard and all armed response personnel *to prevent or impede attempted acts of theft* or radiological sabotage by using force sufficient to counter the force directed at him including the use of deadly force when the guard or other armed response person has a reasonable belief it is necessary in self-defense or in the defense of others.

Duke Response at 20 (emphasis supplied by Duke).

Again, Duke argues, since this is already required, we must presume that Duke complies with it, and that, regarding the "ruse" example posited by BREDL, "response personnel, armed with contingency weapons" and "non-lethal weapons," and "in constant communication with each other and their command," would "use escalating force as they are trained." *Id.* at 20-21 and n.27. Duke notes that § 73.55(h)(4)(iii)(A) "already requires that, upon detection of intrusion into an isolation zone, a protected area, material access area ('MAA') or a vital area," its security organization "must take immediate concurrent measures to neutralize the threat by requiring responding guards or other armed response personnel 'to intercept any person exiting with special nuclear material.'" *Id.* at 21. Duke also notes that, while DOE is onsite, its personnel are permitted under 10 C.F.R. Part 1047 to use deadly force under certain "conditions of extreme necessity, when all lesser means have failed or cannot reasonably be employed." *Id.* at 21 n.28 (citing 10 C.F.R. §§ 1047.1, 1047.2, 1047.7(a)). Duke argues that given these existing requirements, BREDL has "not posed a credible scenario not already covered by the plans that would support this contention," and Contention 4 should be denied. *Id.* at 21.

Staff

The Staff argues that this contention is inadmissible "because it is not supported by law or fact." Staff Response at 10. Again, the Staff asserts that "Duke's Submittal does not raise any issues that are covered by Part 73, Appendix C," and "[t]herefore, Appendix C does not provide an adequate legal basis for alleging that Duke's Submittal is deficient." *Id.* The Staff notes that the language used in § 3 of Appendix C is that the Licensee Planning Base "should" address various topics, including Policy Constraints and Assumptions relating to State laws, etc. *Id.* Given such permissive language, the Staff argues there is no such "requirement," especially since the Commission does use the mandatory "shall" in other parts of the regulation (i.e., in § 3, that the plan "shall include the factors affecting contingency planning that are specific for each facility"). *Id.* at 10-11.

Security Contention 4 - Licensing Board Ruling

Given the use in 10 C.F.R. Part 73, Appendix C, § 3.e, of the permissive words, "[e]xamples that *may be* discussed include: Use of deadly force" (emphasis added), we will not admit Security Contention 4. As with Contentions 2 and 3, however, it may be that evidence from the report submitted by BREDL in support of Contention 4 may be relevant and admissible with regard to the exemption requests at issue in Contention 5, assuming an appropriate showing of this at the appropriate time.

Security Contention 5. Failure to show that Duke meets standard for granting exemptions.

> Duke has failed to show that the requested exemptions from 10 C.F.R. Part 73 are authorized by law, will not constitute an undue risk to the common defense and security, and otherwise would be in the public interest. 10 C.F.R. 11.9, 73.5. consistent with law or in the public interest [sic].

Security Contention 5 - Basis

BREDL provides as basis for this contention various arguments relating to Duke's request for exemption from the following Part 73 requirements for Category I facilities:

> (i) Section 73.45(d)(1)(iv) requirements concerning detection and monitoring systems to discover and assess unauthorized placement and movement of SSNM;
>
> (ii) Section 73.46(c)(1) requirements related to physical barriers for vital areas and Material Access Areas (MAAs),
>
> (iii) Section 73.46(h)(3) requirement to establish a Tactical Response Team, and associated requirements in Section 73.46(b)(3) through (b)(12) related to Tactical Response Team personnel assignment, weapons qualification, training, and physical fitness to the extent they exceed the current requirements in 10 C.F.R. 73.55,
>
> (iv) Section 73.46(d)(9) requirements related to armed guards at MAA access points and search requirements for personnel and materials entering/exiting MAAs, and
>
> (v) Section 73.46(e)(3) requirements concerning alarms for detecting movement within unoccupied vital areas not related to MOX fuel storage.

BREDL Security Contentions at 15 (citing Duke 9/15/03 Security Submittal, Attachment 7

[hereinafter Exemption Request] at 9). BREDL also cites, in its discussion of the request for exemption from § 73.46(d)(9), Duke's related request for exemption from 10 C.F.R. § 11.11(b). BREDL Security Contentions at 25; *see also* Tr. 1500; Exemption Request at 2-7.

BREDL first challenges various "general arguments" made by Duke in support of the preceding exemption requests, asserting that these arguments are neither "consistent with law" nor "adequately protective of common defense and security." BREDL Security Contentions at 15. BREDL begins by attacking Duke's argument that the "underlying rationale for imposing these [Category I] regulatory requirements does not apply to the contemplated use, i.e., the use of fuel pellets sealed inside fuel rods which are part of large, heavy fuel assemblies to be loaded into a reactor." *Id.* at 16 (citing Exemption Request at 1). Arguing that Duke's assertion is "patently incorrect," BREDL points out that "[t]he regulations themselves show that the NRC took into account the characteristics of encapsulated SSNM [ ] when it established security requirements for Category I facilities [and] established even stricter security requirements for SSNM that is not encapsulated." BREDL Security Contentions at 16. BREDL cites as an example of this 10 C.F.R. § 73.46(c)(5), which establishes certain requirements for "[SSNM], other than alloys, fuel elements or fuel assemblies." *Id.* BREDL cites Regulatory Guide [Reg. Guide] 5.61 as another example, noting that the NRC Staff in this Reg. Guide "explains the basis for the stricter requirements," stating that the term, "significant delay to penetrations," as used in section 73.46(c)(5)(iii), means that the MAA barrier must be "more formidable than those surrounding alloys, fuel elements, or assemblies." *Id.* (quoting Regulatory Guide 5.61, *Intent and Scope of the Physical Protection Upgrade Rule Requirements for Fixed Sites* (July 7, 1980) at 5.61-15). Duke is already exempt from these provisions, BREDL argues, "by virtue of the fact that the only SSNM it will possess is encapsulated," and thus Duke has "no legal or factual basis for its argument that the underlying rationale for applying Category I requirements does not apply to plutonium MOX fuel," not having "shown that an additional blanket exemption, beyond the exemption that it will receive under 10 C.F.R. § 73.46(c)(5), should be granted."

BREDL Security Contentions at 16.

BREDL next challenges the following arguments made by Duke in support of its Exemption Request:

> Fundamentally, the security threat does not change with the addition of MOX fuel to the fuel inventory at each reactor site. The MOX fuel material is in the same physical form as the existing uranium fuel material (large and heavy fuel assemblies) and is handled and stored in essentially the same manner as uranium fuel. . . .
>
> . . . . An intruder attempting theft of the SSNM in MOX would require substantial time to access and gain possession of a 1500 pound fuel assembly at the bottom of a 40 foot deep pool surrounded by highly radioactive spent fuel. The inherent access delay associated with this storage location would allow sufficient time for armed security personnel to respond to the intrusion. The current security contingency procedures with the existing security force can effectively respond to this type of intrusion without the need for an additional [redacted].

Exemption Request at 14.

> With the SSNM in the form of complete fresh fuel assemblies, a potential intruder or saboteur can be readily intercepted by the existing armed response force before the intruder can access stored MOX fuel assemblies with the enhanced security measures proposed. 'Access' in this situation is considered as the ability for an intruder, or lone insider, to retrieve and put 'hands on' fresh MOX fuel assembly from the spent fuel pool.

Duke 9/15/03 Security Submittal, Attachment 2 at 6.

Arguing that the "basic elements of Duke's argument for an exemption are that the form of the plutonium fuel makes it no different from uranium fuel, and thus its security should be regulated in 'essentially' the same way," and that "the form of the fuel is a deterrent to theft," BREDL asserts that none of Duke's claims has merit. BREDL Security Contentions at 17. BREDL first points, regarding Duke's statement that the security threat to Catawba is "fundamentally" unchanged by the addition of plutonium MOX fuel, to "a very important difference between the characteristics of the sabotage threat and the threat of theft or diversion of SSNM." *Id.* at 17. BREDL contends that the threat of theft or diversion is "more severe, because the thief is intent on escape," and that "[f]or Duke to assert that the threat remains the

same demonstrates a gross misconception of the security risks posed by its possession of SSNM at the Catawba plant." *Id.* at 17-18.

BREDL also cites certain international physical protection standards and U.S. commitments, with which it asserts Duke's argument is inconsistent. *Id.* at 18. Specifically, BREDL states that neither the International Convention on the Physical Protection of Nuclear Material, to which the United States is a party, nor INFCIRC/225 (Rev. 4), the International Atomic Energy Agency (IAEA) standards for the physical protection of nuclear materials and nuclear facilities, "distinguish between fresh MOX fuel and plutonium oxide with regard to physical protection category." *Id.* at 18. Moreover, BREDL argues, "the September 2000 US-Russian agreement on the management and disposition of excess plutonium, the agreement under which Duke's MOX program is taking place, commits both parties to take into account the recommendations of INFCIRC/225 (Rev. 4) in Article VIII, Section 1(b)." *Id.*

BREDL contends that Duke's arguments on the deterrent effect of the size and weight of the fuel assemblies "simply serve to underscore Duke's lack of appreciation or understanding of the difference between the [DBT] for sabotage and the [DBT] for theft or diversion of Category I SSNM." *Id.* Citing the provision in the DBT for theft found at 10 C.F.R. § 73.1(a)(2), regarding an adversary's ability to operate as two or more teams, including one insider acting in concert with attackers, BREDL asserts that such teams "may be able to overcome the guard force and take over the facility." *Id.* BREDL states that "Duke has not made an effort to demonstrate that the guard force is capable of withstanding such an attack." *Id.* Further, BREDL posits, "[i]n the event the attackers do kill the guards, they will have plenty of time to ■■■■■■■■■■■■■■■■■■ remove the fuel assemblies from the pool," and "[w]hile the fuel assemblies may be heavy and bulky to remove from the plant in one piece, they could be broken up with explosive charges if necessary." *Id.* at 18-19. In support of the latter statement BREDL cites a report by Sandia National Laboratories that was based on a technical assessment of "potential proliferation vulnerabilities associated with the plutonium disposition

options under evaluation within [DOE's] Fissile Materials Disposition Program (FMDP)," commissioned by the DOE's Office of Fissile Materials Disposition. *Id.* at 19 and n.7 (citing Sandia National Laboratories, *Proliferation Vulnerability Red Team Report* (Aug. 12, 1996) [hereinafter Red Team Report], at 4-16; 1-1). BREDL quotes the following selections from this report:

> Proliferation vulnerabilities are features of lower proliferation resistance which provide the greatest opportunities for illicit removal and recovery of plutonium for use in nuclear weapons, thereby reducing the effectiveness of the disposition process. The objective of the Proliferation Vulnerability Red Team (PVRT) was to identify such features and assess their significance.

BREDL Security Contentions at 19 n.7 (citing Red Team Report at 1-1).

> If large units with high plutonium concentration can be quickly made into smaller units containing SQs [significant quantities] of plutonium, the unit size and mass alone does not increase the proliferation resistance of an object to overt threats.

BREDL Security Contentions at 19 (citing Red Team Report at 4-16). BREDL asks us to "note that each plutonium MOX LTA contains over 20 kilograms of plutonium, equivalent to 2.5 SQs of plutonium, as defined by the IAEA, and enough to make three or more crude nuclear weapons." BREDL Security Contentions at 19. BREDL provides excerpts of the Red Team Report as an exhibit to its contentions. BREDL Security Contentions, Exhibit 3.

BREDL also contends [redacted]" BREDL Security Contentions at 19. This is because, BREDL argues, Duke has "[redacted]." *Id.* (citing 10 C.F.R. § 73.1(a)(2)). If [redacted], BREDL asserts, [redacted] — the specific amount of time being dependent on the

response capabilities of offsite local law enforcement, "which is not addressed anywhere in the Security Plan Submittal," according to BREDL. BREDL Security Contentions at 20 and n.8. Further, BREDL argues, "[a]s postulated in the Red Team report, it is also possible to use a heavy lift helicopter as a crane"; BREDL notes that the example given in the Red Team Report is actually of an attack during transport, but argues that it is equally applicable to an attack during storage. *Id.* at 20 (citing Red Team Report at 5-6).

Further, with specific regard to [redacted] on which Duke relies in asserting protection against the 10 C.F.R. § 73.1(a)(2) DBT, BREDL argues that "[redacted]." BREDL Security Contentions at 20. Stating that it "does not know what the insider characteristics of the revised post 9/11 design basis threat for Category I facilities" are, BREDL notes "that the general objective of the two-person rule is 'not allowing a single insider to have unrestricted access to material without some means of detecting his attempted theft of material,'" and suggests that a [redacted]." *Id.* at n.9 (citing SECY-84-216, Security Measures at Nonpower Reactors, Enclosure D, par. 3 (May 25, 1984)).

In addition to the preceding challenges to Duke's general arguments in support of the listed exemption requests, BREDL questions several of Duke's arguments made in support of specific exemption requests. On the request for exemption from the "three-barrier requirement" of 10 C.F.R. § 73.46(c)(1), which requires that SSNM may only be stored in a material access area and that the MAA must be located within a protected area "so that access to vital equipment and to strategic special nuclear material requires passage through at least three physical barriers," BREDL contends that Duke "already has an exemption from the delay requirements for unencapsulated material" found at § 73.46(c)(5) and has not explained why this regulatory "exemption" should be "further expanded." BREDL Security Contentions at 21.

Thus, Duke's arguments that [redacted] so as to meet the definition of a "physical barrier" in Section 73.2, are flawed. *Id.*

According to BREDL, it is [redacted], and "[w]ith respect to radiological material, [redacted], and may serve to enable the theft." *Id.* [redacted], BREDL argues, by "[redacted]." *Id.* If the [redacted], BREDL asserts, "[redacted]." *Id.* Finally, on this issue, BREDL argues [redacted]." *Id.* at 22. Duke should therefore be required to build a separate vault, separately protected in its own vital area, meeting all Category I requirements, for storage of the plutonium MOX fuel. *Id.*

With regard to the tactical response team (TRT) and force-on-force testing requirements of 10 C.F.R. § 73.46(h)(3), BREDL notes that the NRC imposed the TRT requirements (which are "higher and more specialized than for regular security guard forces") in 1988, in an effort to bring security of SSNM at NRC-licensed facilities onto a comparable level with security at DOE facilities. *Id.* (citing Final Rule, Safeguards Requirements for Fuel Facilities Possessing Formula Quantities of Strategic Special Nuclear Material, 53 Fed. Reg. 45,447 (Nov. 10, 1988)). BREDL quotes the following from the preamble to the rule:

> The final rule requires licensees to establish a designated TRT and replaces the current general requirement for an armed response force. Creation of TRT's is expected to provide more highly motivated, professional, and effective organizations to respond to and prevent forceful attempts to remove SSNM from licensee sites.

Id. Thus, BREDL states, the requirement for a TRT is separate from the requirement for security guards, with the TRT seen as the "principal responding force," and the "regular security guard force available to provide assistance." *Id.* (citing 10 C.F.R. § 73.46(h)(3)). BREDL notes that "TRT members carry semi-automatic weapons, [redacted]," *id.* at 23 (citing § 73.46(b)(6)); TRT members "must be specially trained in 'response tactics,'" *id.* (citing 10 C.F.R. § 73.46(b)(8)); TRT members "are held to a higher standard of physical fitness," *id.* (citing 10 C.F.R. § 73.46(b)(11)(i)); and the "special capabilities of TRTs are tested routinely in exercises and 'force on force' testing," *id.* (citing 10 C.F.R. § 73.46(b)(9)).

BREDL cites various additional "gloss" on these requirements found in the Standard Review Plan for Safeguards Contingency Response Plans for Category I Fuel Facilities, to counter Duke's request for [redacted]." *Id.* at 23-24. BREDL argues that Duke's claim that there is "no demonstrable need" for a TRT in light of the form of the MOX fuel being similar to uranium fuel, "is based on a fundamental failure to acknowledge the distinction between the design basis threat for sabotage and the design basis threat for theft or diversion," which according to BREDL "renders the physical characteristics of the plutonium MOX fuel irrelevant to the question of whether [it] can be kept secure from theft in the event of an overt attack involving a highly motivated, well-armed, well-equipped, and well-trained adversary force." *Id.* at 24. Moreover, BREDL contends, to grant Duke's exemption request in this instance would "create an undue risk to the common defense and security." *Id.* BREDL argues that TRTs were established with the "express purpose of providing a high assurance of protection of SSNM from theft or diversion" — an "exceptionally significant" threat in this post-9/11 era, "when international terrorists believe they have a religious obligation to steal nuclear material." *Id.* Duke has not, BREDL insists, "made any attempt to demonstrate that the existing guard force is adequate in numbers, training, fitness, or weaponry to protect against credible theft

scenarios, as opposed to sabotage scenarios," and therefore the exemption request must be rejected. *Id.*

BREDL also opposes Duke's request for [redacted] to have an NRC-U clearance; and prohibit allowing any individual unescorted access to a protected area containing SSNM without either an NRC-U or NRC-R clearance. *Id.* at 25 (citing 10 C.F.R. §§ 73.46(d)(9), 11.11(b)). BREDL argues that Duke has "failed to demonstrate that under an exemption it would be able to provide the same high level of security assurance that compliance with the regulations would afford." *Id.* Specifically, BREDL alleges, Duke has "performed absolutely no analysis of potential threat scenarios that would allow it to say with confidence that the plutonium fuel is safe from theft or diversion while it is being stored in the spent fuel pool," and that "if the LTAs are delivered just prior to or during a refueling outage, when there are many people present in the spent fuel building," maintaining security will be "especially important and difficult." *Id.* Also, citing the Red Team Report, BREDL emphasizes that the fuel is "vulnerable to theft while it is in storage." *Id.* at 25-26.

Contending that compliance with NRC access control and security clearance requirements is "essential," BREDL notes that Duke estimates that 1200 individuals would initially be affected by this requirement at Catawba, and points out that this in itself is "cause for concern – not a reason for an exemption from the rule." *Id.* at 26. This "uncontrolled access to the pools" by many individuals "simply raises the potential for collusion by insiders," BREDL asserts. *Id.* Finally, BREDL argues that Duke's "only rationale for reducing access requirements -- that the fuel is in a form that is resistant to theft – is not credible," because it is "not based on any accounting of the nature of the design basis threat for theft and diversion of Category I SNM." *Id.* BREDL refers us back to its arguments in support of Contention 2 in

further support of this contention.

Security Contention 5 - Duke and Staff Responses

Duke

Duke contests this contention, addressing the various parts of BREDL's basis for the contention one by one. First, Duke argues that BREDL's argument that, because the NRC in promulgating requirements for Category I facilities "chose to apply stricter requirements for certain classes of special nuclear material that are not encapsulated, it cannot issue a further exemption" from the regulations "associated with the encapsulated material in this case," is "incorrect." Duke Response at 22. (Duke states in a footnote that the differing substantive requirements in the rule are not really "exemptions" but merely "appropriate use of rulemaking to recognize substantive differences between classes of material." *Id.* n.29.) Citing various precedent for the proposition that the NRC may issue an exemption "[i]f the applicable exemption standard is met," Duke asserts that "[h]ere, where the facility type at issue, *i.e.*, a commercial nuclear reactor, is so different from the type of facility for which the rule was written, *e.g.*, a fuel fabrication facility, it is a natural subject for an exemption." Duke Response at 23. In addition, Duke asserts, "the recently-issued NRC MOX Security Review Plan clearly contemplates that applicants, such as Duke, may seek exemptions from relevant security requirements in Parts 11 and 73." *Id.* n.31.

Citing the Commission's 1989 exemption of the Fort St. Vrain Nuclear Generating Station from 1988 amendments to Part 73 that "required more stringent physical protection and security personnel performance regulations, and a revised DBT, for NRC-licensed fuel facilities possessing formula quantities of strategic special nuclear material," Duke argues that this illustrates both the Commission's authority to issue exemptions and the substantive basis for such exemptions for a nuclear power plant. *Id.* at 23-24 and n.32 (citing Jan. 19, 1989 letter from K. Heitner, NRR, to R.O. Williams, Jr., Public Service Company of Colorado, transmitting

Public Serv. Co. of Colorado (Fort St. Vrain Nuclear Generating Station), "Exemption" (docket no. 50-267)). Regarding the substantive issue, Duke quotes the following language from the Commission in its exemption to Fort St. Vrain:

> Fuel elements containing 93.15% enriched uranium fuel at Fort St. Vrain are located in the core or in storage. Only fresh fuel in storage is important to this physical protection requirements [sic]. Fresh fuel elements are stored in a substantial building, located within the reactor protected area, that is locked and protected by alarms and guards.
>
> ****
>
> The end result is that the fissile material is highly diluted by graphite and other materials. Recovery of the fissile material is made difficult by the inert and refractory nature of the carbon and silicon carbide coatings and by the presence of thorium. Therefore, due to the fuel element weight and to the extensive processing needed to yield weapons useable material, the fuel is unattractive from a theft point of view.

Id. at 24.

Regarding the form of the plutonium MOX fuel, Duke argues that it *has* taken theft into account in its submittal through the addition of enhanced measures, and that BREDL's assertions regarding the three statements quoted from Duke's submittal are not supported by any basis. *Id.* at 24-25. Nor, asserts Duke, do BREDL's arguments based on the theft DBT and differences between it and that for sabotage, provide "any specific or substantive basis to support proposed Contention 5." *Id.* at 26. Duke disagrees that theft is a greater threat than sabotage and argues that sabotage is actually "more of a threat," because "an individual who is willing to sacrifice his life can more easily penetrate a facility and commit an act of sabotage," whereas theft "has the added element that the thief (or thieves) must escape with the stolen material." *Id.* Theft, Duke argues, requires more time in which attackers may be contained and captured, "which is an acceptable outcome for the security response force." *Id.* In comparison to a fuel facility, Duke asserts, Catawba is more resistant to theft because, "[r]ather than the material being in-process and vulnerable at a number of diverse points, at Catawba it is stored at the bottom of the spent fuel

pool under 23 feet of water and thus is less vulnerable." *Id.* Also, Duke argues that the international authorities cited by BREDL are not applicable in this proceeding. *Id.* n.37.

Characterizing BREDL's example suggesting [redacted], as "nothing more than sheer speculation with no specificity or basis" or "credible vulnerability," Duke argues that BREDL provides no "reasoned discussion of how that vulnerability would be exploited, as would be required to support an admissible contention." *Id.* at 27. Duke asserts that "there can be no doubt that Catawba (or any nuclear power facility) has a substantial capability to engage an armed force consisting of a 'small group' of attackers." *Id.* BREDL fails, Duke says, "to provide the requisite basis for the scenario that would result in all response forces being killed." *Id.* In addition, Duke states that BREDL "fails to address the [redacted], and those in the Central Alarm Station and Secondary Alarm Station and other secure locations who would continue resisting and would be able to call for assistance." *Id.* BREDL has not, Duke contends, "[redacted]." [redacted].[14] Suggesting that BREDL must as part of the basis for this contention identify "any specific additional measure it would like to see taken," Duke notes that BREDL has not done this. *Id.*

Regarding a BREDL suggestion that fuel assemblies could be "broken up with explosive charges if necessary," Duke claims that the Red Team Report does not support this, since what

[14] [redacted].

it addresses is "the use of explosive charges to cut through heavy walled steel vessels,"[15] and the "use of such explosives on very thin clad fuel elements would only result in the distortion, bending or destruction of the pellets, with the result that the fuel pellets could not be removed in any reasonable period of time." *Id.* at 28. In addition, Duke says the report is distinguishable because it addresses "high plutonium concentrations," into which category MOX fuel elements, "with less than 6% $PuO_{2,}$," would not fall. Duke Response at 28 and n.39. BREDL has not therefore, Duke argues, demonstrated that this "is part of a credible scenario." Duke Response at 28.

Duke asserts that BREDL likewise has no basis for its assertion that [redacted] is inappropriate, or for its [redacted]. Duke Response at 28. Duke argues that a more specific basis "for this hypothetical scenario" and "its timeline" is "required by 10 C.F.R. § 2.714(b)(2)." *Id.* Characterizing as speculation the suggestion during oral argument that "a heavy lift helicopter could be utilized to transport the fuel elements from the Fuel Building," Duke asks that we note that, "unlike the situation that may be present during the transportation situation described in the reference cited by BREDL, the Catawba Fuel Building has a [redacted] roof." *Id.* Duke asserts in a footnote the following:

> If one tried to get a fuel assembly into the open, it would have to be loaded, using another crane, onto a carrier (which the intruders would have to bring in with them), and moved [redacted]. This is not physically possible in the timeframes at issue.

Id. at 28 n.40. Thus, Duke argues, "this hypothetical scenario and mode of transportation is not physically possible and not 'credible.'" *Id.* at 28-29. In addition, Duke asserts, theft by this mechanism is not within the design basis threat defined in 10 C.F.R. § 73.1(a)(2), stating that

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[15]We note that BREDL counters this statement by asserting that the Red Team report does speak of fuel assemblies, Tr. 1480, and indeed, upon examination, we see that the report does appear to address subdivision of fuel assemblies into "smaller masses using explosives." Red Team Report at 4-16.

"[c]learly, the DBTs in 10 C.F.R. § 73.1(a)(1) and (a)(2) speak only to land vehicles for entrance to or exit from the facility." *Id.* at 29 and n.41.

On BREDL's challenge to Duke's exemption request to [redacted] 10 C.F.R. § 73.2, Duke argues that BREDL "has raised no specific facts that would provide the basis for a challenge to the requested exemption." *Id.* at 29. Duke reiterates its argument that allowing storage of a class of materials in an MAA "does not constitute an exemption" or support an argument that this provision "would prevent the Commission from issuing another justified exemption from other regulations." *Id.* Duke castigates as "nonsensical" BREDL's arguments about the [redacted], actually urging that the arguments equate to a "suggestion that the water should be removed from the spent fuel pool." *Id.* n.42. Citing the definition of "material access area" and a portion of the definition of "physical barrier" in 10 C.F.R. § 73.2 (i.e., that an MAA is "any location which contains special nuclear material, within a vault or a building, the roof, walls and floor of which each constitutes a physical barrier," and that the definition for a "physical barrier" includes "any other physical obstruction constructed in a manner and of materials suitable for the purpose for which the obstruction is intended," from subsection (3) of the definition), [redacted]." *Id.* at 30.

Duke criticizes BREDL for failing to proffer "any specific credible scenario" [redacted] "unlikely to deter a team of thieves bent on killing all the security guards, [redacted] and stealing the plutonium," and in effect argues that the equipping of the security guards "with contingency weapons, with [redacted]," counters BREDL's posited scenario. *Id.* Duke describes BREDL's scenario as "apparently [occurring] instantaneously and without any casualties on the part of the attackers," and calls it "a completely unrealistic scenario given the defensive strength of the response force." *Id.* Duke avers that BREDL looks at [redacted]

[redacted]." *Id.* at 30 and n.43. In Duke's view, BREDL would have to address how the [redacted], as well as and how they would "operate the complicated controls of the fuel handling crane and other apparatus necessary to remove the fuel from the pool, disassemble the assemblies, and open the [264 fuel pins in an assembly] in such a way as to allow removal of the pellets," in order to develope a "credible scenario." *Id.* at 31 and n.44. Duke further asserts that BREDL has not demonstrated how a small group could overcome the response force and take all steps necessary to steal the MOX pellets, "in a timeframe so as to avoid being surrounded or captured." *Id.* at 31. Finally, Duke argues that because BREDL's suggested relief of a [redacted], it "cannot be granted." *Id.* at 31 and n.45.

On the tactical response team and force-on-force training part of BREDL's Contention 5, Duke states first that it is not seeking an exemption from the latter, and will comply with any force-on-force training requirements. *Id.* at 31. On BREDL's arguments that Duke has not demonstrated the adequacy of the existing guard force (in numbers, training, fitness or weaponry), Duke asserts that these are an attempt by BREDL to "shift the burden to Duke." *Id.* Duke insists that CLI-04-06 has "expressly require[d] BREDL to come forward with a scenario that would call into substantial question the measures that Duke proposes to fulfill NRC requirements." *Id.* at 31-32.

Duke suggests that BREDL's arguments "must be viewed in the context of the events of 9/11 and the actions the Commission has required of its of [sic] nuclear power plant licensees since then," again seemingly asking that we look to the Safeguards material to which BREDL has not been given access in making our decision on this contention. *Id.* at 32. Continuing in this same vein, with regard to BREDL's arguments on [redacted]

[redacted]," Duke again bases its response on this Safeguards material:

> . . . In this regard, the increasing requirements imposed on nuclear power plant security, culminating in the post 9/11 orders, have increased the ability of guard forces to respond to threats at such facilities, such that the fulfillment of such requirements by Duke at Catawba, combined with the additional measures proposed, provides the requisite assurance. BREDL has not demonstrated otherwise, such as by providing a specific, credible scenario.
>
> For example, it is beyond dispute that nuclear power plants must have a formidable response force to counter the sabotage DBT. The response force at a nuclear power plant (or any other nuclear facility) does not know whether an overt and violent attack is for the purposes of radiological sabotage or theft.

Duke Response at 32 (citing BREDL Contentions at 22). Duke then asks this Licensing Board to "take notice that [redacted]." *Id.* at 32.

Duke argues that BREDL "fails to provide any specifics that would call into question the ability of the response force to respond to a threat at Catawba." *Id.* at 33. On BREDL's assertion that Duke fails to acknowledge the distinction between the sabotage and theft or diversion DBTs, Duke argues that it is BREDL "that is basing its contention on an arbitrary distinction," because "the responding force does not know the ultimate intent of the adversary and would take no different action to repel the attackers whether their intent was sabotage or theft." *Id.* "In sum," Duke argues, it "has demonstrated an ability to respond to the theft and diversion DBT as well as radiological sabotage," the "exemptions requested in Duke's Security Submittal are warranted," and BREDL has failed to "meet its burden to challenge that conclusion" with regard to the tactical response team and force-on-force training. *Id.*

On BREDL's arguments on access control and security clearances, Duke asserts that BREDL "completely ignores the information contained in Duke's exemption application," and "has not identified a particular credible threat scenario that would call into question the protection of the facility (as described in the exemption application) or Duke's entitlement to the requested relief."

Id. at 33-34. Stating that "[t]his basis for BREDL's proposed Contention 5 is also based on a false premise," in that the 1200 people would not have "uncontrolled" access to the spent fuel pool, but rather:

> The 1200 people are potentially those who would have unescorted Protected Area access — not those who have access to the Fuel Building or fuel pool. Inasmuch as access to the Fuel Building [redacted]. The number of people inside the building does not change the design basis threat for the insider, so that point is irrelevant.

Id. at 34. Additionally, Duke argues, the Red Team Report fails to support the proposed contention, because it states initially that "the large size of BWR [boiling water reactor] and PWR [pressurized water reactor] assemblies does make covert removal of an assembly extremely difficult," and covert removal is considered to be a non-credible event in the report. *Id.* (citing Red Team Report at 4-16). The same, Duke argues, would be true of a MOX fuel assembly. *Id.* at 34. Asserting that the report segments attached to BREDL's pleading "are focused on dry or outdoor storage rather than storage in pools in massive buildings," Duke further suggests that "if there are more individuals in the fuel pool area, the difficulty of a covert theft is actually increased," and that BREDL "does not dispute this or any other specific aspect of Duke's exemption application in its Security Submittal." *Id.*

Duke concludes its response by arguing that BREDL has, in Contention 5, "identified no case where the requested exemption is contrary to law," and therefore the contention should be denied. *Id.* at 35.

Staff

The Staff argues that this contention is inadmissible, because it is not supported by law or fact and "merely presents a series of unsupported arguments that fail to address Duke's central proposition—that relaxation of certain security requirements would not cause undue harm to the public health and safety given the form, composition, and structure of the MOX LTAs." Staff Response at 12. The Staff charges that BREDL's basis consists only of a "litany of possible

catastrophies associated with an unspecified attack on Catawba" and "vague and highly speculative scenarios," without any factual support, that are "designed to shift to Duke the burden of defending its application." *Id.*

The Staff urges that, "[i]n order to frame an adequate contention, BREDL [i]s required to identify the threat that it allege[s] is not addressed by Duke, and the factual or legal basis for the view that Duke was required to address that threat." *Id.* Characterizing BREDL's arguments as "merely stating, in a conclusory fashion, that an attacking force intent on theft is more determined than one seeking to cause radiological sabotage," the Staff insists that "[i]t is incumbent upon BREDL, as the proponent of the instant contention, to meet the clear standards laid out by the Commission in §2.714 and it has not done so." *Id.* at 12-13.

Security Contention 5 - Licensing Board Ruling

We begin our analysis of Contention 5 by noting that BREDL has not in its basis for the contention specifically addressed either the exemption request regarding detection and monitoring systems, or that concerning alarms for detecting movement within unoccupied vital areas not related to MOX storage. We thus find those parts of Contention 5 relating to these matters to be lacking in specificity sufficient to render them admissible in this proceeding.

With regard, however, to the remaining portions of Contention 5, on the requests for exemption from the requirements of 10 C.F.R. § 73.46(c)(1), concerning physical barriers; § 73.46(h)(3) and 73.46(b)(3)–(b)(12), concerning the tactical response team and related requirements; and § 73.46(d)(9) and 11.11(b), concerning armed guards, security clearances, and related requirements; we find that BREDL has presented a sufficiently specific statement of the issues it wishes to raise, supported by sufficient basis consisting of specifically-stated explanation, fact-based argument and expert opinion (through Dr. Lyman's participation in the preparation of the contention and basis), to establish genuine disputes on material issues of combined law and fact, so as to warrant admission of the contention. In addition, BREDL, as it is required to do, has

provided documentary support of which it is aware at this time. *See* Statement of Consideration, 1989 Amendments to Contention Admissibility Requirements, 54 Fed. Reg. 33,168, 33,170 (Aug. 11, 1989).

On Duke's argument that the existing distinction in the rules between encapsulated and unencapsulated SSN does not prevent any "further exemption," *see supra* at 60, we would observe that this is essentially self-evident, but nonetheless does not prevent litigation of *whether* a "further exemption" is appropriate — regardless of the characterization of the existing distinction as an "exemption," as BREDL urges, or "appropriate use of rulemaking to recognize substantive differences between classes of material," as Duke suggests.[16] We have also considered Duke's extensive arguments that really *go to the merits* of *whether* the exemptions should be granted. These all (with the exception of such unrealistic and somewhat disingenuous assertions as some of those made regarding BREDL's arguments on the shielding effect of water, *see supra* at 64) concern issues that may well be litigated in a hearing on those parts of Contention 5 that we admit herein. However, even though some may indeed ultimately prove to be meritorious, they are not grounds for rejecting those portions of Contention 5 that we find to be admissible.

With respect to the arguments of Duke and the Staff to the effect that BREDL has not supported its contention with an adequate basis, we find that BREDL has supported those three parts of its contention that we admit, with expert opinion, documentary material, and with reasonably specific explanation and fact-based argument sufficient to meet the requirements of the contention admissibility requirements in this regard. It may be that the parties differ on the meaning and import of various facts, statements from documents such as the Red Team Report, and other evidence both encompassed within the basis provided for the contention and later to be

[16]We note, with regard to Duke's arguments based on the exemption granted to Fort St. Vrain, BREDL's argument in response, distinguishing Fort St. Vrain as having fuel elements containing less SQ, or material necessary to make a nuclear weapon. Tr. 1477.

admitted in a hearing on this contention, but such differences in viewpoints more illustrate a "genuine dispute" than negate it, or any other of the requirements for an admissible contention.

We note Duke's arguments that the Commission has somehow heightened the contention admissibility requirements in this proceeding. Specifically, we note Duke's statement that the Commission has "expressly required" BREDL to "come forward with a scenario that would call into substantial question" Duke's proposed measures, Duke Response at 32; and that BREDL should identify a "particular credible threat scenario," *id.* at 34; as well as the following:

> The burden on BREDL in proffering proposed security contentions is clear. *In addition to* satisfying the general rules on admissibility of contentions established in 10 C.F.R. § 2.714, the Commission directed that BREDL (and its putative expert) must review the Security Submittal and "identify *credible* vulnerabilities, if any." CLI-04-06, slip op. at 10 (emphasis supplied). This is a substantive burden. The directive from the Commission gives further clarity to the specificity and basis requirements of Section 2.714(c) in the current context.

Duke Response at 5 (first emphasis added by Licensing Board). Given the rather unusual nature of Duke's argument — that the Commission has created *new* contention admissibility requirements "in addition to" those set forth in the rule, we quote here the actual words of the Commission itself in CLI-04-06:

> At stake here is the appropriate increment -- the appropriate heightening of security measures -- necessitated by the proposed presence of MOX fuel assemblies at the Catawba reactor site. While these security enhancements are safeguards information, BREDL has been given access to that information and thus is in a position to measure Duke's Security proposals against the requirements of Part 73. After doing so, BREDL (or its technical expert) should be able to identify credible vulnerabilities, if any, and present corresponding contentions to the Board.

CLI-04-06, slip op. at 10.

As argued by BREDL counsel in oral argument, the Commission also made the following statements in CLI-04-06, which do not refer to any requirement to submit "scenarios," as argued by Duke:

> This proceeding has a limited scope, focusing on the lawfulness and safety of Duke's proposed MOX amendment.

Id. at 8; Tr. 1341.

> We see no reason why BREDL cannot evaluate Duke's proposed incremental changes to its security plan related to the presence of MOX fuel assemblies and decide whether to challenge Duke's proposed security arrangements as inadequate to accommodate the use of MOX fuel at Catawba.

CLI-04-06 at 9; Tr. 1342. As BREDL argues, its contentions are "addressed to the lawfulness and safety of Duke's proposed MOX amendment," asserting that Duke "has not complied with, and in some cases even addressed, the regulatory requirements." Tr. 1341-42.

What we take from the quoted statements from CLI-04-06 is that, although it is apparent that in one part of CLI-04-06 the Commission indicates that *one way* of submitting an admissible contention is to state a "specific vulnerability" (which might arguably take "scenario" form), in other parts of the decision the Commission allows for *other* ways, in keeping with the actual provisions of the contention admissibility requirements in the governing rule. We take the Commission's words as providing, as often occurs in NRC case law, interpretation of the rule provisions on contentions, but not as adding any *new* requirements to the rule provisions that govern in this proceeding. *See* note 5 above. In light of this, we find that, to the extent the arguments of either Duke or the Staff suggest that BREDL must present a full-blown "scenario" that details fully every possible vulnerability in terms of exact numbers of people, exact numbers and types of weapons, exact methods and timelines, etc., this suggestion does not track with the actual requirements of the governing contention requirements, or with a comprehensive reading of CLI-04-06. In addition, the specificity with which BREDL or any petitioner or intervenor can address a proposal is to some degree obviously tied to the specificity of the proposal itself.

In any event, we find that BREDL has provided, as basis for the three parts of this contention that we admit, a sufficiently specific fact-based argument and explanation, supported by expert opinion as well as a number of documents in which various of the points BREDL raises are addressed. Our summary, above, of BREDL's basis for the contention illustrates these points: BREDL has quite obviously provided a significant amount of detail and specificity on the three subject areas of this contention that we find to be admissible.

Finally, as indicated above, we find that some evidence on the issues raised in the second part of Contention 2, as well as those raised in Contention 3, may be relevant to parts of the three areas of Contention 5 that we admit. We will therefore allow BREDL to present, in addition to other relevant evidence on Duke's requests for exemptions from the three respective sets of regulatory requirements, evidence on the issues raised by BREDL in its Contentions 2 and 3 that relate to these parts of Contention 5. In addition, to the extent that BREDL can show, at an appropriate time, the relevance of the Shaw Pittman report cited in Contention 4 to any of the same three areas of issues, we will allow evidence on this as well in the hearing on Contention 5.

III. CONCLUSION

A. Admitted Contentions

In conclusion, we admit the following security-related contention of BREDL, limited and reframed as necessary to indicate those portions of BREDL Security Contention 5 that are admitted:

> Duke has failed to show, under 10 C.F.R. §§ 11.9 and 73.5, that the requested exemptions from 10 C.F.R. § 73.46, subsections (c)(1); (h)(3) and (b)(3)–(12); and (d)(9) are authorized by law, will not constitute an undue risk to the common defense and security, and otherwise would be consistent with law and in the public interest.

B. Certified Question

We also, pursuant to 10 C.F.R. § 2.718(i), hereby certify to the Commission for its consideration the questions raised in and arising out of Security Contention 1, and relating to issues addressed by the Commission in CLI-04-06, as discussed above in our analysis on the contention.

C. Settlement

Commission regulations recognize that it is in the public interest for particular issues or an entire matter to be settled, and encourage parties and licensing boards to seek fair and reasonable settlements. 10 C.F.R. § 2.759. To the degree the issues in this proceeding may be amenable to

this, we encourage the parties to communicate regarding the possibility of settling any such issues, and advise the parties that they may jointly contact the Board Chair if they wish to have a Licensing Board Panel-appointed Settlement Judge or Mediator assist in this endeavor.

IV. ORDER

In light of the foregoing discussion, and based upon the entire record of this proceeding to date, it is on this 12th day of April, 2004, ORDERED:

1. BREDL Security Contention 5 is hereby admitted in this proceeding, insofar as limited and reframed above; and the request of BREDL for a hearing on this contention, as so limited, is hereby granted.

2. Of the remaining BREDL Security Contentions, Security Contention 1 and related questions, as indicated in section B of the Conclusion above, are certified to the Commission for its consideration; and Security Contentions 2, 3, and 4 are rejected, except as to evidence on certain portions thereof to the limited extent specified herein.

3. On April 20, 2004, during a telephone conference already scheduled in this matter for 10:00 a.m., the Licensing Board will discuss with the parties any appropriate scheduling and other matters relating to the litigation of the contention admitted herein, as well as BREDL's Amended Security Contentions and responses thereto. Thereafter, in a closed conference as necessary, on a date to be scheduled, any related subjects that are not amenable to discussion in a public session will be addressed.

4. This Order is subject to appeal in accordance with the provisions of 10 C.F.R. § 2.714a(a)-(c). Any petitions for review meeting applicable requirements set forth in that section must be filed within 10 days of service of this Memorandum and Order.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD

Ann Marshall Young, Chair
ADMINISTRATIVE JUDGE

Anthony J. Baratta
ADMINISTRATIVE JUDGE

Thomas S. Elleman
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 12, 2004 (Sealed as Safeguards;
Redacted Public Version Issued May 28, 2004)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
DUKE ENERGY CORPORATION	)	Docket Nos. 50-413-OLA
	)	50-414-OLA
(Catawba Nuclear Station, Units 1 and 2)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON SECURITY-RELATED CONTENTIONS) (LBP-04-10) have been served upon the following persons by deposit in the U.S. mail, first class, or through NRC internal distribution.

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Docket Nos. 50-413-OLA and 50-414-OLA
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Dated at Rockville, Maryland,
this 28th day of May 2004