UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)	
)	Docket No. 52-017-COL
Dominion Virginia Power, et al.)	
)	ASLBP No. 08-863-01-COL
North Anna Power Station, Unit 3)	

Dominion's Answer Opposing Petition for Intervention and Request for Hearing By the Blue Ridge Environmental Defense League

I. Introduction

Virginia Electric and Power Company, dba Dominion Virginia Power ("Dominion"), hereby answers and opposes the Petition for Intervention and Request for Hearing by the Blue Ridge Environmental Defense League ("Petition"), which the Blue Ridge Environmental Defense League ("BREDL" or "Petitioner")¹ filed on May 9, 2008. BREDL petitions to intervene in the proceeding for a combined construction permit and operating license ("COL" or "combined license") for a new Unit 3 at the North Anna Power Station ("North Anna Unit 3"). BREDL's Petition should be denied because BREDL has not proposed any admissible contention.

Half of BREDL's contentions seek impermissibly to challenge the NRC's rules, and for the most part the remainder seek impermissibly to revisit matters that have been resolved in a

While the Petition states that "BREDL and its chapter People's Alliance for Clean Energy ('PACE')" petition for leave to intervene (Petition at 1), none of the declarations supporting standing or authorizing the intervention refer to PACE, and the notice of appearance of BREDL's representative makes no reference to PACE. Accordingly, Dominion treats BREDL and its subchapter as a single petitioner.

prior early site permit proceeding. All of BREDL's contentions are vague, and none demonstrates a genuine, material dispute with Dominion's application.

II. Background

This proceeding involves the application, submitted by Dominion on behalf of itself and the Old Dominion Electric Cooperative (collectively, "Applicants") on November 27, 2007, for a combined license to construct and operate an ESBWR at the North Anna Power Station ("NAPS").² The ESBWR is a 4,500 MWt boiling water reactor designed by GE – Hitachi Nuclear Energy Americas, LLC ("GEH"). The ESBWR is an evolutionary design that uses natural circulation for normal operation and has passive safety features. Application, Part 1 at 1. NAPS is located in Louisa County, Virginia, approximately 40 miles north northwest of Richmond. Id. There are two existing nuclear reactors in operation at NAPS, and the ESBWR which will be designated as Unit 3 would be located adjacent to and generally west of the existing units. Id.

The Application and this proceeding are governed by 10 C.F.R. Part 52. In particular, Subpart C of the Part 52 rules sets out the procedures and requirements applicable to the issuance of combined licenses.

The Commission promulgated its Part 52 regulations in 1989,³ and amended them in 2007,⁴ with the aim of enhancing the safety and reliability of nuclear power plants through standardization and early resolution of safety and environmental issues in licensing proceedings.

See 53 Fed. Reg. 32,060-61 (Aug. 23, 1988); 54 Fed. Reg. at 15,372, 15,373; 72 Fed. Reg. at

North Anna 3 Combined License Application (Rev. 0, Nov. 2007), available at ADAMS Accession No. ML073320913 ("Application").

³ 54 Fed. Reg. 15,372 (Apr. 18, 1989).

⁴ 72 Fed. Reg. 49,352 (Aug. 28, 2007).

49,352. The Part 52 rules accomplish this aim through three principal regulatory processes:
Early Site Permits (governed by Subpart A of Part 52), Design Certifications (governed by Subpart B), and Combined Licenses (governed by Subpart C). As the Commission explained:

Part 52 is intended to improve the licensing of nuclear power plants by the use of these procedural innovations. . . . Subpart A of Part 52 formalizes the early site approval process, allowing a prospective applicant to obtain a permit for one or more pre-approved sites on which future nuclear power stations can be located. Subpart B carries forward the standard design approval process . . . in much the same way, allowing a prospective applicant, vendor, or other interested party to obtain Commission approval of a design of a complete nuclear power plant or a major portion of such a plant. Subpart C establishes procedures for the issuance of a combined construction permit and conditional operating license. . . .

This structure reveals the overall purpose of Part 52: to improve reactor safety and streamline the licensing process by encouraging standard designs and by permitting early resolution of environmental and safety issues related to the reactor site and design.

53 Fed. Reg. at 32,062.

The Commission's intent with this rulemaking is . . . to have a sensible and stable procedural framework in place for the consideration of future designs, and to make it possible to resolve safety and environmental issues before plants are built, rather than after.

54 Fed. Reg. at 15,373.

The Application exercises all three of the regulatory improvements established in Part 52. First, the Application seeks a combined license. Second, the Application references an early site permit issued in 2007 approving the North Anna site as suitable for additional units falling within certain parameters. This ESP resolves all site suitability issues (such as the topics addressed in Chapter 2 of a safety analysis report) with the exception of compliance with certain Combined License Action Items set forth in Appendix C of the ESP, variances sought in the Application, and any substantial new information on emergency planning. The ESP also

⁵ ESP-003, Docket No. 52-008 (Nov. 27, 2007), available at ADAMS accession No. ML073180440 (the "ESP").

⁶ A variance is a plant-specific departure from one or more of the site characteristics, design parameters, or terms and conditions of an early site permit. <u>See</u> 10 C.F.R. § 52.39(d).

resolves the environmental issues relating to the construction and operation of nuclear units at the ESP site addressed in the NRC's Final Environmental Impact Statement for an Early Site Permit (ESP) at the North Anna ESP Site ("FEIS"), NUREG-1811 (Dec. 2006), with the exception of issues that were deferred or identified as open items in the FEIS, and any environmental issue involving the construction or operation of the facility for which significant new information has been identified. See generally 10 C.F.R. § 52.39. See also 72 Fed. Reg. at 49.431.

Third, the Application references GEH's application for final design approval and standard design certification for the ESBWR, which the NRC is currently reviewing under docket number 52-010.⁷ Application, Part 1 at 1. Under the NRC rules, the Commission treats as resolved those matters resolved in connection with the issuance of a design certification. 10 C.F.R. § 52.63(a)(5). Here, the Commission has not yet issued the Design Certification for the ESBWR. However, the Commission has stated,

We believe that a contention that raises an issue on a design matter addressed in the design certification application should be resolved in the design certification rulemaking proceeding, and not the COL proceeding.

Statement of Policy on Conduct of New Reactor Licensing Proceedings, CLI-08-07, 73 Fed. Reg. 20,963, 20,972 (Apr. 17, 2008).

The NRC Staff conducted a sufficiency review and, finding the Application acceptable for docketing, docketed the Application on January 28, 2008. 73 Fed. Reg. 6,528 (Feb. 4, 2008). On March 10, 2008, the NRC published a Notice of Hearing and Opportunity to Petition for Leave to Intervene on a Combined License for North Anna Unit 3. 73 Fed. Reg. 12,760 (Mar.

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⁷ The ESBWR Design Certification application may be found at http://www.nrc.gov/reactors/new-licensing/design-cert/esbwr.html.

10, 2008). On April 18, 2008, the NRC published a Supplement to the Notice of Hearing. 73 Fed. Reg. 21,162 (Apr. 18, 2008).

On April 28, 2008, BREDL requested approximately a 40-day extension of the date for filing petitions for leave to intervene in this proceeding.⁸ The Commission denied this motion, observing that BREDL has been given nearly five months to formulate contentions. Order (May 1, 2008). Thereafter, BREDL filed its Petition now before the Board.

III. BREDL's Petition Should Be Denied Because BREDL Has No Admissible Contentions

To be admitted as a party in this proceeding, BREDL must demonstrate standing and plead at least one admissible contention. 10 C.F.R. § 2.309(a). Dominion does not challenge BREDL's standing to seek to participate in this proceeding, but submits that BREDL has proffered no admissible contentions.

A. Standards for the Admissibility of Contentions

1. Contentions must be within the scope of the proceeding and may not challenge NRC rules

As a fundamental requirement, a contention is only admissible if it addresses matters within the scope of the proceeding. Licensing boards "are delegates of the Commission" and, as such, they may "exercise only those powers which the Commission has given to [them]." <u>Public Service Co. of Indiana</u> (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 N.R.C. 167, 170 (1976)(footnote omitted); <u>accord Portland General Electric Co.</u> (Trojan Nuclear Plant), ALAB-534, 9 N.R.C. 287, 289-90 & n.6 (1979). Accordingly, it is well established that a

⁸ Motion Requesting an Amended Deadline to Petition for Leave to Intervene, Submit Hearing Requests and Contentions and Request for Expedited Consideration (Apr. 28, 2008).

⁹ As previously noted, Dominion treats BREDL as a single intervenor. <u>See</u> note 1 <u>supra</u>. There has been no showing that BREDL's subchapter, PACE, has standing as a separate organization.

contention is not cognizable unless it is material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. Marble Hill, ALAB-316, 3 N.R.C. at 170-71; see also Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-616, 12 N.R.C. 419, 426-27 (1980); Commonwealth Edison Co. (Carroll County Site), ALAB-601, 12 N.R.C. 18, 24 (1980). Consistent with this precedent, 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv) require that a petitioner demonstrate that the issue raised by each of its contentions is within the scope of the proceeding and material to the findings that the NRC must make.

This fundamental limitation is particularly important in a COL proceeding in which an ESP is referenced, because the Commission has limited the scope of site suitability and environmental issues that may be revisited. For example, with respect to environmental issues, the Commission has explained:

For an early site permit, the NRC prepares an EIS that resolves numerous issues within certain bounding conditions. These issues have issue preclusion at the combined license or CP stage provided certain conditions are met.

72 Fed. Reg. at 49,431. Therefore, the NRC generally treats as resolved those matters that were resolved in an ESP proceeding (10 C.F.R. § 52.39(a)(2)), allowing only the following matters related to the ESP to be litigated in the COL proceeding:

- (i) The nuclear power reactor proposed to be built does not fit within one or more of the site characteristics or design parameters included in the early site permit;
- (ii) One or more of the terms and conditions of the early site permit have not been met;
- (iii) A variance requested under paragraph (d) of [section 52.39] is unwarranted or should be modified;
- (iv) New or additional information is provided in the application that substantially alters the bases for a previous NRC conclusion or constitutes a sufficient basis for the Commission to modify or impose new terms and conditions related to emergency preparedness; or

(v) Any significant environmental issue that was not resolved in the early site permit proceeding, or any issue involving the impacts of construction and operation of the facility that was resolved in the early site permit proceeding for which significant new information has been identified.

10 C.F.R. § 52.39(c). With respect to environmental issues resolved in the ESP proceeding:

The NRC, in the context of a combined license application that references an early site permit, has defined the term "new" in the phrase "new and significant information" as any information that was both (1) not considered in preparing the ESP environmental report or EIS (as may be evidenced by references in these documents, applicant responses to NRC requests for additional information, comment letters, etc.) and (2) not generally known or publicly available during the preparation of the EIS (such as information in reports, studies, and treatises). For new information to be "significant," it must be material to the issue being considered, that is, it must have the potential to affect the finding or conclusions of the NRC staff's evaluation of the issue.

72 Fed. Reg. at 49,431.

It is also well established that a petitioner is not entitled to an adjudicatory hearing to attack generic NRC requirements or regulations. 10 C.F.R. § 2.335; <u>Duke Energy Corp.</u> (Oconee Nuclear Station, Units 1, 2 and 3), CLI-99-11, 49 N.R.C. 328, 334 (1999). "[A] licensing proceeding . . . is plainly not the proper forum for an attack on applicable statutory requirements or for challenges to the basic structure of the Commission's regulatory process." <u>Philadelphia Electric Co.</u> (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 A.E.C. 13, 20, <u>aff'd in part on other grounds</u>, CLI-74-32, 8 A.E.C. 217 (1974) (footnote omitted). Thus, a contention which collaterally attacks a Commission rule or regulation is not appropriate for litigation and must be rejected. <u>Potomac Electric Power Co.</u> (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 A.E.C. 79, 89 (1974).

Similarly, it is well established that licensing boards "should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission." <u>Duke Energy Corp.</u> (Oconee Nuclear Station, Units 1, 2, and

3), CLI-99-11, 49 N.R.C. 328, 345 (1999), quoting Douglas Point, ALAB-218, 8 A.E.C. at 85.

This principle is particularly important in a COL proceeding in which the application references a Design Certification application under review. As the Commission has explained:

With respect to a design for which certification has been requested but not yet granted, the Commission intends to follow its longstanding precedent that "licensing boards should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission." . . . In accordance with these decisions, a licensing board should treat the NRC's docketing of a design certification application as the Commission's determination that the design is the subject of a general rulemaking. We believe that a contention that raises an issue on a design matter addressed in the design certification application should be resolved in the design certification rulemaking proceeding, and not the COL proceeding. Accordingly, in a COL proceeding in which the application references a docketed design certification application, the licensing board should refer such a contention to the staff for consideration in the design certification rulemaking, and hold that contention in abeyance, if it is otherwise admissible. Upon adoption of a final design certification rule, such a contention should be denied.

Statement of Policy on Conduct of New Reactor Licensing Proceedings, CLI-08-07, 73 Fed.

Reg. at 20,972 (citations omitted).

2. Contentions must be specific and supported by a basis demonstrating a genuine, material dispute

In addition to the requirement to address issues within the scope of the proceeding, a contention is admissible only if it provides:

- a "specific statement of the issue of law or fact to be raised or controverted;"
- a "brief explanation of the basis for the contention;"
- a "concise statement of the alleged facts or expert opinions" supporting the
 contention together with references to "specific sources and documents on
 which the requestor/petitioner intends to rely to support its position on the
 issue;" and
- "[s]ufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact," which showing must include "references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by

law, the identification of each failure and the supporting reasons for the petitioner's belief."

10 C.F.R. §§ 2.309(f)(1)(i), (ii), (v) and (vi). The failure of a contention to comply with any one of these requirements requires dismissal of the contention. <u>Arizona Public Service Co.</u> (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 N.R.C. 149, 155-56 (1991).

These pleading standards governing the admissibility of contentions are the result of a 1989 amendment to 10 C.F.R. § 2.714, now § 2.309, which was intended "to raise the threshold for the admission of contentions." Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168 (Aug. 11, 1989) ("Final Rule"); see also Oconee, CLI-99-11, 49 N.R.C. at 334; Palo Verde, CLI-91-12, 34 N.R.C. at 155-56. The Commission has stated that the "contention rule is strict by design," having been "toughened . . . in 1989 because in prior years 'licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation."" Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 N.R.C. 349, 358 (2001) (citation omitted). The pleading standards are to be enforced rigorously. "If any one of the requirements [now in 10 C.F.R. § 2.309(f)(1)] is not met, a contention must be rejected." Palo Verde, CLI-91-12, 34 N.R.C. at 155 (citation omitted). A licensing board is not to overlook a deficiency in a contention or assume the existence of missing information. Id.

The Commission has explained that this "strict contention rule" serves multiple purposes, which include putting other parties on notice of the specific grievances being raised and assuring that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions. Oconee, CLI-99-11, 49 N.R.C. at

334. By raising the threshold for admission of contentions, the NRC intended to obviate lengthy hearing delays caused in the past by poorly defined or supported contentions. <u>Id.</u> As the Commission reiterated in incorporating these same standards into the new Part 2 rules, "[t]he threshold standard is necessary to ensure that hearings cover only genuine and pertinent issues of concern and that issues are framed and supported concisely enough at the outset to ensure that the proceedings are effective and focused on real, concrete issues." 69 Fed. Reg. 2,182, 2,189-90 (Jan. 14, 2004).

Under these standards, a petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention." Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 N.R.C. 281, 305, vacated in part and remanded on other grounds, CLI-95-10, 42 N.R.C. 1, aff'd in part, CLI-95-12, 42 N.R.C. 111 (1995). Where a petitioner has failed to do so, "the [Licensing] Board may not make factual inferences on [the] petitioner's behalf." Id., citing Palo Verde, CLI-91-12, 34 N.R.C. 149. See also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 N.R.C. 142, 180 (1998) ("PFS") (a "bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient;" rather, "a petitioner must provide documents or other factual information or expert opinion" to support a contention's "proffered bases") (citations omitted).

Further, admissible contentions "must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application]." Millstone, CLI-01-24, 54 N.R.C. at 359-60. In particular, this explanation must demonstrate that the contention is "material" to the NRC findings and that a genuine dispute on a material issue of law or fact exists. 10 C.F.R. \$\\$ 2.309(f)(1)(iv), (vi). The Commission has defined a "material" issue as meaning one where

"resolution of the dispute <u>would make a difference in the outcome</u> of the licensing proceeding." Final Rule, 54 Fed. Reg. at 33,172 (emphasis added).

As the Commission observed, this threshold requirement is consistent with judicial decisions, such as <u>Conn. Bankers Ass'n v. Bd. of Governors</u>, 627 F.2d 245, 251 (D.C. Cir. 1980), which held that:

[A] protestant does not become entitled to an evidentiary hearing merely on request, or on a bald or conclusory allegation that . . . a dispute exists. The protestant must make a minimal showing that material facts are in dispute, thereby demonstrating that an "inquiry in depth" is appropriate.

Id. (footnote omitted); see also Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant Units 1 and 2), CLI-98-14, 48 N.R.C. 39, 41 (1998): ("It is the responsibility of the Petitioner to provide the necessary information to satisfy the basis requirement for the admission of its contentions"). A contention, therefore, is not to be admitted "where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts." Final Rule, 54 Fed. Reg. at 33,171. The Rules of Practice bar contentions where petitioners have what amounts only to generalized suspicions, hoping to substantiate them later, or simply a desire for more time and more information in order to identify a genuine material dispute for litigation.

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2), CLI-03-17, 58 N.R.C. 419, 424 (2003).

Accordingly, under the Rules of Practice, a statement "that simply alleges that some matter ought to be considered" does not provide a sufficient basis for a contention. <u>Sacramento Municipal Utility District</u> (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 N.R.C. 200, 246 (1993), <u>review declined</u>, CLI-94-2, 39 N.R.C. 91 (1994). Similarly, a mere reference to

documents does not provide an adequate basis for a contention. <u>Baltimore Gas & Electric Co.</u> (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 N.R.C. 325, 348 (1998).

3. Contentions cannot ignore publicly available documentation relating to the licensing request

NRC's pleading standards require a petitioner to read the pertinent portions of the licensing request and supporting documents, including the Final Safety Analysis Report ("FSAR") and Environmental Report ("ER"), state the applicant's position and the petitioner's opposing view, and explain why it has a disagreement with the applicant. Final Rule, 54 Fed. Reg. at 33,170; Millstone, CLI-01-24, 54 N.R.C. at 358. Indeed, a petitioner

has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable the petitioner to uncover any information that could serve as the foundation for a specific contention. Neither Section 189a of the Atomic Energy Act nor [the corresponding Commission regulation] permits the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or Staff.

Final Rule, 54 Fed. Reg. at 33,170 (quoting <u>Duke Power Co.</u> (Catawba Nuclear Station, Units 1 & 2), ALAB-687, 16 N.R.C. 460, 468 (1982), <u>vacated in part on other grounds</u>, CLI-83-19, 17 N.R.C. 1041(1983)). The obligation to make specific reference to relevant facility documentation applies with special force to an applicant's FSAR and ER, and a contention should be rejected if it inaccurately describes an applicant's proposed actions or ignores or misstates the content of the licensing documents. <u>See, e.g., Carolina Power & Light Co.</u> (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 N.R.C. 2069, 2076 (1982); <u>Duke Power Co.</u> (Catawba Nuclear Station, Units 1 and 2), LBP-32-107A, 16 N.R.C. 1791, 1804 (1982); <u>Philadelphia Electric Co.</u> (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 N.R.C. 1423, 1504-05 (1982).

If the petitioner does not believe that a licensing request and supporting documentation address a relevant issue, the petitioner is "to explain why the application is deficient." Final Rule, 54 Fed. Reg. at 33,170; Palo Verde, CLI-91-12, 34 N.R.C. at 156. A contention that does not directly controvert a position taken by the applicant in the license application is subject to dismissal. See Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 N.R.C. 370, 384 (1992). An allegation that some aspect of a license application is inadequate does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 N.R.C. 509, 521 & n.12 (1990).

B. BREDL's Contentions Do Not Meet These Standards

None of BREDL's contentions complies with the Commission's standards. Indeed, BREDL essentially ignores the requirements of 10 C.F.R. § 2.309(f)(1). None of the contentions appears to provide a specific statement of the issue of law or fact to be raised or controverted, as required by 10 C.F.R. § 2.309(f)(1)(i) (though perhaps BREDL's vague headings are intended to be the statement of the contention). None of the contentions is supported by any demonstration that the contention is within the scope of the proceeding, as required by 10 C.F.R. § 2.390(f)(1)(iii). None of the contentions is supported by any demonstration that the issue is material to the findings that the NRC must make, as required by 10 C.F.R. § 2.390(f)(1)(iv). None of the contentions provides a concise statement of facts or expert opinions on which BREDL intends to rely, as required by 10 C.F.R. § 2.390(f)(v). As the Commission has held, "If any one these requirements is not met, a contention must be rejected." Palo Verde, CLI-91-

12, 34 N.R.C. at 155 (citation omitted). Here, the Petition's compliance with the requirements in 10 C.F.R. § 2.309(f)(1) is entirely lacking.

1. Contention One Is Inadmissible

BREDL's Contention One, which alleges that Dominion lacks a realistic low-level radioactive waste plan (Petition at 5), is inadmissible because it is vague, unsupported, and fails to demonstrate any genuine, material dispute with the Application. The gravamen of Contention One is that with Barnwell's planned closure in June 2008, there will be no facility at which Class B, C, or Greater-than-Class-C ("GTCC") waste may be disposed. While this is an issue affecting currently operating plants (and many other materials licensees) in the short run, BREDL offers no basis other than unsupported speculation that adequate disposal capability will not exist in the 2015 to 2017 timeframe when Unit 3 might begin operation at the earliest. It would make little sense to try to litigate what waste disposal options will exist at that time, or to license NAPS as a disposal site as BREDL suggests (Petition at 6).

As a threshold matter, Contention One is inadmissible because it does not address Dominion's Application. The only references that BREDL provides to a COL application are to the Bellefonte COL application – not to Dominion's Application. The quotation from ER section 3.5 on page 6 of BREDL's petition is a quotation from the Bellefonte ER, ¹⁰ not from Dominion's ER. Similarly, the quotation from FSAR section on page 7 of BREDL's Petition is a quotation from the Bellefonte FSAR, ¹¹ not from Dominion's FSAR. Apparently, BREDL has simply cut and pasted a contention intended for another plant, and therefore has failed to identify

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Compare Bellefonte Units 3 & 4 COLA (Environmental Report), Rev. 0 - Chapter 03 Plant Description, at 3.5-1, available at ADAMS accession no. ML073110790.

Compare Bellefonte Units 3 & 4 COLA (Final Safety Analysis Report), Rev. 0 - Chapter 11 Radioactive Waste Management, at p. 11.4-1, available at ADAMS accession no. ML073111328.

and explain its dispute with the specific portions of Dominion's Application as required by 10 C.F.R. § 2.309(f)(1)(vi). This failure to address Dominion's Application, by itself, warrants dismissal of this contention.

Contention One is also inadmissible because it is unduly vague. Apart from BREDL's failure to address Dominion's Application, it is unclear whether Contention One is intended to raise an environmental issue or a safety issue. The intermixed references to [Bellefonte's] ER and FSAR fail to provide clear notice as to which portion of the application the Contention is focused. This vagueness too is grounds by itself for dismissal of the contention.

To the extent that Contention One is intended to raise an environmental issue (e.g., the alleged need to evaluate "de facto onsite disposal" – see Petition at 6), ¹³ it is barred because the environmental impacts of the fuel cycle and solid waste management for light water reactors were addressed and resolved in the ESP proceeding. See NUREG-1811, § 6.1. As discussed earlier, the Part 52 regulations are intended to allow early resolution of environmental issues through the early site permit process (53 Fed. Reg. at 32,062) and absent significant new information, to provide preclusion of such issues at the combined license stage (72 Fed. Reg. at 49,431). Here, BREDL has identified no significant new information. Indeed, the planned closure of the Barnwell facility was specifically considered by the NRC Staff in preparing the

¹² BREDL's discussion of standing also refers in one instance to Bellefonte. Petition at 4.

On page 6 of the Petition, BREDL asserts that the issue of radioactive waste is barely addressed in Dominion's COL application and refers to section 3.5 of the environmental report. While, as previously stated, BREDL in fact refers to Bellefonte's COL application – not to Dominion's – this reference suggests that BREDL is seeking to raise an environmental issue. It should be noted that section 3.5 of an environmental report is the section that describes the plant's radioactive waste management system to allow a determination of the quantity of radioactive material released in liquid and gaseous effluent, and a determination of the capability of the radioactive waste management systems to control and maintain such releases in effluents to as low as reasonably achievable. Environmental Standard Review Plan ("ESRP"), NUREG-1555, at 3.5-1. Nothing in the ESRP requires this section to address offsite disposal. Consequently, even if BREDL's Contention One is construed as challenging Dominion's ER, there is simply no basis for BREDL's suggestion that section 3.5 should address disposal options.

FEIS. NUREG-1811, Vol. 2 at 3-236 to 3-237. Therefore, this event cannot be significant new information allowing reconsideration of the FEIS. Further, in responding to comments on the potential closure of Barnwell, the FEIS refers to the conclusion in the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (NUREG-1437) that there should be no significant issues or environmental impacts associated with interim storage of low level waste.

Id. at 3-237. BREDL provides no basis to disturb this conclusion. BREDL had ample opportunity to challenge this conclusion in the ESP proceeding, and having failed to do so, should not be permitted raise this issue anew.

To the extent that Contention One may be intended to raise a safety issue, BREDL provides no information demonstrating that any genuine, material safety issue exists. BREDL asserts that onsite storage "could significantly increase the safety and security risks of the North Anna Site" (Petition at 6), but provides absolutely no support for this assertion. BREDL does not provide any facts, expert opinion, or references to documents or sources indicating that onsite storage of waste (if necessary) would pose any significant safety or security risk. ¹⁴ As previously noted, in the ESP proceeding, the NRC indicated that there should be no significant issues or environmental impacts associated with interim storage of low level waste. NUREG-1811, Vol. 2 at 3-237. Similarly, in a recent press release announcing guidance on onsite storage, the NRC states, "nuclear power plants . . . have the space, expertise and experience

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BREDL's reference to a 1998 GAO Report on Ward Valley (Petition at 6, n.1), does not provide any information indicating that low level waste storage at nuclear power plants is unsafe. That GAO Report, entitled "Answers to Questions Related to the Proposed Ward Valley Low-Level Radioactive Waste Disposal Facility," GAO/RCED-98-40R (May 22, 1998), did not address storage at nuclear power plants. Further, the statement in the GAO Report to which BREDL refers as indicating that LLW can deliver a lethal dose addresses hypothetical exposure to unshielded waste (at a distance of one meter) containing Cs-137 at the maximum Class C limit of 4,600 curies per cubic meter. GAO Report 98-40R at 51-52. BREDL provides no information demonstrating the relevance of this statement to low-level-waste that would be generated at Unit 3. In contrast, Table 12.2-14a of the ESBWR DCD indicates that the concentration of Cs-137 in the High Activity Resin Holdup Tank is 3.49E+5 MBq/m³, which corresponds to approximately 9 curies per cubic meter.

needed to store radioactive wastes for extended periods."¹⁵ In the absence of any contrary expert opinion or references provided by BREDL, BREDL's bald assertion that "it is imperative" to address unspecified safety and security issues is not sufficient. Rancho Seco, LBP-93-23, 38 N.R.C. at 246; PFS, LBP-98-7, 47 N.R.C. at 180.

Similarly, BREDL makes no showing that, if necessary, there would be any difficulty accommodating storage of the relatively small amounts of Class B and C waste that might be generated. As Contention One implicitly acknowledges, there is no issue with the continued ability of nuclear plants to dispose of Class A waste, which constitutes about 96 percent of commercially generated low level waste. As reflected in Table 11.4-1 of the ESBWR Design Control Document ("ESBWR DCD"), the High Activity Resin Holdup Tank has a capacity of 70,000 liters (70 cubic meters), which is about five times the volume of the high activity resins estimated to be generated annually. BREDL provides no basis – no expert opinion, statement of facts, or references to documents or other sources – indicating that storage of Class B and C waste would be a problem even if necessary.

BREDL alleges that Chapter 11 of the FSAR assumes that there will be waste acceptance criteria ("WAC") from a disposal facility (Petition at 7), but BREDL makes no showing that it is necessary for the FSAR to specify WAC in order to establish an acceptable waste management

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¹⁵ U.S. NRC, News Release 08-103, "NRC Updates Guidance to Licensees for Extended Storage of Low-Level Radioactive Waste" (May 29, 2008).

News Release 08-103, <u>supra</u> note 15. Table 11.4-2 of the ESBWR DCD indicates that approximately 474 cubic meters of solid waste will be generated annually (363 cubic meters of dry active waste, plus 110.8 cubic meters of wet solid wastes). This Table also shows that the annually generated volume of the Reactor Water Clean Up ("RWCU") and the Fuel and Auxiliary Pooling Cooling System ("FAPCS") Spent Bead Resins, which constitute the high activity resins (<u>see</u> ESBWR DCD at 11.4-4), is estimated at 15.6 cubic meters, or about 3% of the total solid waste.

¹⁷ A Design Control Document is the document containing the information that is incorporated by reference into a design certification rule. See, e.g., 10 C.F.R. Part 52, App. A, § II.A. The Design Control Document follows the format of an Final Safety Analysis Report.

¹⁸ ESBWR DCD, Table 11.4-1.

program. Nothing in Section 11.4 of the Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants, NUREG-0800 ("SRP"), requires selection of a specific disposal facility or specification of WAC. To the contrary, Section 11.4 of the SRP indicates that meeting the waste classification and waste form criteria in 10 C.F.R. §§ 61.55 and 61.56 provides a level of assurance that processed waste forms will be compatible with disposal sites' WAC. SRP at 11.4-11.

Nor is there any regulatory basis for BREDL's claim that NAPS should be licensed under 10 C.F.R. Part 61 as a permanent disposal site (Petition at 6). The Part 61 regulations establish the requirements for a land disposal facility, and are not applicable to storage at a nuclear power plant. Further, Dominion's Application does not propose any on-site disposal at NAPS.

Finally, BREDL provides no information indicating that the closure of Barnwell raises any issue relating to GTCC waste. First, BREDL provides no information indicating that Unit 3 would generate GTCC waste during normal operations. GTCC waste at nuclear plants is typically generated when a plant is decommissioned. Moreover, disposal of GTCC is the responsibility of the Federal government. U.S.C. § 2021c(b)(1)(D). Therefore, there is no showing that the generation or disposal of GTCC raises any safety issue.

In sum, BREDL provides no basis to reevaluate the environmental impacts of waste management resolved in the ESP proceeding, and no basis to assume that there is a genuine,

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U.S. Department of Energy, "Greater-Than-Class-C Low Level Radioactive Waste and DOE Greater-than-Class-C Like Waste Inventory Estimates" (July 2007) at 2-1, available at http://www.gtcceis.anl.gov/documents/index.cfm. Control rod blades and other non-fuel components of fuel assemblies may also be highly radioactive, but are within the scope of DOE's disposal obligations under the Standard Contract for Disposal of Spent Nuclear Fuel and/or High Level Radioactive Waste. See id. at 2-2; 10 C.F.R. § 961.11 (Standard Contract, App. E, § B.2).

The Department of Energy has published a notice of intent to prepare an environmental impact statement for disposal of GTCC waste. 72 Fed. Reg. 40,135 (July 23, 2007).

material environmental or safety issue associated with management of Class B and C waste. BREDL identifies no expert opinion supporting its claims. Similarly, BREDL identifies no specific facts or references to documents or other sources that would indicate any genuine material dispute. Therefore, Contention One should be rejected.

2 Contention Two Is Inadmissible

Contention Two, which alleges that "Unit 3 Would be Built on Top of a Seismic Fault" (Petition at 7), is inadmissible because this issue has been extensively evaluated and resolved in the ESP proceeding and therefore cannot be litigated in this proceeding. Moreover, Contention Two fails to meet the Commission's pleading requirements.

a. Contention Two Is Beyond the Scope of this Proceeding

The issue that BREDL seeks to raise in Contention Two – whether the site is suitable for the construction and operation of a nuclear power plant due to the presence of what BREDL characterizes as a "geologic fault" (Petition at 8) – was resolved in the ESP proceeding (as well as having been addressed in the 1974 SER for previously proposed units). The Commission's regulations provide that:

In making the findings required for issuance of a construction permit or combined license, or the findings required by § 52.103, or in any enforcement hearing other than one initiated by the Commission under paragraph (a)(1) of this section, if the application for the construction permit or combined license references an early site permit, the Commission shall treat as resolved those matters resolved in the proceeding on the application for issuance or renewal of the early site permit, except as provided for in paragraphs (b), (c), and (d) of this section.

10 C.F.R. § 52.39(a)(2). As none of the exceptions in 10 C.F.R. § 52.39(b), (c), or (d) are applicable, the regulations thus bar the litigation of Contention Two in this proceeding.

NUREG-1835, "Safety Evaluation Report for an Early Site Permit (ESP) at the North Anna ESP Site," ("NUREG-1835") resolved the nature of the fault – referred to as unnamed fault "a" – that is the subject of BREDL's Contention Two with respect to the site geology and its potential for tectonic deformation and vibratory ground motion. In the ESP proceeding, the NRC Staff found that Dominion had adequately described the site area structural geology, including unnamed fault "a":

SSAR Section 2.5.1.2.4 describes the local faults and folds within the metamorphic bedrock underlying and surrounding the site. The applicant identified seven bedrock faults within a 5-mile radius of the ESP site and concluded, based on site area investigations and a review of the published literature, that none of the faults are capable tectonic sources, as defined in RG 1.165. The NAPS licensee thoroughly investigated one of the faults, unnamed fault "a," which traverses the ESP site, following its exposure within the excavations for the abandoned Units 3 and 4. The staff concluded in its 1974 SER for the abandoned Units 3 and 4 that the "North Anna fault zone is neither genetically nor structurally related to any known capable fault," and concurred with Virginia Power's conclusion that fault "a" is not a capable tectonic source.

Subsequent to Virginia Power's investigation, a local geologist mapped fault "a" over a total distance of about 7 miles, which is considerably longer than the original length of about 3000 ft mapped by Virginia Power. In RAI 2.5.3-2, the staff asked the applicant to evaluate the evidence for the continuation of fault "a" beyond the ESP site. In its response, the applicant stated that the local geologist; L. Pavlides, is deceased and did not document an explanation or basis for his mapping of fault "a" beyond the ESP site. The applicant performed aerial reconnaissance, field reconnaissance, and an air photo interpretation of fault "a" and, based on these studies, concluded that no stratigraphic, structural, or geomorphic evidence would support the existence of fault 'a" beyond the EPS site. Based on the evidence presented by the applicant, in particular the evidence cited as a result of the field reconnaissance described below, the staff concludes that the applicant has adequately investigated the possible extension of fault "a" beyond the ESP site. During its field reconnaissance, the applicant found no scarps or lineaments along the trace of fault "a" as mapped by Pavlides. The staff notes that the NAPS licensee's trenching of the fault shows that fault "a" is most likely a minor fault or bedrock shear within the Ta River metamorphic suite and that it is very unlikely that such a minor fault could be recognized or mapped over-a significant distance without a significant number of exposures. Section 2.5.3 of this SER provides further discussion of fault "a" and RAI 2.5.3-2.

Based on its review of SSAR Section 2.5.1.2.4 and the applicant's response to RAI 2.5.3-2, cited above, the staff concludes that the applicant adequately described the site area structural geology. The staff concludes that SSAR Section

2.5.1.2.4 provides an accurate and thorough description of the site area structural geology, with an emphasis on the structural features within a 5-mile radius of the ESP site, as required by 10 CFR 52.17 and 10 CFR 100.23. Section 2.5.3 of this SER provides the staff's complete evaluation of the applicant's description of the local bedrock faults near the ESP site and their potential for tectonic deformation and producing vibratory ground motion.

NUREG-1835 at 2-166 – 2-167.

The NRC Staff then examined the geology in the area of the ESP Site and concluded that no capable tectonic faults²¹ "exist in the plant site area (5 mi) that have the potential to cause near-surface displacement" and further that "no capable tectonic sources have been identified in the [Central Virginia Seismic Zone]." <u>Id</u>. at 2-168. Section 2.5.3 of the SER concludes:

The staff notes that the NAPS licensee's trenching of the fault "a" shows that it is most likely a minor fault or bedrock shear within the Ta River metamorphic suite and that it is very unlikely that such a minor fault could be recognized or mapped over a significant distance without a significant number of exposures. The applicant provided further evidence, described above, to support its original mapping of fault "a" in response to RAI 2.5.3-1. Based on this evidence, the staff concludes that fault "a" is unlikely to extend much farther than originally mapped by the applicant.

In SSAR Table 1.9-1, the applicant identified the item "Capable Tectonic Structures or Sources" as an ESP site characteristic. This item specifies that no fault displacement potential exists within the investigative area. As described above, the staff reviewed the applicant's description of unnamed fault "a" in SSAR Section 2.5.3.2.2 and concludes that the ESP site has no fault displacement potential.

Based on its review of SSAR Sections 2.5.3.1 -through 2.5.3.8 and the applicant's responses to the RAIs, as set forth above, the staff concludes that the applicant adequately investigated the potential for surface faulting in the site area. The staff

Reg. Guide 1.165, App. A, 1.165-10.

²¹ A capable tectonic source is a tectonic structure that can generate both vibratory ground motion and tectonic surface deformation such as faulting or folding at or near the earth's surface, which includes at least one of the following characteristics:

a. Presence of surface or near surface deformation of landforms or geologic deposits of a recurring nature within the last approximately 500,000 years or at least once in the last approximately 50,000 years.

b. A reasonable association with one or more moderate to large earthquakes or sustained earthquake activity that are usually accompanied by significant surface deformation.

c. A structural association with a capable tectonic source having characteristics of either section a or b in this paragraph such that movement on one could be reasonably expected to be accompanied by movement on the other.

concludes that the applicant performed extensive field and aerial reconnaissance of the local faults and concurs with the applicant's assertion that no capable faults exist within the site area. The staff and its USGS consultants also visited the site area and were able to view some of these local faults. Based on its site visit and its review of SSAR Section 2.5.3, as set forth above, the staff concurs with the applicant's conclusion that there is no evidence of Quaternary folding or faulting that could be associated with these local faults.

Id. at 2-208 - 2-209 (emphases added).

Further, in the ESP proceeding, the Atomic Safety and Licensing Board also found that unnamed fault "a" did not constitute a capable tectonic fault or source:

Inasmuch as 10 C.F.R. Part 100 also imposes seismic siting criteria, we examined this topic in our consideration of AEA Safety Issue 2. During the evidentiary hearing, we satisfied ourselves that the record supports the Staff's conclusion that "unnamed fault 'a'," which underlies the proposed ESP site, has been dormant for approximately 200 million years.

<u>Dominion Nuclear North Anna, LLC</u> (Early Site Permit for North Anna ESP Site), LBP-07-09, 65 N.R.C. 539, 601 (2007) (citation omitted).

Thus, the ESP proceeding resolved, <u>inter alia</u>, the following matters: (1) the site area structural geology (including unnamed fault "a") was adequately described; (2) the potential for surface faulting in the site area was adequately investigated (including unnamed fault "a"); (3) the ESP site has no fault displacement potential; and (4) no capable tectonic faults exist in the plant site area (5 mi) (including unnamed fault "a"). Accordingly, BREDL's attempt to litigate unnamed fault "a" in this proceeding is barred.

b. Contention Two Is Beyond the Scope of the Proceeding Because NAPS ESP VAR 2.0-4 Is Unrelated to Unnamed Fault "a"

BREDL states that Dominion has requested a variance for Vibratory Ground Motion (Petition at 8, quoting NAPS ESP VAR 2.0-4), but makes no showing that this variance has anything to do with the existence of the fault claimed by BREDL or the resolution of its

characteristics in the ESP proceeding. Petition at 8. Thus, BREDL provides no basis to reopen the exhaustive characterization of the fault in the ESP proceeding.

In point of fact, as demonstrated by the Application, the requested variance is entirely unrelated to unnamed fault "a":

This variance in spectral acceleration (g) values results from the use of the additional data from the Unit 3 subsurface investigation. The data showed that the top of competent rock under Unit 3 Seismic Category I structures is higher than assumed for the ESP. Also, the data provided the seismic wave transmission characteristics of the materials specifically under the Unit 3 Seismic Category I structures.

COL Application, Part 7 at 2-4 (emphasis added). Because the ESP spectra were provided at an elevation of 76.2 m (250 ft) and the Unit 3 site-specific SSE horizontal and vertical spectra at the top of competent material (Zone III-IV) is at an elevation of 83.2 m (273 ft), a variance was requested to reflect the difference in the SSE horizontal and vertical spectra due to the difference in elevation of the top of competent material used for the ESP and the COL Application. This variance is not only minute, ²² it is unrelated to unnamed fault "a". It therefore provides no basis to reopen the unrelated determination that unnamed fault "a" is not capable.

c. Contention Two Is Not Adequately Supported

Contention Two also fails to meet the Commission's pleading requirements for admissible contentions. Although BREDL notes that Dominion has requested a variance, BREDL fails to provide any concise or clear statement of what significance, if any, it believes that the requested variance would have. As discussed above, it has no relevance with respect to the existence of unnamed fault "a".

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As shown in FSAR Tables 2.0-202 and 2.0-203, to the extent that the Unit 3 site-specific spectra exceeds the ESP spectra at frequencies less than 3 or 4 Hz for horizontal and vertical acceleration respectively, it does so only at the third or fourth decimal place.

Moreover, BREDL does not dispute Dominion's demonstration that the variance is appropriate. BREDL has an "ironclad obligation" to examine the publicly available documentary material pertaining to the Application to uncover any information that could serve as the foundation for a specific contention. Catawba, ALAB-687, 16 N.R.C. at 468. BREDL does not specify any pertinent portions of the license application with which it has a disagreement with the applicant's position regarding the variance. The Application explains that the variance in spectral acceleration (g) values is acceptable because the ESBWR certified seismic design response spectra ("CSDRS") is used for design of Unit 3 Seismic Category I structures, and not the Unit 3 site-specific SSE spectra at the top of competent material. The Application also explains that Unit 3 foundation input response spectra ("FIRS") for Unit 3 Seismic Category I structures fall within the ESBWR CSDRS. Application, Part 7 at 2-5. BREDL does not challenge any aspect of that analysis. BREDL is required to state the applicant's position and the petitioner's opposing view, and explain why it has a disagreement with the applicant. 54 Fed. Reg. at 33,170; Millstone, CLI-01-24, 54 N.R.C. at 358. BREDL has failed to do so, much less "explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application]," as required by the Commission's regulations. Millstone, CLI-01-24, 54 N.R.C. at 359-60.

Additionally, BREDL has failed to provide any factual basis for Contention Two.

BREDL relates a considerable amount of what it believes to be the history of the construction of the units currently operating at NAPS, but none of that history is related to the COL Application or provides any factual basis for disputing the vibratory ground motion analysis in the COL

Application.²³ BREDL simply asserts that "[t]he proposed construction of a third reactor in close proximity to two existing nuclear reactors in an active earthquake zone must not be permitted," (Petition at 11), without any support for the statement or any explanation regarding how the COL Application itself is insufficient. BREDL's bald assertions are not sufficient to support an admissible contention. See, e.g., PFS, LBP-98-7, 47 N.R.C. at 180 (a "bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient;" rather "a petitioner must provide documents or other factual information or expert opinion" to support a contention's "proffered bases") (citations omitted). Contention Two, therefore, must be rejected as inadmissible.

3. Contention Three Is Inadmissible

Contention Three, which alleges that Unit 3 will not meet Clean Water Act requirements and that the water supply will not be sufficient (Petition at 11), is inadmissible for numerous reasons. The contention challenges environmental matters that were resolved in the ESP proceeding and does not identify any significant new information that would allow such resolved issues to be revisited. Furthermore, the contention is impermissibly vague and makes assertions which are not supported by any information demonstrating a genuine, material dispute with the Application.

In issuing the ESP, the NRC evaluated and determined the impacts of both temperature and use for the cooling water system associated with Unit 3. The Petition's vague and unsubstantiated assertions provide no basis to challenge the determinations made by the NRC in the ESP proceeding.

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To form the basis for an admissible contention, allegations of management improprieties or lack of "integrity" must be of more than historical interest: they must relate directly to the proposed licensing action. <u>Millstone</u>, CLI-01-24, 54 N.R.C. at 365.

a. The Allegation of Non-Compliance with Clean Water Act Requirements is Vague and Unsupported

At the outset, BREDL's allegation that Unit 3 will not meet Clean Water Act requirements (Petition at 11) is impermissibly vague and unsupported. BREDL alleges that "Virginia has continually granted variances to Dominion under Section 316 of the CWA which allow excessive amounts of thermal pollution to be discharged into waters of the United States" (id.) but provides absolutely no support for this assertion or explanation of its relevance to Unit 3.24 Unit 3 will employ closed cycle cooling (i.e., cooling towers)25 and thus does not require any thermal effluent limitation variance under Section 316(a) of the Clean Water Act.26

b. The Thermal Impacts of Unit 3 Were Found Negligible and Resolved in the ESP Proceeding

The thermal impacts of the Unit 3 cooling system were fully evaluated in the ESP proceeding and determined to be negligible. The ESP-ER evaluated the temperature increase attributable to discharge of blowdown from the cooling towers, and determined that temperature increase at the end of the discharge canal due to the new units would be less than 0.1° F, ²⁷ which would dissipate to an undetectable level within a short distance of travel in the Waste Heat Treatment Facility. ²⁸ ESP-ER at 3-5-59. In addition, the ESP-ER evaluated the potential

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To the extent that BREDL may be challenging the lawfulness of the thermal discharge limits established by the Commonwealth in the NPDES permits for the existing units, its allegations are beyond the scope of the proceeding. Even if the allegations related to the lawfulness of an NPDES permit for Unit 3, they would be beyond the NRC's jurisdiction. <u>Dominion Nuclear Connecticut</u> (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 N.R.C. 81, 93 (2004), <u>aff'd</u>,CLI-04-36, 60 N.R.C. 631, 642 (2004); <u>Carolina Power & Light Co.</u> (H. B. Robinson, Unit 2), ALAB-569, 10 N.R.C. 557, 561-62 (1979).

²⁵ Application, ER § 3.4, referencing ESP-ER § 3.4.

Section 316(a) of the Clean Water Act allows establishment of an alternative thermal effluent limitation for plants that do not employ closed cycle cooling. See <u>Public Service Co. of New Hampshire</u> (Seabrook Station, Units 1 and 2), CLI-78-1, 7 N.R.C. 1, 25 (1978).

²⁷ The average temperature increase attributable to the Unit 3 blowdown is estimated to be less than a hundredth of a degree Fahrenheit at the end of the discharge canal. ESP-ER at 3-5-58.

²⁸ The Lake Anna reservoir is divided into two distinct bodies of water, Lake Anna and the Waste Heat Treatment Facility ("WHTF"). The WHTF is composed of three lagoons and is designated by the Commonwealth of

increase in lake temperature that might occur as a result of reduced lake volume and estimated that the average increase in lake temperature from this effect would be less than 0.1° F. ESP-ER at 3-5-15.

The NRC Staff performed independent assessments confirming Dominion's estimates in the ESP proceeding:

Dominion determined the operation of Unit 3 would result in an average increase in Lake Anna water temperature of 0.1°F under normal climactic conditions, and of 0.3°F during extended drought events. The staff independently reviewed the analyses and agrees with the assessment.

FEIS at 5-29. Based on this assessment, the FEIS concludes that the thermal impact will be "negligible." <u>Id.</u> at 5-12.

As previously discussed, such environmental findings from an ESP proceeding are treated as resolved, absent significant new information. Here, BREDL has identified no such information. Accordingly, there is no basis for the NRC's prior findings on thermal impacts to be revisited.

Moreover, BREDL is collaterally estopped from raising thermal impacts as a contention, because it litigated this issue in the ESP proceeding. See Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna Site), LBP-06-24, 64 N.R.C. 360 (2006) (granting summary disposition). In granting summary disposition of a thermal impact contention, the Licensing Board observed:

The Intervenors agree that Dominion's revised proposal [closed cycle cooling] will likely have "only insignificant effects on the temperature of the water within Lake Anna" and "eliminate increases" downstream.

Virginia as a waste heat treatment facility in Dominion's Virginia Pollutant Discharge Elimination System ("VPDES") permit for NAPS. <u>See</u> NUREG-1811 at 2-4, 2-5, 2-20.

<u>Id.</u> at 364. Where, as here, the same issue has already been litigated by the same party in a prior proceeding, relitigation is barred. <u>Public Service Co. of New Hampshire</u> (Seabrook Station, Units 1 and 2), ALAB-942, 32 N.R.C. 395, 402-403 (1990); <u>Catawba</u>, LBP-82-107A, 16 N.R.C. at 1808.

c. Water Use Was Also Fully Evaluated and Resolved in the ESP Proceeding

evaluated extensively and resolved in the ESP proceeding. To assess such impacts, Dominion and the NRC Staff each independently modeled water budget impacts. The NRC Staff's review is described in Appendix K to the FEIS and predicts that the percent of time that Lake Anna would be at or below 248 feet msl would increase from about 6 to 11 percent. NUREG-1811, App. K at K-10. Dominion's model is described in Section 5.2.2.1 of the ESP-ER and predicts that the frequency of the lake level dropping below 248 feet would increase from about 5 percent of the time to 7 percent of the time. ESP-ER at 3-5-16. Both of these evaluations considered the effects of water consumption during both normal and drought conditions. See ESP-ER at 3-2-27 to 3-2-33; FEIS at 2-23 to 2-24. Based on these assessments, the FEIS concluded that water use impacts will be small, except during severe droughts when impacts to downstream users could be "temporarily moderate." FEIS at 5-11.

Once more, BREDL identifies no significant new information that would allow these findings resolved in the ESP proceeding to be revisited in this COL proceeding. Indeed, while BREDL makes general statements about water use (Petition at 12-13), it states: "All these data were available to the Applicant before November 27, 2007 . . . " (Petition at 13), which means that it was all available prior to ESP issuance.

Further, in addition to not demonstrating that there is any new information, BREDL does not demonstrate that any of its assertions would materially alter the prior findings in the ESP proceeding. First, the Petition asserts (incorrectly and without any basis) that Unit 3 will have an "annual consumptive use of over 8 billion gallons" (Petition at 12), based on "a minimum make-up flow rate of 15,376 gpm" (id.). BREDL's assertion assumes that the makeup rate constitutes consumptive use, and ignores the fact that a substantial portion of the makeup water withdrawn from the Lake is returned to the Lake as blowdown.²⁹ Thus, BREDL significantly over-states the consumptive use associated with Unit 3. Further, the ER states that 15,376 gpm is the maximum make-up flow rate in the Maximum Water Conservation mode (ER at 3-21), not the minimum as asserted by BREDL (Petition at 12). BREDL's mischaracterizations do not demonstrate any genuine, material dispute with the findings in the ESP proceeding.

Similarly, BREDL's assertion that Dominion has omitted reference to "Local and Regional Water Supply Planning," 9 VAC 25-780, (Petition at 12) raises no genuine, material dispute with the prior findings on consumptive water use. As BREDL correctly observed, the Application lists Virginia regulations for water use permits, 9 VAC 25-220, for a permit to withdraw water. Petition at 12, citing Application, ER at § 1.2. Virginia regulation 9 VAC 25-220 governs requests by users to withdraw water. 9 VAC 25-220-70. In contrast, Virginia regulation 9 VAC 25-780 governs water use planning by local governments. 9 VAC 25-780-20. Dominion is not a local government because it is not an incorporated city, town or county. 9 VAC 25-780-30. BREDL provides no explanation why this provision is applicable to Dominion,

The FEIS conservatively estimates an annual evaporation rate of 8707 gpm. NUREG-1811, App. K at K-14. See also Application, ER at 3-21.

or how it would in any way affect the evaluation of environmental impacts in the FEIS. As a general matter, NRC licensing is not dependent on licensing by other agencies.³⁰

Finally, BREDL's reference to the USGS website (Petition at 13) does not raise any genuine, material dispute with the prior findings on water use. As previously observed, the ESP-ER and FEIS evaluated the impacts of water use for both normal and drought conditions, so a statement that the York River basin has not returned to normal conditions (Petition at 13), even if true, would not affect the validity of the environmental findings in the ESP proceeding. In any event, the first two sentences of the quotation on page 13 of the Petition (i.e., the sentence "Streamflows in the York River basin remain at about half their historical mean," and the next sentence) are not found in or supported by the USGS webpage cited by BREDL, and do not reflect current circumstances. In fact, that web page states it was last updated in 2002.

In sum, Contention Three is inadmissible because it challenges findings that were resolved in the ESP proceeding and identifies no significant new information that would alter those findings. Further, the assertions in Contention Three are simply vague rhetoric unsupported by any expert opinion, references, or other sources demonstrating any genuine material dispute.

4. Contention Four Is Inadmissible

Contention Four, which alleges that Unit 3 will not meet the national emission standards for radionuclides to the atmosphere (Petition at 13), is inadmissible for numerous reasons. The contention is vague, does not challenge the Application, pertains to permitting provisions under the Clean Air Act that are beyond the NRC's purview, is unsupported by any information

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See Millstone, LBP-04-15, 60 N.R.C. at 93; Consumers Power Co. (Palisades Nuclear Plant), LBP-79-20, 10 N.R.C. 108, 124 (1979).

demonstrating a genuine material dispute, and makes unsupported assertions which are simply contrary to law.

At the outset, Contention Four presents no dispute with any of the dose calculations presented in the Application, and presents no dispute that those calculated doses meet all NRC regulations.³¹ Accordingly, the Contention fails to demonstrate any genuine, material dispute with the Application.

Instead, Contention Four appears to be suggesting that some emission standard is insufficiently protective, or that the NRC is required to develop additional standards applying maximum achievable control technology ("MACT") under Section 112 Clean Air Act. In either event, such suggestions are simply challenges to the sufficiency of the NRC's radiation protection standards, and such challenges are barred in an adjudicatory proceeding. 10 C.F.R. § 2.335.

Even if attacks on the NRC rules were permissible – which they are not – Contention Four would be inadmissible because it is vague and unsupported. The contention never identifies what "national emission standard" applies or why. The contention refers to a 10 millirem/year standard for airborne emissions (which it suggests results in risk in excess of some unidentified goal of limiting lifetime risk to one in 10,000), but provides no source for these assertions. The citation on page 14 of the Petition to 10 C.F.R. Part 50 Appendix I provides no such source. Appendix I does not contain a 10 millirem/year standard or the goal to which

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³¹ The annual total body dose to the maximally exposed individual from gaseous effluents from Unit 3 is 1.6 millirem/year. Application, FSAR at Table 12.2-201. The dose objective for gaseous effluents in the NRC regulations at 10 C.F.R. Part 50, Appendix I, is 5 millirem/year. 10 C.F.R. Part 50, App. I, § II.B.2.

BREDL refers.³² Nor is there any support given for the assertion that NRC must determine control technology under Section 112 of the Clean Air Act before issuing an operating license. BREDL's reference to a page on the EPA website (Petition at 14) provides no support for this assertion. In the absence of any lucid explanation or support, these confusing assertions fail to demonstrate the existence of any genuine, material dispute.

Moreover, contrary to BREDL's assertions, there is no national emission standard or MACT standard required to be established under Section 112 for releases of radionuclides under the Clean Air Act. Section 112(d)(9) of the Clean Air Act provides:

No standard for radionuclide emissions from any category or subcategory of facilities licensed by the Nuclear Regulatory Commission . . . is required to be promulgated under this section if the [EPA] Administrator determines, by rule, after consultation with the Nuclear Regulatory Commission, that the regulatory program established by the Nuclear Regulatory Commission pursuant to the Atomic Energy Act for such category or subcategory provides an ample margin of safety to protect the public health.

42 U.S.C. § 7412(d)(9). The EPA made this determination by final rule in 1995. 60 Fed. Reg. 46,206 (Sept. 5, 1995). See 10 C.F.R. § 61.100.

Finally, those permitting requirements are administered under the operating permit program of Title V of the Clean Air Act by the EPA or authorized state/local permitting authorities, not by the NRC. To the extent that BREDL may be claiming that Unit 3 is obliged to apply to the relevant Title V permitting authority for a unit-specific standard, or challenging the sufficiency of the EPA's standards, its issues are beyond the NRC's jurisdiction. The Commission has made it clear that Licensing Boards should narrowly construe their scope to avoid where possible the litigation of issues that are the primary responsibility of other agencies

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³² As previously noted, the dose objective in Appendix I for gaseous effluents is 5 mrem/year. <u>See</u> 10 C.F.R. Part 50, App. I, § II.B.2.

and whose resolution is not necessary to meet NRC's statutory responsibilities. <u>Hydro</u>

<u>Resources, Inc.</u> (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-96-15, 48 N.R.C.

119, 121-22 (1996). Again, as a general matter, NRC licensing is not dependent on licensing by other agencies.³³

5. Contention Five Is Inadmissible

BREDL's Contention Five, which states that "[t]he assumption and assertion that uranium fuel is a reliable source of energy is not supported in the combined operating license application" (Petition at 14), is inadmissible because it fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1). In particular, Contention Five is not supported by any information demonstrating a genuine, material dispute with the Application.

The only references that BREDL provides in purported support of Contention 5 (two web pages)³⁴ give no support and in fact contradict the Contention. It is well established that, in determining the admissibility of a contention, licensing boards are to "carefully examine[]" documents provided in support of a contention to determine whether they "supply an adequate basis for the contention." See, e.g., Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), LBP-04-18, 60 N.R.C. 253, 265 (2004) ("North Anna ESP"). A document put forth by a petitioner as the basis for a contention is subject to Board scrutiny, both as to the portions that support the petitioners' assertions and those that do not. See, e.g. Yankee Atomic Electric Co. (Yankee Nuclear Power Station), LBP-96-02, 43 N.R.C. 61, 90 and n.30 (1996). See also id. at 88-89 (rejecting a contention where the document referenced by petitioner on its face failed to establish a disputed material issue).

³³ See note 30 supra.

Petition at 14 n.2 & 15 n.4 (citing http://www.world-nuclear.org/info/inf75.html?terms=uranium+supply and http://www.world-nuclear.org/info/inf23.html).

Here, the very webpages cited by BREDL on their face belie its Contention. For example, the first webpage cited by BREDL in fact states "[T]he world's present measured resources of uranium (4.7 Mt) in the cost category somewhat above present spot prices and used only in conventional reactors, are enough to last for some 70 years." http://www.world-nuclear.org/info/inf75.html?terms=uranium+supply. The document further states that: "There was very little uranium exploration between 1985 and 2005, so the significant increase in exploration effort that we are now seeing could readily double the known economic resources." Id. The other webpage cited by BREDL indicates that mine production is being substantially increased with the addition of new mines in Canada and Australia and expected large increases in production:

Canada has two major mines which came into production in 1999: Cameco's McArthur River deposit has enormous high-grade reserves and supplies ore from its underground mine to the Key Lake mill, to produce some 7200 tU/yr. Areva's McClean Lake mine can produce over 2000 tU/yr.

Cameco's Cigar Lake underground mine is being developed for 2010 or 2011 start-up. It will truck ore for treatment at McClean Lake and Rabbit Lake mills, 70 km away, to produce 7000 tU/yr. Areva's Midwest mine is ready to develop, with ore milled at McClean Lake nearby, to produce 2200 tU/yr.

With all these operating, Canadian output could be substantially be concentrated at two mills: McClean Lake producing about 7800 tU and Key Lake 10,700 tU per year, with about 2300 t/yr coming from Rabbit Lake. All this will be about half of projected world mine production. (See also Information Paper on Canada).

In Australia there are plans to triple the uranium output of Olympic Dam, to about 12,700 tonnes U per year. Meanwhile the three Australian mines produce some 8000 tonnes U per year, bout 20% of world mine production. (See also Information Paper on Australia).

http://www.world-nuclear.org/info/inf23.html.

BREDL cites very selectively to certain information on these webpages indicating that mines are currently producing less uranium than is being consumed (Petition at 14-15 & n.3), but this does not establish any genuine material dispute with the Application. The webpages do not

indicate that there are insufficient resources, but merely indicate that there is currently a glut of uranium resulting from the conversion of weapons material to reactor fuel. Once more, the very document cited by BREDL explains:

An important source of nuclear fuel is the world's nuclear weapons stockpiles. Since 1987 the United States and countries of the former USSR have signed a series of disarmament treaties to reduce the nuclear arsenals of the signatory countries by approximately 80 percent.

The weapons contain a great deal of uranium enriched to over 90 percent U-235 (ie up to 25 times the proportion in reactor fuel). Some weapons have plutonium-239, which can be used in diluted form in either conventional or fast breeder reactors. From 2000 the dilution of 30 tonnes of military high-enriched uranium has been displacing about 10,600 tonnes of uranium oxide per year from mines, which represents about 13% of the world's reactor requirements.

http://www.world-nuclear.org/info/inf75.html?terms=uranium+supply.

In short, the very webpages cited by BREDL do not support any claim that the uranium supply is unreliable. Rather, these webpages support at least 70 years of uranium fuel in the present measured resources of uranium, with the likelihood that further exploration could double this amount. BREDL provides no other information – no expert opinion, statement of facts, or other references – demonstrating that there is any genuine, material issue concerning the reliability of the fuel supply.

Likewise, BREDL's suggestion that there may be some plan to use MOX fuel missing from the Application (Petition at 15) is sheer speculation. The Application does not propose any use of MOX fuel at Unit 3, and BREDL's unsupported and erroneous speculation does not establish any genuine dispute with the Application.

Finally, BREDL's allegation that it is incumbent upon the applicant to address these issues (Petition at 15) simply ignores information that was provided in the ESP proceeding and incorporated by reference in the Application. Section 10.2 of the ESP-ER states:

Studies performed by U.S. Government agencies, such as the National Defense Stockpile Impact Committee of the Bureau of Industry and Security (Reference 2), and entities such as the World Nuclear Association (Reference 3) (Reference 4), have concluded that there are easily accessible, rich deposits of uranium throughout the world and that existing stocks of highly enriched uranium (HEU) in the U.S. and Russia--formerly for military usage--could be converted to fuel for nuclear power plants. Also, the reduction in use of uranium by the newer reactors when compared to the existing reactors would serve to extend the current 50-year supply of uranium available to the nuclear power industry. Therefore, the uranium that would be used to generate power by the new units at the ESP site, while irretrievable, would not be a large or moderate impact with respect to the long-term availability of uranium worldwide.

* * *

- 2. Effects of Imports of Uranium on the National Security Summary, Bureau of Industry and Security, Document Number 003-009-00698-8, September 1989, website www.bis.doc.gov/defenseindustrialbaseprograms/OSIES/2-3-2-Reports/Uranium89.html.
- 3. *Introduction to Nuclear Energy/Factsheets, Uranium Resources*, World Nuclear Association, website www.world-nuclear.org/factsheets/uranium.htm, accessed 8/15/03.
- 4. Supply of Uranium, Information and Issue Briefs, World Nuclear Association August 2002, website www.world-nuclear.org/info/inf75.htm, accessed 8/15/03.

ESP-ER at 3-10-20. Similarly, the FEIS concludes "[t]he availability of uranium ore and existing stockpiles of highly enriched uranium in the United States and Russia that could be processed into fuel is sufficient." NUREG-1811, at 10-10. This information is referenced in Section 10.2 of the COL-ER. <u>See</u> Application, ER at 10-7. BREDL provides no significant information warranting reconsideration of these findings from the ESP proceeding.

6. Contention Six Is Inadmissible

Contention Six, which alleges that the NRC fails to execute Constitutional Due Process and Equal Protection (Petition at 17), is inadmissible because it challenges the NRC's rules.

BREDL appears to be arguing that the radiation protection standards in the NRC's rules are unconstitutional because they do not recognize higher risk for children and women. See Petition at 17-19. Such a challenge to the NRC rules is barred. 10 C.F.R. § 2.335. Contention Six also

suggests that the Board should overturn Supreme Court precedent and declare the Price-Anderson Act unconstitutional. See id. at 19-20. The Board, however, has no authority to overturn statutes or to ignore the law of the land.

Contention Six first alleges that NRC regulations will not prevent "elevated levels of exposure" from Unit 3 (Petition at 18), but this allegation is simply an attack on the sufficiency of the NRC rules barred by 10 C.F.R. § 2.335. BREDL makes no claim and provides no information suggesting that Unit 3 will not meet NRC's standards.³⁵ Instead, BREDL claims that the NRC's radiation safety limit of 100 millirem per year means that 3 to 4 persons per 1,000 could die if exposed over a lifetime. Petition at 18. This attack on the sufficiency of the NRC rules is not only impermissible but also misleading, since the 100 millirem standard in 10 C.F.R. § 20.1301(a)(1) is a limit for the maximally exposed individual, is complemented by NRC rules requiring much lower doses to meet the "as low as reasonably achievable" ("ALARA") standard,³⁶ and does not represent the risk to the general population.³⁷

BREDL suggests that the total body dose for all three units will be above some "Hypothetical Lifetime Risk benchmark of 35 in a million" from the NRC's Below Regulatory Concern ("BRC") Policy. Petition at 17. The NRC's BRC Policy has been withdrawn (58 Fed. Reg. 44,610 (Aug. 24, 1993)) and therefore does not establish applicable standards. In addition, the BRC Policy never established any such "benchmark." As reflected in the BRC Policy, 35 in a million simply corresponded to the estimate lifetime risk from a continuing annual dose of 1 mrem. See 55 Fed. Reg. 27,522, 27,527 (Table 1) (July 3, 1990). Moreover, the BRC Policy was intended to establish criteria that the NRC would use in decisions to exempt materials from regulation (see 55 Fed. Reg. at 27,522) and therefore has no applicability to the permissibility of regulated activities. What is more, the standard that the Commission proposed in its BRC policy was 10 millirem/year for exempted practices not involving widespread distribution of radioactivity in consumer products or recycled material. Id. at 27,527.

BREDL also refers to the increase in thyroid dose which it attempts to suggest is elevated (Petition at 17-18) but

BREDL also refers to the increase in thyroid dose which it attempts to suggest is elevated (Petition at 17-18), but BREDL does not dispute its compliance with the NRC's standards, including Appendix I to Part 50. It should be noted that (prior to the submission of BREDL's Petition) the estimated thyroid dose from Unit 3 was revised down to 11 mrem/year, reflecting revised source terms in the ESBWR Design Control Document (i.e., from the design certification proceeding). See Response to Request for Additional Information Letter No. 1 (Apr. 28, 2008) (Revised FSAR Table 12.2-203). Therefore, BREDL's reference to a 15 mrem/year thyroid dose (Petition at 18) is incorrect.

As BREDL observes, the total body dose to the maximally exposed individual from all releases from the existing units and Unit 3 combined is 3.7 mrem/year. Petition at 17. See Application, FSAR at 12.2-203. The total body dose to the maximally exposed individual from Unit 3 releases is 1.7 mrem/year. Application, FSAR at 12.2-203.

BREDL's allegation that the NRC's radiation exposure standard does not protect all members of the public fairly (Petition at 18) is likewise an impermissible attack on the NRC rules. Further, BREDL's allegation has little basis. The NRC recently considered and rejected similar claims. See Denial of Petition for Rulemaking, 72 Fed. Reg. 71,083, 71,085 (Dec. 14, 2007).³⁸

Finally, BREDL's suggestion that the constitutionality of the Price-Anderson Act should be revisited (Petition at 19-20) is both beyond the scope of this proceeding, and beyond the jurisdiction of the Board. This proceeding is not a proper forum to challenge the Price-Anderson Act. Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Unit No. 2), ALAB-335, 3 N.R.C. 830, 841 n.25 (1976); Florida Power & Light Co. (Turkey Point, Units 3 and 4), 4 A.E.C. 787, 788 (1972); Douglas Point, ALAB-218, 8 A.E.C. at 81 n.7; General Electric Co. (GETR Vallecitos), LBP-85-4, 21 N.R.C. 399, 402 (1985); Pennsylvania Power & Light Co. (Susquehanna Steam Electric Station, Units 1 and 2), LBP-79-6, 9 N.R.C. 291, 323, 324 (1979). Further, the Licensing Board cannot disregard or overturn Supreme Court precedent. South

Thus, the doses to the maximally exposed individual are far below the 100 mrem limit, and in full compliance with the 5 mrem dose objective in 10 C.F.R. Part 50, App. I.

³⁷ The FEIS estimated the number of fatal cancers, non-fatal cancer, and severe hereditary effects of less than 0.02 annually for a single new unit at the North Anna ESP site. FEIS at 5-66.

³⁸ As the Commission observed, "[a]lthough some epidemiological studies have shown that children, individuals in poor health, and the elderly are more radiosensitive to radiation at high doses and high dose rates, no adverse health effects have been observed in these populations at the doses associated with NRC's radiation protection regulations." 72 Fed. Reg. at 71,085. Similarly, the NRC observed,

The BEIR VII committee's preferred estimate of lifetime attributable risk for solid cancer incidence and mortality (Tables 12-13) suggest that females are more sensitive than males to radiation exposure at 10 rem, a level that is 100 times the NRC's radiation protection standards specified in 10 CFR Part 20. The BEIR VII committee's preferred estimate of lifetime attributable risk for leukemia cancer incidence and mortality (Tables 12-13), moreover, suggest that males are more sensitive than females. The BEIR committee uses the 95 percent confidence intervals associated with estimated lifetime cancer risk for males and females that suggest that the apparent gender difference may not be statistically significant. Consequently, the BEIR VII report combined the two risk estimates and cited an average value which was also done by the BEIR V committee. A potential gender difference was not discussed in the BEIR VII report.

<u>Carolina Electric & Gas Co.</u> (Virgil C. Summer Nuclear Station, Unit 1), ALAB-710, 17 N.R.C. 25, 28 (1983) (Licensing Boards are bound to comply with directives of a higher tribunal).

For all of these reasons, Contention Six is inadmissible.

7. Contention Seven Is Inadmissible

Contention Seven, which alleges that the ER is deficient because it fails to discuss the environmental implications of the lack of options for permanent disposal of spent fuel (Petition at 21), is inadmissible because it impermissibly challenges the NRC's Waste Confidence Rule (10 C.F.R. § 51.23). The Waste Confidence Rule makes a generic finding that a geologic repository will be available beyond the operating life of any reactor to dispose of its spent nuclear fuel (10 C.F.R. § 51.23(a)) and hence bars this issue. Further, this contention is an impermissible attempt to litigate matters that were resolved in the ESP proceeding. Not only were fuel cycle and solid waste impacts of light water reactors addressed and resolved in the ESP proceeding, but also a virtually identical contention proffered by BREDL was rejected in that proceeding. North Anna ESP, LBP-04-18, 60 N.R.C. at 269.

a. Contention Seven Impermissibly Challenges the Commission's Waste Confidence Rule

The NRC's Waste Confidence rule provides in pertinent part:

(a) The Commission has made a generic determination that, if necessary, spent fuel generated in <u>any reactor</u> can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent fuel storage installations. Further, the Commission believes that there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of <u>any reactor</u> to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time.

(b) Accordingly, . . . within the scope of the generic determination in paragraph (a) of this section, no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSI) for the period following the term of the . . . reactor combined license . . . for which application is made, is required in any environmental report, environmental impact statement, environmental assessment, or other analysis prepared in connection with the . . . issuance . . . of a combined license for a nuclear power reactor under parts 52 and 54 of this chapter. . . .

10 C.F.R. § 51.23(a), (b) (emphases added).

In essence, Contention Seven argues that Dominion cannot rely on NRC's Waste Confidence Decision (49 Fed. Reg. 34,658 (1984), as amended, 55 Fed. Reg. 38,474 (Sep. 18, 1990)), upon which 10 C.F.R. § 51.23 is based, "because it applies only to plants which are currently operating, not new plants." Petition at 22. BREDL is just wrong in claiming that the Waste Confidence Decision does not apply to new reactors. The express language of 10 C.F.R. § 51.23, the NRC findings in the Waste Confidence Decision, and the record in that proceeding all refute BREDL's claim.

First, the NRC amended the Waste Confidence Rule in 2007 to make it clear that it applied to combined license applications. See 72 Fed. Reg. at 49,429; 10 C.F.R. § 51.23(b) (explicitly referring to combined license applications). Thus, the rule clearly applies to applications for new reactors.

Further, by its express terms, 10 C.F.R. § 51.23(a) applies to "any reactor." 10 C.F.R. § 51.23(a). Thus, as held in the North Anna ESP proceeding, the plain language of the rule applies to new reactors. North Anna ESP, LBP-04-18, 60 N.R.C. at 269. Indeed, when the NRC promulgated this rule, it explained, "in licensing actions involving (a) the storage of spent fuel in new or existing facilities, or (b) the expansion of storage capacity at existing facilities, the NRC will continue to require consideration of reasonably foreseeable safety and environmental

impacts of spent fuel storage only for the period of the license applied for." 49 Fed. Reg. at 34,689 (emphasis added).

BREDL argues that "as amended in 1999," the second finding of the Waste Confidence Decision "clearly . . . applies to any existing reactor, including reactors whose licenses are revised or renewed." Petition at 22-23 (emphasis added). Contrary to BREDL's insinuation, the second finding does not refer to and is in no way limited to "existing reactors." Rather, like the Waste Confidence Rule itself, the second finding (quoted by BREDL) applies to "any reactor." Further, the record for the 1990 revision of the second finding could not be more clear in its consideration and inclusion of new reactors. In that record, the Commission addressed relevant issues that had arisen since its original Waste Confidence Decision in 1984. 55 Fed. Reg. at 38,500. The Commission identified one of those issues as:

Is there sufficient uncertainty in total spent fuel projections (e.g., from extension-of-life license amendments, renewal of operating licenses for an additional 20 to 30 years, or a new generation of reactor designs) that this Waste Confidence review should consider the institutional uncertainties arising from having to restart a second repository program.

55 Fed. Reg. at 38,501 (emphasis added). Just as the issue presented clearly addressed new reactors, so did the Commission's response:

Assuming for the sake of establishing a conservative upper bound that the Commission does grant 30-year license renewals, the total operating life of some reactors would be 70 years, so that the spent fuel initially generated in them would have to be stored for about 100 years if a repository were not available until 30 years after the expiration of their last OLs.

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Fed. Reg. 68,005 (Dec. 6, 1999).

³⁹ BREDL is mistaken in describing the second finding of the Waste Confidence Decision as having been amended in 1999. Petition at 22. In fact, the original Waste Confidence Decision (49 Fed. Reg. 34,658 (Aug. 31, 1984)) was amended in 1990 (55 Fed. Reg. 38,474 (Sept. 18, 1990)). In 1999, the Commission decided that a comprehensive evaluation of the Waste Confidence Decision was unnecessary, and that experience and developments since 1990 confirmed the 1990 findings, and no modification to those findings was necessary. 64

Even under the conservative bounding assumption of 30-year license renewals for all reactors, however, if a repository were available within the first quarter of the twenty-first century, the oldest spent fuel could be shipped off the sites of all currently operating reactors well before the spent fuel initially generated in them reached beyond the age of 100 years. Thus, a second repository, or additional capacity at the first, would be needed only to accommodate the additional quantity of spent fuel generated during the later years of these reactors' operating lives. The availability of a second repository would permit spent fuel to be shipped offsite well within 30 years after expiration of these reactors' OLs. The same would be true of the spent fuel discharged from any new generation of reactor designs.

In sum, although some uncertainty in total spent fuel projections does arise from such developments as utilities' planning renewal of OLs for an additional 20 to 30 years, the Commission believes that this Waste Confidence review need not at this time consider the institutional uncertainties arising from having to restart a second repository program. Even if work on the second repository program is not begun until 2010 as contemplated under current law, there is sufficient assurance that a second repository will be available in a timeframe that would not constrain the removal of spent fuel from any reactor within 30 years of its licensed life for operation.

55 Fed. Reg. at 38,503-04 (emphases added). As that statement demonstrates, the Commission fully considered the possibility of additional spent nuclear fuel generation stemming from <u>both</u> the renewal of existing licenses and the licensing of new reactors. <u>North Anna ESP</u>, LBP-04-18, 60 N.R.C. at 269 & n.6. Therefore, any assertion that the Waste Confidence Decision does not apply to new reactors must be rejected.

Moreover, this same record of the 1990 Waste Confidence review belies BREDL's arguments that the Commission "backtracked" from its original Waste Confidence Decision and no longer has confidence that more than one repository will open. See Petition at 23.⁴⁰ As quoted above, the Commission stated that "there is sufficient assurance that a second repository

BREDL bases this argument on the 1990 amendment to the second finding, from assurance that "one or more" repositories would be available by years 2007 to 2009, to assurance that "at least one" repository would be available by the first quarter of the twenty-first century. Petition at 23.

will be available in a timeframe that would not constrain the removal of spent fuel from any reactor within 30 years of its licensed life for operation." 55 Fed. Reg. at 38,504.

For the same reason, BREDL's concern about the limitation on the capacity of the first repository (Petition at 23-26 & n.6) is irrelevant. The Commission considered this limitation in its 1990 review and concluded:

The Commission believes that if the need for an additional repository is established, Congress will provide the needed institutional support and funding, as it has for the first repository.

55 Fed. Reg. at 38,502.

Contention Seven goes on to argue, without any support, that no indication is given that the Commission "has confidence that repository space can be found for spent fuel and other high-level radioactive waste from new reactors licensed after December of 1999." Petition at 23. To the contrary, the Commission could not have been more clear in its 1999 Status Report on the Review of the Waste Confidence Decision (64 Fed. Reg. 68,005 (1999)) reaffirming, without qualification, its 1990 findings. Referring to the ongoing repository development and spent fuel storage activities, the Commission stated:

These considerations <u>confirm and strengthen</u> the Commission's 1990 findings and lead the Commission to conclude that no significant and unexpected events have occurred – no major shifts in national policy, no major unexpected institutional developments, no unexpected technical information – that would cast doubt on the Commission's Waste Confidence findings or warrant a detailed reevaluation at this time.

64 Fed. Reg. at 68,007 (emphasis added). Not only did the Commission decide not to review its 1990 Waste Confidence findings in 1999, the Commission found that events since then had only served to strengthen the 1990 findings, which expressly include consideration of new reactors.

In sum, Contention Seven is a direct challenge to 10 C.F.R. § 51.23 and must be rejected. The regulation's plain language and the Commission's Waste Confidence Decisions demonstrate that the Commission fully considered new reactors in this generic rulemaking. As 10 C.F.R. § 51.23 applies to COL applications and any reactors, BREDL's contention to the contrary in this proceeding must be rejected as an impermissible challenge to the NRC's regulations.

b. Contention Seven Impermissibly Seeks to Litigate an Issue Resolved in the ESP Proceeding

Contention 7 is not only an impermissible challenge to the NRC rules, but also an impermissible attempt to litigate issues already resolved in the ESP proceeding. The FEIS evaluated the environmental impacts for the fuel cycle and solid waste management, and resolved those issues for light water reactors. See NUREG-1811, § 6.1.1. The FEIS also responded to public comments and affirmed the applicability of the Waste Confidence Rule to new reactors. Id., Vol. 2 at 3-234. BREDL has provided no information that would disturb this conclusion. Further, as previously stated, BREDL (along with other petitioners) proffered a virtually identical contention in the North Anna ESP proceeding, which was rejected by the licensing board in that proceeding as impermissibly challenging the Waste Confidence Rule.

North Anna ESP, LBP-04-18, 60 N.R.C. at 269. BREDL did not appeal that decision in the ESP proceeding, and provides no explanation why it should now be entitled to raise the very same issues anew.

8. Contention Eight Is Inadmissible

Contention Eight is inadmissible for much the same reasons as is Contention Seven.

Contention Eight argues that the Waste Confidence Decision should be reconsidered because of the alleged increased threat of terrorist attack. Petition at 27. Once more, this contention is an

impermissible challenge to the NRC's Waste Confidence Rule. Further, this contention too was raised and rejected in the ESP proceeding. Finally, this contention is barred by the Commission's holdings that the National Environmental Policy Act ("NEPA") does not require consideration of the effects of terrorism.

a. Contention Eight Impermissibly Challenges the Commission's Waste Confidence Rule

10 C.F.R. § 2.335 states that "[e]xcept as provided in paragraphs (b), (c), and (d) of this section, no rule or regulation of the Commission . . . is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding subject to this part." 10 C.F.R. § 2.335(a). As was held in the North Anna ESP proceeding, in which BREDL raised the same contention, this contention is inadmissible because it raises an impermissible challenge to the Commission's regulatory requirements. North Anna ESP, LBP-04-18, 60 N.R.C. at 270.

Further, while BREDL states that the Waste Confidence Decision should be reconsidered (Petition at 27), such a request falls far short of meeting any of the requirements for seeking a waiver of a rule, as set out in 10 C.F.R. §§ 2.335(b)-(d).

Indeed, it is clear that BREDL could not meet the standards for a waiver. In this regard, 10 C.F.R. § 2.335(b) provides:

The sole ground for petition of waiver or exception is that <u>special circumstances</u> <u>with respect to the subject matter of the particular proceeding</u> are such that the application of the rule or regulation (or a provision of it) would not serve the purposes for which the rule or regulation was adopted.

10 C.F.R. § 2.335(b) (emphasis added). The "special circumstances" required cannot be merely alleged and must be set forth "with particularity." <u>Harris</u>, LBP-82-119A, 16 N.R.C. at 2073. In order to establish special circumstances that would support a waiver, the petitioner "must allege

facts not in common with a large class of facilities that were not considered, either explicitly or by necessary implication, in the rulemaking proceeding for the rule sought to be waived." PFS, LBP-98-7, 47 N.R.C. at 238 (citing Public Service Co. of New Hampshire (Seabrook Station Units 1 and 2), CLI-89-20, 30 N.R.C. 231, 235 (1989)) (emphasis added). Here, BREDL's contention refers to: "U.S. facilities" (Petition at 27); "commercial reactors" (id. at 28); "Independent Spent Fuel Storage Installations" (id.); transportation of spent nuclear fuel (id.); the phase-out of nuclear power (id.); "fuel storage pools" (id.); and "dry storage facilities" (id.). Nowhere in Contention Eight does BREDL refer to any special circumstances that might exist with respect to the proposed Unit 3, which is the subject of this proceeding. The contention seeks reconsideration of the Waste Confidence Decision as it pertains to all spent nuclear fuel, wherever it might or will be produced and stored, and is "nothing more than a generalization regarding [petitioners'] views of what applicable policies ought to be." Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-76, 16 N.R.C. 1029, 1035 (1982) (citing Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 A.E.C. 13, 20-21 (1974). Such a broad request does not and cannot meet the standard in 10 C.F.R. § 2.335(b).

BREDL also fails to show, within the context of NEPA, that there are special circumstances that would cause the rule not to serve its purpose. The NRC's Waste Confidence Decision considered the <u>remoteness</u> of terrorist attacks and their radiological consequences. 49 Fed. Reg. 34,658. In its 1990 review of the Waste Confidence findings, the Commission stated:

[N]o considerations have arisen to affect the Commission's confidence since 1984 that the possibility of a major accident or sabotage with off site radiological impacts at a spent-fuel storage facility is extremely remote.

55 Fed. Reg. at 38,512 (emphasis added). Subsequent to the September 11 events, the Commission has held that an attack on a fuel storage facility "is speculative and simply too far

removed from the natural or expected consequences of agency action to require a study under NEPA." <u>Private Fuel Storage</u>, CLI-02-25, 56 N.R.C. 340, 349 (2002). The Commission has also held:

[A]n EIS is not an appropriate format to address the challenges of terrorism. The purpose of an EIS is to inform the decisionmaking agency and the public of a broad range of environmental impacts that will result, with a fair degree of likelihood, from a proposed project, rather than speculate about "worst case scenarios" and how to prevent them.

<u>Id.</u> at 347. NEPA's mandate "is to consider a broad range of environmental effects that are reasonably likely to ensue as a result of a major agency action, not to engage in speculation about what might happen as a result of criminal terrorist activities." <u>Id.</u> at 352. The Waste Confidence Decision reflects the NRC's judgment that spent fuel can be stored safely and without significant environmental impact from the expiration of a reactor's facility operating license until a repository is available. Consistent with the Commission's multiple rulings, ⁴² the Commission's analysis need not include speculation about potential consequences of terrorism on fuel temporarily stored at the site of new reactors after the end of their licensed life. ⁴³ In this context,

While the Commission has indicated that likelihood of a terrorist attack cannot be ascertained with confidence by any state-of-the-art methodology, it has added:

If we were to speculate on the probability of the scenario . . . [of] a hijacked jumbo jet hitting the PFS facility and causing catastrophic effects – our guess is that the probability is actually miniscule. 56 N.R.C. at 351.

The Commission has ruled in several contexts that NEPA does not require it to conduct a terrorism analysis. See Private Fuel Storage, CLI-02-25, 56 N.R.C. 340 (2002); Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility) CLI-02-24, 56 N.R.C. 335 (2002) (construction permit); Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 N.R.C. 358 (2002) (license renewal); Dominion Nuclear Connecticut, Inc. (Millstone Power Station, Unit 3), CLI-02-27, 56 N.R.C. 367 (2002) (license amendment proceeding to expand spent fuel pool storage capacity).

Taking into account the design, licensing and construction period, a forty-year licensed life, and potential 20 year license renewals, this period of storage for new units would not even occur until near the end of the century. The suggestion that the NRC should attempt to evaluate terrorist risk at this point in the future makes little sense.

Contention Eight is nothing more than a back-door attempt to circumvent the Commission's rulings that terrorism is not a proper subject for NEPA analysis.⁴⁴

Finally, even if intended as a waiver request, Contention Eight fails to meet the affidavit requirement in Section 2.335:

The petition must be accompanied by an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule or regulation (or provision of it) would not serve the purposes for which the rule or regulation was adopted. The affidavit must state with particularity the special circumstances alleged to justify the waiver or exception requested.

10 C.F.R. § 2.335(b). This affidavit should contain enough proof for the Licensing Board to determine whether the petitioner has made a <u>prima facie</u> showing for a waiver. <u>Harris</u>, LBP-82-119A, 16 N.R.C. at 2073. Further, "[i]ntervenors should be aware that as a practical matter, in most cases, a petition for a waiver of a rule under [§ 2.335] will involve a substantial investment in time and effort." <u>Id.</u> No affidavit with any such specificity or proof was provided to support a waiver in this proceeding. In sum, even if Contention Eight is intended to constitute a waiver request, it does not and cannot satisfy the standards for a waiver.

b. Contention Eight Impermissibly Seeks to Litigate an Issue Resolved in the ESP Proceeding

Just as with Contention Seven, Contention Eight is barred not only because it challenges an NRC rule but also because the environmental impacts for the fuel cycle and solid waste management were resolved for light water reactors in the ESP proceeding. See NUREG-1811, §

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⁴⁴ BREDL's reliance on <u>San Luis Obispo Mothers for Peace v. NRC</u>, 449 F.3d 1016 (9th Cir. 2006) for "special circumstances" warranting reconsideration of the Waste Confidence Decision is misplaced. The Commission has applied that ruling only to the Diable Canyon proceeding and will not apply it to other proceedings because it

applied that ruling only to the <u>Diablo Canyon</u> proceeding and will not apply it to other proceedings because it "continue[s] to believe that NEPA does not require the NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities." <u>Amergen Energy Co., LLC</u> (Oyster Creek Nuclear Generating Station), CLI-07-08, 65 N.R.C. 124, 129 (2007). Therefore, the <u>San Luis Obispo Mothers for Peace</u> decision does not amount to special circumstances warranting the requested reconsideration of the Waste Confidence rule.

6.1.1. Moreover, just as with Contention Seven, a contention virtually identical to Contention Eight was proffered by BREDL and rejected in the North Anna ESP proceeding. North Anna ESP, LBP-04-18, 60 N.R.C. at 269. The licensing board in the North Anna ESP proceeding held that the contention raised issues outside the scope of the proceeding and impermissibly challenged a Commission regulatory requirement, and that BREDL has failed to demonstrate that "special circumstances" existed to warrant waiving of the regulation. Id. at 270. These matters should not be revisited in this COL proceeding.

IV. Selection of Hearing Procedures

Commission rules require the Atomic Safety and Licensing Board designated to rule on the Petition to "determine and identify the specific procedures to be used for the proceeding" pursuant to 10 C.F.R. §§ 2.310 (a)-(h). 10 C.F.R. § 2.310. The regulations are explicit that "proceedings for the . . . grant . . . of licenses subject to [10 C.F.R. Part 52] may be conducted under the procedures of subpart L." Id. § 2.310(a). The regulations permit the presiding officer to use the procedures in 10 C.F.R. Part 2, Subpart G ("Subpart G") in certain circumstances. Id. § 2.310(d). It is the proponent of the contentions, however, who has the burden of demonstrating "by reference to the contention and bases provided and the specific procedures in subpart G of this part, that resolution of the contention necessitates resolution of material issues of fact which may be best determined through the use of the identified procedures." Id., § 2.309(g). BREDL did not address the selection of hearing procedures in the Petition and therefore did not satisfy its burden to demonstrate why Subpart G procedures should be used in this proceeding.

Accordingly, any hearing arising from BREDL's Petition should be governed by the procedures of Subpart L.

V. Conclusion

For all of the foregoing reasons, BREDL's Petition should be denied.

Respectfully Submitted,

/Signed electronically by David R. Lewis/

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June 3, 2008

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

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)	Docket No. 52-017-COL
)	
)	ASLBP No. 08-863-01-COL
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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "Dominion's Answer Opposing Petition for Intervention and Request for Hearing by the Blue Ridge Environmental Defense League," dated June 3, 2008, were served on the persons listed below in accordance with the Commission E-Filing rule, which the NRC promulgated in August 2007 (72 Fed. Reg. 49,139), this 3rd day of June, 2008.

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