

April 11, 2008

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

Before the Atomic Safety and Licensing Board

In the Matter of )  
 )  
Dominion Nuclear Connecticut, Inc. ) Docket No. 50-423  
(Millstone Nuclear Power Station, Unit 3) )  
 )

**DOMINION NUCLEAR CONNECTICUT’S RESPONSE TO CONNECTICUT  
COALITION AGAINST MILLSTONE AND NANCY BURTON’S PETITION TO  
INTERVENE AND REQUEST FOR HEARING**

**I. INTRODUCTION**

Pursuant to 10 C.F.R. § 2.309 (h)(1), Applicant Dominion Nuclear Connecticut, Inc. (“Dominion”) hereby provides this Answer in opposition to the “Connecticut Coalition Against Millstone and Nancy Burton Petition to Intervene and Request for Hearing” (“Petition”) filed on March 17, 2008 by Connecticut Coalition Against Millstone and Nancy Burton (“Petitioners”) regarding Dominion’s License Amendment Request (“LAR”) to amend Facility Operating License NPF-49 for the Millstone Nuclear Power Station, Unit 3 (“MPS3”) to increase the Unit’s maximum authorized core power from 3411 megawatts thermal (“MWt”) to 3650 MWt (“stretch power uprate” or “SPU”).<sup>1</sup> The Petition should be rejected because it fails to propose any admissible contentions that meet the requirements of 10 C.F.R. § 2.309(f)(1). See 10 C.F.R. § 2.309(a).

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<sup>1</sup> The LAR is available in the NRC ADAMS system under accession number ML072000386.

In particular, Petitioners demonstrate no genuine, material dispute with the application. Petitioners' allege that the LAR has "grave potential" to increase safety risk due to flow accelerated corrosion ("FAC") and the characteristics of the Unit 3 containment. Petition at 1. In so alleging, they simply ignore the analyses in the LAR addressing FAC and demonstrating substantial margin between the containment design pressure and the peak pressure that might be experienced in an accident. Similarly, Petitioners' claims concerning radiological and thermal releases essentially ignore the analysis in the Supplemental Environmental Report which is part of the LAR. Moreover, those claims have no basis. Indeed, Petitioners' allegation that plant releases will have "devastating environmental consequences" (Petition at 46) is reminiscent of Connecticut Coalition Against Millstone's ("CCAM") similar claim, rejected as baseless and inadmissible, in the Millstone license renewal proceeding. See Dominion Nuclear Connecticut (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 N.R.C. 81, 91, 94 (2004) (rejecting contentions that operations "have caused death, disease, biological and genetic harm and human suffering on a vast scale" and resulted in "devastating losses"), reconsideration denied, LBP-04-22, 60 N.R.C. 379, aff'd, CLI-04-36, 60 N.R.C. 631 (2004). These recycled claims, unsupported by any expert opinion or other credible factual basis, are equally inadmissible in this proceeding.

Accordingly, Petitioners' request for a hearing should be denied and the Petition should be dismissed.

## II. PROCEDURAL BACKGROUND

On July 13, 2007, Dominion submitted its LAR seeking a license amendment that increases MPS3's maximum authorized core power from 3411 MWt to 3650 MWt.<sup>2</sup> The LAR includes a 1,681-page safety analysis demonstrating that the uprate can be achieved safely.<sup>3</sup> While the requested uprate is an SPU, Dominion's safety analysis conforms to the NRC's Review Standard for Extended Power Uprates ("RS-001"),<sup>4</sup> and applies the acceptance criteria in the NRC's Standard Review Plan for Review of Safety Analysis Report for Nuclear Power Plants ("NUREG-0800").<sup>5</sup> The safety analysis includes an extensive section (221 pages) reviewing the performance of the containment under SPU conditions.<sup>6</sup> In addition, the safety analysis demonstrates the continued effectiveness of the aging management programs previously established in the MPS3 license renewal proceeding. A comprehensive discussion (25 pages) is devoted to the flow accelerated corrosion program.<sup>7</sup> The LAR also includes an Environmental Report ("ER") demonstrating that the uprate will have no significant environmental impact.<sup>8</sup> The ER addresses, *inter alia*, both radiological impacts<sup>9</sup> and thermal impacts.<sup>10</sup> In very large measure, the Petition simply ignores this analysis.

On January 15, 2008, the Commission published a "Biweekly Notice: Applications and Amendments to Facility Operating Licenses Involving No Significant Hazards Considerations"

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<sup>2</sup> The LAR was subsequently supplemented on July 13, September 12, November 19, December 13, and December 17, 2007.

<sup>3</sup> LAR, Attachment 5, SPU Licensing Report.

<sup>4</sup> *Id.* at 1-1.

<sup>5</sup> *Id.* at 1-2.

<sup>6</sup> *Id.*, § 2.6, "Containment Review Considerations."

<sup>7</sup> *Id.*, § 2.1.8, "Flow-Accelerated Corrosion."

<sup>8</sup> LAR, Attachment 2, "Supplemental Environmental Report."

<sup>9</sup> *Id.* at 34-42.

<sup>10</sup> *Id.* at 23-25.

(“Notice”), 73 Fed. Reg. 2,546 (Jan. 15, 2008). The Notice permitted any person who interest may be affected by the proposed amendment to the MPS3 license to file a request for a hearing and petition for leave to intervene within 60 days of the Notice. *Id.* at 2,547, 2,549-50. It directed that any petition must set forth with particularity the specific contentions sought to be litigated, and stated:

Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner/requestor shall provide a brief explanation of the bases for the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner/requestor intends to rely in proving the contention at the hearing. The petitioner/requestor must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner/requestor intends to rely to establish those facts or expert opinion. The petition must include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner/ requestor to relief. A petitioner/ requestor who fails to satisfy these requirements with respect to at least one contention will not be permitted to participate as a party.

*Id.* at 2,547, 2,556.

On March 17, 2008, CCAM and Nancy Burton (“Burton”) filed the joint Petition herein.<sup>11</sup> The Petition asserts nine proposed contentions and requests that the LAR be rejected. See, e.g., Petition at 9.<sup>12</sup> None of the proposed contentions is admissible.

### **III. STANDING**

Dominion does not challenge CCAM’s standing to seek to participate in this proceeding.

While Dominion does not object to Ms. Burton acting as CCAM’s representative, Dominion

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<sup>11</sup> While the Petition was served electronically on Dominion’s counsel on March 17, 2008, it was not filed electronically in accordance with Commission requirements. See Connecticut Coalition Against Millstone and Nancy Burton Request for Exemption from “E-Filing” Requirements (Mar.17, 2008).

<sup>12</sup> The pages in the Petition are not numbered.

submits that Ms. Burton has not demonstrated standing to intervene in her own right. To the best of Dominion's knowledge, Ms. Burton resides in Redding Ridge, Connecticut (as reflected in the address on the Certificate of Service), more than 50 miles from the plant. This is beyond the maximum distance at which standing based on proximity to the facility has been found in NRC proceedings. See, e.g., Tennessee Valley Authority (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413 5 N.R.C. 1418, 1421 n.4 (1997). While Ms. Burton also claims to be a "seasonal resident of Mystic" (Declaration of Nancy Burton ¶ 3), this claim is too vague to demonstrate standing. Where a petitioner claims standing based on visits to the vicinity of a plant, the petitioner must provide sufficient information on their length and nature to establish a bond between the petitioner and the facility's vicinity, and "the likelihood of an ongoing connection and presence." Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI 98-13, 48 N.R.C. 26, 32 & n.3 (1998); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI 99-10, 49 N.R.C. 318, 324 (1999).

#### **IV. PETITIONERS HAVE NOT PROFFERED AN ADMISSIBLE CONTENTION**

##### **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 and does not seek to attack NRC regulations governing the proceeding. Thus, 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.

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; Duke Energy Corp. (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.” Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 A.E.C. 13, 20, aff’d in part on other grounds, 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. Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 A.E.C. 79, 89 (1974).

**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. Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 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 . . . 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. Id. 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) (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 would make a difference in the outcome 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 Conn. Bankers Ass’n v. Bd. of Governors, 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).

Therefore, 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. Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 N.R.C. 200, 246 (1993), review declined, CLI-94-2, 39 N.R.C. 91 (1994). Similarly, a mere reference to documents does not provide an adequate basis for a contention. Baltimore Gas & Electric Co. (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 Safety Analysis Report, 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 33,171; Millstone, CLI-01-24, 54 N.R.C. at 358.

Indeed, an intervenor

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 Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), ALAB-687, 16 N.R.C. 460, 468 (1982), vacated in part on other grounds, 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 Safety Analysis Report and Environmental Report, 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. See, e.g., Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 N.R.C. 2069, 2076 (1982); Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), LBP-32-107A, 16 N.R.C. 1791, 1804 (1982); Philadelphia Electric Co. (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. Petitioners' Contentions are Impermissibly Vague, Raise Matters Beyond the Scope of this Proceeding, Launch Collateral Attacks on the Commission's Rules, Lack Basis, and are Otherwise Inadmissible**

None of the contentions tendered by Petitioners meet the admissibility requirements of 10 C.F.R. § 2.309. For the most part, they are vague and generalized assertions that fail to demonstrate any genuine material dispute with the LAR and, in some cases, seek to raise issues beyond the scope of the proceeding. The failure to proffer a single admissible contention requires denial of the Petition.

**1. Contention 1 does not challenge the LAR and is based on erroneous premises**

Contention 1, which alleges that the LAR exceeds an NRC criterion for an SPU because the power increase exceeds 7%,<sup>13</sup> is inadmissible because it lacks factual basis and fails to raise any genuine, material dispute with the application and therefore fails to satisfy the requirements in 10 C.F.R. §§ 2.309(f)(1)(i), (iii) and (vi). In addition, the contention is based on erroneous readings of the LAR and the NRC Staff guidance on the review of uprate requests.

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<sup>13</sup> Contention 1 asserts:

The proposed power level for which Dominion has applied to uprate Millstone Nuclear Power Station Unit 3 exceeds the NRC's SPU regulatory "criteria." The SPU application fails to satisfy the first NRC "criterion" that the NRC has set the power limit for SPUs at ". . . up to 7% . . ."

Petition at 7 (emphasis in original, footnote omitted).

a. Contention 1 lacks factual basis

Contention 1 quibbles that the 7% power increase has been improperly rounded up to the nearest megawatt, but never explains why this makes a difference. Petitioners provide no information showing that the rounding raises any safety or environmental concern.

At the outset, it should be noted that the proposed power increase is a 7.0 % increase to the nearest megawatt (i.e.,  $1.07 \times 3411 \text{ MWt} = 3649.77 \text{ MWt}$ ,<sup>14</sup> which has been rounded to 3650 MWt). Taking the rounding into consideration, the percentage increase is 7.0067%.<sup>15</sup> Specifying the power level to the nearest megawatt is consistent with the method used to specify thermal power in MPS3's Technical Specifications.<sup>16</sup>

Petitioners and their declarant, Mr. Arnold Gundersen, assert that “mathematical methodology demands that the calculation be rounded down” but provide absolutely no basis for this claim.<sup>17</sup> Neither the Petitioners nor Mr. Gundersen identify any rule, standard, or guidance that “demands” that the calculation be rounded down. In fact, the statement on the NRC website which Petitioners identify<sup>18</sup> as establishing the 7 percent criterion does not even make 7 percent a precise limit for an SPU. The full quote, which Petitioners have truncated, states: “Stretch power uprates are *typically* up to 7 percent and are within the design capacity of the plant.”<sup>19</sup>

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<sup>14</sup> Petitioners state that the increase is “a full 300 KW” above what is allowable. In fact, the rounding increases the power by only 230 KW. Petition at 9.

<sup>15</sup> The increase from 3411 to 3650 MWt is 239 MWt. The fraction of power increase is  $239/3411=0.070067$  or 7.0067%, which if rounded up to one significant decimal point accuracy becomes 7.0%.

<sup>16</sup> See Table 2.2-1 of MPS3's Technical Specifications, ADAMS Accession No. ML022330120. It should be noted that, in performing the safety analyses in support of the LAR, Dominion rounded up the uprated power to 3650 MWt.

<sup>17</sup> Declaration of Arnold Gundersen Supporting Connecticut Coalition Against Millstone in its Petition for Leave to Intervene, Request for Hearing, and Contentions (Mar. 15, 2008) (“Gundersen Decl.”) ¶ 14.

<sup>18</sup> Petition at 7 & n.3. See also Gundersen Decl. ¶ 13.

<sup>19</sup> See <http://www.nrc.gov/reactors/operating/licensing/power-uprates.html>. See also RS-001, “Review Standard for Extended Power Uprates” (Rev. 0, Dec. 2003), Background (page not numbered, emphasis added).

The use of the word “typically” in the NRC definition clearly indicates that 7 percent limit is not a hard and fast limit but an approximation – in this case, an increase slightly above 7.000% could still fall within the definition of SPU. Indeed, the NRC’s website explains: “The actual value for percentage increase in power a plant can achieve and stay within the stretch power uprate category is plant-specific and depends on the operating margins included in the design of a particular plant.”<sup>20</sup> In the LAR, Dominion demonstrates that adequate operating margins are maintained.<sup>21</sup> Therefore, the proposed SPU is consistent with the NRC guidance for approving such an uprate and the contention is without basis.

b. Contention 1 fails to demonstrate a genuine material dispute with the LAR

Neither Petitioners nor Mr. Gundersen explain how NRC guidance categorizing uprates raises any material dispute concerning the adequacy of the LAR. Petitioners do not claim or show that categorizing the LAR as an SPU resulted in any material error or omission in the application. Indeed, they cannot, because RS-001 was in fact used in preparing the LAR. As the LAR states: “. . . DNC developed this LAR utilizing the guidelines in NRC review Standard, RS-001, ‘Review Standard for Extended Power Uprates.’”<sup>22</sup> Because Contention 1 does not demonstrate any genuine, material dispute with the application – indeed, it does not challenge any specific portion of or analysis in the LAR – it does not provide a basis for an admissible

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<sup>20</sup> <http://www.nrc.gov/reactors/operating/licensing/power-uprates.html>.

<sup>21</sup> LAR, Attachment 1, “Descriptions, Technical Analysis and Regulatory Analysis for the Proposed Operating License and Technical Specifications Changes, Section 6.1, “No Significant Hazards Consideration,” ADAMS Accession No. ML072000390; see also, LAR Attachment 5, “SPU Licensing Report,” Table 1.0-1, ADAMS Accession No. ML072000400.

<sup>22</sup> LAR, transmittal letter at 1.

contention. See, e.g., Calvert Cliffs, CLI-98-14, 48 N.R.C. at 41.<sup>23</sup>

Petitioners appear to challenge the categorization of the LAR as an SPU on the grounds that it will yield Dominion additional profit. Petition at 9-10; Gundersen Decl. ¶ 16. Such an economic issue is irrelevant and beyond the scope of this proceeding.<sup>24</sup>

For all the above stated reasons, Contention 1 must be rejected.

**2. Contention 2 does not challenge the LAR, raises issues outside the scope of this proceeding, and lacks any basis demonstrating a genuine material dispute**

Proposed Contention 2, which alleges that the Millstone uprate does not meet the NRC's second criterion for an SPU because Unit 3 already has had its design margins dramatically reduced,<sup>25</sup> is inadmissible because it does not challenge or demonstrate any genuine, material dispute with the LAR and therefore fails to satisfy the requirements in 10 C.F.R. §§ 2.309(f)(1)(i), (iii) and (vi). In addition, the contention raises issues that are irrelevant and outside the scope of this proceeding.

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<sup>23</sup> If Petitioners intended to suggest that the NRC's review will be adversely affected by the classification of the uprate, their contention would still be inadmissible. It is well established that the manner in which the NRC Staff performs its review is not an appropriate issue in this proceeding or gives rise to an admissible contention. "With the exception of NEPA issues, the sole focus of the hearing is on whether the application satisfies NRC regulatory requirements, rather than the adequacy of the NRC Staff performance." Final Rule, 54 Fed. Reg. at 33,171 (citing Pacific Gas & Electric Co., (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-728, 17 N.R.C. 777, 807, review declined, CLI-83-32, 18 N.R.C. 1309 (1983). An Atomic Safety and Licensing Board has no jurisdiction to review the NRC Staff's review process. Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), CLI-93-5, 37 N.R.C. 168, 170 (1993); Northeast Nuclear Energy Co. (Montagne Nuclear Power Station), LBP-75-19, 1 N.R.C. 436, 437 (1975).

<sup>24</sup> Petitioners also state that no Westinghouse reactor has been granted an SPU in excess of 7 percent. Since 7 percent is the approximate level used to define an SPU, this statement is meaningless and certainly does not establish any particular deficiency in the application. Moreover, Table 1 in the Petition and Gundersen Declaration purporting to list "Westinghouse Uprates in Ascending Order" is misleading, because it omits the 8 percent uprate granted to Beaver Valley Units 1 and 2. See <http://www.nrc.gov/reactors/operating/licensing/power-uprates/approved-applications.html>.

<sup>25</sup> Contention 2 alleges:

Dominion's application fails to meet the NRC's second "criterion" for a SPU application because Millstone Unit 3 already has had its design margins dramatically and substantially reduced.

Petition at 11.

- a. Contention 2 does not challenge the LAR or demonstrate a genuine material dispute

Contention 2 is inadmissible because it does not identify any error or omission in the 220 pages of the safety analysis demonstrating that the Unit 3 containment meets all NRC safety criteria with adequate margin. See LAR, Attachment 5 at 2.6-1 to 2.6-221 (Section 2.6, entitled “Containment Review Considerations”). It does not demonstrate any genuine, material dispute with any portion of this analysis. Indeed, it does not even appear that Petitioners or their Declarant, Mr. Gundersen, have ever read this portion of the LAR, because there is not a single reference to the containment analysis in either the Petition or Mr. Gundersen’s Declaration.

Section 2.6 of the safety analysis<sup>26</sup> describes the analyses performed by Dominion which demonstrate that the SPU does not adversely impact containment performance. After describing and evaluating various accident scenarios, Dominion concludes:

DNC has reviewed the containment pressure and temperature transient and concludes that it adequately accounts for the increase of mass and energy that would result from the proposed SPU. Table 2.6.1.3 compares the current containment analysis results based upon the S&W LOCTIC methodology to those calculated with the Dominion methodology at SPU conditions. DNC further concludes that containment systems will continue to provide sufficient pressure and temperature mitigation capability to ensure that containment integrity is maintained. The DNC also concludes that the containment systems and instrumentation will continue to be adequate for monitoring containment parameters and release of radioactivity during normal and accident conditions and will continue to meet the requirements of GDCs -13, -16, -38, -50, and -64 following implementation of the proposed SPU. Therefore, DNC finds the proposed SPU acceptable with respect to containment functional design.

LAR, Attachment 5, Section 2.6.1.3 at 2.6-15 to 2.6-16. Table 2.6.1.3, referenced in the above excerpt, presents the results of the analyses in summary form:

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<sup>26</sup> LAR, Attachment 5, § 2.6.

**Table 2.6.1.3  
Comparison of Current and SPU Results**

	Current	SPU	Limit
LOCA Peak Pressure, psig	38.28	41.4 (56.09 psia)	45
Steam Line Break Peak Pressure, psig	34.14	38.15	45
Steam Line Break Peak Temperature, degrees F	335.9	343	350 <sup>(1)</sup>
1. Current maximum temperature from EEQ profile			

Id. at 2.6-30. As can be seen from the Table, the bounding containment accident pressures and temperatures for SPU operating conditions are within design limits, with margin.

Petitioners have not challenged the containment analyses and results in the LAR. In particular, while Mr. Gundersen discusses past changes in the calculated peak pressure, he never relates these peak pressures to the containment design limit of 45 psig.<sup>27</sup> This containment design limit has not changed. Indeed, Mr. Gundersen appears to confuse the calculated peak pressure with the containment design limit. See, e.g., Gundersen Decl. ¶¶ 30, 30B, referring to “peak containment design pressure.” Therefore, Contention 2 must be dismissed as not raising a genuine dispute with Dominion on a material issue of law or fact relating to the LAR. 10 C.F.R. § 2.309(f)(1)(vi).

b. Contention 2 raises irrelevant allegations outside the scope of this proceeding

Most of the discussion by Mr. Gundersen and Petitioners in Contention 2 relates to Mr. Gundersen’s view of historical matters which are outside the scope of the SPU proceeding.

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<sup>27</sup> After construction, the containment was subjected to a containment structure integrity test at 1.15 times the design pressure, or 51.8 psig. See, MPS3 FSAR Section 6.2.6.1, “Containment Integrated Leakage Rate Test (Type A),” at page 6.2-82. The success of this test further demonstrates the adequacy of the margin.

Thus, Mr. Gundersen faults the rationale that was given by Northeast Utilities (“NU”)<sup>28</sup> when it applied for a license amendment in 1990 to decrease the containment under-pressure.<sup>29</sup> See Gundersen Decl. ¶ 31. This allegation is irrelevant to whether there is margin between the calculated peak containment pressure and the containment design pressure. Mr. Gundersen also expresses a vague concern that NU applied less conservative assumptions when it revised the pressure containment analysis (id., ¶¶ 32B-C), but he never explains what the insufficient conservatisms were or how they affect the current analysis in LAR. If Mr. Gundersen had any concerns with NU’s 1990 license amendment, he should have raised them when the amendment was pending,<sup>30</sup> not eighteen years after the fact. More importantly, the LAR describes in considerable detail how the containment analysis under updated conditions was performed, and Mr. Gundersen does not identify any non-conservatism in the current analysis. His views of past events are therefore irrelevant.

Finally, Mr. Gundersen refers to the fact that the 1990 license amendment was considered an unreviewed safety question. See id. ¶ 33. This is simply the test under the NRC rules for determining whether a license amendment is required. See 10 C.F.R. § 50.59. The change

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<sup>28</sup> Dominion purchased Millstone from subsidiaries of Northeast Utilities and other companies in 2001.

<sup>29</sup> Throughout his Declaration, Mr. Gundersen characterizes the Unit 3 subatmospheric containment as “unique.” In fact, there are six other units with subatmospheric containments: Surry Units 1 & 2, North Anna Units 1 & 2, and Beaver Valley Units 1 & 2. Mr. Gundersen also asserts that the Unit 3 containment was converted to a standard “dry” containment. Gundersen Decl. at ¶28. In fact, the Unit 3 containment remains a subatmospheric containment (see LAR, Attachment 5, at 2.6.1; FSAR § 6.2.1.2, at 6.2-2), but with the underpressure reduced to within a range of 10.4 to 14.2 psia. See MPS3 License Amendment 59, ADAMS Accession No. ML0117990140. The NRC’s Information Digest also identifies Unit 3 as having a subatmospheric containment. See NUREG-1350, App. A at 97. It should also be noted that all of the subatmospheric containments are “dry.”

<sup>30</sup> License Amendment 59, which implemented the current design of the MPS3 containment, was requested in February 26, 1990, and was supplemented April 30, December 6 and 19, 1990. The amendment was granted by the NRC on January 25, 1991. See ADAMS Accession No. ML0117990140. There were no challenges to the proposed amendment.

requested in the 1990 amendment was subsequently reviewed and approved by the NRC in License Amendment 59.

Accordingly, Contention 2 fails to meet Commission admissibility requirements and should be rejected. Contention 2 fails to dispute any part of the LAR, and in particular does not dispute the analysis of containment margin in the LAR. Contention 2 thus fails to demonstrate any genuine, material dispute with the application.

### **3. Contention 3 does not challenge the LAR**

Contention 3, which alleges that MPS3 is an “outlier” because of its containment size,<sup>31</sup> is inadmissible because it does not assert any deficiencies in the LAR.

#### **a. The contention does not challenge the LAR**

Contention 3 does not claim that there are any deficiencies in the LAR. Like Contention 2, Contention 3 makes general allegations concerning the Unit 3 containment, but never addresses the sections of the LAR demonstrating that the Unit 3 containment has a design limit well in excess of the calculated peak containment pressure. LAR, Attachment 5, Section 2.6.1.3 at 2.6-15 to 2.6-16. Petitioners do not challenge this analysis in the LAR. Therefore, Contention 3 fails to demonstrate the existence of any genuine, material dispute with the LAR. 10 C.F.R. § 2.309(f)(1)(vi).

In the absence of any discussion by Petitioners or Mr. Gundersen of the containment analysis in the LAR, Mr. Gundersen’s comparison of Volume to Power ratios (Gundersen Decl.

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<sup>31</sup> Proposed Contention 3 alleges:

When compared to all other Westinghouse Reactors, Millstone Unit 3 is an “outlier” or “anomaly.” Dominion’s proposed uprate is the largest per cent power uprate for a Westinghouse reactor, while Millstone Unit 3 also has the smallest containment for any Westinghouse reactor of roughly comparable output.

Petition at 18.

¶¶ 34-39) does not demonstrate a genuine, material dispute.<sup>32</sup> This comparison is also irrelevant because Mr. Gundersen is comparing apples to oranges – ambient containments versus MPS3’s sub-atmospheric containment. In fact, as footnote 16 (at ¶ 34) of Mr. Gundersen’s Declaration indicates, Mr. Gundersen has eliminated from his comparison the other six operating units (North Anna 1&2, Surry 1&2, Beaver Valley 1&2) with similar containment designs to MPS3’s. As previously discussed, his premise that MPS3 is no longer a sub-atmospheric containment is faulty and unsupported. Finally, in determining whether the MPS3 containment is capable of performing its intended function during an accident, the appropriate focus is on whether the peak containment pressure will remain below the containment design limit.<sup>33</sup> The LAR shows that it does, and neither Mr. Gundersen nor Petitioners provide any basis to dispute this fact. Further, if one wishes to compare the margins in different containment designs, it would be more meaningful to examine the ratio of peak containment pressure to the containment design pressure. For example, if one compares this ratio for MPS3 and Seabrook (one of the plants with a dry ambient containment on Mr. Gundersen’s list), it is clear that the Millstone containment in fact has more margin, as shown below:

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<sup>32</sup> In this regard, neither Mr. Gundersen nor Petitioners identify any regulation, Regulatory Guide, or provision in any standard review plan which makes the “volume to power ratio” a regulatory criterion for determining the adequacy of a containment structure. Thus, Petitioners fail to provide any basis demonstrating a genuine material dispute.

<sup>33</sup> Mr. Gundersen refers to more energy being “absorbed by” and “squeezed” into a smaller volume. Gundersen Decl. ¶¶ 40, 42. In the event of an accident, however, the containment and cooling systems operate to transfer energy to the ultimate heat sink. As discussed in LAR Attachment 5, Section 2.6.2.2.2 at page 2.6-7, what is important is the ability of the containment structures and cooling systems to maintain the peak pressure below design pressure, not the ability of the containment air space to “absorb energy.”

<b>Plant</b>	<b>Ratio of Peak Containment Pressure to Containment Design Pressure</b>	<b>Reference</b>
Millstone	0.920 (41.4/45 = 0.920)	Millstone SPU LAR
Seabrook	0.945 (49.13/52 = 0.945)	Seabrook SPU LAR

Likewise, Mr. Gundersen’s reference to MPS3 having “a history of exceeding its licensed reactor power” (Gundersen Decl. ¶ 44B) raises no genuine, material dispute with the application. First of all, the “history” to which Mr. Gundersen apparently refers was a single power excursion during testing that lasted a few minutes and was appropriately responded to by the operators.<sup>34</sup> Further, Mr. Gundersen refers to this excursion to advocate that “any analysis of Millstone Unit 3’s Containment should use a 9% additional power level in order to most accurately reflect the condition of this one-of-a-kind Containment to withstand any additional pressures during an accident.” Gundersen Decl. ¶ 44E. However, that is exactly what Dominion has done. The containment peak pressure analysis is based on an initial power level of 3723 MWt, which is 9% above the current licensed power level of 3411 MWt. LAR, Attachment 5 at 2.6-47. Again, Contention 3 does not raise a genuine material dispute with the LAR and is therefore inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).<sup>35</sup>

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<sup>34</sup> Millstone Power Station – NRC Integrated Inspection Report 05000336/2007005 and 05000423/2007005 (Feb. 7, 2008) (ADAMS Accession No. ML080380599) at 20.

<sup>35</sup> With respect to Contention 3, Mr. Gundersen also opines that “[c]ore samples from within the Containment should be analyzed to assure that the Containment’s integrity has not been jeopardized by operating Millstone Unit 3 under these conditions during the first four years of its operational life during the time period while concrete curing shrinkage is known to occur.” Gundersen Decl. ¶ 43. This assertion appears unrelated to Contention 3, which focuses on the containment size. See Petition at 18 (setting forth Contention 3). Rather, this assertion appears more logically related to Contention 4. In any event, the request that Containment concrete core samples be taken analyzed is clearly outside the scope of this adjudicatory proceeding.

**4. Contention 4 is impermissibly vague, does not challenge the LAR, and raises claims outside the scope of this proceeding**

Petitioners' proposed Contention 4, which suggests that initial operation of the containment at high temperature, low pressure, low specific humidity conditions places stress calculations "in uncharted analytical areas,"<sup>36</sup> is inadmissible since it is vague, does not controvert the analyses in the LAR, and raises issues outside the scope of this proceeding.

a. Contention 4 is impermissibly vague

Contention 4 is impermissibly vague. While the contention alleges that due to several factors "the calculations used to predict stress on that concrete containment [are] in uncharted analytical areas," neither the Petition or the Declaration of Mr. Gundersen specify which calculations used to predict stress on the containment that are questionable, or what is the nature of their deficiency (if any).<sup>37</sup> Such a vague description of the matters raised by Contention 4 requires its dismissal for lack of specificity. 10 C.F.R. § 2.309(f)(1)(i).

b. The contention does not controvert the LAR

As discussed in connection with Contentions 2 and 3, Dominion provided in the LAR a thorough analysis of the peak pressure and temperature loads imparted on the MPS3 containment during design basis accidents, and demonstrated that those loads are within design limits. Contention 4 does not challenge any of those analyses – or, for that matter, any other analyses in the LAR. Instead, Petitioners and Mr. Gundersen request that the NRC Staff subject the LAR to

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<sup>36</sup> Contention 4 alleges:

Construction problems due to the unique sub-atmospheric containment design, coupled with the impact upon the containment concrete by the operation of the containment building at very high temperature, very low pressure and very low specific humidity, place the calculations used to predict stress on that concrete containment in uncharted analytical areas.

Petition at 23.

<sup>37</sup> The statement that places the stress calculations "in uncharted analytical areas" is incomprehensible.

“a more intensive and comprehensive review ... under EPU standards.” Petition at 26; see also Gundersen Decl. ¶ 48I. However, such a request is directed at the Staff’s review of the LAR and raises no litigable issues in this proceeding. Therefore, Contention 4 does not raise a genuine dispute with Dominion on a material issue of law or fact relating to the LAR and is inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).

c. Contention 4 raises claims that are irrelevant, speculative and out of scope

In addition to being vague, the allegations by Petitioners and Mr. Gundersen are unsupported by any facts or other basis demonstrating a genuine material dispute. In particular, neither Mr. Gundersen nor Petitioners point to anything indicating that the Unit 3 containment has operated in a uniquely “high temperature, low pressure, low specific humidity” environment. Petitioners and Mr. Gundersen do not quantify the containment conditions they allege, and also fail to provide any reference or source indicating that the alleged containment conditions, if existing, would have an adverse effect the structural integrity of the containment concrete. Thus, there is no basis for this contention. Indeed, Mr. Gundersen does not even assert that the structural integrity of the containment was compromised, but only that it may have been. Such unbridled speculation does not support an admissible contention. Millstone, CLI-01-24, 54 N.R.C. at 358.

In fact, contrary to Petitioners’s suggestions, the evaluations performed in the Millstone license renewal proceeding indicate that the MPS3 containment is not subject to temperatures that would reduce the strength or modulus of concrete. The ASME Code, Section III, Division 2, Subsection CC, indicates that aging due to elevated temperature exposure is not significant as long as concrete general area temperatures do not exceed 150° F and local area temperatures do not exceed 200° F. Accordingly, the NRC’s Generic Aging Lessons Learned Report (“NUREG-

1801”) requires further evaluation only if temperatures exceed these limits. Generic Aging Lessons Learned (GALL) Report (NUREG-1801, Vol. 2, Rev. 1) (Sept. 2005), Table II.A.1.

Addressing this requirement, Dominion’s license renewal application stated:

3.5.2.2.1.3 Reduction of Strength and Modulus of Concrete Structures due to Elevated Temperature

No concrete structural components exceed specified temperature limits. General area temperatures remain below 150°F and local area temperatures remain below 200°F.

MPS3 License Renewal Application (Jan. 20, 2004), ADAMS Accession No. ML040260103, at 3-491. The NRC Staff agreed with Dominion’s assessment. NUREG-1838, “Safety Evaluation Report Related to the License Renewal of the Millstone Power Station, Units 2 and 3” (Oct. 2005), Section 3.5.B.2.2.1, PWR Containments, at 3-511.

If Petitioners disagreed with this analysis, they should have raised the issue in the Millstone license renewal proceeding, in which they sought to participate. See Millstone, LBP-04-15. They did not. Further, Petitioners and Mr. Gunderson have provided absolutely no basis to suggest that the containment is, or has ever been, subject to conditions that could have weakened it.

Much of the remaining discussion in Contention 4 focuses on alleged “challenges” experienced in pouring concrete during the construction of MPS3.<sup>38</sup> However, Mr. Gunderson does not claim that these asserted “challenges” actually resulted in uncorrected construction deficiencies, so they are irrelevant as unfounded speculation.<sup>39</sup> Indeed, he acknowledges that the procedure used to pour concrete “was qualified and construction workers were trained. . . .”

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<sup>38</sup> Gunderson Decl. ¶ 48.

<sup>39</sup> It goes without saying that construction of a crucial safety-related structure is subject to continuous oversight by the quality assurance program of the project and that any construction deficiencies, had they occurred, would have been subject to identification and correction during the course of plant construction. Neither Petitioners nor Mr. Gunderson identify any such instances of improper construction.

Gundersen Decl. ¶ 48F. He does not identify any inspection report, condition report, or other document indicating any construction or quality assurance deficiency. Nor does Mr. Gundersen identify any deficiency with the containment structure integrity test which pressure tested the containment at 51.8 psig (1.15 x design pressure)<sup>40</sup> to provide assurance that the containment, as built, has adequate margin.

Thus, these claims are based on nothing more than a speculative and unsupported concern. Such a vague concern certainly does not demonstrate the existence of a genuine, material dispute with the application.

Moreover, the time and place to raise any such alleged deficiencies would have been during the operating license proceeding for MPS3 near a quarter of a century ago, not today. They are unquestionably outside the scope of this proceeding.

Contention 4 is, for all the above reasons, inadmissible and must be rejected.

**5. Contention 5 is impermissibly vague, fails to challenge the LAR, and raises erroneous or irrelevant factual claims**

Proposed Contention 5, which alleges that flow-accelerated corrosion has not been adequately addressed,<sup>41</sup> is inadmissible because it is impermissibly vague, fails to address the relevant section of the LAR, and raises demonstrably erroneous or irrelevant factual claims.

a. The contention is impermissibly vague and fails to challenge the LAR

Contention 5 is impermissibly vague in that it does not specify in what respects the LAR fails to “adequately analyze” or “address” the impact of flow-accelerated corrosion (“FAC”) at

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<sup>40</sup> FSAR Section 6.2.6.1, “Containment Integrated Leakage Rate Test (Type A),” page 6.2-82.

<sup>41</sup> Contention 5 states:

The impact of flow-accelerated corrosion at Dominion’s proposed higher power level for Millstone Unit 3 has not been adequately analyzed nor addressed.

Petition at 26.

the increased power level.<sup>42</sup> For that reason alone, the contention must be rejected as failing to satisfy the requirements of C.F.R. § 2.309(f)(1)(i). Millstone, CLI-01-24, 54 N.R.C. at 359-60.

In addition, Contention 5 totally ignores the extensive discussion of FAC in the LAR<sup>43</sup> and fails to point out in what specific respect it is inadequate. As noted earlier, a petitioner has an ironclad obligation to review the application and supporting materials to identify and raise any alleged deficiencies with the applicant's submittal. In this case, Petitioners have not done so. Indeed, once more, there is no indication that Petitioners or Mr. Gundersen have even read the section of the LAR addressing FAC. Neither the Petition nor Mr. Gundersen's Declaration contain a single reference to the discussion of FAC in the LAR. Accordingly, their FAC claim must be rejected as not raising a genuine dispute exists with the application. 10 C.F.R. § 2.309(f)(1)(vi); 54 Fed. Reg. at 33,170; Catawba, ALAB-687, 16 N.R.C. at 468.

Contention 5 makes vague allegations concerning an issue that has already been decided in the license renewal proceeding. Petitioners' allegation that the LAR does not adequately address license renewal guidance<sup>44</sup> seeks to raise an issue that was already decided in the Millstone license renewal proceeding. Petitioners provide no explanation of why the NRC's prior decision approving MPS3's FAC Program should be revisited. Further, this allegation is vague and fails to address an abundance of information, both in the LAR and in the prior license renewal proceeding, demonstrating that the MPS3 FAC Program meets the NRC's guidelines.

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<sup>42</sup> Contention 5 is partly based on the assumption that "Dominion's proposed power uprate will change Millstone Unit 3's reactor coolant flow by approximately 7+ per cent." Petition at 27; Gundersen Decl. ¶ 49A. This assumption is incorrect. The reactor coolant volumetric flow rate (90,800 gallons per minute) will not change as a result of the power uprate. See LAR, Attachment 5, Table 1-1 at page 1-12.

<sup>43</sup> LAR, Attachment 5, Section 2.1.8, "Flow Accelerated Corrosion."

<sup>44</sup> Petitioners and Mr. Gundersen's allege that the LAR "does not adequately address the guidance of NRC NUREG-1800." Petition at 29; Gundersen Decl. ¶ 54. NUREG-1800 is the NRC's Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants.

Compliance of the MPS3 FAC Program with NUREG-1800 was addressed during the Millstone license renewal proceeding. There, the NRC Staff determined that the MPS3 FAC Program complies with the requirements of the GALL Report,<sup>45</sup> which NUREG-1800 identifies as providing an acceptable standard.<sup>46</sup> NUREG-1838, “Safety Evaluation Report Related to the License Renewal of the Millstone Power Station, Units 1 and 2”, Section 3.0.3.2.8.

The LAR clearly points out that conformance of the MPS3 FAC Program with the guidance in the GALL Report has already been established in the license renewal proceeding.

NUREG-1838, Section 3.0.3.2.8 states that the FAC Program is adequate to manage the aging effects for which it is credited. The SER concludes that the MPS3 FAC Program is consistent with the requirements of the GALL. The requirements, methods, and criteria of the existing FAC Program will continue to be implemented following the SPU; no changes to these elements are required as a result of the SPU. Evaluations of impact of the SPU on system parameters affecting FAC have been performed within the scope of the existing program. Therefore, the SPU does not affect the conclusions in the License Renewal SER regarding the FAC Program, and no new aging effects requiring management are identified.

LAR, Attachment 5, at 2.1-86. Petitioners and Mr. Gundersen provide no basis to dispute these statements, and offer no explanation of why the conformance of the FAC Program with the GALL Report recommendations should be revisited in this uprate proceeding. Petitioners had the opportunity to challenge the MPS3 FAC Program’s conformance with the GALL Report in the license renewal proceeding but did not do so. Since Petitioners make no attempt to relate their claim to the uprate proceeding (i.e. attempted to make no showing of how the uprate may affect the NRC’s prior determination that the FAC Program contains the elements required by

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<sup>45</sup> NUREG-1801, “Generic Aging Lessons Learned (GALL),” U.S. Nuclear Regulatory Commission, Revision 1, Sept. 2005 (“GALL Report”).

<sup>46</sup> NUREG-1800, “Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants” (Rev. 1, 2005), Section 3.0.1. See also, Section 3.1.2.2.14.

the GALL Report), their claim appears to be nothing more than an untimely attempt to litigate a prior license renewal determination beyond the scope of this proceeding.

Further, the LAR specifically examines the system parameters affected by the SPU to demonstrate that the program remains adequate. In particular, the LAR rigorously reviews:

1. Program scope and susceptibility screening
2. Analysis method determination
3. Criteria for selection of piping components (i.e., pressure rated pipe and fittings) for inspection
4. Component re-examination frequency
5. Inspection techniques
6. Scope of inspection of piping systems
7. Comparison of predicted and measured wall thickness
8. Criteria for repair/replacement of piping components
9. Description of a recent piping component repair/replacement

Id., § 2.1.8.2. Petitioners and Mr. Gundersen identify no deficiency in this analysis. Indeed, they ignore it.

Finally, there is ample description of the FAC Program in the LAR.<sup>47</sup> In fact, all elements of the NRC guidance identified by Mr. Gundersen as required (Gundersen Decl. ¶ 54) are addressed in the LAR.<sup>48</sup> The information in the prior license renewal proceeding

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<sup>47</sup> See LAR, Attachment 5, Section 2.1.8 at 2.1-89 – 2.1-90; Dominion Response to Request for Additional Information Regarding Stretch Power Uprate License Amendment Request -- Response to Questions CSG-07-0010 and CSG-07-0011, dated January 11, 2008, ADAMS Accession No. ML080110695.

<sup>48</sup> See LAR, Attachment 5, Section 2.1.8 at 2.1-77 (scope), 2.1-79 (analytical tools), 2.1-89 (benchmarking of the computer model), 2.1-84 (preventative activities), 2.1-77 (what is monitored), 2.1-81 – 2.1-83 (what is inspected), 2.1-80 (trend analysis), 2.1-84 (acceptance criteria), 2.1-81 – 2.1-82 (operating experience), 2.1-83 (inspection techniques) and 2.1- 83 – 84 (data collection).

demonstrating that the FAC Program meets NRC’s license renewal guidance<sup>49</sup> is also readily available on the NRC website.<sup>50</sup> In light of extensive information available, Petitioners’ assertion that the LAR fails to “adequately address the guidance of NRC NUREG-1800” is impermissible vague. Instead, Petitioners have an “ironclad” obligation to address the LAR and supporting information and to explain specifically why the LAR is deficient. Their vague and conclusory allegations provide no bases to question the MPS3 FAC Program and fail to demonstrate any genuine material dispute.

b. The remaining allegations are also vague and unsupported, and fail to establish a genuine material dispute

The remaining allegations in Contention 5 are equally vague and unsupported. Petitioners and Mr. Gundersen allege that “Millstone Unit 3’s program for assessing Flow Accelerated Corrosion in Dominion’s proposed uprate of the plant fails to comply with 10 C.F.R. 50 Appendix B, XVI” (Petition at 28; Gundersen Decl. ¶ 50), but provide no support for this assertion. Neither Petitioners nor Mr. Gundersen specify in which respects Dominion’s FAC

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<sup>49</sup> For example, the license renewal application explains:

The Flow-Accelerated Corrosion program, which manages the aging effect of loss of material, is in accordance with the EPRI guidelines in NSAC-202L (Reference B-8), and includes procedures or administrative controls to assure that the structural integrity of carbon steel and low-alloy steel piping and components, such as valves, steam traps, and feedwater heaters, is maintained.

Specific procedures and methods satisfy NRC Bulletin 87-01 (Reference B-45) and NRC GL 89-08 (Reference B-7). The program predicts, detects, and monitors FAC as identified by wall thinning (loss of material) in plant piping and components. The program includes the following elements: (a) conduct an analysis to determine critical locations; (b) perform limited baseline inspections to determine the extent of thinning at these locations; and (c) perform follow-up inspections to confirm the predictions, or repair or replace components as necessary. To ensure that loss of material due to FAC is properly managed, the program uses the predictive code, CHECWORKS/FAC. The selection of components for examination is determined through the use of CHECWORKS/FAC analysis, component re-inspection, and plant and industry experience.

Millstone Power Station Unit 3, Application for Renewed Operating License (Jan. 20, 2004), Section B2.1.11.

<sup>50</sup> See <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/millstone.html#application>. See also <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1838/>.

Program fails to comply with Appendix B, Criterion XVI, which requires that measures be established to assure that conditions adverse to quality are promptly identified and corrected. It is indisputable that the FAC Program for MPS3 includes requirements for the identification and replacement of large and small bore piping segments whose predicted thickness is less than a specified fraction of the component's nominal thickness.<sup>51</sup> These requirements implement the provisions of Criterion XVI.

Similarly, Petitioners statement that “disturbingly” Dominion has not proposed hiring new personnel to deal with FAC (Petition at 27, 29-30, 31; Gundersen Decl. ¶¶ 49E, 55) raises no genuine material issue. Petitioners point to no NRC regulation or guidance requiring that Dominion address staffing in the uprate application. Petitioners provide no information indicating that available staffing is a concern. Moreover, in point of fact, FAC inspections at MPS3 are conducted by outside contractor personnel during refueling outages, and therefore no hiring of new plant personnel is required to continue effective implementation of the program under SPU conditions.<sup>52</sup>

Finally, Contention 5 claims that “[i]t does not appear that the containment has been analyzed to withstand this increased energy” [presumably from the increased power output]. Petition at 28; Gundersen Decl. ¶ 49H. Aside from the fact that the containment has been exhaustively analyzed for plant operation at SPU levels,<sup>53</sup> the FAC Program does not address the performance of the containment. Therefore, the assertion is irrelevant as well as erroneous.

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<sup>51</sup> LAR, Attachment 5, Section 2.1.8 at 2.1-84 – 2.1-85.

<sup>52</sup> Enclosed as Attachment A is a sample invoice (with the financial information redacted) from integrated Technologies, inc., an outside vendor that performs inspections at MPS3 under the FAC Program.

<sup>53</sup> LAR, Attachment 5, Section 2.6.

**6. Contention 6 is inadmissible since it does not challenge the LAR**

Petitioners' Contention 6, which alleges that the NRC has not adopted standards for an SPU,<sup>54</sup> is inadmissible because it does not challenge the LAR and misconstrues applicable NRC guidance to its Staff. Further, it fails to raise any genuine material issue.

a. Contention 6 does not challenge the LAR or demonstrate any genuine material dispute

Contention 6 is inadmissible because it focuses on "standards or regulatory requirements" for the Staff's review of SPU applications. Petition at 31-32. As discussed earlier, a contention that challenges the Staff's review of a licensing application is inadmissible.

In the same vein, the contention does not challenge any aspect of the LAR, and therefore does not satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi). Further, the absence of guidance specific to an SPU is irrelevant, because RS-001 was in fact used in preparing the LAR. As the LAR states: ". . . DNC developed this LAR utilizing the guidelines in NRC review Standard, RS-001, 'Review Standard for Extended Power Uprates.'"<sup>55</sup> Accordingly, this contention raises no genuine, material dispute with the application.

b. The contention misconstrues the NRC guidance

The NRC's website statement regarding SPU reviews reads:

Since many of the available stretch power uprates have already been approved by the NRC, and since only a limited number of stretch power uprate applications are expected in the future, there is no specific guidance for stretch power uprates. The NRC,

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<sup>54</sup> Petitioners' Contention 6 alleges:

Dominion's application for a Millstone Unit 3 7+ per cent uprate cannot be and should not be analyzed as a SPU application insofar as the NRC has not adopted standards nor regulatory requirements for reviewing SPU applications.

Petition at 31.

<sup>55</sup> LAR, transmittal letter at 1.

therefore, uses previously approved stretch power uprates, along with RS-001, for guidance.

<http://www.nrc.gov/reactors/operating/licensing/power-uprates.html> (emphasis added). Thus, contrary to Petitioners' assertions, there is guidance to the Staff for its review of the SPU applications, and the guidance is identified.

The same NRC website identifies over sixty SPU applications that have been submitted and reviewed by the Staff since the late 1970s. Such a large database provides ample precedent for the Staff to evaluate any aspect of new SPU applications. Thus, there is no basis to question the Staff's ability to review an SPU.

For those reasons, Contention 6 is inadmissible.

**7. Contention 7 is inadmissible because the issuance of RAIs does not give rise to an admissible contention, and the RAIs issued on the MPS3 SPU have been appropriately answered**

Proposed Contention 7, which alleges that the application should be considered incomplete,<sup>56</sup> is inadmissible because it improperly characterizes the issuance of requests for additional information ("RAIs") by the NRC Staff as signifying a deficiency in the LAR. The contention is also inadmissible because it fails to demonstrate the existence of any genuine material dispute with the application. Petitioners have simply combed through past correspondence looking for instances where Dominion was still in the process of responding to NRC questions, have made no effort to identify follow-up responses closing out such requests, and have not sought to demonstrate that this routine question and answer process reflects a material deficiency in the application. In sum, this contention raises no substantive issue.

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<sup>56</sup> Contention 7 reads:

Dominion has neglected to provide all information to the NRC staff as it has requested and therefore its application for Millstone Unit 3 uprate should be considered to be incomplete and inadequate.

Petition at 33-34.

a. The existence of RAIs does not imply that the LAR is incomplete or deficient

The NRC Staff accepted Dominion’s SPU application and is in the process of reviewing it. The Commission has made it clear that the manner in which the NRC Staff conducts its sufficiency review and whether its decision to accept an application for review was correct are not matters within the purview of an adjudicatory proceeding. Curators of the University of Missouri, CLI-95-8, 41 N.R.C. 386, 395-96 (1995); Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), LBP-98-26, 48 N.R.C. 232, 242, aff’d, CLI-98-25, 48 N.R.C. 325, 349 (1998), aff’d sub nom., Nat’l Whistleblower Ctr. v. NRC, 208 F.3d 256 (D.C. Cir. 2000), cert. denied, 531 U.S. 1070 (2001). See also New England Power Co. (NEP, Units 1 and 2), LBP-78-9, 7 N.R.C. 271, 280-81 (1978).

Further, it is well established that the issuance of RAIs by the Staff, and the pendency of RAI responses, provide no basis for deeming the application deficient or incomplete. As the Commission has explained, “RAIs are a standard and ongoing part of NRC licensing reviews.’ They are a routine means for our staff to request clarification or further discussion of particular items in the application. What would be unusual in a license renewal case is if by now no RAIs had been issued, not that some have been.” Oconee, CLI-99-11, 49 N.R.C. at 336 (quoting Calvert Cliffs, CLI-98-25, 48 N.R.C. at 349; see also Entergy Nuclear Vermont Yankee, LLC & Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), LBP-04-33, 60 N.R.C. 749, 753 (2004) (holding that RAIs do not indicate that an application is incomplete); Safety Light Corp. (Bloomsburg, Pennsylvania Site), LBP-04-25, 60 N.R.C. 516, 525-26 (2004) (holding that RAIs do not suggest that an application is deficient).

Rather, for a contention to be admissible, it must provide references to “specific portions of the application . . . that the petitioner disputes” and must show that a genuine dispute exists on

a material issue of law or fact. Calvert Cliffs, CLI 98-25, 48 N.R.C. at 348 (emphasis in original). Therefore, this contention does not raise a cognizable challenge to the LAR and should be rejected.

b. Petitioners do not demonstrate the existence of any genuine, material dispute with the application

Contention 7 cites six instances in which Dominion has allegedly neglected to provide information requested in RAIs or deferred submission of the information to future dates. Petitioners, however, do not make any showing of why the subject matter of these RAIs or responses raises a genuine, material dispute with the application. Indeed, Petitioners do not challenge any specific portion of the application or the RAI responses. Further, as discussed below, Petitioners made little effort to determine whether follow-up responses (most of which were available to Petitioners before they filed their Petition) closed out the questions. Moreover, in some of the instances, Petitioners refer to information that is not required to support the LAR review, but instead references documents that will be developed to implement the SPU after it is approved by the NRC.

A. RAI AADB-07-0012 – Petitioners quote the first page of the response to this RAI as stating: “A modification **will be developed** to implement this assumption.” Petition at 34 (emphasis in Petition). However, the quoted language is not in the response to the RAI, but in the RAI itself:

The staff notes that section 2.9.2.2.1.5, Control Room, states that: “The control room emergency ventilation system (CREVS) is assumed to be in the filtered recirculation mode of operation within 30 minutes of a fuel handling accident involving a spent fuel assembly. A modification will be developed to implement this assumption.”

Please provide additional information describing all planned modifications to the CREVS related to credit taken in the revised dose consequences analyses.

Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3 Response to Request for Additional Information Regarding Stretch Power Uprate License Amendment Request Response to Question AADB-07-0012 (Jan. 10, 2008), ADAMS Accession No. ML080100604, Attachment at 1. Following the text of the RAI, Dominion's response provided a detailed description of all planned modifications inquired about by the NRC.<sup>57</sup> The RAI response was available to Petitioners long in advance of their filing their Petition.

B. Questions EEEB-07-0049 through EEEB-07-0057 – Petitioners quote the following response to Question EEEB-07-0052: **“The evaluations for the continued acceptability of the EQ equipment with increased accident temperature in the Main Steam Valve Building (MSVB) and the increased radiation TID in selected Engineered Safety Features and**

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<sup>57</sup> Dominion wrote (*id.*, Attachment at 1-2): “Presently, the Control Building inlet and outlet dampers will close, isolating the control building from the outside environment, upon receipt of a Control Building Isolation (CBI) signal. Following a fuel handling accident (FHA), the CBI signal can be generated manually or from a radiation sensor mounted in the Control Building ventilation inlet plenum. After sixty (60) minutes following the CBI, the operators will manually initiate pressurized filtration and filtered recirculation, i.e., starting the Control Room Emergency Ventilation System (CREVS).

The Millstone Power Station 3 (MPS3) Stretch Power Uprate (SPU) FHA analysis requires that the CREVS be operating in filtered recirculation mode within 30 minutes from receipt of a high radiation CBI. While it might be possible to credit operator action to accomplish this, it has been decided to modify the Control Building ventilation system and CREVS to perform this automatically. The CREVS will be modified to start in the pressurized filtration mode automatically, providing not only pressurized filtration but also filtered recirculation. The modifications will perform the following:

- The Control Building inlet dampers will be changed from their present mode of operation; normally open, fail closed, close on CBI, to normally open, fail open, open on CBI.
- The CREVS will receive a signal to automatically start upon receipt of a CBI and the associated dampers will align to the pressurized filtration mode of operation.
- The Control Room pressurization system has been removed from the MPS3 Technical Specifications (Ref Amendment No. 232) and is not credited for operation in any accident analysis. The CBI signal to actuate the air bottle outlet control valves will be removed. The system can then be maintained either pressurized or depressurized as plant operations dictates, with manual actuation from the control room, as required.
- Various plant process computer inputs and Control Board status lights will be modified to reflect the changed operating modes and control signals described above.”

**Auxiliary Building zones are ongoing. The results will be available by March 31, 2008.**<sup>58</sup>

Petition at 34-35 (emphasis in Petition). However, the results of these evaluations were provided to the NRC on March 25, 2008.<sup>59</sup>

C1. Questions EMCB-07-0060 through EMCB-07-0081 – Petitioners quote from the response to Question EMCB-07-0072: “Several steam generator and pressurizer locations have maximum stress ranges that exceed the  $3S_m$  limit in NB-3222.2. . . . **A summary showing that each of these requirements have been satisfied will be provided. In addition, those sections that exceed  $3S_m$  and that were qualified by full elastic-plastic analysis will also be summarized in the response showing details of the plasticity analysis. Documentation of the final results of the elastic-plastic analysis is under development. A summary of the results will be provided by February 28, 2008.**”<sup>60</sup> Petition at 35 (emphasis in Petition). However, the promised results were provided on February 25, 2008<sup>61</sup> and thus were available to Petitioners prior to the filing of their Petition.

C2. Question EMCB-0072 – Petitioners provide a partial quote from the response to this question, as follows: “...The Power Ascension Test Procedure, **which is currently under development**, will be used during the return of MPS3 to power operation after the Fall 2008

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<sup>58</sup> Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3 Response to Request for Additional Information Regarding Stretch Power Uprate License Amendment Request Response to Questions EEEB-07-0049 Through EEEB-07-0057 (January 10, 2008), ADAMS Accession No. ML80100600, Attachment at 2-3.

<sup>59</sup> Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3 Response to Request for Additional Information Regarding Stretch Power Uprate License Amendment Request Supplemental Response to Question EEEB-07-0052 (March 25, 2008), ADAMS Accession No. ML080850894.

<sup>60</sup> Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3 Response to Request for Additional Information Regarding Stretch Power Uprate License Amendment Request Response to Questions EMCB-07-0060 Through EMCB-07-0069 and EMCB-07-0071 through EMCB-07-0081 (January 14, 2008), ADAMS Accession No. ML080140570, Attachment at 16.

<sup>61</sup> Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3 Response to Request for Additional Information Regarding Stretch Power Uprate License Amendment Request Supplemental Response to Question EMCB-07-0072 (Feb. 25, 2008), ADAMS Accession No. ML080560392.

refueling outage.”<sup>62</sup> Petition at 36 (emphasis in Petition). Petitioners, however, fail to include the language in the RAI response immediately after the sentence they quote, which reads:

The Power Ascension Test Procedure will be integrated with existing plant procedures to provide additional administrative controls as MPS3 power level is increased to the new rated thermal power level of 3650 MWt. It will provide operational guidance for the power increase, and direct the monitoring of plant systems, components, and parameters to ensure safe plant operation. It will also contain verification steps to ensure all of the required plant modifications have been completed and properly retested. The Power Ascension Test Procedure is expected to contain the following aspects. [A detailed, two-page description of the procedure follows].<sup>63</sup>

The Power Ascension Test Procedure can only be finalized after the SPU has been approved. However, the RAI response provides a detailed description of the contents of the procedure. The response was filed on January 14, 2008, and was available to Petitioners long before the Petition was filed.

D. Question CPNB-007-0048 – Petitioners again provide a partial quote from the response to this question, as follows: “ ... There are plans to mitigate the hot leg and cold leg RPV nozzles, however the technology and schedule for doing this are not yet finalized.”<sup>64</sup> Petition at 36. The sentences preceding and following the one cited by Petitioners explain why the technology and schedule for implementing the mitigation of the hot leg and cold leg RPV nozzles have not been finalized. The full paragraph reads: “MPS3 has an on-going program to mitigate piping welds subject to PWSCC [pressurizer weld stress corrosion cracking]. The

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<sup>62</sup> Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3 Response to Request for Additional Information Regarding Stretch Power Uprate License Amendment Request Response to Questions EMCB-07-0060 Through EMCB-07-0069 and EMCB-07-0071 through EMCB-07-0081 (Jan. 14, 2008), ADAMS Accession No. ML080140570, Attachment at 16.

<sup>63</sup> *Id.*, Attachment at 24-26.

<sup>64</sup> Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3 Response to Request for Additional Information Regarding Stretch Power Uprate License Amendment Request Response to Question CPNB-07-0048 (Jan. 10, 2008), ADAMS Accession No. ML080100611, Attachment at 2.

pressurizer welds have already been mitigated. There are plans to mitigate the hot leg and cold leg RPV nozzles, however the technology and schedule for doing this are not yet finalized. Due to the nozzle inaccessibility described above, a full structural weld overlay mitigation is not feasible. Other mitigation technologies are being considered. Mitigation plans for the RPV nozzles will be updated when demonstrated mitigation techniques become available.”<sup>65</sup> In other words, selection of the mitigation plan for the hot leg and cold leg nozzle welds remains subject to review and adjustment based on available technologies and industry experience in implementing them. This is acceptable because mitigation of PWSCC susceptible locations is not a requirement of any regulatory requirement or industry guideline, but is a voluntary program developed under the sponsorship of the Electric Power Research Institute.<sup>66</sup> Dominion’s plans on this issue were described in the January 10, 2008 RAI response and were available to Petitioners at about that time.

E. Question SBPB-07-0082 – Once again, Petitioners quote in part from the NRC Staff question, as follows:<sup>67</sup> “In Attachment 5, Section 2.5.6.3, Solid Waste Management Systems, the licensee states ‘Implementation of SPU is anticipated to increase the potential for occurrence of the crud induced power shift (CIPS) phenomena. Details associated with the fuel cleaning process proposed to manage and/or preclude CIPS require finalization.’” Petition at 36. Petitioners, however, fail to include the actual question posed by the NRC and the response to this question by Dominion, which are as follows:

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<sup>65</sup> Id.

<sup>66</sup> See [http://portfolio.epri.com/project.aspx?id=3905&product\\_id=P41.01.04.07](http://portfolio.epri.com/project.aspx?id=3905&product_id=P41.01.04.07)

<sup>67</sup> Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3 Response to Request for Additional Information Regarding Stretch Power Uprate License Amendment Request Response to Questions SBPB-07-0082 Through SBPB-07-0087 (Jan. 11, 2008), ADAMS Accession No. ML080140077 (incorrectly cited by Petitioners as ML080110695) (see Petition at 36), Attachment at 1.

Consistent with the requirements of 10 CFR 50.34a(c), describe any new equipment necessary for control of liquid effluents from the cleaning process and the effect that treatment of those effluents would have on the packaging and storage of solid waste.

**DNC Response**

Dominion Nuclear Connecticut (DNC) is currently in the process of evaluation and selection of the vendor that will provide the fuel cleaning services. As such, no details about the equipment are available at this time.

The fuel cleaning systems currently under evaluation do not include any permanently installed equipment and would not involve the creation of any liquid radioactive effluents. The crud removed from the fuel will be collected on filters and the filters would require subsequent disposal. It is expected that these filters would not be significantly different from other filters that collect radioactive materials.

The normal change processes will be applied when the fuel cleaning equipment is placed into service (e.g. procedure changes and temporary modifications). These change processes will insure that the control of liquid and solid radioactive wastes will comply with all applicable regulations and requirements.<sup>68</sup>

Thus, Dominion’s response to the NRC question, “describe any new equipment necessary for control of liquid effluents from the cleaning process,” is that “[t]he fuel cleaning systems currently under evaluation do not include any permanently installed equipment and would not involve the creation of any liquid radioactive effluents.” No new permanent equipment will be installed, CIPS equipment will be handled under normal plant processes, and NRC approval of equipment selection is not needed for the uprate. This information has been available to Petitioners since January 2008.

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<sup>68</sup> Id.

As stated above, the existence of RAIs does not give rise to an admissible contention. Oconee, CLI-99-11, 49 N.R.C. at 336. In addition, the RAI responses provided by Dominion do not reflect any deficiency in the LAR. Contention 7 is without merit and must be rejected.

**8. Contention 8 does not controvert the LAR and the allegations it raises are without factual basis**

Contention 8, which alleges that the uprate will result in heightened releases and a proportional increase in the risk of harmful health effects,<sup>69</sup> is inadmissible because it does not controvert the LAR and is founded on unsupported factual allegations. Further, Contention 8 is a challenge to the NRC regulations establishing limits on releases that are deemed protective of public health and safety.

a. Contention 8 amounts to an impermissible challenge to the NRC rules

Contention 8 seeks to challenge the safety of radiological releases<sup>70</sup> but such a challenge is an impermissible attack on the adequacy of the NRC's regulations establishing the permissible standards for such releases. The LAR shows that, with the SPU, the whole body dose to the maximally exposed individual is 0.00261 mrem/year from liquid effluents and 0.0203 mrem/year

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<sup>69</sup> Contention 8 alleges:

The uprate will result in heightened releases of radionuclides and consequent exposures to plant workers and to the public estimated by Dominion to be 9 per cent but likely in excess of 9 per cent above current levels and such increases will result in corresponding 9 per cent (or more) increases of the risk of harmful health effects. Dominion's application for Millstone 3 uprate makes no provision for new shielding or other techniques to mitigate increased radionuclide release levels. Since Millstone first went online in 1970, cancer incidences in the communities surrounding Millstone have become the highest in the state for many types of cancer; the Millstone host communities suffer high incidences of fetal distress, stillbirth, premature birth, genetic defects and childhood cancer. Cancer is widespread among current and former Millstone workers. Under these circumstances, Dominion's application is entirely inadequate to assure that the uprate will not endanger plant workers or the public to an unsafe and unacceptable degree. Dominion's application must be rejected.

Petition at 37-38.

<sup>70</sup> Contention 8 never identifies any particular portion of the application as subject to challenge. However, the Contention itself alleges that "Dominion's application is entirely inadequate to assure that the uprate will not endanger plant workers or the public to an unsafe and unacceptable degree." Petition at 38. Therefore, it appears that Contention 8 seeks to raise a safety issue.

from gaseous effluents. LAR, Attachment 5, at 2.10-22 (Table 2-10.1-2).<sup>71</sup> This represents 0.087% and 0.406%, respectively, of the levels that are considered in the NRC regulations to be “as low as reasonably achievable.” See id., comparing the calculated doses with 10 C.F.R. Part 50, App. I limits. The LAR also shows that the maximum dose from direct radiation is 0.1443 mrem/year, so “the current annual whole body dose from all pathways due to liquid releases, gaseous releases and direct shine is conservatively estimated at 0.17 mrem (i.e., 0.0026 + 0.0203 + 0.1433).” LAR, Attachment 5, at 2.10-17. This calculated dose is far below the 100 mrem annual dose limit for members of the public permitted by 10 C.F.R. § 20.1301(a)(1), and is also a small fraction of the annual dose limit of 25 mrem to the whole body of any member of the public beyond the site boundary set forth in 40 C.F.R. § 190.10(a). Since Petitioners never challenge the maximum projected doses for the LAR or their compliance with the NRC’s safety standards, it follows that their contention is in fact a challenge to the sufficiency of those standards. Such a contention calling for requirements in excess of those imposed by Commission regulations must be rejected as amounting to a collateral attack on the regulations. Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Units 2 and 3), LBP-01-10, 53 N.R.C. 273, 286 (2001); Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 N.R.C. 1649, 1656 (1982).

- b. Contention 8 does not controvert the LAR or demonstrate the existence of any genuine material dispute

Contention 8 should also be rejected because it does not demonstrate any genuine dispute with the LAR. As noted above, Contention 8 does not dispute the radiological doses calculated

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<sup>71</sup> See also LAR, Attachment 5, § 2.10.1.2.4, and Attachment 2, § 8.2.1, demonstrating that radiological releases will remain far below applicable safety limits.

in the LAR, or identify any error or omission in the radiological analyses in Section 2.10 of the safety analysis<sup>72</sup> or Chapter 8 of the environmental report.<sup>73</sup>

Rather than challenging any portion of the LAR, Petitioners and their declarant, Dr. Ernest J. Sternglass, merely repeat their statements that the exposure [from shine] will increase by about 9 percent (corresponding to the 7 percent power increase plus a 2 percent adder for conservatism), and that there will be similar increases in noble gases, particulates, iodine and tritium in the reactor coolant. See Petition at 39.<sup>74</sup> This presents no dispute with the application.

In the same vein, the references by Petitioners and Dr. Sternglass to the linear-no-threshold assumption in the BEIR VII Report (Petition at 40; Sternglass Decl. ¶ 7) present no genuine material dispute. The NRC's Standards for Protection Against Radiation in 10 C.F.R. Part 20 are based on the linear-no-threshold hypothesis. See 56 Fed. Reg. 23,360 (May 21, 1991). See also Denial of Petition for Rulemaking, 72 Fed. Reg. 71,083, 71,084-85 (Dec. 14, 2007).

The Petition claims that the increases “may be even greater than predicted by Dominion because of the new dynamics of plant operations under the uprate which will accelerate the rate of coolant flow and increase heat levels leading and [sic] slow response time by plant personnel” (Petition at 38), but that claim is not supported by Dr. Sternglass' Declaration or anything else.<sup>75</sup>

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<sup>72</sup> LAR, Attachment 5, § 2.10.

<sup>73</sup> LAR, Attachment 2, § 8.0.

<sup>74</sup> As indicated in the LAR, the calculated doses to the maximally exposed individual very conservatively assumed that the increase in the activity in the reactor coolant would result in a corresponding increase in the plant effluents. See LAR, Attachment 5, at 2.10-15 to 2.10-16.

<sup>75</sup> Petitioners also baldly assert that “[i]t is believed that it is credibly postulated that the recently approved 20 per cent power generation uprate at the Vermont Yankee Nuclear Power Plant will result in a corresponding 40 per cent increase in radionuclide generation and dispersion to the environment.” Petition at 40 n. 23. This statement is not supported by Mr. Gundersen's Declaration, Dr. Sternglass' Declaration, or any other reference or source. Such an anonymous statement of “belief” in something being “credibly postulated” has clearly no weight, aside from the fact that the alleged increase in radionuclide generation and dispersion at Vermont (Footnote continued on next page)

There is no expert opinion or other reference to support this naked claim, as required by 10 C.F.R. § 2.309(f)(1)(v). Petitioners provide no information demonstrating that this assertion presents a genuine, material dispute, as required by 10 C.F.R. § 2.309(f)(1)(vi). Such bald and unsupported allegations do not establish the existence of a genuine material dispute. Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180; Millstone, LBP-04-15, 60 N.R.C. at 91. Finally, Contention 8 cites the Declaration of Cynthia M. Besade (“Besade Decl.”), a CCAM member, who enumerates various cancer cases in the residential neighborhoods near Millstone. Petition at 41-43. These anecdotal accounts, however, have no probative value and are flatly contradicted by studies, such as that conducted by the National Cancer Institute in 1991, which have found that there is no general increased risk of death from cancer for people living in 107 counties containing or closely adjacent to 62 nuclear facilities.<sup>76</sup> An admissible contention must be based on more than generalized, unsupported suspicions. McGuire, CLI-03-17, 58 N.R.C. at 424.

Indeed, in the Millstone license renewal proceeding, a contention containing very similar allegations was raised by CCAM and was rejected as baseless. Millstone, LBP-04-15, 60 N.R.C. at 90-91 & n.39. In that proceeding, the Licensing Board found that CCAM had not provided any specific factual basis or expert opinion to support claims of “cancer clusters” and that none of its declarants “indicate[d] having any basis for their knowledge or any expert knowledge of any kind.” Id. at 91 n.39. The Licensing Board also found that a reference to Michael Steinberg’s book (which Petitioners reference on page 43 of the Petition) failed to provide the requisite support for the contention because “neither he nor CCAM has provided sufficient

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Yankee, even if true, is clearly irrelevant to the anticipated increase in releases at MPS3. This unsupported statement, too, fails to demonstrate the existence of any genuine, material dispute with the LAR.

<sup>76</sup> See <http://www.cancer.gov/cancertopics/factsheet/Risk/nuclear-facilities>.

information to establish any expertise on his part in this area.” Id. at 39. On appeal, the Commission affirmed the Board’s rulings. Millstone, CLI-04-36, 60 N.R.C. at 637-38.

It should also be noted that the unsupported allegations in Ms. Besade’s declarations all pertain to past operations, not to the effects of the uprate. Consequently, these allegations are beyond the scope of the proceeding. Indeed, the effects of plant operations were assessed for Millstone’s renewal term by a generic finding in the NRC’s rules and Generic Environmental Impact Statement for Renewal of Nuclear Plants and determined to be small.<sup>77</sup> Ms. Besade’s allegations are inconsistent with this generic determination in the NRC rules and should be rejected as such. Moreover, in the Millstone license renewal proceeding, the NRC Staff specifically considered an exhibit by Ms. Besade entitled “Millstone Community Cancer Victims Personally Known”, as well as Mr. Steinberg’s book and a memo from Dr. Sternglass. Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Millstone Power Station, Units 2 and 3, NUREG-1437, Supplement 22, (June 2005), at 4-62. After reviewing this information, the NRC Staff concluded:

NRC's dose limits are conservative and supported by the EPA and international agencies, such as ICRP, United Nations Scientific Committee on the Effects of Atomic Radiation; and the European Commission on Radiation Protection. Review and evaluation of new studies and analyses of the health effects of radiation exposure is an ongoing process at the NRC. The scientifically defensible epidemiological studies on the biological effects of ionizing radiation provide solid evidence that the current regulatory standards are protective of human health. Dominion has demonstrated that releases from Millstone during the renewal period are expected to be below regulatory limits.

The NRC staff has reviewed all of the documents listed above and finds that the information in these documents fails to demonstrate that the analysis in the GEIS (as codified in 10 CFR Part 51,

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<sup>77</sup> 10 C.F.R. Part 51, App. B, Table B-1; NUREG-1437, Generic Environmental Impact Statement for Renewal of Nuclear Plants, §4.6.2.5.

Subpart A, Appendix B, Table B-1) of the human health impact of radiation exposure resulting from the operation of Millstone is incorrect.

Id., Section 4.7, at 4-63. Petitioners provide no basis to dispute these findings.

For all of these reasons, Petitioners' Contention 8 does not "show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact" as required by 10 C.F.R. § 2.309(f)(1)(vi).

**9. Contention 9 does not controvert the LAR**

The final contention propounded by Petitioners, which alleges that the environmental consequences of radioactive releases and thermal discharges are inadequately addressed,<sup>78</sup> is inadmissible because it does not specifically challenge the LAR or demonstrate the existence of a genuine, material dispute with the application. It is also inadmissible because it is vague, speculative, and unsupported.

a. Contention 9 does not challenge the LAR

In Contention 9, Petitioners assert that the LAR "proposes significant adverse environmental impacts which have not been adequately analyzed." Petition at 44. Petitioners, however, do not contest the validity of the environmental impact assessments contained in the Supplemental Environmental Report ("SER"), Attachment 2 to the LAR.<sup>79</sup> That Report includes an entire section (Section 7.0) analyzing the non-radiological environmental impacts of the

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<sup>78</sup> Contention 9 alleges:

Dominion's application for a 7+ per cent power generation uprate at Millstone Unit 3 will result in significant new releases of radioactive material to the environment and it will result in discharges of significant volumes of water to the Long Island Sound at heightened temperatures, both of which consequences are inadequately addressed in the application.

Petition at 44.

<sup>79</sup> LAR, Attachment 2, Supplemental Environmental Report, ADAMS Accession No. ML072000391.

update and another section (Section 8.0) addressing the radiological environmental impacts. In fact, Petitioners cite, without disagreement, the estimated 7 % increase in the unit's thermal discharge, as presented in Section 7.2.2 of the SER, and the 9 % increase in radionuclide effluents. Petition at 45. Not having stated a disagreement with any specific portion of the LAR, Contention 9 is inadmissible for failure to comply with 10 C.F.R. § 2.309(f)(1)(vi).

b. The allegations in Contention 9 are impermissibly vague and lack any factual support

Petitioners assert that the non-radioactive and radioactive release increases resulting from the update “pose an unanalyzed risk of environmental harm.” Petition at 45. Petitioners provide no explanation, however, as to what “unanalyzed risk of environmental harm” is posed by these increases.

With respect to non-radiological impacts, Petitioners do not challenge the determination in Section 7 of the LAR that the temperature of the plant discharges after implementation of the SPU will still be within the limits allowed by the plant's National Pollutant Discharge Elimination System (NPDES) permit.<sup>80</sup>

In summary, under SPU conditions, the plant will continue to operate within the existing plant flow and thermal discharge limits as defined in the currently authorized NPDES permit. With no changes in the currently permitted cooling system operating conditions at the site, the MPS3 SPU is not expected to have any significant adverse impact on aquatic resources of Niantic Bay or Long Island Sound.

LAR, Attachment 2, Section 7.2.2 at 24. Petitioners also do not dispute that the temperature of the releases from the plant will be within the allowable limits of the NPDES permit.

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<sup>80</sup> NPDES permit ID Number CT0003263. Issued by Connecticut Department of Environmental Protection, Robert E. Moore on December 14, 1992.

Further, the Environmental Report reflects the Connecticut Department of Environmental Protection's ("CTDEP")<sup>81</sup> findings that its thermal effluent limitations are sufficiently protective of the environment. In issuing the NPDES permit in 1992, the CTDEP determined that thermal discharges from MPS were sufficiently protective of fish and wildlife communities of Niantic Bay and eastern Long Island Sound. LAR, Attachment 2, at 25. On December 10, 2007, the CTDEP issued a Second Notice of Tentative determination to renew Millstone's NPDES permit (the "Second Notice"). The CTDEP stated in the Second Notice that its "tentative determination to renew Millstone's NPDES permit also includes a tentative determination regarding section 316(a) of the federal water pollution control act, 33 U.S.C. §1326(a) that this permit will assure the protection of shellfish, fish and wildlife in and on the receiving waters. . . ." <sup>82</sup> The Second Notice further states that:

The Department makes clear here that, with respect to the thermal component of Millstone's discharge, no variance from the state's water quality standards or from any other applicable requirement is needed because the thermal component of the discharge is consistent with the state's water quality standards and those standards are sufficient to assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife in and on the receiving waters.

Id. at 3. Thus, contrary to Petitioners unsupported claim that "the proposed Millstone Unit 3 power uprate will have devastating environmental consequences, such as overheating the Long Island Sound and thereby destroying critical fish habitat," the CTDEP has determined that the

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<sup>81</sup> NPDES permits are issued under section 402 of the Federal Water Pollution Control Act ("FWPCA"), 33 U.S.C. § 1342. Under Section 402(b) of the FWPCA, 33 U.S.C. § 1342(b), the EPA may authorize a State to implement the NPDES permitting program for discharges into navigable waters within the State's jurisdiction. Connecticut is an authorized state. See U.S. EPA NPDES State Program Status at <http://cfpub.epa.gov/npdes/> (at "authorized sites").

<sup>82</sup> CTDEP, Second Notice of Tentative Determination - - Intent to Renew a National Pollutant Discharge Elimination System Permit for Discharges into the Waters of the State of Connecticut at 1 (Dec.10, 2007).

thermal effluent limitations (which will not change) will assure the protection and propagation of a balanced indigenous aquatic population. Pursuant to Section 511(c)(2) of the FWPCA, 33 U.S.C. §1371(c)(2), the National Environmental Policy Act does not authorize any Federal licensing agency to review an NPDES permitting agency's effluent limitations. Moreover, under long-standing NRC precedent applying this provision, the NPDES permitting agency's assessment of the environmental impacts of facility releases must be taken at face value and accepted as dispositive in an NRC licensing proceeding. Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 N.R.C. 371, 387-89 (2007).

With respect to radiological impacts, Petitioner does not dispute the magnitude of the radioactive releases and cites without objection the release estimates in sections 8.1.2 and 8.1.3 of the SER. Petition at 45 & nn. 25, 26). While Petitioners assert that the uprate "will have devastating environmental consequences, such as ... contaminating fruits and vegetables raised locally for sale for human consumption" (*id.* at 46), Petitioners provide no further elaboration on this claim; nor do they describe how the radioactive releases from the plant will "contaminate" fruits and vegetables raised locally. Therefore, that claim also fails for lack of basis and factual support. 10 C.F.R. §§ 2.309 (f)(1)(i), (ii) and (v). Petitioners also provide no information – no expert opinion, document, reference, or other source – indicating that the additional fraction of a millirem dose that the maximally exposed individual will incur will result in any significant effect.

Similarly, Petitioners' reference to the detection of strontium-90 in goat milk (Petition at 44-45) provides no basis for the claim that the food supply will be contaminated. Not only do Petitioners fail to explain the relevance of that measurement to the radiological impacts of the

SPU, but they in fact provide no information to attribute that measurement to Millstone. Indeed, Petitioners are well aware that the CTDEP has determined that:

The ratios and quantities of radioactive materials found in these goat milk samples did not fall within the known values generated from a nuclear reactor. The ratio of Strontium-89 to Strontium-90 and the ratio of Cesium-134 to Cesium 137 do not match to the proper ratios generated by Millstone Power Station. Millstone is not the source of the radionuclides detected in these samples."

Connecticut Department of Environmental Protection, "Reassessment of Millstone Power Station Environmental Monitoring Data" (March 2006) at 2 (emphasis added). This same conclusion was reached by Dominion and by the NRC Staff during the license renewal proceeding. See NUREG-1437, Supp. 22, at A-106 to A-108.<sup>83</sup>

In short, Petitioners offer no facts or expert opinion in support of their broad and vague claims in Contention 9. The claims are not supported by any expert opinion, document or reference demonstrating the existence of any genuine, material dispute, and do not identify any error or omission in the Environmental Report or any other part of the LAR. For all of these reasons, Contention 9 is inadmissible.

## V. 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 . . . licensee-initiated amendment . . . of licenses subject to [10 C.F.R. Part 50] may be conducted under the procedures of subpart L." Id. § 2.310(a). The regulations

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<sup>83</sup> CCAM is aware of this information, because it previously accused the NRC Staff of "fraud, deceit, and cover-up" for its disposition of CCAM's claims – an accusation by CCAM that the Commission found frivolous. See Dominion Nuclear Connecticut (Millstone Nuclear Power Station, Units 2 and 3), CLI-06-4, 63 N.R.C. 32, 36-37, 38 (2006).

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). Petitioners did not address the selection of hearing procedures in the Petition and therefore did not satisfy their burden to demonstrate why Subpart G procedures should be used in this proceeding. Accordingly, any hearing arising from their Petition should be governed by the procedures of Subpart L.

## VI. CONCLUSION

For the foregoing reasons, Petitioners have propounded no admissible contentions and their request for a hearing should accordingly be denied.

Respectfully submitted,

/Original signed by Matias F. Travieso-Diaz/

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Dated: April 11, 2008

Counsel for Dominion Nuclear Connecticut, Inc.

**UNITED STATES OF AMERICA**  
**NUCLEAR REGULATORY COMMISSION**

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	
Dominion Nuclear Connecticut, Inc.	)	Docket No. 50-423
(Millstone Nuclear Power Station, Unit 3)	)	
	)	

**CERTIFICATE OF SERVICE**

I hereby certify that copies of “Dominion Nuclear Connecticut’s Response to Connecticut Coalition Against Millstone and Nancy Burton’s Petition to Intervene and Request for Hearing” 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), and, where indicated by an asterisk, by e-mail, this 11th day of April, 2008.

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