

April 1, 2014

**UNITED STATES OF AMERICA**  
**NUCLEAR REGULATORY COMMISSION**  
Before the Atomic Safety and Licensing Board

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

**DOMINION’S ANSWER TO**  
**BREDL’S MOTION TO REOPEN AND ADMIT NEW CONTENTION**

**I. INTRODUCTION**

Pursuant to 10 C.F.R. § 2.309(i), Virginia Electric and Power Company, dba Dominion Virginia Power (“Dominion”), hereby answers and opposes the Motion to Reopen and Admit New Contention (“Motion”), filed by the Blue Ridge Environmental Defense League (“BREDL”) in this proceeding on March 7, 2014. BREDL’s Motion should be denied because it does not meet the NRC standards for reopening a closed adjudicatory record, and because BREDL proposed contention does not meet NRC standards of admissibility.

Despite having been given two months to prepare its Motion and formulate a contention challenging Dominion’s assessment of the August 11, 2011 Mineral, Virginia earthquake, BREDL’s Motion in large measure cuts and pastes portions of BREDL’s September 22, 2011 Request to Admit Intervenor’s New Contention, and makes virtually no effort to challenge any specific portion of Dominion’s application. Indeed, BREDL’s Motion does not contain a single reference to the Final Safety Analysis Report (“FSAR”), and does not challenge a single statement in the numerous FSAR sections presenting Dominion’s investigation of the Mineral, Virginia earthquake and probabilistic seismic hazard analysis (“PSHA”). Further, despite the

considerable time that it has been given, BREDL ignores the requirement to support its Motion by an affidavit and reliable, probative, material evidence. Instead, BREDL's Motion is vague, unsupported and conclusory, falling far short of meeting the criteria either for reopening or for admitting a new contention. The Motion should therefore be denied.<sup>1</sup>

## II. PROCEDURAL BACKGROUND

This proceeding involves Dominion's application ("Application") for a combined license ("COL") to construct and operate a third reactor at the North Anna Power Station ("Unit 3").<sup>2</sup> The Application references an early site permit ("ESP") issued in 2007 that approves the North Anna site as suitable for additional units falling within certain plant parameters.<sup>3</sup>

In the North Anna ESP proceeding, Dominion performed geologic and seismic investigations sufficient to meet the regulatory requirements in 10 C.F.R. Part 100 and used the investigations to perform a PSHA and develop ground motion response spectra for the site.<sup>4</sup> The PSHA was examined by the Atomic Safety and Licensing Board in the mandatory hearing in the ESP proceeding.<sup>5</sup> Based on the PSHA, horizontal and vertical hard rock safe shutdown

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<sup>1</sup> For completeness, the Board should also deny BREDL's Request to Admit Intervenor's New Contention (Sept. 22, 2011) and BREDL's Request to Reopen and Admit New Contention (May 28, 2013), both of which have been held in abeyance.

<sup>2</sup> The Application is available at <http://www.nrc.gov/reactors/new-reactors/col/north-anna/documents.html#application>. The current revision of the Final Safety Analysis Report included as Part 2 of the Application is also available in ADAMS at Accession No. ML14007A640, and the current revisions of the Departures Report included as Part 7 of the Application is also available in ADAMS at Accession No. ML14007A421.

<sup>3</sup> ESP-003, Docket No. 52-008 (Nov. 27, 2007) (ADAMS Accession No. ML073180440).

<sup>4</sup> See Safety Evaluation Report for an Early Site Permit (ESP) at the North Anna ESP Site, NUREG-1835 (Sept. 2005) ("NUREG-1835") § 2.5.2.3.4 at 2-193 to 2-197 (regarding the PSHA), § 2.5.2.3.5 at 2-197 to 2-199 (regarding compliance with 10 C.F.R. § 100.23(d)), § 2.5.2.3.6 at 2-199 to 2-201 (regarding the SSE), and § 2.5.2.4 at 2-201 to 2-202 (concluding that the North Anna ESP site is acceptable and meets the requirements of 10 C.F.R. § 100.23); see also North Anna Early Site Permit Application (Rev. 9, Sept. 2006) (ADAMS Accession No. ML062580096), Part 2 (Site Safety Analysis Report) ("SSAR"), § 2.5.2.

<sup>5</sup> See *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-07-9, 65 N.R.C. 539, 594-98, 599-601 (2007).

earthquake (“SSE”) spectra were established for the site in the ESP proceeding.<sup>6</sup> These SSE seismic response spectra are established as a site characteristic in the ESP.<sup>7</sup>

Under the NRC rules, this ESP resolves all site suitability issues (such as the topics addressed in Chapter 2 of a safety analysis report), with the exception of compliance with certain Combined License Action Items set forth in Appendix C of the ESP, variances<sup>8</sup> sought in the Application, and any substantial new information on emergency planning. The ESP also resolves the environmental issues relating to the construction and operation of nuclear units at the ESP site addressed in the NRC’s Final Environmental Impact Statement for an Early Site Permit (ESP) at the North Anna ESP Site, NUREG-1811 (Dec. 2006) (“ESP-FEIS”), with the exception of issues that were deferred or identified as open items in the ESP-FEIS, and any environmental issue involving the construction or operation of the facility for which significant new information has been identified. *See generally* 10 C.F.R. § 52.39; *see also* Final Rule, Licenses, Certifications, and Approvals for Nuclear Power Plants, 72 Fed. Reg. 49,352, 49,431 (Aug. 28, 2007).

In addition, the Application references a standard design for which a design certification application is under review. As originally submitted and currently amended, the Application references the ESBWR standard design. The Design Control Document (“DCD”) for the ESBWR standard design includes Certified Seismic Design Response Spectra (“CSDRS”) as generic plant parameters on which the standard design is based.<sup>9</sup>

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<sup>6</sup> See SSAR, Figure 2.5-48A; NUREG-1835, Figure 2.5.2-6.

<sup>7</sup> See ESP-003 (*supra* note 3) at A-12 and A-14 (Figure 2).

<sup>8</sup> A variance is a plant-specific departure from one or more of the site characteristics, design parameters, or terms and conditions of an early site permit. See 10 C.F.R. § 52.39(d).

<sup>9</sup> ESBWR Design Control Document (Rev. 10, Dec. 2013), Tier 2, Chapter 2, Site Characteristics, at 2.0-7 and 2.0-11 (Table 2.0-1 and note 9), and 2.0-20 to 2.0-22 (Figures 2.0-1 and 2.0-2) (ADAMS Accession No.

BREDL previously intervened in this proceeding, having proffered one admissible contention related to the storage of low-level waste.<sup>10</sup> This contention and a subsequently admitted contention on the same topic were later dismissed as moot,<sup>11</sup> but BREDL was provided an opportunity to submit further contentions based on Dominion's 2010 revision to its Application, changing the referenced design to the US-APWR.<sup>12</sup> BREDL then submitted two additional proposed contentions, one of which (Contention 13) alleged that Dominion had improperly requested a site-specific exemption from the seismic spectra in the US-APWR Tier 1 DCD.<sup>13</sup> The Board rejected these two contentions, ruling with respect to Contention 13 that BREDL had not demonstrated a genuine dispute because it did not say what was wrong with the site-specific analyses or how a modification to the power plant systems to accommodate site conditions was inadequate.<sup>14</sup>

On August 23, 2011, a Magnitude 5.8 earthquake occurred approximately 5 miles from Mineral, Virginia. The epicenter was approximately 11 miles west-southwest of North Anna Power Station. On September 22, 2011, BREDL submitted a request to admit a new contention

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ML14010A359). The CSDRS are also included as Tier 1 information. *See* ESBWR Design Control Document (Rev. 10, Dec. 2013), Tier 1, at 5.1-3 (Table 5.1-1), 5.1-7 (note 6), 5.1-8 (Figure 5.1-1), and 5.1-9 (Figure 5.1-2) (ADAMS Accession No. ML13010A349). As the Tier 1 document explains:

Assuming the certified design will be referenced for a wide range of sites, it is necessary to specify a set of site parameters enveloping the conditions that could occur at most potential power plant sites in the United States. These parameters are provided in Table 5.1-1. It is intended that any facility that references the certified design will utilize a site where the actual site-specific conditions are within the defined envelope.

In the case of seismic design and soil parameters not meeting the defined conditions, site-specific soil-structure interaction analyses may be performed. The results may be used to confirm the seismic design adequacy of the certified design using approved methods and acceptance criteria.

*Id.* at 5.1-1.

<sup>10</sup> LBP-08-15, 68 N.R.C. 294 (2008).

<sup>11</sup> Order (Dismissing Contention 1 as Moot (Aug. 19, 2009); LBP-10-17, 72 N.R.C. 501 (2010).

<sup>12</sup> Order (Setting Deadline for Filing New Contentions Based on New Information in the Applicant's June 29, 2010 Revision to the License Application) (Aug. 11, 2010).

<sup>13</sup> Intervenor's New Contentions (Oct. 2, 2010).

<sup>14</sup> LBP-11-10, 73 N.R.C. 424, 452-53 (2011).

related to this event.<sup>15</sup> Pursuant to the agreement of the participants,<sup>16</sup> the Licensing Board held this request in abeyance until Dominion completed its assessment of the Mineral, Virginia earthquake.<sup>17</sup>

In 2012, acting on an earlier petition for review filed by Dominion, the Commission held that the contested proceeding should have been terminated in April 2011 when, with the issuance of LBP-11-10, no contentions remained before the Board.<sup>18</sup> The Commission therefore held that the record of the adjudicatory proceeding is closed<sup>19</sup> and that any new contention must satisfy the NRC's reopening standards.<sup>20</sup> Recognizing that BREDL had filed a request to admit a new contention on the implications of the Mineral, Virginia earthquake,<sup>21</sup> the Commission remanded the case to the Board to exercise jurisdiction for the limited purpose of considering whether to reopen the record to admit BREDL's seismic contention.<sup>22</sup>

Shortly thereafter, Dominion notified the Licensing Board, the NRC Staff and BREDL that it had chosen to integrate use of the new seismic source characterization ("SSC") model for the Central and Eastern United States ("CEUS")<sup>23</sup> with its assessment of the Mineral, Virginia earthquake.<sup>24</sup> Dominion recommended that BREDL's proposed contention continue to be held

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<sup>15</sup> Request to Admit Intervenor's New Contention (Sept. 22, 2011).

<sup>16</sup> Consent Motion to Hold BREDL's New Contention in Abeyance (Oct. 12, 2011) ("Consent Motion").

<sup>17</sup> Order (Granting Consent Motion to Hold BREDL's New Contention in Abeyance) (Oct. 20, 2011).

<sup>18</sup> CLI-12-14, 75 N.R.C. 692, 699 (2012), *reconsideration denied*, CLI-12-17, 76 N.R.C. 207 (2012).

<sup>19</sup> *Id.* at 703.

<sup>20</sup> *Id.* at 702.

<sup>21</sup> *Id.* at 698-99.

<sup>22</sup> *Id.* at 701-02.

<sup>23</sup> NUREG-2115, Central and Eastern United States Seismic Source Characterization for Nuclear Facilities (Jan. 2012).

<sup>24</sup> Letter from D. Lewis to ASLB (June 19, 2012).

in abeyance while Dominion completed this work.<sup>25</sup> In response, BREDL proposed that it be given sixty days following the completion of Dominion's assessment in which to amend its contention.<sup>26</sup>

Thereafter, after considering recommendations from Dominion and BREDL, the Board issued an Order providing that BREDL would have 60 days following Dominion's notification that the seismic assessment was complete in which to file a motion to reopen the proceeding to admit a seismic contention.<sup>27</sup> The Board advised BREDL that:

In order to be accepted, BREDL's motion will need to meet each of the following requirements: Under subsection 2.326(a), the motion must be timely, must concern a significant environmental or safety issue, and must demonstrate the likelihood of a materially different result. Under subsection 2.326(b), the motion must be supported by an affidavit that separately addresses each of the 2.326(a) criteria. Because the contention relates to a matter not previously in controversy among the parties, under subsection 2.326(d) the motion must also satisfy the requirements of 10 C.F.R. § 2.309(c). Additionally, the underlying contention must meet the admissibility requirements of 10 C.F.R. § 2.309(f).<sup>28</sup>

In April 2013, Dominion notified the Board, the NRC Staff and BREDL that the Application would revert to the ESBWR design.<sup>29</sup> On January 6, 2014, Dominion notified the Board, the NRC Staff and BREDL that it had completed its seismic assessment and incorporated it into the update to the COL Application, completing the revisions necessitated by the reversion to the ESBWR design.<sup>30</sup> This notification stated:

As reflected in the updated COLA, Dominion has gathered and evaluated geologic information and performed field reconnaissance activities to investigate the August 23, 2011 Mineral Virginia earthquake. Dominion has also used the new Central and Eastern United States seismic source characterization ("CEUS

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<sup>25</sup> *Id.* at 3.

<sup>26</sup> Letter from L. Zeller to the ASLB (July 13, 2012).

<sup>27</sup> Order (Setting Time for Filing Motion to Reopen the Proceeding (July 26, 2012) ("Scheduling Order").

<sup>28</sup> *Id.* at 2-3.

<sup>29</sup> Letter from D. Lewis to ASLB (Apr. 26, 2013).

<sup>30</sup> Letter from D. Lewis to ASLB (Jan. 6, 2014).

SSC”) model (NUREG-2115 (Jan. 2012)) and the methodology in Regulatory Guide 1.208 to develop a revised Probabilistic Seismic Hazard Analysis (“PSHA”) and site-specific seismic response spectra. Dominion updated the seismicity catalog in the CEUS SSC model to include the Mineral Virginia earthquake and evaluate the hazard input of that earthquake.<sup>31</sup>

Dominion’s notification specifically identified the principal sections of the Application addressing the Mineral Virginia earthquake.

Information on the Mineral Virginia earthquake is provided throughout Sections 2.5.1 and 2.5.2 of the FSAR, including but not limited to the following: Information on the investigations and geologic reconnaissance undertaken to assess the seismicity of the Mineral Virginia earthquake is provided in Sections 2.5.1.1.7, 2.5.2.1.3, 2.5.2.2.5.1, and 2.5.2.4.2 of the FSAR. The updating of the CEUS SSC catalog is addressed in Sections 2.5.2.1.2 of the FSAR. Within FSAR Section 2.5.2.4, which details the PSHA for Unit 3, Sections 2.5.2.4.2 - 2.5.2.4.3 address the impact of the Mineral Virginia earthquake on the CEUS SSC model. FSAR Section 2.5.2.6 presents the development of the site-specific seismic response spectra. Soil-structure interaction (“SSI”) analyses demonstrating the ability of the plant to withstand these ground motions is presented in Section 3.7 of the FSAR. Departures and variances are addressed in Part 7 of the COLA.<sup>32</sup>

On March 7, 2014, BREDL filed its current Motion. The Motion seeks to reopen the record to admit a contention alleging that “Dominion-Virginia Power . . . has not presented a sound probabilistic basis for the magnitude of the possible adverse consequences and the likelihood of occurrence of each consequence for issuing a license to construct and operate North Anna Unit 3.” Motion at 1-2.

### **III. APPLICABLE LEGAL STANDARDS**

The NRC does not look with favor on amended or new contentions filed after the initial filing. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 N.R.C. 631, 638 (2004). As the Commission has repeatedly stressed,

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<sup>31</sup> *Id.*

<sup>32</sup> *Id.* at 2.

our contention admissibility and timeliness rules require a high level of discipline and preparation by petitioners “who must examine the publicly available material and set forth their claims and the support for their claims at the outset.” There simply would be “no end to NRC licensing proceedings if petitioners could disregard our timeliness requirements” and add new contentions at their convenience during the course of a proceeding based on information that could have formed the basis for a timely contention at the outset of the proceeding. Our expanding adjudicatory docket makes it critically important that parties comply with our pleading requirements and that the Board enforce those requirements.

*AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 N.R.C. 235, 271-72 (2009) (citations omitted).

Where, as here, the adjudicatory record has been closed, the Commission’s rules specify that a motion to reopen that record to consider additional evidence – including evidence on a new contention (*see* 10 C.F.R. § 2.326(d)) – *will not* be granted unless the following criteria are satisfied:

- (1) The motion must be timely. However, an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented;
- (2) The motion must address a significant safety or environmental issue; and
- (3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.

10 C.F.R. § 2.326(a). Further, under the NRC rules,

[t]he motion must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied. Affidavits must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised. Evidence contained in affidavits must meet the admissibility standards of this subpart. Each of the criteria must be separately addressed, with a specific explanation of why it has been met. When multiple allegations are involved, the movant



must identify with particularity each issue it seeks to litigate and specify the factual and/or technical bases which it believes support the claim that this issue meets the criteria in paragraph (a) of this section.

10 C.F.R. § 2.326(b).<sup>33</sup>

“All of the factors in section 2.326 must be met in order for a motion to reopen to be granted.” *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-12-3, 75 N.R.C. 132, 143 (2012); *Oyster Creek*, CLI-09-7, 69 N.R.C. at 287 (“[P]roponents of a reopening motion bear the burden of meeting all of [these] requirements.”). Further, this burden is deliberately placed on the party seeking reopening. *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 N.R.C. 658, 674 (2008).

Under 10 C.F.R. § 2.326, it is not [applicant’s] (or the Staff’s) burden to defeat the motion to reopen. Instead, it is [petitioner’s] burden, through its motion to reopen and in its accompanying affidavit . . . to demonstrate that the motion should be granted.

*Id.*

The Commission has repeatedly emphasized that “[t]he burden of satisfying the reopening requirements is a heavy one.” *Oyster Creek*, CLI-09-7, 69 N.R.C. at 287 (citing *Louisiana Power & Light Co.* (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 N.R.C. 1, 5 (1986)). “Bare assertions and speculation . . . do not supply the requisite support.” *Id.* (citing *Oyster Creek*, CLI-08-28, 68 N.R.C. at 674). Evidence contained in the Section 2.326(b) affidavits must meet the admissibility standards in 10 C.F.R. § 2.337 – it must be relevant, material, and reliable. *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-12-6, 75 N.R.C. 352, 367 (2012), *aff’d sub nom., Mass. v. NRC*, 708 F.3d 63 (1st Cir. 2013); *Pilgrim*, CLI-12-3, 75 N.R.C. at 138-39.

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<sup>33</sup> See also *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-12-15, 75 N.R.C. 704, 713 (2012).

In addition, where a motion to reopen relates to a contention not previously in controversy, as is the case here, a motion to reopen must also satisfy the timeliness standards in 10 C.F.R. § 2.309(c). 10 C.F.R. § 2.326(d); *Pilgrim*, CLI-12-3, 75 N.R.C. at 140.<sup>34</sup> Section 2.309(c) provides that a new or amended contention filed after the deadline for hearing requests and contentions *will not* be entertained, absent a determination by the Board that a participant has demonstrated good cause by showing that:

- (i) The information upon which the filing is based was not previously available;
- (ii) The information upon which the filing is based is materially different from information previously available; and
- (iii) The filing has been submitted in a timely fashion based on the availability of the subsequent information.

10 C.F.R. § 2.309(c)(1).

Finally, any new contention must satisfy the standards for admissibility in 10 C.F.R. § 2.309(f)(1). *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-93-12, 37 N.R.C. 355, 362-63 (1993). That rule requires that an admissible contention:

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

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<sup>34</sup> See also *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 N.R.C. 115, 125 (2009); *Oyster Creek*, CLI-08-28, 68 N.R.C. at 668.

- (vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

10 C.F.R. § 2.309(f)(1)(i)-(vi).

These standards also are enforced rigorously. "If any one . . . is not met, a contention must be rejected." *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Unit Nos. 1, 2, and 3), CLI-91-12, 34 N.R.C. 149, 155 (1991) (citation omitted); *USEC, Inc.* (American Centrifuge Plant), CLI-06-9, 63 N.R.C. 433, 437 (2006) ("These requirements are deliberately strict, and we will reject any contention that does not satisfy the requirements." (footnotes omitted)). A licensing board is not to overlook a deficiency in a contention or assume the existence of missing information. *Palo Verde*, CLI-91-12, 34 N.R.C. at 155; *Oyster Creek*, CLI-09-7, 69 N.R.C. at 260 (the contention admissibility rules "require the petitioner (not the board) to supply all of the required elements for a valid intervention petition").

As the Commission has emphasized, its rules 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; Catawba 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 denied*, 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).

Instead, the NRC's pleading standards require a petitioner to read the pertinent portions of the license application, state the applicant's position and the petitioner's opposing view, and explain why it has a disagreement with the applicant. 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 N.R.C. 349, 358 (2001), *reconsideration denied*, CLI-02-1, 55 N.R.C. 1 (2002). If the petitioner does not believe these materials address a relevant issue, the petitioner is "to explain why the application is deficient." 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), *appeal dismissed*, CLI-93-10, 37 N.R.C. 192, *stay denied*, CLI-93-11, 37 N.R.C. 251 (1993).

#### **IV. BREDL HAS NOT MET THE REOPENING STANDARDS OR THE CONTENTION ADMISSIBILITY STANDARDS**

BREDL's Motion should be denied because BREDL has failed to satisfy the criteria in 10 C.F.R. § 2.326 to reopen the record, as is required in this closed adjudicatory proceeding. *See* CLI-12-14, 75 N.R.C. at 702.<sup>35</sup> BREDL does not meet a single one of the reopening standards. Its Motion is unsupported by affidavit and conclusory, is not founded on new information, and makes no showing that BREDL is raising a significant issue on which there is a likelihood that

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<sup>35</sup> BREDL's Motion should also be denied because BREDL has failed to intervene anew and demonstrate its standing. Because a petitioner's status changes over time and the bases for standing in earlier proceedings may no longer apply, a petitioner that has previously been dismissed from a proceeding must address the requirements for both reopening and intervention. *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Unit 2), CLI-93-4, 37 N.R.C. 156, 161-62 & n.1 (1993) (observing that standing should not be presumed when more than four years had passed since the original demonstration).

BREDL will prevail. BREDL's Motion should also be denied because BREDL has failed to satisfy the criteria for an admissible contention. Its contention is fatally vague, fails to address or take issue with the analyses in the Application, and in certain respects impermissibly challenges the NRC rules.

**A. BREDL'S MOTION IS NOT SUPPORTED BY THE REQUISITE AFFIDAVIT**

As a threshold matter, BREDL's Motion must be denied because it is not supported by an affidavit as required by Section 2.326(b). That section states unequivocally:

The motion must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied. Affidavits must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised. Evidence contained in affidavits must meet the admissibility standards of this subpart. Each of the criteria must be separately addressed, with a specific explanation of why it has been met. . . .

10 C.F.R. § 2.326(b). The Board specifically advised BREDL of this requirement,<sup>36</sup> yet, BREDL has ignored it. The failure to meet this mandatory affidavit requirement is by itself sufficient grounds to reject the Motion to Reopen. *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12, 36 N.R.C. 62, 76 (1992).

Nor is the mandatory affidavit requirement met by BREDL's statement that "Arnold Gundersen ... has reviewed this submittal but is unable to provide an affidavit because he is traveling." Motion at 9. This uncorroborated statement is no substitute for the affidavit specifically required by the NRC rules. Further, this vague assertion says nothing about the accuracy of any of the statements in the Motion. Moreover, Mr. Gundersen is not a seismic

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<sup>36</sup> Scheduling Order, *supra* note 27, at 3.

expert and has no apparent qualifications to support the Motion.<sup>37</sup> Thus, there is no indication that he would be competent to provide an affidavit, or that he has knowledge of the facts, both of which are required by 10 C.F.R. § 2.326(b). *See also Pilgrim*, CLI-12-6, 75 N.R.C. at 367.

The blog<sup>38</sup> of Christopher Bailey attached to the Motion similarly fails to suffice because it is not an affidavit and does not address any of the reopening criteria. The required affidavit must address each of the criteria in 10 C.F.R. § 2.326(a). A Licensing Board may not fill in omissions. *See Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), CLI-11-8, 74 N.R.C. 214, 222 (2011), citing *Oyster Creek*, CLI-08-28, 68 N.R.C. at 668-69. Further, “[r]eopening will only be allowed where the proponent presents “material, probative evidence.” *Entergy Nuclear Generating Co.* (Pilgrim Nuclear Power Station), CLI-12-10, 75 N.R.C. 479, 498 & n.95 (2012), citing Criteria for Reopening Records, 51 Fed. Reg. 19,535, 19,538 (May 30, 1996). A two-year old blog that not only fails to address the reopening criteria but also does not even address the contents of Dominion’s Application is not material, probative evidence.

**B. The Motion Fails to Satisfy the Reopening Criteria in 10 C.F.R. § 2.326(a)**

BREDL’s Motion should also be denied because it fails to meet the Section 2.326(a) criteria for reopening the record. The extremely short shrift given by BREDL to these criteria, amounting to just ten conclusory statements unsupported by any affidavit or analysis (*see* Motion at 2), utterly fails to meet the “heavy burden” that the rules impose. This sort of cursory argument “falls far short” of meeting the NRC’s requirements. *See, e.g., Entergy Nuclear*

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<sup>37</sup> The *Curriculum Vitae* of Mr. Gundersen was previously provided as Exhibit 2 to Intervenor’s New Contentions (Oct. 2, 2010).

<sup>38</sup> *See* Motion, Attachment at 22 (indicating that the Attachment is a blog).

*Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 N.R.C. 333, 347 (2011); *Oyster Creek*, CLI-09-7, 69 N.R.C. at 290-91. As discussed below, BREDL does not satisfy any of the requirements in Section 2.326(a).

**1. BREDL's Motion Fails to Meet the Timeliness Requirement in 10 C.F.R. § 2.326(a)(1) and the Related Good Cause Standards in 10 C.F.R. § 2.309(c)**

The Motion does not meet the timeliness requirement in 10 C.F.R. § 2.326(a)(1), because BREDL has failed to address or satisfy the good cause standards in 10 C.F.R. § 2.309(c), as required by 10 C.F.R. § 2.326(d). The timeliness requirement in 10 C.F.R. § 2.326(a)(1) and good cause standard in 10 C.F.R. § 2.326(a)(1) are inextricably linked. As the Commission has explained,

[w]hen determining whether a new contention is timely for the purposes of reopening a record, we look to whether the contention could have been raised earlier—that is, whether the information on which it is based was previously available or whether it is materially different from what was previously available, and whether it has been submitted in a timely fashion based on the information's availability.

*Entergy Nuclear Generating Co.* (Pilgrim Nuclear Power Station), CLI-12-21, 76 N.R.C. 491, 498 (2012); *see also Pilgrim*, CLI-12-10, 75 N.R.C. at 492-93. Thus, timeliness is determined by the Section 2.309(c) factors. As discussed below, BREDL fails to make any showing that the proposed new contention is based on information that is new and significantly different from previously available information.

First, the Motion does not even address the factors in 10 C.F.R. § 2.309(c), which must be satisfied pursuant to 10 C.F.R. § 2.326(d). The Board specifically advised BREDL that the requirements in 10 C.F.R. § 2.309(c) must be satisfied,<sup>39</sup> but BREDL made no effort to do so.

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<sup>39</sup> Scheduling Order, *supra* note 27, at 3. The Commission's Order remanding the proceeding to the Board also requires BREDL to satisfy the reopening standards. *See* CLI-12-14, 75 N.R.C. at 702.

The failure to properly address the criteria in 10 C.F.R. § 2.309(c) is again reason enough by itself to reject the Motion. *Millstone*, CLI-09-5, 69 N.R.C. at 126. As the Board has previously held, if BREDL fails to address the Section 2.309(c) factors, the Board will not manufacture arguments for BREDL that it has not made itself.<sup>40</sup>

Further, the requirements of 10 C.F.R. § 2.309(c) are not met by BREDL's assertion that the Motion is timely just because it was submitted within the deadline set by the Board (Motion at 3). Nothing in the Board's prior orders relieved BREDL of the obligation to demonstrate compliance with the good cause standards in 10 C.F.R. § 2.309(c). To the contrary, the Board's Scheduling Order specifically advised BREDL that these standards had to be satisfied.<sup>41</sup> Similarly, the Board's earlier Order in 2011 granting the consent motion to hold BREDL's contention in abeyance provided for the filing of an amended contention "based on any new information arising on or after the August 23, 2011 earthquake."<sup>42</sup> While BREDL met the deadline for its Motion, it is still required by both the Commission's decision in CLI-12-14 and the Board's Scheduling Order to demonstrate that the standards for reopening are met. In short, the Board's Order established a deadline for timeliness under 10 C.F.R. § 2.309(c)(iii), allowing BREDL's motion to be considered timely if it otherwise satisfies 10 C.F.R. § 2.309(c)(i)-(ii). In the context of the Board's Orders, 10 C.F.R. § 2.309(c)(i)-(ii) still requires BREDL to demonstrate that its Motion and proposed contention are based on information that was not available, and is materially different from that which was available, prior to the August 23, 2011 earthquake. BREDL has not done so.

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<sup>40</sup> See Order (Denying Motion to Admit Proposed Contention Nine) (June 2, 2009) at 6.

<sup>41</sup> Scheduling Order, *supra* note 27, at 3.

<sup>42</sup> Order (Granting Consent Motion to Hold BREDL's New Contention in Abeyance) (Oct. 20, 2011) at 2.



Finally, none of the information upon which BREDL appears to rely, as set forth in the Motion at 8-9, is new and significantly different from previously available information.

BREDL first asserts that, in 2010, the NRC rated the North Anna plant the seventh riskiest. Motion at 8. Putting aside the absence of any support cited for this assertion, as well as its irrelevance to Unit 3, information dating back to 2010 is obviously not new.

Second, BREDL refers to an August 2010 NRC Staff paper addressing GSI-199, relating to the Implications of Updates to Probabilistic Seismic Hazard Estimates in Central and Eastern Units States on Existing Plants. *Id.* at 8 & n.11. Again, putting aside the irrelevance of an assessment pertaining to “existing plants,” this information again dates back to 2010 and is therefore not new.

Third, BREDL refers to an April 2011 article by M.V. Ramana. *Id.* at 8 & n.12. Once more, this article predates the Mineral Virginia earthquake and is therefore not new. Moreover, the quoted criticism of probabilistic risk assessment in this article is from a 1978 report by the Risk Assessment Review Group.

Finally, BREDL refers to Christopher Bailey’s December 2011 blog. While this blog was posted after the Mineral, Virginia earthquake and contains information describing the earthquake, none of this information appears to challenge Dominion’s assessment of that earthquake or PSHA. Because BREDL has provided no explanation of how this blog supports its contention, one cannot determine whether the contention is based on any new information in the blog. Without any showing that BREDL’s proposed contention genuinely stems from alleged new information, such information does not provide good cause. *Pilgrim*, CLI-12-10, 75 N.R.C. at 492-93; *Vermont Yankee*, CLI-11-2, 73 N.R.C. at 343-44. *See also* 10 C.F.R. § 2.309(c)(1)(i)-(ii) (requiring that the information “on which the filing is based” be previously

unavailable or materially different). A document that does not specifically relate to Unit 3 and the COL Application does not constitute new information supporting the Motion. *Vermont Yankee*, CLI-11-2, 73 N.R.C. at 343-44.

It is possible that BREDL is referring to this blog because it states that “[e]stimating both the size and exact location of historic earthquakes is difficult” (Motion, Attachment at 20) and past quakes in central Virginia “rarely correlate to mapped faults” (*id.* at 21). BREDL later quotes similar statements by W. Horton from March 2012 presentation slides that “[d]ecades of studies have been unable to link earthquakes in CVSZ [the Central Virginia Seismic Zone] to a causative fault” (Motion at 10) and “[f]undamentally, we don’t know the cause of earthquakes in this part of the country” (*id.* at 11). If this is indeed BREDL’s point, it is nothing new. The statements by Bailey and Horton are not significantly different from information that has long been available, and in fact are the very reason why PSHA is performed.

As the Commission explained when it promulgated its rules requiring PSHA:

Although [the deterministic] approach has worked reasonably well for the past two decades, in the sense that SSEs for plants sited with this approach are judged to be suitably conservative, the approach has not explicitly recognized uncertainties in geosciences parameters. Because of uncertainties about earthquake phenomena (especially in the eastern United States), there have often been differences of opinion and differing interpretations among experts as to the largest earthquakes to be considered and ground-motion models to be used, thus often making the licensing process relatively unstable.

Over the past decade, analysis methods for incorporating these different interpretations have been developed and used. These “probabilistic” methods have been designed to allow explicit incorporation of different models for zonation, earthquake size, ground motion, and other parameters. The advantage of using these probabilistic methods is their ability not only to incorporate different models and different data sets, but also to weight them using judgments as to the validity of the different models and data sets, and thereby providing an explicit expression for the uncertainty in the ground motion estimates and a means of assessing sensitivity to various input parameters. . . .

The final regulation explicitly recognizes that there are inherent uncertainties in establishing the seismic and geologic design parameters and allows for the option of using a probabilistic seismic hazard methodology capable of propagating uncertainties as a means to address these uncertainties.

61 Fed. Reg. 65,157, 65,164 (Dec. 11, 1996). A Regulatory Guides issued with this rule<sup>43</sup> elaborates:

In the CEUS, characterization of seismic sources is more problematic than in the active plate-margin region because there is generally no clear association between seismicity and known tectonic structures or near-surface geology. In general, the observed geologic structures were generated in response to tectonic forces that no longer exist and have little or no correlation with current tectonic forces. Therefore, it is important to account for this uncertainty by the use of multiple alternative models.

Regulatory Guide 1.165, Identification and Characterization of Seismic Sources and Determination of Safe Shutdown Earthquake Ground Motion (Mar. 1997) at 3.

Generally, the seismic sources for the CEUS are area sources because there is uncertainty about the underlying causes of earthquakes. This uncertainty is due to a lack of active surface faulting, a low rate of seismic activity, and a short historical record.

*Id.* at 6.

In the CEUS, identifying seismic sources is less certain because of the difficulty in correlating earthquake activity with known tectonic structures, the lack of adequate knowledge about earthquake causes, and the relatively lower activity rate. . . . Moreover, it is not generally known what relationships exist between observed tectonic structures in a seismic source within the CEUS and the current earthquake activity that may be associated with that source. Generally, the observed tectonic structure resulted from ancient tectonic forces that are no longer present.

*Id.* at 30.<sup>44</sup>

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<sup>43</sup> See SECY-96-118, Amendments to 10 CFR Parts 50, 52, and 100, and Issuance of a New Appendix S to Part 50 (May 24, 1996) at 15 and Attachment 10.

<sup>44</sup> The same statements remain in current regulatory guidance. See Regulatory Guide 1.208, A Performance-Based Approach to Define the Site Specific Earthquake Ground Motion (Mar. 2007) at 6, 14, C-1.

As stated above, this uncertainty is explicitly recognized in the NRC rules. The NRC rule requiring the determination of ground motion response spectra defining the safe shutdown earthquake states that “[u]ncertainties are inherent in such estimates.” 10 C.F.R. § 100.23(d)(1). It then provides that “[t]hese uncertainties must be addressed through an appropriate analysis, such as a probabilistic seismic hazard analysis or suitable sensitivity analyses.” *Id.* The PSHA presented in Dominion’s Application is thus the approved means of addressing the geologic uncertainties, and BREDL has provided no information questioning its adequacy.

For all of these reasons, BREDL has not demonstrated that its Motion and proposed contention are based on new information, and therefore has failed to demonstrate that its Motion meets the criteria in 10 C.F.R. § 2.309(c) and 10 C.F.R. § 2.326(a)(1). Nor is there any indication that BREDL has raised an “exceptionally grave” issue, which the Board could consider at its discretion pursuant to 10 C.F.R. § 2.326(a)(1).<sup>45</sup> BREDL makes no claim that its issue is exceptionally grave, and as BREDL’s contention fails to address or identify any error in the sections of the COL application assessing the Mineral Virginia earthquake, no such issue is apparent.

**2. BREDL’s Motion Fails to Demonstrate That Its Motion Addresses A Significant Issue, as Required by 10 C.F.R. § 2.326(a)(2)**

BREDL fails to demonstrate that its Motion addresses a significant issue, as required by 10 C.F.R. § 2.326(a)(2). BREDL provides no information demonstrating any error in the PSHA that has been used to establish a site-specific seismic response spectra for the Unit 3 site, and no information demonstrating any error in the soil-structure interaction (“SSI”) analysis performed

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<sup>45</sup> This is a “narrow exception” which “will be granted rarely and only in truly extraordinary circumstances.” 51 Fed. Reg. at 19,536. *Pilgrim*, CLI-12-21, 76 N.R.C. at 501 & n.67; *see also Pilgrim*, CLI-12-10, 75 N.R.C. at 497 & n.91.

to demonstrate that Unit 3 is designed to meet this ground motion. While BREDL asserts baldly that the proposed design of Unit 3 is unsuitable for the North Anna site, such bare assertions and speculation does not suffice. *Oyster Creek*, CLI-09-7, 69 N.R.C. at 287. A “significant” issue is not shown “merely by showing that a plant component performs safety functions and thus has safety significance.” *See Oyster Creek*, CLI-08-28, 68 N.R.C. at 672. Further, a motion to reopen does not raise a significant issue if it fails to controvert the assessment addressing its concern. *Oyster Creek*, CLI-09-7, 69 N.R.C. at 288.

**3. BREDL’s Motion Fails to Demonstrate That A Materially Different Result Would Be Likely, As Required By 10 C.F.R. § 2.326(a)(3)**

BREDL’s Motion fails to demonstrate that a materially different result would be likely, as required by 10 C.F.R. § 2.326(a)(3). BREDL’s Motion and proposed contention essentially ignore the Application. The Motion does not mention or dispute any of the FSAR sections evaluating the Mineral, Virginia earthquake, defining the site specific seismic response spectra, or evaluating the adequacy of the Unit 3 design. Instead, BREDL merely speculates that, “*if standards cannot be met*,” the plant would have to be modified or the license denied. Motion at 3 (emphasis added). This speculative statement does not come close to demonstrating that a “materially different *result*” is “*likely*” – i.e., that BREDL is likely to prevail on the merits.

As the Commission has explained, to meet the reopening standards, the movant must “demonstrate a likelihood of *prevailing*.” *Pilgrim*, CLI-12-15, 75 N.R.C. at 719 (emphasis in original). Technical details and analysis are required to support reopening the proceeding. *Oyster Creek*, CLI-08-28, 68 N.R.C. at 674.<sup>46</sup> “The evidence must be sufficiently compelling to suggest a *likelihood* of materially affecting the ultimate results in the proceeding.” *Pilgrim*, CLI-

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<sup>46</sup> *See also Pilgrim*, CLI-12-10, 75 N.R.C. at 499 (it is insufficient merely to point to disputed facts).

12-10, 75 N.R.C. at 499 (emphasis added). BREDL's speculative and conclusory assertion, unsupported by any evidence or analysis, falls far short of satisfying this prong of the reopening standards. *See Oyster Creek*, CLI-09-7, 69 N.R.C. at 290-91.

Further, putting aside BREDL's failure to provide any evidentiary support and detailed analysis demonstrating a likelihood of prevailing, the issues that BREDL raise do not even appear material.

No genuine material dispute with the Application is raised by BREDL's allegation that gathering of seismic data required by 10 C.F.R. § 100.23 may have been hampered because "the August 2011 quake apparently generated horizontal acceleration 100% over the existing North Anna standard, causing numerous problems such as an electronic sensor failure of eight seconds before power was restored." Motion at 4-5. Dominion assumes that the reference to the existing North Anna standard refers to the seismic response spectra for the existing Units 1 and 2 – a matter that is irrelevant to the site-specific seismic response spectra that has been established for Unit 3 in the current revision to the Application, based on the CEUS model and investigation of the Mineral, Virginia earthquake. BREDL cannot be referring to the current Unit 3 seismic response spectra, because it made this same allegation in its September 22, 2011 contention,<sup>47</sup> more than two years before the current Unit 3 spectra was established.

Dominion also assumes that BREDL's reference to an eight-second sensor failure alludes to the loss of power that occurred to an annunciator panel in the control room for the existing units during the earthquake. Because of an eight-second loss of power, the plant operators were not informed of occurrence or magnitude of the earthquake through the panel annunciator. *See Virginia Electric & Power Co. (North Anna Power Station, Units 1 and 2)*, DD-12-2, 76 N.R.C.

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<sup>47</sup> *See Request to Admit Intervenor's New Contention* (Sept. 22, 2011) at 5.

391, 403 (2012). The failure of the alarm to annunciate does not mean that the data in the seismic recorders was lost. As reflected in the NRC Staff's Technical Evaluation,

[t]he NRC staff concludes that the licensee's characterization of the ground motion from the August 23, 2011, earthquake and its impact on NAPS, Units 1 and 2, were reasonable and acceptable. The NRC staff concludes that the licensee has reasonably *demonstrated the operability of the seismic instrumentation during the seismic event at NAPS, Units 1 and 2.*

Technical Evaluation by the Office of Nuclear Reactor Regulation Related to Plant Restart After the Occurrence of an Earthquake Exceeding the Level of the Operating Basis and Design Basis Earthquakes (Nov. 11, 2011) at 18 (ADAMS Accession No. ML11308B406) (emphasis added). In fact, Figures 2.5.2-205 through 2.5.2-210 of the FSAR show the time histories recorded by the plant instrumentation, and show no gap in the data. BREDL provides no basis to dispute this information, and no explanation whatsoever of why the analysis in Dominion's Application is deficient.

BREDL's allegation that the NRC rated the North Anna plant in 2010 as the seventh riskiest plant (Motion at 8) fails to raise any genuine material dispute with the Application. Although BREDL provides no citation or other support for this specific allegation, Dominion assumes that this allegation refers to the NRC's August 2010 Safety/Risk Assessment of Generic Issue 199, Implications of Updates Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants, cited later in BREDL's Motion (*see* Motion at 8 n.11).<sup>48</sup> As reflected in its title, this assessment relates to *existing plants* and therefore is irrelevant to Unit 3. Further, BREDL mischaracterizes the NRC's assessment. As the NRC has previously explained:

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<sup>48</sup> The ADAMS accession number by BREDL provides only a portion of the NRC's Assessment. The full document is available at ADAMS Accession No. ML100270582.

Question: Does GI-199 provide rankings of US nuclear plants in terms of safety?

Answer: The NRC does not rank nuclear plants by seismic risk. The objective of the GI-199 Safety/Risk Assessment was to perform a conservative, screening-level assessment to evaluate if further investigations of seismic safety for operating reactors in the central and eastern US (CEUS) are warranted, consistent with NRC directives. The results of the GI-199 safety risk assessment should not be interpreted as definitive estimates of plant-specific seismic risk because some analyses were very conservative making the calculated risk higher than in reality. The nature of the information used (both seismic hazard data and plant-level fragility information) make these estimates useful only as a screening tool.

Expanded NRC Questions and Answers related to the March 11, 2011 Japanese Earthquake and Tsunami (Aug. 12, 2011) at 44 (ADAMS Accession No. ML112230068).

No genuine material dispute with the Application is raised by BREDL's allegation that, in the Generic Issue 199 assessment, the seismic hazard from ESP submittals including North Anna was found to be higher over most frequency ranges compared to an earlier EPRI-SOG study. This statement does not suggest any deficiency in any ESPs. Further, as reflected in the Unit 3 Application, the current site-specific seismic response spectra for Unit 3 is based on the new CEUS SSC model, which replaced earlier seismic source models including the EPRI-SOG study. Unit 3 FSAR at 2-295. Thus, any concerns regarding the EPRI-SOG modeling, which dated back to the late-1980s (*see id.*), are irrelevant.

BREDL's allegation that probabilistic *risk* assessments do not account for unexpected failure modes (Motion at 8-9) raises no genuine material dispute with the Application. The quoted portions of the Ramana article raise concerns about the completeness of event-trees and difficulty in modeling common-mode failures. These are issues that relate to a probabilistic risk assessment examining the risk of accident progression and system failures in a plant, not a probabilistic *seismic hazard* analysis. BREDL provides nothing suggesting that these issues apply to the probabilistic modeling used to establish ground motion parameters. Further, the



Commission has made it clear that old, general concerns that do not specifically relate to the plant or application provide no support for a motion to reopen or for a contention. *Vermont Yankee*, CLI-11-2, 73 N.R.C. at 344.

The quotations from Christopher Bailey’s blog (Motion at 9) do not raise a genuine material dispute with the Application. BREDL quotes the statement that peak ground acceleration from the Mineral Virginia earthquake reached  $250 \text{ cm/sec}^2$ , “more than sufficient to damage unreinforced masonry structures in the epicentral region.” Motion at 9. This peak ground acceleration is consistent with the recorded values included in the Unit 3 Application (*see* FSAR at 2-317), and therefore provides no basis for disputing the Application. The observation that this ground motion was sufficient to damage “unreinforced masonry structures” obviously has no relevance to the adequacy of the North Anna Unit 3 seismic category I structures. BREDL neither addresses, nor provides any basis to dispute, the adequacy of the site-specific seismic response spectra that has been established for Unit 3, or the SSI analysis that has been performed to demonstrate the ability of the plant to withstand these ground motions.

Similarly, the quoted statement that the earthquake occurred along a blind, previously unrecognized reverse fault in the Virginia Piedmont (Motion at 9) presents no genuine material dispute with the Application. The assessment of the fault in the blog is quite consistent with the information in the FSAR. *Compare* BREDL Motion at 17 *with* FSAR at 2-315 to 2-316, 2-335, 2-341. BREDL identifies no discrepancy.

The bullet points from W. Horton’s presentation slides quoted by BREDL (Motion at 10-11) do not present any genuine material dispute with the Application. The statements reflecting the existing uncertainty in correlating earthquakes to faults in the CEUS are consistent with the FSAR, which recognizes that:

In stable continental regions (SCR) like the CEUS, the geologic, geophysical, and geodetic evidence of past earthquakes is not as widely available. The causative source mechanisms and structures for the occurrence of damaging earthquakes are generally poorly understood, and the rates of crustal deformation are low such that surface and near-surface indications of stresses in the crust and the buildup and release of crustal strains are difficult to quantify.

FSAR at 2-296 to 2-297. Further, as previously discussed, the NRC rules and guidance also recognize this uncertainty and require PSHA for this very reason. BREDL has identified no error or insufficiency with the PSHA presented in the Application, and therefore has raised no genuine material dispute with the manner in which the geologic uncertainty is addressed.

Finally, BREDL's reference to the departure from the generic SSE defined ESBWR DCD (Motion at 11-12) raises no genuine material dispute. As this Board has previously ruled, a vague accusation concerning the propriety of such a departure does not rise to the level of an admissible genuine dispute of material fact or law where, as here, BREDL does say what is wrong with the site-specific analyses supporting the departure. *See* LBP-11-10, 73 N.R.C. at 452-53. The Departures Report in the Application explains that "FSAR Section 3.7.2.4 discusses the site-specific SSI analyses that are performed to validate design of the standard plant Seismic Category I structures, based on the site-specific SSI input motions." BREDL does not address or dispute this analysis.<sup>49</sup>

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<sup>49</sup> BREDL asserts that according to the updated COLA, the CSDRS is 135% of that in the DCD. Motion at 12. BREDL misunderstands the Application, underscoring the lack of competent expert support for the Motion. CSDRS are the generic spectra defined in the DCD for the ESBWR. As reflected in the Departures Report at 1-1 (and in DCD Table 2.0-1 which it references), the CSDRS is defined by DCD Figures 2.0-1 and 2.0-2 at the foundation level (which is below grade) for the Reactor Building/Fuel Building and Control Building Structures, and at 1.35 times the values in DCD Figures 2.0-1 and 2.0-2 for the base slab of the Firewater Service Complex, which is a surface-founded structure. Therefore, the difference in the CSDRS for these structures simply reflects the difference in the ground motion that would be observed at a subsurface foundation versus a foundation at grade, given the difference in elevation. It is unrelated to the requested departure or the extent by which the site-specific seismic response spectra for these structures exceeds the corresponding CSDRS.

**C. BREDL's Proposed Contention Does Not Meet Admissibility Standards**

BREDL's Motion must also be denied because BREDL's proposed contention does not satisfy the standards for an admissible contention in 10 C.F.R. § 2.309(f)(1).

First, BREDL's contention is impermissibly vague. BREDL states that its contention is that Dominion "has not presented a sound probabilistic basis for the magnitude of the possible adverse consequences and the likelihood of occurrence of each consequence for issuing a license to construct and operate North Anna Unit 3." Motion at 1-2. This is not a specific contention taking issue with any specific portion of the Application. It is not even clear what this contention means. Therefore, BREDL's contention does not meet the requirement in 10 C.F.R. § 2.309(f)(1)(i) to provide a specific statement of law or fact to be raised or controverted.

Second, BREDL does not demonstrate that the issue raised is within the scope of the proceeding. As previously discussed, Dominion's Application references an ESP which resolved site suitability issues. While the revised seismic analysis in the COL Application involves variances that BREDL could permissibly challenge under 10 C.F.R. § 52.39,<sup>50</sup> Dominion

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<sup>50</sup> Under NRC regulations, "if the application for the . . . combined license references an early site permit, the Commission shall treat as resolved those matters resolved in the proceeding on the application for . . . the early site permit" subject to certain limited exceptions. 10 C.F.R. § 52.39(a)(2). 10 C.F.R. § 52.39(c)(1) identifies these limited exceptions that may be considered in a hearing on a COL application:

- (i) The nuclear power reactor proposed to be built does not fit within one or more of the site characteristics or design parameters included in the early site permit;
- (ii) One or more of the terms and conditions of the early site permit have not been met;
- (iii) A variance requested under paragraph (d) of this section is unwarranted or should be modified;
- (iv) New or additional information is provided in the application that substantially alters the bases for a previous NRC conclusion or constitutes a sufficient basis for the Commission to modify or impose new terms and conditions related to emergency preparedness; or
- (v) Any significant environmental issue that was not resolved in the early site permit proceeding, or any issue involving the impacts of construction and operation of the facility that was resolved in the early site permit proceeding for which significant new information has been identified.

10 C.F.R. § 52.39(c)(1)(i)-(v). In LBP-08-15, this Board set forth the legal standard for evaluating whether an issue was "resolved" in the ESP proceeding. LBP-08-15, 68 N.R.C. at 309-11.

respectfully submits that BREDL should at least identify the specific portions of the Application and variances that it seeks to dispute. Here, BREDL's Contention is so vague, and makes so little reference to the Application, that it is very difficult to determine whether BREDL is in fact seeking to challenge some variance or is simply challenging the adequacy of the geologic investigations conducted in the ESP proceeding or PSHA in general.

In addition, some of BREDL's allegations appear impermissibly to challenge the NRC rules and are outside the scope of the proceeding for this reason as well. In particular, BREDL's allegations appear to challenge the use of PSHA (*see* Motion at 8-9), and may be suggesting that inherent uncertainties in correlating earthquakes to faults in the CEUS (Motion at 10-11) preclude licensing. The NRC's rules at 10 C.F.R. § 100.23(d)(1) recognize that that this uncertainty exists and require that it be addressed through an appropriate analysis, such as PSHA. Any suggestion that uncertainty precludes licensing or PSHA cannot be used is simply at odds with this NRC rule. A petitioner is not entitled to an adjudicatory hearing to attack NRC 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).

Third (and foremost), BREDL does not demonstrate that the issues it seeks to raise are material to the findings that the NRC must make, as required by 10 C.F.R. § 2.309(f)(1)(iv), and does not provide information sufficient to show a genuine dispute exist with the applicant on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi). As 10 C.F.R. § 2.309(f)(1)(vi) provides, this information must include references to specific portions of the application 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.<sup>51</sup> Here, BREDL virtually ignores the Application. Its contention does not contain a single reference to the extensive discussion in the FSAR assessing the Mineral, Virginia earthquake and establishing the new site-specific seismic response spectra for Unit 3. BREDL does not dispute any of this information or explain why any specific portion of the Application is incorrect.

Indeed, the only reference to the Application anywhere in BREDL's Motion is the assertion that Dominion is seeking a departure from the SSE defined in the ESBWR DCD. *See* Motion at 11-12. With respect to this sole reference to the Application, BREDL provides no explanation of why the requested departure is improper. Because BREDL has wholly failed to "explain why the application is deficient," its contention must be rejected." 54 Fed. Reg. at 33,170. *See also Palo Verde*, CLI-91-12, 34 N.R.C. at 156.

Further, as previously discussed, none of BREDL's allegations or assertions appears to raise any genuine, material dispute with the Application. *See* discussion at pages 22-26, *supra*.

Finally, BREDL fails to provide a basis for its contention, as required by 10 C.F.R. § 2.309(f)(1)(ii), and fails to provide facts or expert opinion *which support the contention*, together with specific references and sources, as required by 10 C.F.R. § 2.209(f)(v). BREDL provides no facts, expert opinion, references or other sources supporting any deficiency in Dominion's assessment of the Mineral Virginia earthquake or in the development of its PSHA or site-specific

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<sup>51</sup> *See also Duke Power Co.* (Catawba Nuclear Station, Units 1 and 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) ("[A]n intervention petitioner has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable [the petitioner] to uncover any information that could serve as the foundation for a specific contention. Stated otherwise, neither Section 189a. of the Act nor Section 2.714 [now 2.309] of the Rules of Practice permits the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff.").

seismic response spectra. BREDL has included various assertions and references in its Motion, but none of them provide a basis for challenging the Application.

**D. BREDL’s “Placeholder” Request Is Improper**

BREDL concludes its Motion with a request “to have the North Anna Unit 3 license application process reopened pending new contentions to be submitted by BREDL to the Atomic Safety and Licensing Board” (Motion at 12), but this request is improper and should be denied. The Commission’s rules do not contemplate a “placeholder” motion to submit a new contention in the future, which the Commission has characterized as tantamount to impermissible notice pleadings. *Millstone*, CLI-09-5, 69 N.R.C. at 120. *See also Port Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit No. 3), CLI-00-22, 52 N.R.C. 266, 295 (2000) (pleading standards do not allow for mere “notice pleading,” or the filing of general, vague, or unsupported claims to be elaborated on at some later time). Further, the Board’s jurisdiction on remand is limited to consideration of whether to reopen the record to admit BREDL’s seismic contention. CLI-12-14, 75 N.R.C. at 701-02. Therefore, “this Board as presently constituted has the power only to rule on a petition to reopen that challenges the adequacy of the applicant’s seismic analyses.” Order (Holding Motion to Reopen the Proceeding in Abeyance) (July 23, 2013) at 2. Accordingly, the Board should deny BREDL’s placeholder request, and also dismiss BREDL’s previous Request to Reopen and Admit New Contention (May 28, 2013) currently held in abeyance.

## V. CONCLUSION

For all of the reasons stated above, BREDL's Motion to Reopen and Admit New Contention, and any other pending motion or request (*see supra* note 1), should be denied.

Respectfully Submitted,

/Signed electronically by David R. Lewis/

Lillian M. Cuoco  
Senior Counsel  
Dominion Resources Services, Inc.  
120 Tredegar Street, RS-2  
Richmond, VA 23219  
Tel. (804) 819-2684

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David R. Lewis  
Pillsbury Winthrop Shaw Pittman, LLP  
2300 N Street, NW  
Washington, DC 20037-1128  
Tel. (202) 663-8474

Counsel for Dominion

Dated: April 1, 2014

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

Before the Atomic Safety and Licensing Board

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

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Dominion's Answer to BREDL's Motion to Reopen and Admit New Contention has been served through the E-Filing system on the participants in the above-captioned proceeding, this 1st day of April, 2014.

/Signed electronically by David R. Lewis/

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David R. Lewis