UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

LBP-21-04

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before the Licensing Board:

G. Paul Bollwerk, III, Chairman
Nicholas G. Trikouros
Dr. Gary S. Arnold

In the Matter of VIRGINIA ELECTRIC AND POWER COMPANY (North Anna Power Station, Units 1 and 2)	Docket Nos. 50-338-SLR and 50-339-SLR ASLBP No. 21-970-01-SLR-01 March 29, 2021

MEMORANDUM AND ORDER
(Denying Intervention Petition and Terminating Proceeding)

Having previously obtained an initial twenty-year extension of its 10 C.F.R. Part 50 operating licenses for Units 1 and 2 at the North Anna Power Station, by application dated August 24, 2020, licensee Virginia Electric and Power Company (VEPCO) now seeks a second twenty-year renewal.[1] In a December 14, 2020 hearing request, Beyond Nuclear, Inc., Sierra Club, and Alliance for a Progressive Virginia (collectively Petitioners) contest the Environmental Report (ER) portion of VEPCO's subsequent license renewal (SLR) application. Petitioners have submitted a single contention challenging the VEPCO ER because it fails to discuss the

[1] See Letter from Mark D. Sartain, Vice President-Nuclear Engineering and Fleet Support, VEPCO, to NRC Document Control Desk, encls. (Aug. 24, 2020) (ADAMS Package Accession No. ML20246G703).

environmental significance of the 2011 Mineral, Virginia earthquake. Further, acknowledging that such a seismic accident impacts issue is otherwise precluded from consideration in this proceeding by appendix B to 10 C.F.R. Part 51, subpart A, Petitioners also seek a 10 C.F.R. § 2.335(b) waiver of that regulatory exclusion.[2] Both VEPCO and the Nuclear Regulatory Commission (NRC) Staff oppose Petitioners' hearing request, asserting there is no basis for further adjudicatory consideration of either the contention or the waiver request.[3]

For the reasons set forth below, while finding Petitioners have established their representational standing to intervene, we conclude they have failed to demonstrate that either their waiver petition or their contention meets the applicable waiver or contention admissibility standards. Accordingly, their hearing petition must be denied and this proceeding terminated.

I. BACKGROUND

A. Procedural Background

Submitted in response to an October 15, 2020 Federal Register hearing opportunity notice regarding the VEPCO SLR application,[4] Petitioners' single contention asserts that the ER fails to satisfy the NRC's regulations implementing the National Environmental Policy Act

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[2] See Hearing Request and Petition to Intervene by [Petitioners] and Petition for Waiver of 10 C.F.R. §§ 51.53(c)(3)(i), 51.71(d), and 51.95(c)(1) to Allow Consideration of Category 1 NEPA Issues (Dec. 14, 2020) at 13–37 [hereinafter Hearing Petition]; see also VEPCO, Appendix E, Applicant's Environmental Report, Subsequent Operating License Renewal Stage, North Anna Power Station Units 1 and 2 (Aug. 2020) (ADAMS Accession No. ML20246G698) [hereinafter ER].

[3] See Applicant's Answer Opposing Request for Hearing, Petition to Intervene, and Petition for Waiver Submitted by [Petitioners] (Jan. 8, 2021) at 2–3 [hereinafter VEPCO Answer]; NRC Staff Answer to Hearing Request, Petition to Intervene, and Petition for Waiver Filed by [Petitioners] (Jan. 8, 2021) at 2 [hereinafter Staff Answer].

[4] See [VEPCO], North Anna Power Station, Units 1 and 2, 85 Fed. Reg. 65,438 (Oct. 15, 2020).

(NEPA). Specifically, the contention claims that the ER does not address the environmental impacts of operating the North Anna facility during the extended SLR term under the significant risk of exceeding the two reactors' design-basis earthquake (DBE). According to the contention, this risk of a beyond DBE was demonstrated by the 2011 Mineral, Virginia earthquake that surpassed both units' design basis, the epicenter for which was located a short distance from the facility. See Hearing Petition at 13–14. In addition, Petitioners recognize the contention would be barred from consideration in this SLR proceeding because it involves a "Category 1" issue listed in Table B-1 of Part 51, subpart A to appendix B of the agency's NEPA implementation provisions. Consequently, pursuant to section 2.335(b) they seek a waiver of sections 51.53(c)(3)(i), 51.71(d), and 51.95(c)(1) to permit consideration of their contention in this adjudication. See id. at 30.

By memorandum dated December 17, 2020, the Secretary of the Commission referred Petitioners' hearing request to the Chief Administrative Judge,[5] who, in turn, on December 21, 2020, assigned the intervention petition to this Licensing Board to rule on standing and contention admissibility matters and preside at any hearing.[6] While not contesting Petitioners' representational standing to intervene in this proceeding, in their January 8, 2021 answers to Petitioners' hearing request, both VEPCO and the Staff assert that Petitioners' single contention is inadmissible and that their waiver request fails to meet the requisite standards in section 2.335. See VEPCO Answer at 3 & n.5; Staff Answer at 2. Petitioners' January 15 reply maintains that their waiver request should be granted and their contention admitted.[7]

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[5] See Memorandum from Annette L. Vietti-Cook, NRC Secretary, to E. Roy Hawkens, Chief Administrative Judge (Dec. 17, 2020).

[6] See [VEPCO], Establishment of Atomic Safety and Licensing Board, 85 Fed. Reg. 85,683 (Dec. 29, 2020).

[7] Reply by [Petitioners] to Oppositions to Hearing Request and Waiver Petition (Jan. 15,

In a series of issuances, the Board scheduled an initial prehearing conference to consider the efficacy of Petitioners' hearing request.[8] A virtual conference was conducted on February 4, 2021, during which the Board heard oral argument from the participants on the sufficiency of Petitioners' waiver and contention admissibility claims.[9]

B. Environmental Review Process Regarding an SLR Application

An application for either an initial or subsequent renewal of the 10 C.F.R. Part 50 operating license for an existing nuclear power plant is governed by the provisions of 10 C.F.R. Part 54.[10] The environmental contents of such an application are described in 10 C.F.R. § 54.23, which provides that the application must "include a supplement to the [ER] that complies with the requirements of subpart A of 10 CFR Part 51." The information required for such a supplement is outlined in section 51.53(c),[11] which also provides in paragraph (3)(i) that

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2021) at 1–2 [hereinafter Petitioners Reply].

[8] See Licensing Board Memorandum and Order (Initial Prehearing Conference Scheduling and Procedures) (Jan. 19, 2021) (unpublished); Licensing Board Memorandum and Order (Scheduling Initial Prehearing Conference) (Jan. 25, 2021) (unpublished); Licensing Board Memorandum (Licensing Board Questions/Areas of Interest and Public Call-In Access Information for Oral Argument) (Jan. 29, 2021) (unpublished).

[9] See Tr. at 1–98; see also Licensing Board Memorandum and Order (Adopting Transcript Corrections for Initial Prehearing Conference) (Feb. 25, 2021) (unpublished).

[10] An initial and subsequent renewal each add an additional 20 years to the original 40-year term of a Part 50 reactor operating license, so that in the case of the North Anna facility, if the VEPCO SLR application is granted, the Units 1 and 2 operating license terms would run until April 1, 2058, and August 21, 2060, respectively. See Staff Answer at 3.

[11] In their hearing petition, noting a then-pending case before the United States Court of Appeals for the District of Columbia Circuit concerning the question whether this section is applicable only to an initial license renewal application, Petitioners assert the Commission case under review upholding section 51.53(c)'s applicability to an SLR proceeding is wrongly decided and request a formal ruling by this Board on the same question to preserve the issue for judicial review. See Hearing Petition at 26–27 & n.8 (citing Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant Units 3 and 4), CLI-20-3, 91 NRC 133 (2020)); see also Exelon Generation Co, LLC (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-20-11, 92 NRC __, __–__ (slip op. at 10–13)) (Nov. 20, 2020) (adhering to Turkey Point ruling regarding section 51.53(c)'s applicability to an SLR proceeding). Although the District of

"[t]he [ER] for the operating license renewal stage is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in appendix B to subpart A of this part." 10 C.F.R. § 51.53(c)(3)(i). Other Part 51 provisions extend this impacts analysis exemption for Category 1 issues to the Staff's draft and final environmental impact statements (EISs) as well. See id. §§ 51.71(d), 51.95(c)(1).

As appendix B to subpart A of Part 51 makes clear, "[t]he Commission has assessed the environmental impacts associated with granting a renewed operating license for a nuclear power plant . . . [and] Table B-1 summarizes the Commission's findings on the scope and magnitude of environmental impacts" as required by NEPA. Id. pt. 51, subpart A, app. B. Table B-1, in turn, indicates that the "[d]ata supporting this table are contained in NUREG-1437, Revision 1, 'Generic Environmental Impact Statement ([GEIS]) for License Renewal of Nuclear Plants (June 2013)'" and that for Category 1 items, "[t]he generic analysis of the issue may be adopted in each plant-specific review." Id. tbl. B-1 nn.1–2. Commission caselaw establishes that an adjudicatory challenge based on an applicant's failure to deal appropriately with a Category 1 item constitutes an attack on an agency rule, making a section 2.335(b) waiver the sole vehicle for raising such an issue in an adjudication.[12]

Among its listings, Table B-1 specifically identifies summary environmental impact findings relating to "Postulated Accidents," including "Design-basis accidents" and "Severe

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Columbia Circuit case was recently dismissed as "incurably premature," see Friends of the Earth v. NRC, __ Fed. App'x __, __, 2021 WL 1048575, at *2 (Mar. 4, 2021) (per curiam), as Petitioners also recognize, see Hearing Petition at 27, the Commission's Turkey Point decision is binding precedent that the Board must follow in this proceeding.

[12] See Entergy Nuclear Vt. Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-07-3, 65 NRC 13, 20 & n.26 (2007) (citing Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11–13 (2001)).

accidents."[13] Id. pt. 51, subpart A, app. B. tbl. B-1. The agency impacts finding regarding a design-basis accident is not only classified as a Category 1 item, but is summarized as being "SMALL. The NRC staff has concluded that the environmental impacts of design-basis accidents are of small significance to all plants."[14] Id. In contrast, severe accidents are classified as a Category 2 item, which is a Table B-1 listing designating those items for which "the analysis reported in the [GEIS] has shown that . . . additional plant specific review is required." Id. n.2. And the Table B-1 summary impacts finding for such accidents states:

> SMALL. The probability-weighted consequences of atmospheric release, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts from severe accidents are small for all plants. However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives.

Id.[15]

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[13] The Table B-1 summary impact findings are based on the generic analysis of design-basis and severe accidents provided in the referenced GEIS, which was originally promulgated in 1996 and was updated in 2013. See 1 Office of Nuclear Regulatory Research (RES), NRC, [GEIS], Main Report, Final Report (May 1996) (ADAMS Accession No. ML040690705) [hereinafter 1996 GEIS]; 1 NRR, NRC, [GEIS], NUREG-1437, Main Report, Final Report (rev. 1 June 2013) (ADAMS Accession No. ML13106A241) [hereinafter 2013 Revised GEIS].

[14] Table B-1 defines the significance level of a "SMALL" impacts designation as

> [f]or the issue, environmental effects are not detectable or are so minor that they will neither destabilize or noticeably alter any important attribute of the resource. For the purposes of assessing radiological impacts, the Commission has concluded that those impacts that do not exceed permissible levels in the Commission's regulations are considered small as the term is used in this table.

10 C.F.R. pt. 51, subpart A, app. B. tbl. B-1 n.3.

[15] As the basis for its findings regarding design-basis accidents, including seismic-generated events, the 1996 GEIS states that

> [b]ecause of the requirements that continuous acceptability of the consequences and aging management programs be in effect for license renewal, the environmental impacts as calculated for

> design-basis accidents should not differ significantly from initial licensing assessments over the life of the plant, including the license renewal period. In addition, any refurbishment necessary to prepare for license renewal would be done in a fashion consistent with the limits set for design-basis accidents and would not alter their consequences. Accordingly, the design of the plant relative to design-basis accidents during the extended license period is considered to remain acceptable and the environmental impacts of those accidents will not be examined further in this section.

1996 GEIS at 5-11 to -12. And with respect to the impacts of severe accidents arising from seismic hazards, under the heading of "Probabilistic Assessment of Severe Accidents," the 1996 GEIS states:

> NRC's earthquake design standards have been conservatively developed to ensure protection of the public health and safety from earthquakes whose magnitudes are well above the most likely earthquake magnitude when considering the collective earthquakes history for specific plant sites in the United States. Therefore, earthquakes exceeding NRC seismic design standards are extremely unlikely. However, in the unlikely event of such an earthquake, there would be substantial damage to older residential structures, commercial structures, and high-hazard facilities such as dams whose seismic design standards are below nuclear seismic design standards. The societal impact due to the non-nuclear losses alone from an earthquake larger than the design basis of a nuclear plant, including property damage, injuries, and fatalities, would be major. . . . However, . . . the commission expects that the reactor accident contribution to the losses from large beyond design basis earthquakes would be small relative to the non-nuclear losses. While this in itself does not mean the reactor consequences from such an earthquake would be small, the commission concludes that even with potentially high consequences from a beyond design basis earthquake, the extremely low probability of such earthquake yields a small risk from beyond design basis earthquakes at existing nuclear power plants.

Id. at 5-17 to -18. The 1996 GEIS thus concluded that "the risk from . . . beyond design basis earthquakes at existing nuclear power plants is small . . . ." Id. at 5-18.

Thereafter, in the 2013 Revised GEIS the Commission made no change in its analysis of the impacts of either design-basis or severe seismic accidents, see 3 NRR, NRC, [GEIS], NUREG-1437, Appendices, Final Report at B-29 to -30 (rev. 1 June 2013) (ADAMS Accession No. ML13106A244) [hereinafter 2013 Revised GEIS Appendices], while observing that

> [c]hanges in potential seismic hazards are not within the scope of

Also, as the final sentence of this Category 2 finding indicates, unless analyzed previously, severe accident mitigation alternatives (SAMAs) for each facility applying for renewal of its operating license must be investigated as part of the environmental assessment process.[16] But under section 51.53(c)(3)(ii)(L), which the Commission has described as affording the "functional equivalent" of the Category 1 issue preclusion established by section 51.53(c)(3)(i), a license renewal contention regarding the adequacy of a previously considered SAMA environmental analysis cannot be litigated absent a section 2.335(b) waiver.[17]

For the North Anna SLR application, the environmental evaluation of seismic events is found in two contexts. The first is the ER's discussion of postulated accidents, including design-basis accidents and severe accidents relative to the 2013 Revised GEIS, and the possible existence of "new and significant information" regarding such accidents, of which VEPCO concluded there was none. See ER at E-4-84 to -87. The second is the ER's

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> the license renewal environmental review, except, where appropriate, during the analysis of [SAMAs], because any such changes would not be the result of continued operation of the nuclear power plant. Seismic design issues are considered during site-specific safety reviews and, more specifically, are addressed on an ongoing basis through the reactor oversight process and other NRC safety programs, such as the Generic Issues Program, which are separate from the license renewal process. When new seismic hazard information becomes available, the NRC evaluates the new information, through the appropriate program, to determine if any changes are needed at one or more existing plants.

2013 Revised GEIS at 3-52.

[16] Because there had not been a SAMA analysis done at the time the original Part 50 operating licenses were issued for North Anna Units 1 and 2, such an analysis was performed by VEPCO and reviewed by the Staff as part of the initial license renewal proceeding for the North Anna facility. See NRR, NRC, [GEIS], NUREG-1437, at 5-4 (Supp. 7 Nov. 2002) (ADAMS Accession No. ML023380542) [hereinafter North Anna GEIS Supp.].

[17] Exelon Generation Co., LLC (Limerick Generating Stations, Units 1 and 2), CLI-13-7, 78 NRC 199, 211–12 (2013), pet. for review denied sub nom., NRDC v. NRC, 823 F.3d 641 (D.C. Cir. 2016).

consideration of SAMAs and, once again, the possible existence of new and significant information regarding such alternatives. Based on a probabilistic risk assessment (PRA) model, however, VEPCO concluded no such information existed. See id. at E-4-88 to -92.

C. Design-Basis Seismic Events and the 2011 Mineral Earthquake and Its Aftermath

Relative to both their section 2.335 waiver request and their contention, Petitioners focus on the purported failure of VEPCO's ER

> to address the environmental significance of a 2011 earthquake within several miles of the North Anna reactors, whose ground motion exceeded the design basis for the reactors and thereby called into question all previous assurances by the NRC that the environmental impacts of operating North Anna Units 1 and 2 are small.

Hearing Petition at 2. Under 10 C.F.R. Part 100, the term "design-basis earthquake" (DBE) is considered synonymous with the term "safe shutdown earthquake" (SSE). 10 C.F.R. pt. 100, app. A, § III(c) n.1. An SSE, in turn, is defined as "the earthquake which produces the maximum vibratory ground motion for which" functionality still can be assured for the reactor structures, systems, and components (SSCs) that maintain coolant pressure boundary integrity, safe shutdown and shutdown maintenance capabilities, and the capability to prevent or mitigate accident consequences that otherwise would result in potential Part 100 guideline-comparable offsite exposures. Id. § III(c).

The earthquake in question, which the United States Geological Survey reported as having a Richter scale magnitude of 5.8, occurred on August 23, 2011, with its epicenter near Mineral, Virginia, approximately 10 miles from the North Anna facility. Operating at 100 percent power, both North Anna facility units tripped shortly after the earthquake, which also caused a loss of offsite power. Both units were stabilized following the earthquake and were taken to safe shutdown conditions, while the loss of offsite power caused the activation of four emergency diesel generators and an alternate diesel generator to provide power to the facility until offsite

power was restored. Because the spectral and peak ground accelerations for the facility's DBE/SSE and operating basis earthquake (OBE) were exceeded at certain frequencies for a short time period, NRC regulations required that the North Anna units remain shut down until VEPCO demonstrated to the agency that no functional damage occurred to those features necessary for continued safe operation.[18]

To this end, VEPCO provided a September 17, 2011 report indicating that subject to completion of some near-term monitoring, testing, and inspection activities, both units were ready for restart, albeit with the understanding that additional long-term seismic monitoring and evaluation activities were to be undertaken as well.[19] This was followed by a September 30, 2011 Staff confirmatory action letter (CAL) reiterating VEPCO's commitment not to restart the facility until NRC had finished its review of the circumstances surrounding the seismic event and authorized continued operation.[20] And with the completion of various agency

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[18] See NRR, NRC, Technical Evaluation by [NRR] Related to Plant Restart after the Occurrence of an Earthquake Exceeding the Level of the Operating Basis and Design Basis Earthquakes at PDF1–PDF2 (Nov. 11, 2011) (ADAMS Accession No. ML11308B406) [hereinafter Staff Technical Evaluation]. Because of this document's organization, page references employ its portable document format (PDF) pagination.

The OBE earthquake is defined as the earthquake that "produces the vibratory ground motion for which those features of the nuclear power plant necessary for continued operation without undue risk to health and safety of the public are designed to remain functional." 10 C.F.R. pt. 100, app. A, § III(d). Section V(a)(2) of appendix A, which indicates that the maximum vibratory ground acceleration for an OBE must be at least one-half of the SSE maximum vibratory ground acceleration, requires that if vibratory ground motion exceeding the OBE occurs, plant shutdown is mandated and the licensee must demonstrate to the agency prior to resuming operations that no functional damage occurred to those plant features that defined the OBE. See id. § V(a)(2).

[19] See Letter from E.S. Grecheck, Vice President-Nuclear Development, VEPCO, to NRC Document Control Desk at 6 (Sept. 17, 2011) (Summary Report of August 23, 2011 Earthquake Response and Restart Readiness Determination Plan) (ADAMS Accession No. ML11262A151); id. encl. 8 (Near-Term Actions to be Completed Prior to Unit Restart); id. encl. 9 (Long Term Actions to be Completed after Unit Restart).

[20] See Letter from Victor M. McCree, Administrator, NRC Region II, to David Heacock,

earthquake-associated inspection activities,[21] noting only minor, non-functional damage to non-safety-related equipment that would not preclude safe facility operation, on November 11, 2011, the Staff authorized restart of the North Anna units. See Staff Technical Evaluation at PDF9–PDF10. In doing so, however, the Staff did not require VEPCO to update the DBE for its North Anna facility. See Staff Answer at 10. The Staff, however, did leave in place its CAL relative to the long-term earthquake-associated activities identified by VEPCO, which included implementing a Seismic Margin Management Plan (SMMP) and revising the North Anna facility's Updated Final Safety Analysis Report (UFSAR).[22] Also, the Staff noted VEPCO's commitment to evaluating further the need for modifications to the plant as well as the facility's DBE.[23] Thereafter, in a December 24, 2015 determination, the Staff found that VEPCO had completed these long-term activities, including establishing the SMMP to ensure seismic margins are maintained by evaluating all plant modifications for the effects of the 2011 Mineral earthquake and revising the facility's UFSAR.[24]

President & Chief Nuclear Officer (CNO), VEPCO, at 1–2 (Sept. 30, 2011) (Commitments to Address Exceeding Design Bases Seismic Event) (ADAMS Accession No. ML11273A078).

[21] See Staff Technical Evaluation at PDF10–PDF11. Those inspection activities included an augmented inspection team review begun on August 30, 2011, to evaluate VEPCO's response to a potential beyond DBE event and an additional inspection team effort instituted on October 5, 2011, to assess VEPCO's earthquake-related inspection program and its restart readiness. See id.

[22] See Letter from Eric J. Leeds, Director, NRC NRR, to David A. Heacock, President & CNO, VEPCO, encl. (Nov. 11, 2011) ([VEPCO] Long-Term Actions Associated with [2011 Mineral] Earthquake) (ADAMS Accession No. ML11311A201).

[23] See Letter from Eric J. Leeds, Director, NRC NRR, to David A. Heacock, President & CNO, VEPCO, at 1–2 (Nov. 11, 2011) (Technical Evaluation of Restart Readiness Determination Plan) (ADAMS Accession No. ML11308B405).

[24] See Letter from William M. Dean, Director, NRC NRR, to David A. Heacock, President & CNO, VEPCO, encl. 1, at 3, 7 (Dec. 24, 2015) (Closure of [CAL] Regarding North Anna Power Station, Unit Nos. 1 and 2) (ADAMS Accession No. ML15015A575).

Additionally, the 2011 Mineral earthquake's implications were assessed by VEPCO and the NRC in another context, that of responding to the March 11, 2011 earthquake and resulting tsunami at Japan's Fukushima Dai-ichi Nuclear Power Station. As part of its post-accident lessons-learned assessment, the Staff on March 12, 2012, issued a 10 C.F.R. § 50.54(f) request that, among other things, asked licensees to evaluate their site seismic hazards using current methodologies and guidance to develop a ground motion response spectrum (GMRS).[25] Because the reevaluated North Anna seismic hazard, as characterized by the facility's GMRS, was found to exceed its DBE, the NRC requested that VEPCO complete a seismic probabilistic risk assessment (SPRA) focusing on seismic hazards to determine whether plant enhancements were necessary.[26]

A report summarizing VEPCO's SPRA was submitted to the NRC on March 28, 2018.[27] In synopsizing the conclusions of the eight-member peer review team that assessed the SPRA's technical elements, including the seismic hazard input, the summary report indicated that the SPRA evaluation

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[25] See Letter from Eric J. Leeds, Director, NRC NRR, & Michael R. Johnson, Director, NRC Office of New Reactors, to All Power Reactor Licensees and Holders of Construction Permits in Active or Deferred Status, encl. 1, at 5–6 (Mar. 12, 2012) (Recommendation 2.1: Seismic) (ADAMS Accession No. ML12053A340). As the Staff observed, "[a] response spectrum is a plot of the maximum responses (acceleration, velocity or displacement) of idealized single-degree-of-freedom oscillators as a function of the natural frequencies of the oscillators for a given dampening value" that "typically represents the first part of the development of the SSE for a site characterization of the regional and local seismic hazards." Staff Answer at 12 n.55; see 10 C.F.R. pt. 100, app. A, § III(l).

[26] See Letter from Tekia Govan, Project Manager, NRC NRR, to David A. Heacock, President & CNO, VEPCO, encl. at 4, 9 (Apr. 20, 2015) (Staff Assessment by [NRR] Related to Seismic Hazard Evaluation and Screening Report) (ADAMS Accession No. ML15057A249).

[27] See Letter from Daniel G. Stoddard, Senior Vice President & CNO, VEPCO, to NRC Document Control Desk, attach. (Mar. 28, 2018) (North Anna Power Station Units 1 and 2, Seismic Probabilistic Risk Assessment in Response to 10 CFR 50.54(f) Letter with Regard to [Near-Term Task Force (NTTF) Recommendation] 2.1 Seismic, Summary Report) (ADAMS Accession No. ML18093A445).

> focused on the implications of the Mineral, VA earthquake, an update to the earthquake catalog that is the basis for the estimate of earthquake recurrence rates, and the evaluation of new information available in the literature to determine if there was a basis for making revisions to the SSC model or the addition of new, local seismic sources that would contribute to the ground motion hazard at the North Anna site. The evaluation of the Mineral, VA earthquake[,] which included discussions/input from experts in the field [and] a literature review[,] concluded there was no basis to revise or amend the SSC model for the North Anna [probabilistic seismic hazard analysis].

Id. at 84. In its April 25, 2019 report regarding the VEPCO SPRA, the Staff concluded "that the results and risk insights provided by the SPRA support the NRC's determination that no further response or regulatory actions are required," noting as well that VEPCO's "actions and experience gained after the 2011 Mineral Earthquake provide additional assurance regarding North Anna's ability to handle a beyond design basis seismic event."[28] Subsequently, in a June 9, 2020 letter, the Staff acknowledged that VEPCO had completed the post-Fukushima actions sought by the agency regarding the North Anna facility. This included providing seismic and other information sought by the agency's March 12, 2012 section 50.54(f) request for information, which the Staff indicated showed implementation of the safety enhancements that were mandated by the agency's Fukushima lessons-learned regulatory changes and that would be the subject of agency operational oversight through the ongoing Reactor Oversight Process (ROP).[29]

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[28] Letter from Letter from Louise Lund, Director, NRC NRR, to Daniel G. Stoddard, Senior Vice President & CNO, VEPCO, at 1, 5 (Apr. 25, 2019) (Staff Review of Seismic Probabilistic Risk Assessment Associated with Reevaluated Seismic Hazard Implementation of the [NTTF] Recommendation 2.1: Seismic EPID NO. L-2018-JLD-0003) (ADAMS Accession No. ML19052A522) [hereinafter Staff SPRA Review Letter].

[29] See Letter from Robert J. Bernardo, Project Manager, NRC NRR, to Daniel G. Stoddard, Senior Vice President & CNO, VEPCO, at 1, 8 (June 9, 2020) (Documentation of the Completion of Required Actions Taken in Response to the Lessons Learned from the Fukushima Dai-Ichi Accident) (ADAMS Accession No. ML20139A077). The ROP is the

II. STANDING

As the Commission noted recently, to establish representational standing,

> [u]nder section 2.309(d)(1) . . . the hearing request must state (1) the name, address, and telephone number of the petitioner; (2) the nature of the petitioner's right under the AEA to be made a party to the proceeding; (3) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (4) the possible effect of any decision or order that may be issued in the proceeding on the petitioner's interest. In addition, an organization seeking to represent its members must show that at least one member has standing and has authorized the organization to represent her and to request a hearing on her behalf. Further, the interests that the representative organization seeks to protect must be germane to its own purpose, and neither the asserted claim nor requested relief must require an individual member to participate in the organization's legal action.
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> While we will construe the hearing request in the petitioner's favor, the petitioner has the burden of demonstrating that the standing requirements are met.[30]

And while Petitioners' standing has not been contested, an independent Board determination is required about whether each has fulfilled these requirements to establish standing to intervene in this proceeding.[31]

In this instance, Petitioners rely on the proximity presumption as a principal element in establishing their representational standing. This presumption, which in the power reactor

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agency's "program to inspect, measure, and assess the safety and security performance of operating commercial nuclear power plants, and to respond to any decline in their performance." [ROP], https://www.nrc.gov/reactors/operating/oversight.html (last updated Mar. 24, 2021).

[30] S. Nuclear Operating Co., Inc. (Vogtle Electric Generating Plant, Unit 3), CLI-20-6, 91 NRC 225, 237–38 & n.83 (2020) (footnote omitted) (citing Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-15-25, 82 NRC 389, 394 (2015)).

[31] See 10 C.F.R. § 2.309(d)(2); see also Exelon Generation Co., LLC (Peach Bottom Atomic Power Station, Units 2 and 3), LBP-19-5, 89 NRC 483, 491 (2019), aff'd on other grounds, CLI-20-11, 92 NRC __ (Nov. 12, 2020).

context excuses those otherwise meeting the requirements for standing from making a specific showing of injury in fact so long as they reside, work, or otherwise have regular contacts within a 50-mile radius of the facility in question, has recently been applied by several licensing boards in SLR proceedings.[32] Member affidavits supplied with Petitioners' hearing request showed that each has at least one member residing within 50 miles of the North Anna facility who has met the other standing requirements specified above.[33] We thus conclude that each of the Petitioners has established its representational standing to intervene in this proceeding.

III. PETITIONERS' 10 C.F.R. § 2.335(b) WAIVER PETITION

A. Standards for Obtaining a Waiver under 10 C.F.R. § 2.335(b)

As the discussion in section IV below indicates, the six basic requirements for an admissible contention set forth in section 2.309(f)(1) generally are of paramount importance in determining whether the issue statements posed by an intervention petition can be accepted for further litigation. Nonetheless, as the background discussion in section I.B above also makes clear, in a license renewal proceeding such as this one involving a dispute over the efficacy of an applicant's ER discussion regarding a Table B-1, Category 1 issue, of equal import is whether that challenge merits a section 2.335 waiver. That provision declares that "no rule or regulation of the Commission, or any provision thereof . . . is subject to attack by way of . . . any adjudicatory proceeding" in the absence of a waiver granted in accordance with paragraphs (b)

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[32] See Peach Bottom, LBP-19-5, 89 NRC at 490–91; Fla. Power & Light Co. (Turkey Point Nuclear Generating Units 3 and 4), LBP-19-3, 89 NRC 245, 258–59 (2019), appeal dismissed and referred ruling aff'd, CLI-20-3, 91 NRC 133 (2020).

[33] See Hearing Petition, attach. 1B (affidavit of Beyond Nuclear, Inc. member residing approximately 14 miles from the North Anna facility); id., attach. 1G (affidavit of Sierra Club member residing approximately 30 miles from the North Anna facility); id., attach. 1K (affidavit of Alliance for a Progressive Virginia member residing approximately 38 miles from the North Anna facility). The distance measurements provided above are Google Maps-based calculations.

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

Long-standing Commission precedent -- the so-called Millstone test -- establishes the specific requirements governing when a section 2.335 waiver can be granted, mandating a finding that each of the following four factors has been met:

> (i) the rule's strict application would not serve the purposes for which it was adopted;
> (ii) special circumstances exist that were not considered, either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived;
> (iii) those circumstances are unique to the facility rather than common to a large class of facilities; and
> (iv) waiver of the regulation is necessary to reach a significant safety (or environmental) problem.[34]

Ultimately, however, a determination about whether these criteria have been fulfilled so as to warrant a waiver is the sole province of the Commission. See 10 C.F.R. § 2.335(c), (d). A licensing board's role thus is limited to deciding whether a petitioner's waiver request has made a prima facie showing regarding each of these factors. A determination that a prima facie showing is lacking means the licensing board "may not further consider the matter," while a board conclusion that a sufficient showing has been made as to each of the four factors requires

[34] Exelon Generation Co., LLC (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 207–08 & n.36 (2013) (citing Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559–60 (2005)).

that the board "certify the matter directly to the Commission," which itself may then grant or deny the waiver or make whatever other determination it deems appropriate.[35] Id.

B. Petitioners' Waiver Petition Fails to Meet the Section 2.335(b) Standards

Petitioners' sole contention, entitled "Failure to Address Environmental Impacts of Reactor Accidents Caused or Contributed to by Earthquakes," asserts that VEPCO's ER does not satisfy "NEPA or NRC implementing regulations 10 C.F.R. §§ 51.53(c)(2) and 51.45(a), because it does not address the environmental impacts of operating North Anna Units 1 and 2 during the extended [SLR] term under the significant risk of an earthquake that exceeds the design basis for the reactors." Hearing Petition at 13. As support for this proposition, Petitioners point to the 2011 Mineral earthquake. This seismic event, they assert, disproves the assumption underlying the agency's determination in issuing and initially renewing the North Anna Units 1 and 2 Part 50 operating licenses "that the reactors could be operated safely and without significant adverse environmental impacts because their SSCs were built to a design basis of sufficient rigor to protect against likely earthquakes." Id. And Petitioners maintain as well that because this supposition is no longer valid, a new EIS is required to analyze both the additional risk during the SLR term of operation and the cumulative effects of earthquakes upon facility SSCs that may be compromised by long-term aging. See id. at 13–14.

As we noted in section I.B above, the Commission has codified generic determinations for certain environmental issues, identified as Category 1 issues, for license renewal proceedings. Moreover, as we also observed there, absent the grant of a section 2.335 waiver,

[35] A prima facie showing within the meaning of section 2.335(d) "is one that is 'legally sufficient to establish a fact or case unless disproved.'" Pub. Serv. Co. of N.H. (Seabrook Station, Units 1 and 2), ALAB-895, 28 NRC 7, 22 (1988) (quoting Pac. Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, 16 NRC 55, 72 (1981)).

challenges to Category 1 generic determinations in an adjudication such as this one are precluded.[36] And because their sole contention involves a Category 1 issue, Petitioners request a section 2.335 waiver of section 51.53(c)(3) and "other NRC regulations that would apply Category 1 exclusions to any analysis of reactor accident impacts caused by or contributed to by an earthquake."[37] Hearing Petition at 27. Given this need for a section 2.335(b) waiver, below we analyze the Millstone four-factor test to determine if Petitioners have made the required prima facie showing that warrants Board certification to the Commission of the issue whether the referenced regulatory requirements should be waived.

1. Millstone Factor 1: Whether Strict Application of the Rule Would Not Serve the Purposes for Which the Rule was Adopted

Concerning the first Millstone factor, Petitioners recognize that the statement of considerations for the 1996 GEIS indicated its purposes included "increasing efficiency, saving costs, and improving the quality of both generic and site-specific environmental analyses." Id. at 32 (citing Final Rule for Environmental Review of Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28,467, 28,467 (June 5, 1996)). Petitioners nonetheless assert that

> "[a]pplication of the Category 1 exclusions in this proceeding would defeat the Commission's purpose of ensuring NEPA compliance and improving the quality of site-specific license renewals reviews, by barring consideration of new and significant information regarding the

[36] See Limerick, CLI-13-7, 78 NRC at 207 ("When we engage in a rulemaking, we are 'carving out' issues from adjudication for generic resolution. Therefore, to challenge the generic application of a rule, a petitioner seeking waiver must show that there is something extraordinary about the subject matter of the proceeding such that the rule should not apply.").

[37] In support of their waiver claim, Petitioners cite sections "51.53(c)(3)(i), 51.71(d), and 51.95(c)(1)," Hearing Petition at 30, a reference the NRC Staff claims is insufficient because it does not include Table B-1 as well, see Staff Answer at 26. Given that Table B-1 does not appear to be self-executing as an issue preclusion mechanism, we find this argument unconvincing, while also observing that to the degree Petitioners' waiver arguments could be interpreted to encompass the need for a SAMA re-analysis otherwise precluded by section 51.53(c)(3)(ii)(L), they have not made a section 2.335 waiver request regarding that provision.

> environmental impacts of operating North Anna Units 1 and 2 in [an SLR] term."

Id. at 33. Further, according to Petitioners, this new and significant information is the occurrence of the first-ever earthquake to exceed the North Anna facility's DBE, an event that "has not been considered in any previous site-specific or generic environmental study." Id. Petitioners also claim that this beyond DBE event disproved the assumption under which the NRC approved the original and initially renewed operating licenses for the North Anna units, i.e., "that the reactors could be operated safely and without significant adverse environmental impacts because their [SSCs] were designed and built with sufficient rigor to protect against likely earthquakes," such that the "environmental implications of the 2011 [earthquake] are significant as a matter of law." Id.

In terms of the purposes of the 1996 GEIS and the 2013 Revised GEIS, federal courts have acknowledged the legitimacy of (1) avoiding new analyses of generic Category 1 issues as counterproductive to administrative efficiency and decision; and (2) the agency's regulatory determination, at least in the absence of a valid section 2.335 rule waiver petition, to direct consideration of purported new and significant environmental impact information regarding Category 1 issues proffered by members of the public to the EIS public comment process in 10 C.F.R. §§ 51.73 and 51.74 or the section 2.802 rulemaking petition process rather than the Part 2 adjudicatory process.[38] In Petitioners' view, however, these agency purposes cannot

[38] See Mass. v. United States, 522 F.3d 115, 119–21 (1st Cir. 2008); see also NRDC, 823 F.3d at 647. In this regard, while the Commission has noted that reliance on section 51.53(c)(3)(iv) new and significant information is not enough to negate the requirement in an adjudication to proffer a valid section 2.335 waiver petition to obtain consideration of that information, see Vt. Yankee, CLI-07-3, 65 NRC at 20–21, it also is apparent that by its very nature purported new and significant information is likely to be the basis for any successful waiver petition, see Limerick, CLI-13-7, 78 NRC at 210–11; Turkey Point, CLI-01-17, 54 NRC at 12.

justify the lack of any generic or site-specific review of the applicable environmental impacts of the 2011 Mineral seismic event given the overarching purpose of the GEIS rulemakings -- ensuring compliance with NEPA's requirements under Part 51 through quality environmental analyses -- is not being served.

As the Commission has observed, the designation of a Category 1 issue "reflects the NRC's expectations that our NEPA obligations have been satisfied with reference to our previously conducted environmental analysis in the GEIS." Limerick, CLI-13-7, 78 NRC at 212–13. Yet, in the context of the adjudicatory process, section 2.335 and the associated Millstone waiver standards provide the mechanism to permit consideration of the question whether, to ensure a quality environmental analysis will be generated, some aspect of or information regarding an otherwise-precluded Category 1 issue, like the seismic impacts issue here, merits further NEPA analysis. Nonetheless, regardless of whether Petitioners have satisfied this first Millstone standard, Petitioners' failure to meet the remaining Millstone standards, as we detail below, requires that we reject their section 2.335 waiver request that an additional environmental analysis of beyond-design-basis seismic impacts be included in the VEPCO ER.

2. Millstone Factor 2: Whether Special Circumstances, Previously Not Considered, Exist with Respect to this License Renewal Review

Regarding the second Millstone factor, Petitioners assert that special circumstances exist that previously were not considered because the NRC has not prepared an EIS or GEIS analyzing the environmental significance of the 2011 Mineral beyond DBE at North Anna Units 1 and 2. See Hearing Petition at 34. Disputing this, VEPCO and the Staff assert that Petitioners have not made any showing that the 2011 Mineral earthquake would not be encompassed by

the existing GEIS findings regarding severe accidents, including beyond DBE events, or by the existing North Anna SAMA analysis.[39]

As was outlined in section I.B above, in both the 1996 GEIS and 2013 Revised GEIS rulemaking processes, the NRC addressed the issue of environmental impacts associated with both design-basis and severe, i.e., beyond-design-basis, accidents and associated seismic events at domestic nuclear facilities, including North Anna.[40] This included the 2013 revised GEIS expanding the scope of the severe accident evaluation in the 1996 GEIS by utilizing more recent technical information, such as core damage frequencies associated with, among other things, seismic events. See supra note 40. Additionally, VEPCO's site-specific ER for its SLR application addresses the NEPA requirement to identify and consider any post-GEIS new and significant information about environmental impacts, both as it relates to Category 1

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[39] See VEPCO Answer at 22–23 (referencing Commission observation that Millstone factor two requires demonstration of a circumstance that was "not considered either explicitly, or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived" (quoting Millstone, CLI-05-24, 62 NRC at 560)); Staff Answer at 32–33.

[40] See 1996 GEIS at 5-11 to -12 (impacts assessment of design-basis and severe accidents); id. at 5-17 to -18 (impacts assessment of DBEs concluding that "even with potentially high consequences from a beyond [DBE], the extremely low probability of such [an] earthquake yields a small risk from beyond [DBEs] at existing nuclear power plants"); 2013 Revised GEIS at 1-25 to -28 (addressing and rejecting comments asserting 1996 GEIS discussion of design-basis and severe accidents impacts was incorrect); id. at 1-32 to -34 (addressing impacts associated with Fukushima earthquake and tsunami and resulting severe accident); id. at 3-49 to -52, 4-30 (regarding geologic environment changes, noting that except for the SAMA analysis, potential seismic hazards changes are not within the scope of the license renewal environmental review because they would not be the result of continued operation of the nuclear power plant); id. at 4-158 to -160 (explaining reduction in environmental impacts based on the use of new design-basis and severe accident information obtained since the 1996 GEIS analysis outweighs any increased impacts resulting from this same information so that the impact findings in the 1996 GEIS remain valid); 2013 Revised GEIS Appendices at E-4 to -6 (analyzing continued validity of 1996 GEIS severe accident findings in light of Fukushima earthquake and tsunami and need to reassess 1996 GEIS design-basis and severe accident impact assessments); id. at E-10 to -24 (analyzing updated information regarding potential internal and external event impacts associated with accidents, including seismic events).

design-basis accidents and to Category 2 severe accident-associated SAMAs, which included consideration of a seismic PRA that took into account the 2011 Mineral earthquake. See ER at E-4-84 to -92.

Thus, the environmental consequences of design-basis and severe accidents, including the risk of a beyond DBE, have been addressed by the pertinent evaluations. In contrast, Petitioners have not identified any "special circumstances" that were not considered explicitly or through bounding analyses in these appraisals. As a result, the second Millstone factor has not been satisfied with the requisite prima facie showing.

3. Millstone Factor 3: Whether Special Circumstances Exist that are Unique to North Anna Units 1 and 2

With respect to the third Millstone factor, Petitioners contend that their waiver request presents special circumstances that are unique "because the seismic design of North Anna is based on an assessment of an earthquake whose impacts are unique to the North Anna site." Hearing Petition at 34. Moreover, according to Petitioners, the 2011 Mineral earthquake's occurrence "irrefutably disproves, uniquely for North Anna, the 1996 License Renewal GEIS' conclusion that the environmental impacts of design-basis accidents are small because 'design and performance criteria' for all operating reactors are 'acceptable.'" Id. (quoting 1996 GEIS at xliii.)

Initially we note, as the Staff observed,[41] that (1) the risk from severe accident externally initiated events, and specifically seismic hazards, are not unique to North Anna or to license renewal; and (2) while the probability of a plant undergoing a beyond-design-basis event is low, any plant can experience such a happenstance.[42] In this regard, the 2013 Revised GEIS

[41] See Tr. at 36 (Ghosh-Naber).

[42] Relative to seismic events, section (V)(a)(2) of appendix A of Part 100 anticipates that

determined the environmental effects of seismically induced severe accidents using calculations from fourteen nuclear power units, which required the assumption that beyond DBEs are possible. See 2013 Revised GEIS Appendices at E-18 to -19 (tables E-4 and E-5). It thus is evident that the potential for a beyond DBE is not unique to North Anna, but is an essential assumption associated with the design and licensing of all nuclear power plants.

Nor have Petitioners not provided any specific technical information to establish how the 2011 Mineral earthquake has any bearing on the GEIS conclusions regarding the environmental impacts of design-basis and severe accidents as small. Instead, Petitioners treat the 2011 Mineral earthquake, a beyond DBE event, as an essentially a fortiori occurrence that would establish uniqueness for purposes of the third Millstone factor in this, and presumably any other instance in which a beyond DBE might occur at a facility. Such an approach, however, hardly seems consistent with identifying the requisite "unique" circumstance.

Petitioners thus have not satisfied the third Millstone factor requiring a prima facie demonstration that special circumstances exist that are unique to North Anna Units 1 and 2.

4. Millstone Factor 4: Whether a Waiver of the Category 1 Findings is Necessary to Reach a Significant Safety or Environmental Issue

In seeking to show their waiver petition fulfills the fourth Millstone factor, Petitioners assert that the 2011 Mineral beyond DBE establishes that North Anna earthquake-related accident impacts must be considered significant "as a matter of law" because the occurrence of the earthquake upended the central conclusion of the original North Anna EIS and the 1996 GEIS that "environmental impacts of most reactor accidents will be small." Hearing Petition at 35. In particular, Petitioners challenge the findings and analysis in the 1996 GEIS for

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a facility's OBE may be exceeded without causing a severe accident, directing in such a circumstance the actions that must be completed prior to resuming operation after such an incident. See supra note 18.

design-basis accidents by asserting that the sole grounds for the GEIS conclusion of insignificant impacts is the assumption underlying NRC safety regulations that reactors will operate within their design bases.[43] Petitioners maintain that because this "key assumption has been refuted" by the 2011 Mineral beyond DBE, neither VEPCO nor the Staff can lawfully conclude that the environmental impacts of operating North Anna for a second renewal term are insignificant. Id.; see also Petitioners Reply at 7–9. This, Petitioners assert, constitutes a significant environmental analysis deficiency that the Staff must rectify by evaluating the probability of more beyond DBEs at the North Anna facility, the consequences of such events, and the cost-effectiveness of avoidance or mitigation measures, including upgrading safety equipment. See Hearing Petition at 37.

As we have noted previously, both the 1996 GEIS and the 2013 Revised GEIS did assess the environmental impacts of design-basis accidents and severe accidents induced by seismic events.[44] See supra note 40. Petitioners, on the other hand, do not demonstrate the

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[43] See Hearing Petition at 34 ("All plants have had a previous evaluation of the environmental impacts of design-basis accidents[.]" (quoting 1996 GEIS at xliii)); see also id. (challenging the 1996 GEIS conclusion (at xliii) that the environmental impacts of design-basis accidents are small because "design and performance criteria" for all operating reactors are "acceptable").

[44] In this regard, the 2013 Revised GEIS made the following findings:

> Given the discussion in Appendix E of this document, the staff concludes that the reduction in environmental impacts from the use of new information (since the 1996 GEIS analysis) outweighs any increases resulting from this same information. As a result, the findings in the 1996 GEIS remain valid. Therefore, design-basis accidents remain a Category 1 issue, and although the probability-weighted consequences of severe accidents are SMALL for all plants, severe accidents remain a Category 2 issue to the extent that only alternatives to mitigate severe accidents must be considered for all plants that have not previously considered such alternatives.
>
> . . . Alternatives to mitigate severe accidents still must be

2011 Mineral beyond DBE posed any unanalyzed environmental impacts that would challenge the conclusion in either GEIS that the environmental impacts from design-basis accidents are small for North Anna. Instead, Petitioners rely principally on the claim that the 1996 GEIS conclusion about the low environmental impacts of design-basis accidents is no longer applicable. This is the case, they maintain, because the 2011 Mineral earthquake disproved the assumption upon which that finding was grounded, i.e., that because a reactor's design is based on the agency's deterministic rules, that design is adequate to prevent or mitigate the effects of likely accidents. See Petitioners Reply at 7–8. As a result, Petitioners maintain, the NRC "must re-examine how the occurrence of a beyond-design-basis earthquake at North Anna would affect the basis for its original findings of no significant impact for design-basis accidents, including the deterministic portion of those findings." Id. at 9.

As VEPCO points out, however, Petitioners' analysis misinterprets the scope of the GEIS conclusions about the small earthquake-related environmental impacts, which are not based solely on the plant's design basis. Rather, the GEIS small impact conclusions span both design-basis and severe accidents and, recognizing the possibility that external events may cause a facility's design-basis to be exceeded, analyzes such a happenstance as a severe accident, "the probability of [which] is so low." VEPCO Answer at 21–22 (quoting Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-15-6, 81 NRC 340, 372 (2015)).

Lacking merit as well as a basis for showing a significant safety or environmental issue is Petitioners' expressed concern that the licensing assumption for the North Anna units, i.e.,

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> considered for all plants that have not considered such alternatives; however, as discussed further in Appendix E, those plants that have already had a SAMA analysis considered by the NRC as part of an EIS, supplement to an EIS, or EA, need not perform an additional SAMA analysis for license renewal.

2013 GEIS at 4-160; see 2013 Revised GEIS Appendices at E-10 to -27, E-43 to -48.

that the facility's safe, environmentally sound operation is established by the rigorous design and assembly of the facility's SSCs, was "breached" by the 2011 Mineral beyond DBE and thus, "as a matter of law," requires an additional environmental analysis as part of the SLR process. Tr. at 49–50 (Curran). As we have indicated previously, see supra section III.B.2, the 1996 GEIS and the 2013 Revised GEIS looked at design-basis and severe accidents broadly and determined their environmental impacts were small. Further, the ER for the VEPCO SLR application discusses possible post-2013 Revised GEIS new and significant information and finds that nothing has been identified to require a new analysis that would change the previous conclusions both as to design-basis accidents and severe accident-associated SAMAs. At the same time, even apart from the fact that the integrity of SSCs is a current licensing basis issue and so beyond challenge in this adjudication,[45] as the discussion in section 1.B above makes apparent, whether as a licensing or an operational matter,[46] the safety impact of the 2011 Mineral earthquake already has been fully assessed by VEPCO and the Staff. This assessment

[45] See Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7 (2001).

[46] Petitioners have asserted that neither the VEPCO/Staff post-incident review of the 2011 Mineral earthquake nor their Fukushima-related appraisal have any relevance in assessing Petitioners' waiver request because these were "operational" rather than "licensing" activities, only the latter being the type that have NEPA environmental impact analysis implications. See Tr. at 56, 93–94 (Curran). This, in our view, draws too fine a distinction. To be sure, there is an operational aspect to both assessments. At the same time, as was suggested during the February 4 oral argument, see Tr. at 63–64 (Ghosh-Naber), if VEPCO or the Staff had determined either of these assessments required a license amendment or a Staff-initiated order mandating a change in the North Anna facility's DBE, then a licensing process with an appropriate NEPA analysis would have been required. The fact that under the agency's procedural rules Petitioners' involvement in such a regulatory process prior to a determination to undertake a licensee-initiated license amendment or Staff-initiated order arguably would involve submitting a 10 C.F.R. § 2.206 petition in lieu of a section 2.309 hearing petition does not make it any less a licensing process. See Millstone, CLI-05-24, 62 NRC at 63; see also 10 C.F.R. § 2.309(b)(4)(ii) (providing schedule for submitting a hearing petition in proceeding in which no Federal Register or agency website notice of agency action is published).

included (1) a post-incident review, which encompassed SMMP establishment and implementation to ensure the maintenance of adequate seismic margins;[47] and (2) a Fukushima-associated appraisal, which involved a state-of-the-art SPRA that explicitly considered the 2011 Mineral earthquake. Each of these evaluations, which resulted in a finding that the design basis for the facility remained suitable to support continued operation, is fully consistent with the 1996 GEIS and 2013 Revised GEIS conclusions about the environmental impacts of seismic design-basis and severe accidents,[48] as well as the VEPCO ER's discussion about new and significant information.[49]

In contrast, Petitioners provide no technical analysis or other relevant supporting information questioning the efficacy of any of these VEPCO and Staff evaluations, including the existing GEIS analyses,[50] advocating instead for an essentially "per se" approach in which the

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[47] As the UFSAR for the North Anna facility indicates, an evaluation of existing plant structures, piping systems and pipe supports, and equipment impacted by the ground motion generated by the 2011 Mineral earthquake showed that these items intended to fulfill the plant's existing DBE requirements had not suffered any damage or deformation. See North Anna Power Station, [UFSAR], chap. 3, at 3.7-55 to -61 (rev. 52 Sept. 29, 2016) (ADAMS Accession No. ML17033B500). At the same time, to ensure that any new plant components that had not been subjected to the 2011 Mineral earthquake could withstand such an event, under the SMMP any new equipment is qualified to seismic margins consistent with that event. See id. at 3.7-54 to -55. A similar approach was taken regarding seismic qualification for the 10 C.F.R. Part 52 combined operating license for North Anna Unit 3. See Dominion Va. Power (North Anna Power Station, Unit 3), CLI-17-8, 85 NRC 157, 176–82 (2017).

[48] As was observed at the oral argument, while referencing the GEIS severe accident analysis, the crux of Petitioners' challenge apparently is to the GEIS design-basis accident analysis. See Tr. at 24–25 (Lighty).

[49] See ER at E-4-84 to -87.

[50] During oral argument, in response to a Board member's question about whether the 1996 GEIS and 2013 Revised GEIS severe accident analyses covered greater than design-basis events that, while having a core damage frequency of zero, nonetheless resulted in radiological releases, see Tr. at 80 (Trikouros), Petitioners' counsel suggested that the NEPA analysis triggered by the 2011 Mineral beyond DBE might need to include a discussion of other issues without core damage implications, such as added wear on increasingly fragile facility safety equipment caused by operating beyond the seismic design basis, see Tr. at 85–86

2011 Mineral beyond DBE event at the facility has the effect of legally mandating a new environmental impact analysis for an SLR application for that facility.[51] Lacking the information necessary to determine that such an event, in and of itself,[52] creates a significant safety or environmental issue that warrants consideration as part of this SLR adjudicatory proceeding, we must conclude that Petitioners have not made the prima facie showing needed to satisfy the fourth Millstone factor.[53]

For Petitioners' proposed contention to be eligible for consideration in this proceeding, Petitioners must obtain a waiver under 10 C.F.R. § 2.335(d). For the reasons set forth above,

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(Curran). Of course, neither the Board's observations, see infra note 57, nor those of counsel unsupported by any documentary or expert opinion information can provide the technical basis supporting the grant of Petitioners' section 2.335(b) waiver petition or, concomitantly, the admission of their contention.

[51] The legalistic "per se" nature of Petitioners' challenge is apparent given the method used to comply with the requirement that a waiver petition "must be accompanied by an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding to which the application of the regulation (or provision of it) would not serve the purposes for which the rule or regulation was adopted." 10 C.F.R. § 2.335(b). The affidavit supporting the hearing petition was executed not by a technical or scientific expert, but by Petitioners' counsel, and makes no factual representations independent of what are set forth in the Staff and VEPCO documents in the agency's ADAMS document management system as they relate to this proceeding. See Hearing Petition, attach. 2 (affidavit of Diane Curran).

[52] Cf. Limerick, CLI-17-3, 78 NRC at 214-15 (noting that accepting assertion that passage of time required SAMA analysis to be redone, a circumstance that could be applicable to any initial renewal or SLR application, so as to justify a section 51.53(c)(3)(ii)(L) waiver "would 'necessarily swallow the rule'" (citation omitted)).

[53] While Petitioners several times cite the decision of the United States Court of Appeals for the Third Circuit in Limerick Ecology Action v. NRC, 869 F.2d 719 (3d Cir. 1989), as supporting different aspects of their petition, see Hearing Petition at 5, 9, 28, 36, as a general matter that case provides limited, if any, basis for their request for further NEPA consideration of the 2011 Mineral earthquake. In contrast to the policy statement-precluded severe accident mitigation design alternatives (SAMDA) analysis at issue there, see Limerick Ecology Action, 869 F.2d at 741 (finding agency's preclusion of SAMDA NEPA analysis pursuant to a policy statement improper), the 1996 GEIS and the 2013 Revised GEIS, with their consideration of design-basis and severe seismic and other accidents, as well as Table B-1 and the other Part 51 provisions at issue here, were the subjects of an agency rulemaking process.

the Board concludes that, having failed to make a prima facie showing consistent with the four-factor Millstone test that a waiver can be granted, Petitioners' waiver request cannot be certified to the Commission for a merits determination about whether a waiver is warranted so as to make their contention eligible for consideration in this adjudication.[54]

IV. ADMISSIBILITY OF PETITIONERS' CONTENTION

As we observed in section III.A above, even if Petitioners' waiver request were found sufficient to warrant certification to the Commission, to be litigable their contention would still need to satisfy the admissibility criteria in 10 C.F.R. § 2.309(f)(1). Yet, as we explain below, their contention is wanting in that regard, which is an additional basis for denying their hearing request.

A. Contention Admissibility Standards under 10 C.F.R. § 2.309(f)(1)

When a hearing requestor, such as Petitioners here, seeks admission of a contention submitted as part of a timely intervention petition, that contention must satisfy the six admissibility factors set forth in section 2.309(f)(1). Those factors require the proponent of a contention to

> (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;

[54] The Board's finding in this regard is based on the showing made by Petitioners in support of their section 2.335(b) waiver request that, consistent with their "per se" approach, did not include any relevant technical information in support of their challenge to the adequacy of the VEPCO ER's discussion of seismic environmental impacts associated with the 2011 Mineral earthquake. Nonetheless, the Board's determination regarding Petitioners' waiver request does not negate the Staff's responsibility (1) in conducting its "hard look" licensing review of the VEPCO ER to assess whether new and significant information exists that requires additional consideration; or (2) per 10 C.F.R. § 51.73, to consider whether any information provided by public comments as part of the environment review process for VEPCO's SLR application merits further analysis as new and significant information. See Limerick, CLI-17-3, 78 NRC at 216–17.

> (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 . . . ; and
> (vi) . . . [P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.

10 C.F.R. § 2.309(f)(1)(i)–(vi).

These six criteria aim to "focus litigation on concrete issues and result in a clearer and more focused record for decision." Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004) [hereinafter 2004 Part 2 Changes]. The petitioner bears the burden to satisfy each of the criteria,[55] and a failure to comply with any of the requirements constitutes grounds for rejecting a proposed contention.[56] Moreover, when a petitioner neglects to provide the requisite support for its contentions, the board may not cure the deficiency by supplying the information.[57]

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[55] See Entergy Nuclear Operations, Inc. (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 329 (2015) ("[I]t is Petitioners' responsibility, not the Board's, to formulate contentions and to provide 'the necessary information to satisfy the basis requirement' for admission." (quoting Statement of Policy on Conduct of Adjudicatory Proceedings, CLI-98-12, 48 NRC 18, 22 (1998)).

[56] See 2004 Part 2 Changes, 69 Fed. Reg. at 2221; see also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

[57] See Ariz. Pub. Serv. Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991) (licensing board cannot supply missing information supporting a contention).

B. Petitioners' Contention Fails to Meet the Section 2.309(f)(1) Contention Admissibility Standards

Petitioners' single contention, "Failure to Address Environmental Impacts of Reactor Accidents Caused or Contributed to by Earthquakes," alleges that

> [VEPCO's ER] fails to satisfy NEPA or NRC implementing regulations 10 C.F.R. §§ 51.53(c)(2) and 51.45(a), because it does not address the environmental impacts of operating North Anna Units 1 and 2 during the extended SLR term under the significant risk of an earthquake that exceeds the design basis for the reactors.

Hearing Petition at 13. As we outline below, this contention is inadmissible for failing to satisfy one or more of the requirements in section 2.309(f)(1)(iii)–(vi).

With their principal focus on the 2011 Mineral beyond DBE, Petitioners attempt to call into question "all previous assurances by the NRC that the environmental impacts of operating North Anna Units 1 and 2 are small." Id. at 2. Petitioners' central argument in support of their contention is that VEPCO's ER "contains no discussion of earthquake or other accident impacts" and so fails to satisfy NEPA and the NRC's regulations implementing NEPA by not "addressing the probability and consequences of accidents caused or contributed to by earthquakes during a second license renewal term." Id. at 13, 18. And they extend their criticism to the agency, noting as part of the contention's basis that "[n]o North Anna-specific licensing actions were taken by NRC in relation to the 2011 earthquake." Id. at 17. This, they maintain, meant there were "no rights of public participation in the decision-making process" associated with the agency's assessment of the 2011 Mineral earthquake, as well as no "environmental analyses of the earthquake's environmental impacts and implications under NEPA." Id. And while acknowledging the ER section in which, based on a seismic PRA that took into account the 2011 Mineral earthquake, VEPCO concluded there was no new and significant information meriting an additional SAMA analysis, Petitioners nonetheless contend

this assessment is merely a summary finding that fails to provide any detailed earthquake-related risk or consequence analyses from the PRA. See id. at 19 (citing ER at E-4-89 to -92).

As VEPCO asserts, Petitioners' claims in support of their contention could be read as taking on the mantle of either a contention of omission, i.e., that the ER is devoid of any discussion of a particular issue that must be addressed, or a contention of sufficiency/adequacy, i.e., that the ER discussion of a particular issue somehow lacks important substantive information or analysis.[58] See VEPCO Answer at 32–33. Belying either asserted deficiency, however, is the VEPCO ER's incorporated-by-reference discussion from the 2013 Revised GEIS regarding the impact of design-basis and severe accidents,[59] including those induced by seismic events, along with the ER's discussion of that subject in the context of its no new and significant information findings. See supra note 40; ER at E-4-84 to -92. Thus, consistent with 10 C.F.R. § 51.53(c)(3)(i), (iii), the ER did consider the environmental effects of design-basis and beyond-design-basis earthquakes in the SLR term and determined, in the context of section 51.53(c)(3)(iv)'s mandate, that there was no post-2013 Revised GEIS new and significant information to incorporate into the ER that would change the GEIS conclusion that

[58] A principal example of the latter would be Petitioners' claim that the ER's SAMA analysis is insufficient, see Hearing Petition at 37, which does not appear to account sufficiently for the ER Appendix E review of whether, based on a PRA model that takes into account the 2011 Mineral earthquake, any new and significant information required changes to the SAMA analysis done in support of the North Anna facility's initial license renewal application, see ER at E-4-89.

[59] To the degree that Petitioners attempt to challenge the incorporation by reference of the GEIS discussion of design-basis and severe accidents into the ER as part of the basis for their contention, see Hearing Petition at 18–19, such an assertion fails to establish a material factual dispute under section 2.309(f)(1)(vi). See Peach Bottom, LBP-19-5, 89 NRC at 502–03, aff'd, CLI-20-11, 92 NRC at __–__ (slip op. at 12–13).

the environmental impacts of design-basis and severe accidents would be small. See ER at E-4-84 to -87.[60] In the face of these environmental impact determinations, Petitioners' generalized claims of missing or inadequate discussion, unsupported by any relevant technical analysis,[61] fails to cross the threshold of providing sufficient factual or expert opinion support or of establishing a material dispute with the application, as required by section 2.309(f)(1)(v)–(vi).

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[60] This, of course, is simply the final link in an analytical chain that includes the incorporated-by-reference 2013 Revised GEIS, which reached the same conclusion relative to the 1996 GEIS, as did the earlier NRC Staff site-specific analysis of design-basis and severe accidents for North Anna prepared in conjunction with the initial license renewal application for the North Anna units. See 2013 Revised GEIS at 4-160; North Anna GEIS Supp. at 5-1 to -4.

[61] The best that Petitioners offer in this regard are references to agency documents that are alleged to support (1) assertions about the generic uncertainties surrounding aging SSCs, including reactor pressure vessel embrittlement, irradiation-assisted stress corrosion cracking of reactor internals, concrete structures and containment degradation, and electrical cable qualification and condition assessment, as well as the harvesting of decommissioned reactor components that purportedly have not been resolved by the agency; and (2) a claim that the VEPCO ER is deficient because it fails to address the environmental impacts of operating the North Anna facility with aging equipment, including a purported deficiency in the safety portion of the VEPCO SLR application for failing to adequately analyze the significance of 2011 Mineral earthquake ground motion values relative to the facility's aging equipment. See Hearing Petition at 14, 19–25 (citing Memorandum from Mark A. Satorius, NRC Executive Director for Operations (EDO), to NRC Commissioners, Ongoing Staff Activities to Assess Regulatory Considerations for Power Reactor [SLR], SECY-14-0016 (Jan. 31, 2014) (ADAMS Accession No. ML14050A306) [hereinafter SECY-14-0016]); 1–5 RES, NRC, Expanded Materials Degradation Assessment (EMDA), NUREG/CR-7153, ORNL/TM-2013/532 (Oct. 2014) (ADAMS Accession Nos. ML14279A321, ML14279A331, ML14279A349, ML14279A430, ML14279A461) [hereinafter EMDA]).

According to the Staff, however, Petitioners mischaracterized the nature of SECY-14-0016, the referenced Staff recommendation to institute an SLR rulemaking that the Commission rejected in favor of alternatives such as updated guidance and generic communications. See Staff Answer at 51–52 (citing Memorandum from Annette L. Vietti-Cook, Secretary, to Mark A. Satorius, EDO, Staff Requirements—SECY-14-0016—Ongoing Staff Activities to Assess Regulatory Considerations for Power Reactor [SLR] at 1 (Aug. 29, 2014) (ADAMS Accession No. ML14241A578)). Further, the Staff asserts that, while quoting the joint NRC/Department of Energy five-volume EMDA report's concerns about degradation research needs during the post-60-year reactor operation period, Petitioners failed to acknowledge the revised agency guidance regarding aging effects management during the SLR period that was relied upon by VEPCO in its SLR application. See id. at 50–51 (citing NRR, NRC, Standard Review Plan for Review of [SLR] Applications for Nuclear Power Plants (SRP-SLR), Final Report, NUREG-2192 (July 2017) (ADAMS Accession No. ML17188A158); 1–2 NRR, NRC,

Finally, Petitioners claim that the ER needed to include a discussion of cumulative impacts, including the effects of earthquakes, on purported Staff-identified aging problems associated with SSCs operating during the SLR term to avoid "significant knowledge gaps and uncertainties in predicting long-term aging behavior." Hearing Petition at 14, 29 (citing SECY-14-0016, at 1; EMDA Report). But by improperly conflating a reactor safety issue, i.e., the cumulative effect of earthquakes on aging SSCs, with the requirement to consider cumulative environmental impacts under 10 C.F.R. § 51.53(c)(3)(ii)(O),[62] Petitioners demand an analysis that is not required by the agency's environmental regulations.[63] As such, this claim is

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Generic Aging Lessons Learned for [SLR] (GALL-SLR) Report, Final Report, NUREG-2191 (July 2017) (ADAMS Accession Nos. ML17187A031 and ML17187A204); VEPCO, North Anna Power Station Units 1 and 2, Application for [SLR] at 2-6, 3-1, app. B at B-1 (Aug. 2020) (ADAMS Accession No. ML20246G696)). And, according to the Staff, Petitioners' concern about the lack of consideration of the 2011 Mineral earthquake in connection with the application's analysis of safety equipment improperly tries to bring the Staff's reactor restart DBE assessment into question, as well as impermissibly challenges the current licensing basis of the North Anna facility. See id. at 52–53 & n.256 (quoting AmerGen Energy Co., LLC *(*Oyster Creek Nuclear Generating Station*),* CLI-09-7, 69 NRC 235, 272 n.209 (2009) ("[A] challenge to the adequacy of the acceptance criteria (or any other component of the current licensing basis) is not within the scope of the license renewal proceeding.")).

We agree with the Staff that these purported concerns fail to support the contention's admissibility under section 2.309(f)(1)(iii), (iv), and (vi) as outside the scope of the proceeding, lacking materiality, and failing to establish a genuine dispute with the application.

[62] Section 51.53(c)(3)(ii)(O) states that "[a]pplicants shall provide information about other past, present, and reasonably foreseeable future actions occurring in the vicinity of the nuclear plant that may result in a cumulative effect."

[63] To support this argument, Petitioners reference the licensing board decision in Interim Storage Partners LLC (WCS Consolidated Interim Storage Facility), LBP-19-7, 90 NRC 31, 106 & n.510 (2019), aff'd, CLI-20-14, 92 NRC __, __ (slip op. at 20) (Dec. 17, 2020) (indicating petitioners' cumulative impacts contention among those dismissed by licensing board and not appealed), for the proposition that "[a]n EIS also must include an evaluation of the cumulative impacts of a proposed action." See Hearing Petition at 9. In WCS, in considering whether a proffered contention concerning cumulative impacts was admissible for hearing, the licensing board, quoting Colo. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1176 (10th Cir. 1999), noted that the petitioners had stated correctly that "under NEPA, an EIS 'must analyze not only the direct impacts of a proposed action, but also the indirect and cumulative impacts of "past, present, and reasonably foreseeable future actions."'" WCS, LBP-19-7, 90 NRC at 106 (quoting Joint

neither material to the findings the NRC must make nor does it establish a genuine dispute with the application under section 2.309(f)(1)(iv) and (vi).

We thus find Petitioners' contention inadmissible.

V. CONCLUSION

For the reasons set forth above in section II.B., Petitioners have provided an adequate showing to establish their representational standing in this SLR proceeding for VEPCO's North Anna facility. Nonetheless, for the reasons described in sections III.B and IV.B above, we find Petitioners have failed to justify (1) certifying to the Commission the matter of whether to grant a waiver of the 10 C.F.R. Part 51 provisions that otherwise exclude environmental consideration of the 2011 Mineral, Virginia beyond DBE as part of the adjudicatory process associated with VEPCO's SLR application; and (2) admitting their contention challenging the ER's purported

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Petitioners' Petition at 138). Such a cumulative environmental impacts analysis is included in the VEPCO ER, however. Consistent with section 51.53(c)(3)(ii)(O) and agency guidance on ER preparation for license renewal applications, see RES, NRC, Preparation of [ERs] for Nuclear Power Plant License Renewal Applications, Regulatory Guide 4.2, Supp. 1, at 47–49 (rev. 1 June 2013) (ADAMS Accession No. ML13067A354), the VEPCO ER provides a discussion of cumulative impacts over the SLR term with regard to land use and visual resources, air quality and noise, geology and soils, water resources, ecological resources, historic and archaeological resources, socioeconomics, human health, and waste management. See ER at E-4-62 to -79. Petitioners offer no explanation about why, under the NRC's environmental regulations, a "cumulative impacts" analysis must include a discussion of the cumulative safety impacts of earthquakes on aging SSCs.

failure under Part 51 to assess properly the environmental impacts of the 2011 Mineral seismic event. Accordingly, Petitioners' hearing request cannot be granted.

For the foregoing reasons, it is this twenty-ninth day of March 2021, ORDERED, that:

1. The December 14, 2020 hearing request of petitioners Beyond Nuclear, Inc., the Sierra Club, and Alliance for a Progressive Virginia is denied and this proceeding is terminated.

2. In accordance with the provisions of 10 C.F.R. § 2.311, as this memorandum and order rules upon an intervention petition, any appeal to the Commission from this memorandum and order must be taken within 25 days after this issuance is served.

THE ATOMIC SAFETY
AND LICENSING BOARD

/RA/

G. Paul Bollwerk, III, Chairman
ADMINISTRATIVE JUDGE

/RA/

Nicholas G. Trikouros
ADMINISTRATIVE JUDGE

/RA/

Dr. Gary S. Arnold
ADMINISTRATIVE JUDGE

Rockville, Maryland

March 29, 2021

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
VIRGINIA ELECTRIC AND POWER COMPANY	)	Docket Nos. 50-338 and 50-339-SLR
	)	
(North Anna Power Station Units 1 and 2)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the **MEMORANDUM AND ORDER (Denying Intervention Petition and Terminating Proceeding) (LBP-21-04)** have been served upon the following persons by Electronic Information Exchange.

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Office of the Secretary of the Commission

Dated at Rockville, Maryland,
this 29th day of March 2021.