

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

VIRGINIA ELECTRIC AND POWER
COMPANY

(North Anna Power Station, Units 1 and 2)

Docket Nos. 50-338-SLR
50-339-SLR

NRC STAFF ANSWER TO HEARING REQUEST, PETITION TO INTERVENE, AND PETITION
FOR WAIVER FILED BY BEYOND NUCLEAR, SIERRA CLUB, AND ALLIANCE FOR
PROGRESSIVE VIRGINIA

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PROGRESSIVE VIRGINIA**

INTRODUCTION

In accordance with 10 C.F.R. § 2.309(i), the U.S. Nuclear Regulatory Commission (NRC) staff (Staff) hereby files its answer to the hearing request, petition to intervene, and waiver petition filed by Beyond Nuclear, Inc., Sierra Club, and Alliance for Progressive Virginia (collectively, the Petitioners),¹ concerning the subsequent license renewal application (SLRA) submitted by Virginia Electric and Power Company (Dominion or Applicant) for North Anna Power Station, Unit Nos. (Units) 1 and 2 (North Anna). The Petitioners offer one contention in their petition that challenges Dominion's environmental report (ER), and the ER's alleged failure to address the environmental significance of a magnitude 5.8 earthquake that originated near Mineral, Virginia on August 23, 2011.

¹ See "Hearing Request and Petition to Intervene by Beyond Nuclear, Sierra Club, and Alliance for Progressive Virginia 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) (ADAMS Accession No. ML20349D952) [hereinafter Petition or Waiver Petition].

For the reasons described below, the hearing request, intervention petition, and waiver petition should be denied. The Staff acknowledges that the Petitioners have demonstrated representational standing to intervene in this proceeding. However, they have not met the standard required to receive a waiver under 10 C.F.R. § 2.335 and have not sought a waiver of the requirements in 10 C.F.R. Part 51, Appendix B, Table B-1 or the exception in 10 C.F.R. § 51.53(c)(3)(ii)(L), both of which must be waived to litigate Petitioners' concerns. Further, the Petitioners have not proffered an admissible contention: the proffered contention does not raise an issue material to the findings the NRC must make, raises issues that are out of the scope of this proceeding, and does not create a genuine dispute with Dominion's application. Ultimately, Petitioners have not met the waiver requirements or the contention admissibility requirements, both of which must be met to receive a hearing on the issues raised in the Petition.

Below the Staff (1) briefly describes the background of this proceeding; (2) discusses the legal principles governing standing and analyzes the Petitioner's standing to intervene; (3) summarizes the North Anna design basis earthquake (DBE) and NRC's oversight activities at North Anna following the 2011 Mineral, VA earthquake and the 2011 accident at Fukushima; (4) discusses the legal principles governing contention admissibility, waiver petitions, license renewal proceedings, and environmental reviews of SLRAs; (5) analyzes the petition for waiver; and (6) analyzes the admissibility of the Petitioners' contention.

BACKGROUND

This proceeding concerns the application submitted by Dominion in August 2020² for the subsequent license renewal of Renewed Facility Operating License Nos. NPF-4 and NPF-7 to permit an additional 20 years of operation of North Anna. The current renewed operating

² North Anna Power Station Units 1 and 2, Application for Subsequent License Renewal (August 2020 (ML20246G696) [hereinafter SLRA]. The application includes "Appendix E, Applicant's Environmental Report, Subsequent Operating License Renewal Stage, North Anna Power Station Units 1 and 2" (ML20246G698) [hereinafter ER].

licenses for Units 1 and 2 expire at midnight on April 1, 2038 and August 21, 2040, respectively.³ Thus, Dominion is seeking to extend the North Anna Unit 1 and 2 operating licenses to April 1, 2058, and August 21, 2060.⁴

North Anna Units 1 and 2 are located in Louisa County, Virginia and are adjacent to Lake Anna in the northeastern portion of the Commonwealth of Virginia.⁵ The northeastern-most portion of the site boundary extends into Spotsylvania County.⁶ North Anna is on an 1,803-acre (730-hectare) site, of which approximately 760 acres (308 hectares) are covered by water.⁷ Additionally, North Anna is approximately 40 miles (64 km) northwest of Richmond, Virginia, and approximately seven miles (11 km) northeast of the town of Mineral, Virginia.⁸

The NRC published a notice of receipt of the North Anna SLRA on September 21, 2020.⁹ Subsequently, the NRC determined that the application was acceptable for docketing and published notice of opportunity to request a hearing and to petition for leave to intervene on October 15, 2020.¹⁰ On December 14, the Petitioners timely filed a request for hearing and petition for leave to intervene.¹¹ This Atomic Safety and Licensing Board was established on December 21, 2020, to preside over the contested proceeding.¹²

³ North Anna Power Station, Unit No. 1, Renewed Facility Operating License No. NPF-4 at 9 (ML052990145); North Anna Power Station, Unit No. 2, Renewed Facility Operating License No. NPF-7 (ML052990147); *see also* SLRA at 1-2.

⁴ *See* SLRA at 1-7.

⁵ ER at E-3-1.

⁶ *Id.*

⁷ *Id.*

⁸ *See id.* at E-3-1, E-3-2.

⁹ North Anna Power Station, Units 1 and 2, 85 Fed. Reg. 59,334 (Sep. 21, 2020).

¹⁰ North Anna Power Station, Units 1 and 2, 85 Fed. Reg. 65,438 (Oct. 15, 2020).

¹¹ The Petitioners submitted a request for a 32-day extension of the December 14, 2020 filing deadline. That request was denied on December 9, 2020. Order of the Secretary, at 1 (Dec. 9, 2020) (unpublished) (ML20344A438).

¹² Virginia Electric and Power Co. (North Anna Power Station, Units 1 and 2), Establishment of Atomic Safety and Licensing Board (Dec. 21, 2020) (ML20356A175).

DISCUSSION

I. Standing to Intervene

A. Applicable Legal Requirements

Under the Commission's Rules of Practice, any person (petitioner) whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for hearing or petition for leave to intervene. The petition must include the contentions that the petitioner seeks to litigate in the hearing.¹³ The presiding officer will grant the petition if it determines that the petitioner has standing under 10 C.F.R. § 2.309(d) and has proposed at least one admissible contention that meets the requirements of 10 C.F.R. § 2.309(f).¹⁴

Under the general standing requirements set forth in 10 C.F.R. § 2.309(d)(1), a petition must state:

- (i) The name, address, and telephone number of the petitioner;
- (ii) The nature of the petitioner's right under the Atomic Energy Act of 1954 to be made a party to the proceeding;
- (iii) The nature and extent of the petitioner's property, financial, or other interest in the proceeding; and
- (iv) The possible effect of any decision or order that may be issued in the proceeding on the petitioner's interest.¹⁵

The regulations state that in ruling on a petition, the presiding officer "must determine, among other things, whether the petitioner has an interest affected by the proceeding considering the factors enumerated in" § 2.309(d)(1).¹⁶

¹³ 10 C.F.R. § 2.309(a). As defined in 10 C.F.R. § 2.4, "*Person* means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency other than the Commission . . . , any State or any political subdivision of, or any political entity within a State, any foreign government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing."

¹⁴ 10 C.F.R. § 2.309(a).

¹⁵ 10 C.F.R. § 2.309(d)(1).

¹⁶ 10 C.F.R. § 2.309(d)(2). The presiding officer may also consider a request for discretionary intervention

As the Commission has observed, the NRC has “long applied contemporaneous ‘judicial concepts of standing,’” which requires “an actual or threatened injury that is fairly traceable to the challenged action, is likely to be redressed by a favorable decision, and arguably falls within the ‘zone of interest’ protected by the AEA.”¹⁷ The “injury ‘must be both concrete and particularized, not conjectural, or hypothetical.’”¹⁸ Further, at “the heart of the standing inquiry is whether the petitioner has ‘alleged such a personal stake in the outcome of the controversy’ as to demonstrate that a concrete adverseness exists which will sharpen the presentation of issues.”¹⁹

While the Commission generally requires the elements of standing to be pled with specificity, standing to intervene has been found to exist in construction permit and operating license proceedings based upon a “proximity” presumption.²⁰ In such proceedings, standing is presumed for persons who reside in, or have frequent contact with, the zone of possible harm from the nuclear reactor.²¹ In practice, the Commission has found standing based on the proximity presumption for persons who reside within approximately 50 miles of the facility.²² As

when a petitioner is determined to lack standing to intervene as a matter of right, where a sufficient showing is made with respect to the factors enumerated in 10 C.F.R. § 2.309(e).

¹⁷ *El Paso Elec. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-20-07, 92 NRC ___, ___ (Sep. 15, 2020) (slip op. at 4) (quoting *Calvert Cliffs 3 Nuclear Project, LLC and Unistar Nuclear Operating Servs., LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009)).

¹⁸ *Palo Verde*, CLI-20-07, 92 NRC at ___ (slip op. at 4–5) (quoting *Sequoyah Fuels Corp. and General Atomics* (Gore, Okla. Site), CLI-94-12, 40 NRC 64, 72 (1994)).

¹⁹ *Sequoyah Fuels*, CLI-94-12, 40 NRC at 71 (quoting *Duke Power Co. v. Carolina Env'tl. Study Group, Inc.*, 438 U.S. 59, 72 (1978)).

²⁰ See, e.g., *Calvert Cliffs 3 Nuclear Project, LLC and Unistar Nuclear Operating Servs., LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-17 (2009) (quoting *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)).

²¹ *Id.* at 915.

²² *Id.* at 915-16.

noted by the Commission, Licensing Boards have also employed the proximity presumption to establish standing to intervene in reactor operating license renewal proceedings.²³

An organization seeking to intervene “must satisfy the same standing requirements as an individual seeking to intervene.”²⁴ The organization may establish standing based on organizational standing (showing that its own organizational interests could be adversely affected by the proceeding), or representational standing (based on the standing of its members). Where an organization seeks to establish “representational standing,” the organization must demonstrate that “at least one of its members may be affected” by the proceeding and these members, who must be identified by name, have authorized the organization to represent them and to request a hearing on their behalf.²⁵ Further, the “member seeking representation must qualify for standing in [their] own right; the interests that the representative organization seeks to protect must be germane to its purpose; and neither the asserted claim nor the requested relief must require an individual member to participate in the organization’s legal action.”²⁶

B. Petitioners’ Standing to Intervene

The Petition states that Beyond Nuclear is a nonprofit organization that aims to educate and activate the public about the connections between nuclear power and nuclear weapons and the need to abolish both to protect the public health and safety, prevent environmental harms,

²³ *Id.* at 915 n.15 (noting that the Board in *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-06, 53 NRC 138, 150, *aff’d on other grounds*, CLI-01-17, 54 NRC 3 (2001) was “applying [the] proximity presumption in [a] reactor operating license renewal proceeding”).

²⁴ *Palo Verde*, CLI-20-07, 92 NRC at ___ (slip op. at 5).

²⁵ *FirstEnergy Nuclear Operating Co. and FirstEnergy Nuclear Generation, LLC* (Beaver Valley Power Station, Units 1 and 2; Davis-Besse Nuclear Power Station, Unit 1; Perry Nuclear Power Plant, Unit 1), CLI-20-05, 91 NRC 214, 220 (2020); *Consumers Energy Co.* (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 409-10 (2007).

²⁶ *Beaver Valley*, CLI-20-05, 91 NRC at 220 (citing *Entergy Nuclear Operations, Inc. and Entergy Nuclear Palisades, LLC* (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 258 (2008); *Private Fuel Storage, L.L.C.* (Indep. Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 323 (1999)).

and safeguard the future.²⁷ It further states that Sierra Club is a national environmental organization that focuses on using all lawful means to protect earth's ecosystems and resources and to protect and restore the quality of the natural and human environment.²⁸ Finally, the Petition states that Alliance for Progressive Virginia is an all-volunteer, nonprofit organization focused on educating and influencing the public, media, and elected officials about important issues of the day.²⁹

Each Petitioner seeks to establish representational standing to intervene, based on the individual standing of its members. Each Petitioner attached Declarations by multiple members in support of the Petition, in which the members provided their home addresses, stated that they live within a 50 mile radius of North Anna, that extended operations at North Anna cause them concern regarding their own, and their families', health, safety, and economic wellbeing, and that they are concerned about the potential for environmental damage that could result from North Anna's continued operation.³⁰ The declarants also stated that they are members of their respective organizations and that they authorize their respective organizations to represent their interests in this proceeding.³¹

In the Staff's view, Beyond Nuclear, Sierra Club, and Alliance for a Progressive Virginia have established representational standing to intervene in this proceeding. Each Petitioner provided the name and address of at least one of its members, who stated that they are concerned about the environmental impacts of continued operations of North Anna Power Station. The Declarations demonstrate that the members reside within 50 miles of the facility, and that they authorize their respective organizations to represent their interests in this

²⁷ Petition at 4.

²⁸ *Id.*

²⁹ *Id.* at 5.

³⁰ *See id.* Att. 1A-1K.

³¹ *Id.*

proceeding. As such, each of the Petitioners has shown that at least one of its members would have standing to intervene in their own right, based on the proximity presumption, and that those members have authorized their organizations to represent their interests here. Accordingly, each of the Petitioners has satisfactorily established its representational standing to intervene in the proceeding under the proximity presumption.³²

II. The North Anna DBE and NRC Oversight Activities at North Anna Following the 2011 Mineral Earthquake

As discussed more fully in Section VI below, the Petitioners' contention challenges Dominion's ER, and the ER's alleged failure to address the environmental significance of a magnitude 5.8 earthquake that took place in Mineral, Virginia on August 23, 2011. Among other things, the Petitioners argue that because the 2011 Mineral earthquake exceeded North Anna's design basis, the assumption that those reactors could be operated safely and without significant adverse environmental impacts was disproved.³³ Accordingly, the Petitioners contend that Dominion must analyze the probability and consequences of reactor accidents caused or contributed by earthquakes in the second license renewal term.³⁴ The discussion below briefly summarizes the North Anna DBE and the NRC's oversight activities related to seismic conditions at North Anna following the 2011 earthquake.³⁵

A nuclear power plant's design basis must take into account the potential effects of two levels of earthquake motion—the Safe Shutdown Earthquake (SSE) and the Operating Basis Earthquake (OBE).³⁶ The SSE represents an earthquake that produces the maximum vibratory

³² See e.g., *Palo Verde*, CLI-20-07, 92 NRC at ___ (slip op. at 6); *Calvert Cliffs*, CLI-09-20, 70 NRC at 911.

³³ Petition at 13.

³⁴ *Id.*

³⁵ As noted in Section IV.C below, seismic conditions and hazards are considered an ongoing safety issue and fall outside the scope of this license renewal proceeding.

³⁶ See generally 10 C.F.R. Part 100, app A. The geologic and seismic siting criteria in 10 C.F.R. Part 100 apply here because North Anna's construction permits were issued prior to January 10, 1997. See 10 C.F.R. § 100.23(a); see also 10 C.F.R. Part 50, app. S, General Information.

ground motion for which certain structures, systems, and components are designed to remain functional.³⁷ For North Anna, the SSE is also known as the Design Basis Earthquake (DBE).³⁸ The OBE is the lesser of the two ground motions and represents an earthquake which produces the vibratory ground motion for which those features of the nuclear power plant necessary for continued operation without undue risk to the health and safety of the public are designed to remain functional.³⁹

Shortly following the August 23, 2011 Mineral earthquake, both the Unit 1 and Unit 2 reactors tripped, and the station experienced a loss of offsite power.⁴⁰ During the earthquake, both the OBE and DBE were exceeded for a short period of time.⁴¹ Following the earthquake, Dominion stabilized both units and took them to a safe shutdown condition.⁴² Offsite power was also restored.⁴³ Because the earthquake resulted in ground accelerations greater than what was assumed in the design of North Anna,⁴⁴ the facility remained shut down until the licensee

³⁷ 10 C.F.R. Part 100, app. A § III(c). The SSE is based upon an evaluation of the maximum earthquake potential considering regional and local geology and seismology and the specific characteristics of local subsurface material. *Id.*

³⁸ “North Anna Power Station, Units 1 and 2, Technical Evaluation Related to Plant Restart after the Occurrence of an Earthquake Exceeding the Level of the Operating Basis and Design Basis Earthquakes,” at PDF 13 (Nov. 11, 2011) (ML11308B406) [hereinafter North Anna Power Station, Technical Evaluation Related to Plant Restart]. For structures founded on rock, North Anna’s DBE was taken at 0.12g for horizontal ground motion and two-thirds of that value (0.8g) for vertical ground motion. For structures founded on soil, the DBE was taken at 0.18g for horizontal motion and 0.12g for vertical motion. *Id.* at PDF 14.

³⁹ 10 C.F.R. Part 100, app. A § III(d). The OBE is that earthquake which, considering the regional and local geology and seismology and specific characteristics of local subsurface material, could reasonably be expected to affect the plant site during the operating life of the plant. *Id.*

⁴⁰ North Anna Power Station, Technical Evaluation Related to Plant Restart at PDF 2

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ In accordance with 10 C.F.R. Part 100, app. A § V(a)(2), a nuclear power plant is required to be shut down when the vibratory ground motion exceeds that of the OBE.

was able to demonstrate to the NRC's satisfaction that no functional damage had occurred to any features necessary for continued operation.⁴⁵

In response to the earthquake, the licensee performed a number of inspections, tests, and analysis to demonstrate that no functional damage had occurred as a result of the earthquake.⁴⁶ After a thorough investigation, the NRC Staff concluded that the licensee had performed adequate inspections, walkdowns, and testing to ensure that the safety-related structures, systems, and components (SSCs) had not been adversely affected by the earthquake.⁴⁷ Further, the Staff conducted its own independent inspection of plant equipment, observed North Anna's surveillance testing, reviewed test data and calculations, and confirmed the operability and functionality of North Anna's SSCs.⁴⁸ On November 11, 2011, the Staff completed its evaluation and determined that North Anna could be safely restarted based on its finding that the licensee demonstrated that no functional damage occurred to those features necessary for continued operation, and that North Anna can be operated without undue risk to the health and safety of the public.⁴⁹ The Staff did not require North Anna to update its DBE in response to the Mineral earthquake.⁵⁰

In addressing the potential restart of the North Anna reactors, Dominion identified several inspections and tests it would perform as part of the restart process; Dominion also

⁴⁵ North Anna Power Station, Technical Evaluation Related to Plant Restart at PDF 2. On September 30, 2011, the NRC issued a Confirmatory Action Letter confirming the licensee's commitment that it would not restart North Anna until it receives NRC approval for restart. See Confirmatory Action Letter Regarding North Anna Power Station Unit Nos. 1 and 2, Commitments to Address Exceeding Design Bases Seismic Event (CAL No. 2-2011-001) (Sept. 30, 2011) (ML11273A078).

⁴⁶ North Anna Power Station, Technical Evaluation Related to Plant Restart at PDF 2.

⁴⁷ *Id.* at PDF 3.

⁴⁸ *Id.*

⁴⁹ *Id.* The NRC Staff noted that there was some earthquake-related damage to non-safety-related equipment observed at North Anna; however, this damage was considered minor in that it was not functional damage that would preclude safe operation of the facility. *Id.*

⁵⁰ See *generally* North Anna Power Station, Technical Evaluation Related to Plant Restart.

identified and committed to complete several long-term action items to address the impact of the 2011 earthquake, including committing to implement a Seismic Margin Management Plan (SMMP), reevaluating its time limited aging analyses, and revising its Final Safety Analysis Report (FSAR).⁵¹ In particular, to ensure adequate seismic margins were maintained for plant SSCs, Dominion committed to evaluate plant modifications for the effects of the 2011 Mineral earthquake in addition to evaluation of the DBE.⁵² On December 24, 2015, the Staff found that Dominion had completed all long-term actions that it had committed to, including implementation of the long-term SMMP to ensure that plant modifications will be evaluated for the effects of the Mineral earthquake and that seismic margin will be maintained.⁵³

III. NRC Oversight Activities Following the Accident at Fukushima

Prior to the Mineral earthquake, the NRC had begun taking action to confirm the safety of U.S. nuclear power plants with respect to seismic hazards in response to the March 11, 2011 earthquake and subsequent tsunami that hit the Fukushima Dai-ichi Nuclear Power Station in Japan.⁵⁴ Consequently, the NRC Staff's assessment of the Mineral earthquake's impact on North Anna took place during the Staff's post-Fukushima assessment of seismic hazards at numerous U.S. plants, including North Anna.

⁵¹ For a complete list of Dominion's long-term action item commitments for North Anna, see "Confirmatory Action Letter Regarding North Anna Power Station, Unit Nos. 1 and 2, Long-Term Commitments to Address Exceeding Design Bases Seismic Event" (CAL No. NRR-2011-002) (Nov. 11, 2011) (ML11311A201).

⁵² *Id.* at PDF 4. See also Letter from Eric J. Leeds, NRC, to David A. Heacock, Dominion, "North Anna Power Station, Units 1 and 2, Technical Evaluation of Restart Readiness Determination Plan," at 1-2 (Nov. 11, 2011) (ML11308B405) [hereinafter North Anna Restart Letter] (noting Dominion's commitment that the seismic ground acceleration and derived in-structure response spectra from North Anna's DBE and the 2011 Mineral earthquake would be included in any future seismic analysis to determine the maximum bounding design values for future modifications).

⁵³ "Closure of Confirmatory Action Letter Regarding North Anna Power Station, Unit Nos. 1 and 2" (Dec. 24, 2015) (ML15015A575).

⁵⁴ See "Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," at PDF 1-2 (Mar. 12, 2012) (ML12053A340) [hereinafter March 2012 50.54(f) Request].

On March 12, 2012, the NRC issued a request under 10 C.F.R. § 50.54(f), as part of implementing lessons learned from the accident at Fukushima, that, among other things, requested licensees to reevaluate the seismic hazards at their sites using present-day methodologies and guidance to develop a ground motion response spectrum (GMRS).⁵⁵ The North Anna GMRS was found to exceed the plants' DBE.⁵⁶ Because the reevaluated seismic hazard for North Anna, as characterized by the GMRS, was not bounded by the current plant-design basis SSE, the NRC requested that Dominion complete a seismic probabilistic risk assessment (Seismic PRA) to determine if plant enhancements were warranted.⁵⁷

Dominion submitted its Seismic PRA on March 28, 2018.⁵⁸ The NRC Staff reviewed Dominion's Seismic PRA and concluded that the results and risk insights provided by the Seismic PRA support the NRC's determination that no further response or regulatory action are required at North Anna.⁵⁹ The Staff also noted that the actions taken by Dominion and experience gained after the 2011 Mineral earthquake "provide additional assurance regarding

⁵⁵ See *id.* at 11-13. 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 damping value. 10 C.F.R. Part 100, app. A § III(d). The GMRS typically represents the first part of the development of the SSE for a site a characterization of the regional and local seismic hazards. See Regulatory Guide 1.208, "A Performance-Based Approach To Define the Site-Specific Earthquake Ground Motion" (Mar. 2007) (ML070310619), for more information on developing a site-specific, performance-based GMRS.

⁵⁶ "North Anna Power Station, Units 1 and 2—Staff Assessment of Information Provided Pursuant to [10 CFR 50.54(f)], Seismic Hazards Reevaluations Relating to Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident" at PDF 6 (April 20, 2015) (ML15057A249) (noting that the licensee will perform a seismic risk evaluation because the GMRS exceeded the DBE over the frequency range of 1 to 10 Hz).

⁵⁷ *Id.*; March 2012 50.54(f) Request at PDF 11-15.

⁵⁸ "North Anna Power Station, Units 1 and 2 Response to March 12, 2012 Information Request Seismic Probabilistic Risk Assessment for Recommendation 2.1" (Mar. 28, 2018) (ML18093A445).

⁵⁹ "North Anna Power Station, Units 1 and 2 – Staff Review of Seismic Probabilistic Risk Assessment Associated with Reevaluated Seismic Hazard Implementation of the Near-Term Task Force Recommendation 2.1: Seismic" at 1, PDF 5-6 (Apr. 25, 2019) (ML19052A522) [hereinafter NRC Staff Review of Seismic PRA] (finding that a backfit was not warranted because the staff did not identify any potential modifications that would result in substantial reductions in the seismic core damage frequency (SCDF) and mean seismic large early release frequency (SLERF), substantial safety improvement, or that would be appropriate to consider necessary for adequate protection or compliance).

North Anna’s ability to handle a beyond-design-basis seismic event.”⁶⁰ In its June 9, 2020 letter completing its post-Fukushima assessment for North Anna, the Staff noted that North Anna had implemented the safety enhancements mandated by the NRC based on the lessons learned from the Fukushima accident and stated that the NRC will continue to provide oversight of North Anna’s seismic safety enhancements through the Reactor Oversight Process.⁶¹

IV. Legal Standards

A. General Requirements for Contention Admissibility

The legal requirements governing the admissibility of contentions are set forth in 10 C.F.R. § 2.309(f)(1)-(2). Specifically, a petition must “set forth with particularity” the contentions that a petitioner seeks to raise and, for each contention, the petition must:

- (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;⁶²
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;⁶³
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the

⁶⁰ *Id.* at PDF 5.

⁶¹ “North Anna Power Station, Units 1 and 2 – Documentation of the Completion of Required Actions Taken in Response to the Lessons Learned from the Fukushima Dai-Ichi Accident,” at 1 (June 9, 2020) (ML20139A077). The Staff noted that no further information related to the reevaluated seismic hazard is required. *Id.* at 8. The Staff also considered the revised Mitigation of Beyond-Design-Basis-Events (MBDBE) rule in its assessment and confirmed that the conclusions in the various other staff assessments support a determination that no further regulatory requirements are needed for North Anna. *Id.*

⁶² Contentions cannot be based on speculation and must have “some reasonably specific factual or legal basis.” *Entergy Nuclear Vt. Yankee, LLC and Entergy Nuclear Operations, Inc.*, (Vermont Yankee Nuclear Power Station), CLI-15-20, 82 NRC 211, 221 (2015).

⁶³ All proffered contentions must be within the scope of the proceeding as defined by the Commission in its initial hearing notice and order referring the proceeding to the licensing board. See *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000). As a consequence, any contention that falls outside the specified scope of the proceeding must be rejected. See *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 435-36 (2011).

action that is involved in the proceeding;⁶⁴

- (v) Provide a concise statement of the alleged facts or expert opinions that support the 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 petitioner intends to rely to support its position on the issue;⁶⁵ and
- (vi) Provide sufficient information to show that a genuine dispute exists with the applicant or 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.⁶⁶

Further, "contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner."⁶⁷ "On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report."⁶⁸

⁶⁴ "A dispute at issue is material if its resolution would make a difference in the outcome of the licensing proceeding." *Holtec Int'l* (Hi-STORE Consolidated Interim Storage Facility), CLI-20-04, 91 NRC 167, 190 (2020) (internal quotations omitted).

⁶⁵ The petitioner is obliged to present the facts and expert opinions necessary to support its contention. See *USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 457 (2006) (it is the petitioner's responsibility to satisfy the basic contention admissibility requirements; Boards should not have to search through a petition to "uncover" arguments and support for a contention, and "may not simply 'infer' unarticulated bases of contentions"). See also *Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 and 3), CLI-91-12, 34 NRC 149, 155 (1991).

⁶⁶ To show that a genuine dispute exists the contention "must include references to specific portions of the application that the petitioner disputes and the supporting reasons for each dispute" and if the petitioner believes that the application fails to contain information on a relevant matter, "the contention must identify each failure and the supporting reasons for the petitioner's belief." *Exelon Generation Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-20-11, 92 NRC ____, (Nov. 12, 2020) (slip op. at 10).

⁶⁷ 10 C.F.R. § 2.309(f)(2).

⁶⁸ *Id.*

The Commission's regulations governing contention admissibility are intended to "focus litigation on concrete issues and result in a clearer and more focused record for decision."⁶⁹ The Commission has explained that the contention admissibility rules are "strict by design."⁷⁰ "Failure to satisfy any of the six pleading requirements renders a contention inadmissible."⁷¹ The rules require "a clear statement as to the basis for the contentions and the submission of ... supporting information and references to specific documents and sources that establish the validity of the contention."⁷² Although a petitioner does not have to prove its contention at the admissibility stage,⁷³ the contention admissibility standards are meant to only afford hearings to those who "proffer at least some minimal factual and legal foundation in support of their contentions."⁷⁴ The petitioner must provide some support for the contention, either in the form

⁶⁹ See e.g., *S. Nuclear Operating Co.* (Vogtle Elec. Generating Plant, Unit 3) LBP-20-08, 91 NRC ___, ___ (Aug. 10, 2020) (slip op. at 19) (quoting "Changes to Adjudicatory Process," 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004)); *Crow Butte Res., Inc.* (In Situ Leach Facility, Crawford, NE), LBP-15-15, 81 NRC 598, 601 (2015).

⁷⁰ *Entergy Nuclear Operations, Inc.* (Indian Point, Unit 2) CLI-16-5, 83 NRC 131, 136 (2016) (citing *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001) and *S. Carolina Elec. & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 7 (2010)). The Commission has stated that it "should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing." Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

⁷¹ *Indian Point*, CLI-16-5, 83 NRC at 136; see also *Duke Energy Corp.* (Oconee Nuclear Station), CLI-99-11, 49 NRC 328, 334-35 (1999) (the heightened contention admissibility rules are designed to preclude contentions "based on little more than speculation"). The requirements are intended, *inter alia*, to ensure that a petitioner reviews the application and supporting documents prior to filing contentions; that contentions are supported by at least some facts or expert opinion known to the petitioner at the time of filing; and that there exists a genuine dispute before a contention is admitted for litigation, to avoid the practice of filing contentions which lack any factual support and seeking to flesh them out later through discovery. *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-35, 34 NRC 163, 167-68 (1991).

⁷² *Amergen Energy Co.* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118 19 (2006) (quoting *Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, & 3), CLI-91-12, 34 NRC 149, 155-56 (1991)).

⁷³ *Private Fuel Storage L.L.C.* (Indep. Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004).

⁷⁴ *Oconee*, CLI-99-11, 49 NRC at 334.

of facts or expert testimony, and failure to do so requires that the contention be rejected.⁷⁵ Any supporting material provided by the petitioner is subject to scrutiny by the presiding officer,⁷⁶ and the presiding officer must confirm that the proffered material provides adequate support for the contention.⁷⁷ The Commission has long held that the “basis” requirements are intended to: (1) ensure that the contention raises a matter appropriate for adjudication in a particular proceeding; (2) establish a sufficient foundation for the contention to warrant further inquiry into the assertion; and (3) put other parties sufficiently on notice of the issues to be litigated.⁷⁸

If a petitioner neglects to provide the requisite support for its contentions, then the presiding officer should not make assumptions of fact that favor the petitioner or search for or supply information that is lacking.⁷⁹ Moreover, providing any material or document as a basis for a contention, without setting forth an explanation of its significance, is grounds for the presiding officer to reject the contention.⁸⁰ In sum, the information, facts, and expert opinions provided by the petitioner are to be examined by the presiding officer to determine whether they provide adequate support for the proffered contentions.⁸¹

Under the Commission’s caselaw, and absent a waiver, a contention must be rejected if it challenges applicable statutory requirements, regulations, or the basic structure of the

⁷⁵ *Palo Verde*, CLI-91-12, 34 NRC at 155; *accord*, *Indian Point*, CLI-16-5, 83 NRC at 136. See “Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process,” 54 Fed. Reg. at 33,170 (“This requirement does not call upon the intervener to make its case at this stage of the proceeding, but rather to indicate what facts or expert opinions, be it one fact or opinion or many, of which it is aware at that point in time which provide the basis for its contention.”).

⁷⁶ See *Vt. Yankee Nuclear Power Co.* (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), *vacated in part on other grounds and remanded*, CLI-90-4, 31 NRC 333 (1990); see also *Tenn. Valley Authority* (Bellefonte Nuclear Plant, Units 1 and 2), LBP-10-7, 71 NRC 391, 421 (2010).

⁷⁷ See *Vt. Yankee*, ALAB-919, 30 NRC at 48; see also *Bellefonte*, LBP-10-7, 71 NRC at 421.

⁷⁸ *Oconee*, CLI-99-11, 49 NRC at 328; See also *Phila. Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974).

⁷⁹ See *Am. Centrifuge Plant*, CLI-06-10, 63 NRC at 457.

⁸⁰ See *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 205 (2003).

⁸¹ *Am. Centrifuge Plant*, CLI-06-10, 63 NRC at 457; see *Bellefonte Nuclear Plant*, LBP-10-7, 71 NRC at 421.

Commission's regulatory process.⁸² Contentions that are nothing more than a generalization regarding the petitioner's view of what applicable policies ought to be must also be rejected.⁸³ Further, attempts to advocate for requirements stricter than those imposed by regulation constitute collateral attacks on the Commission's rules and are therefore inadmissible.⁸⁴

B. Standards Governing Petitions for Waiver

In general, NRC regulations are not subject to attack in an adjudicatory proceeding;⁸⁵ however, the application of a specific regulation may be waived or an exception may be made for a particular proceeding, upon the Commission's grant of a petition for waiver.⁸⁶ Because rules apply generically, rather than on a case-by-case basis, a waiver request must demonstrate 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 purpose for which the rule or regulation was adopted."⁸⁷

If the presiding officer determines that the petitioner has not made "a *prima facie* showing" that the application of the specific Commission rule or regulation (or provision thereof)

⁸² As set forth in 10 C.F.R. § 2.335(a), "no rule or regulation of the Commission ... is subject to attack ... in any adjudicatory proceeding," in the absence of a waiver petition granted by the Commission. See *also Dominion Nuclear Conn.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003). Further, any contention that amounts to an attack on applicable statutory requirements or represents a challenge to the basic structure of the Commission's regulatory process must be rejected. *Id.*

⁸³ *Millstone*, CLI-03-14, 58 NRC at 218.

⁸⁴ *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 315 (2012) (citations omitted); See *Peach Bottom*, ALAB-216, 8 AEC at 20-21 (explaining that a contention that seeks to raise an issue that is not proper for adjudication in the proceeding or that does not apply to the facility in question, or seeks to raise an issue that is not concrete or litigable must also be rejected).

⁸⁵ 10 C.F.R. § 2.335(a); see *also Millstone*, CLI-03-14, 58 NRC at 218.

⁸⁶ 10 C.F.R. § 2.335(a).

⁸⁷ 10 C.F.R. § 2.335(b); See *Pac. Gas and Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-15-21, 82 NRC 295, 302 (2015). The petition must be accompanied by an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule or regulation (or provision of it) would not serve the purposes for which the rule or regulation was adopted. The affidavit "must state with particularity the special circumstances alleged to justify the waiver or exception requested." 10 C.F.R. § 2.335(b). Other participants may file a response by counter-affidavit or otherwise. *Id.*

to a particular aspect or aspects of the subject matter of the proceeding would not serve the purposes for which the rule or regulation was adopted and that application of the rule or regulation should be waived or an exception granted, the presiding officer may not further consider the matter.⁸⁸ Moreover, even if the presiding officer determines that a *prima facie* showing has been made, they are required, before ruling on the petition, to certify the matter directly to the Commission for a determination of whether application of the rule or regulation (or provision thereof) should be waived or an exception made, in consideration of a particular aspect or aspects of the subject matter of the proceeding.⁸⁹

The Commission has established a four-factor test for waiver applications:

- (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.⁹⁰

Petitioners must satisfy all four factors to obtain a waiver.⁹¹ The waiver standard is "stringent by design," and the waiver petitioner faces a "substantial burden."⁹² To challenge the generic application of a rule, a petitioner seeking waiver of the rule must show that "there is something extraordinary about the subject matter of the proceeding such that the rule should not apply."⁹³

⁸⁸ 10 C.F.R. § 2.335(c).

⁸⁹ 10 C.F.R. § 2.335(d).

⁹⁰ *Pac. Gas and Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-15-21, 82 NRC 295, 302 (2015) (citing *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559–60 (2005)). The Commission has clarified that the fourth factor "also may apply to a significant environmental issue." *Exelon Generation Co.* (Limerick Generating Station, Units 1 and 2), CLI-13-07, 78 NRC 199, 209 (2013).

⁹¹ *Millstone*, CLI-05-24, 62 NRC at 560.

⁹² *Limerick*, CLI-13-07, 78 NRC at 207, 208

⁹³ *Limerick*, CLI-13-07, 78 NRC at 207.

These requirements apply, as well, to contentions challenging the generic “Category 1” determinations in the GEIS for license renewal, even challenges based on “new and significant information.”⁹⁴ As the Commission explained, “[f]undamentally, any contention on a ‘Category 1’ issue amounts to a challenge to our regulation that bars challenges to generic environmental findings,” and “adjudicating Category 1 issues site by site based on merely a claim of ‘new and significant information,’ would defeat the purpose of resolving generic issues in a GEIS.”⁹⁵ Therefore, to challenge the Staff’s analysis of new and significant information on a Category 1 issue, an intervenor must first obtain a waiver of the Commission’s rules adopting its generic environmental findings.⁹⁶

C. Scope of License Renewal Proceedings

The Commission’s regulations in 10 C.F.R. Part 54 limit the scope of a license renewal proceeding to those matters that must be considered for the license renewal application to be granted and that have not been addressed by rulemaking or on a generic basis.⁹⁷ Under 10

⁹⁴ *Entergy Nuclear Vt. Yankee, LLC and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 20 (2007).

⁹⁵ *Id.* at 20–21.

⁹⁶ *Accord, Exelon Generation Co.* (Limerick Generating Station, Units 1 and 2), CLI-12-19, 76 NRC 377, 386 (2012) (a waiver is required to litigate new information concerning SAMA issues, where the plant’s SAMAs were previously considered in an EIS, given the proscription of such further litigation under 10 C.F.R. § 51.53(c)(3)(ii)(L)—which the Commission viewed “as the functional equivalent of a Category 1 issue, removing SAMAs from litigation in this, as well as certain other, case-by-case license renewal adjudications”).

⁹⁷ *Oyster Creek*, CLI-06-24, 64 NRC at 117-18; *see also* 10 C.F.R. § 54.29; *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 8-10 (2001).

The standards in 10 C.F.R. Part 54 and the environmental regulations related to license renewal set forth in 10 C.F.R. Part 51 and Appendix B thereto establish the scope of issues that may be considered in a license renewal proceeding. *See generally* Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943 (Dec. 13, 1991); Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461 (May 8, 1995). As the Commission made clear in 2014, the existing regulatory framework and regulatory process for license renewals also apply to subsequent license renewals. *See* “Staff Requirements—SECY-14-0016—Ongoing Staff Activities to Assess Regulatory Considerations for Power Reactor Subsequent License Renewal” (Aug. 29, 2014) (ML14241A578) (SRM-SECY-14-0016) (declining rulemaking, directing the staff to update license renewal guidance as needed to provide clarity, and to “address emerging technical issues and operating experience through alternative vehicles”).

C.F.R. § 54.29, when determining whether to grant a license renewal application, the Commission requires actions be identified that have been or will be taken with regard to:

- (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under § 54.21(a)(1); and
- (2) time-limited aging analyses that have been identified to require review under § 54.21(c).⁹⁸

These actions must provide reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the current licensing basis (CLB),⁹⁹ and that any changes made to the plant's CLB are in accordance with the Act and the Commission's regulations.¹⁰⁰ Additionally, under 10 C.F.R. § 54.29, a renewed license may be issued if the Commission finds that the applicable requirements of Subpart A of 10 C.F.R. Part 51 have been satisfied and any matters raised under § 2.335 have been addressed.¹⁰¹ Further, the adequacy and manner of Staff's safety review may not be challenged in a licensing proceeding.¹⁰²

⁹⁸ 10 C.F.R. § 54.29(a).

⁹⁹ As defined in 10 C.F.R. § 54.3, the current licensing basis is "the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect. . . ."

¹⁰⁰ *Id.*

¹⁰¹ 10 C.F.R. § 54.29(b)-(c).

¹⁰² *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 493 n.56 (2010)(citations omitted) (noting that adjudicatory challenges that focus on the Staff's review of the application rather than errors or omissions in the application are not permitted in NRC adjudications); *AmerGen Energy Co.* (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 476-77, 481-82 (2008) (citations omitted) (stating that "[t]he NRC has not, and will not, litigate claims about the adequacy of the Staff's safety review in licensing adjudications" and that it is the applicant, not the Staff, that has the burden of proof in litigation). Further, boards are not generally empowered to correct or supervise the Staff's performance of its research activities. See 10 C.F.R. § 2.319. Boards "simply have no jurisdiction over nonadjudicatory activities of the Staff that the Commission has clearly assigned to other offices unless the Commission itself grants that jurisdiction to the Board." *Duke Energy Corp.* (Catawba Nuclear Station, Units 1 & 2), CLI-04-6, 59 NRC 62, 74 (2004) (citations omitted). Staff non-adjudicatory functions include safety reviews and the approaches to conducting environmental reviews. See *id.* at 74 ("[L]icensing boards do not sit to correct NRC Staff misdeeds or to supervise or direct NRC Staff regulatory reviews.").

These standards, along with other regulations in 10 C.F.R. Part 54, and the environmental regulations related to license renewal set forth in 10 C.F.R. Part 51 and Appendix B thereto, establish the scope of issues that may be considered in a license renewal proceeding. Any contention that falls outside this scope is inadmissible and must be rejected.¹⁰³

The Commission has found it generally unnecessary to review, for license renewal, issues that are already monitored and reviewed in ongoing regulatory oversight processes.¹⁰⁴ In license renewal proceedings, the NRC conducts a technical review under 10 C.F.R. Part 54, to ensure that pertinent public health and safety requirements have been satisfied.¹⁰⁵ Regardless of whether or not a license renewal application has been filed for a facility, the Commission has a continuing responsibility to oversee the safety and security of ongoing plant operations, and it routinely oversees a broad range of operating issues under its statutory responsibility to ensure the protection of public health and safety for operations under existing operating licenses. In contrast, the NRC's license renewal safety review focuses on "plant systems, structures, and components for which current [regulatory] activities and requirements *may* not be sufficient to manage the effects of aging in the period of extended operation."¹⁰⁶ Adjudicatory proceedings on license renewal applications are bounded by the same rules and scope as the NRC's license renewal review.¹⁰⁷

¹⁰³ 10 C.F.R. § 2.309(f)(1)(iii); see *Millstone*, CLI-05-24, 62 NRC at 567.

¹⁰⁴ See *Turkey Point*, CLI-01-17, 54 NRC at 8-10. For example, the Commission has held that "[i]ssues like emergency planning—which already are the focus of ongoing regulatory processes—do not come within the NRC's safety review at the license renewal stage." *Turkey Point*, CLI-01-17, 54 NRC at 10; accord, *Millstone*, CLI-05-24, 62 NRC at 565, 567.

¹⁰⁵ See *Turkey Point*, CLI-01-17, 54 NRC. at 6.

¹⁰⁶ *Id.* at 10 (quoting 60 Fed. Reg. at 22,469).

¹⁰⁷ As the Commission stated, "[a]djudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC Staff review; for our hearing process (like our Staff's review) necessarily examines only the [safety] questions our safety rules make pertinent." *Id.* at 10.

Relevant to the current proceeding, seismic conditions are considered an ongoing safety issue for operating plants.¹⁰⁸ The NRC requires all licensees to take seismic activity into account to maintain safe operating conditions at all nuclear power plants. When new seismic hazard information becomes available, the NRC evaluates the new data and models to determine if any changes are needed at existing plants, regardless of a plant's license renewal status.¹⁰⁹ Therefore, the NRC's ongoing regulatory oversight, which includes the oversight of seismic safety, remains separate from license renewal.¹¹⁰

D. Environmental Review of Subsequent License Renewal Applications

The National Environmental Policy Act of 1969, as amended (NEPA), 42 U.S.C. § 4321 *et seq.*, requires Federal agencies to include in any recommendation or report on proposals for major Federal actions significantly affecting the quality of the human environment, a detailed statement on:

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects that cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented.¹¹¹

In accordance with its NEPA responsibilities, the NRC is required to take a "hard look" at the environmental impacts of a proposed major Federal action that could significantly affect the

¹⁰⁸ "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants—Final Report," NUREG-1437, rev. 1, vol. 1, at 1-21 (May 2013) (ML 13106A241) (2013 GEIS).

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ NEPA, Section 102(2)(C), 42 U.S.C. § 4332.

environment, as well as reasonable alternatives to that action.¹¹² This “hard look” is “tempered by a practical rule of reason.”¹¹³ Consideration of environmental impacts need not address all theoretical possibilities because to do so would require “virtually infinite study and resources.”¹¹⁴ An agency thus need only address impacts that are reasonably foreseeable and need not perform analyses concerning events that would be considered worst case scenarios or those considered “remote and highly speculative.”¹¹⁵ Further, NEPA “does not call for certainty or precision, but an *estimate* of anticipated (not unduly speculative) impacts.”¹¹⁶ And NEPA gives agencies “broad discretion to keep their inquiries within appropriate and manageable boundaries.”¹¹⁷ With respect to alternatives, the Commission has observed that “NEPA requires consideration of ‘reasonable’ alternatives, not all conceivable ones.”¹¹⁸ The Staff’s EISs “need only discuss those alternatives that ... will bring about the ends of the proposed action—a principle equally applicable to Environmental Reports.”¹¹⁹

The NRC has adopted regulations in 10 C.F.R. Part 51 that address the scope of environmental reviews for license renewal applications.¹²⁰ Appendix B to Part 51 delineates the issues that are to be considered in license renewal environmental reviews.¹²¹ The regulations in

¹¹² See *La. Energy Services, LP* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998).

¹¹³ *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-22, 72 NRC 202, 208 (2010) (quoting *Communities, Inc. v. Busey*, 956 F.2d 619, 626 (6th Cir. 1992)).

¹¹⁴ *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 315 (2010).

¹¹⁵ *Private Fuel Storage, L.L.C.* (Indep. Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-49 (2002).

¹¹⁶ *La. Energy Services, L.P.* (National Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005).

¹¹⁷ *LES*, CLI-98-3, 47 NRC at 103.

¹¹⁸ *Seabrook*, CLI-12-5, 75 NRC at 338.

¹¹⁹ *Id.* at 339 (footnotes and quotation marks omitted).

¹²⁰ 10 C.F.R. § 51.1; see *Turkey Point*, CLI-01-17, 54 NRC at 6-7.

¹²¹ The regulations in Part 51 and Appendix B were last updated in 2013. The 2013 rulemaking redefined the number and scope of the environmental impact issues that must be addressed during license renewal environmental reviews. The rulemaking also incorporated lessons learned and knowledge gained during

10 C.F.R. Part 51, Appendix B, divide the license renewal environmental review into “Category 1” generic issues and “Category 2” site-specific issues,¹²² based on and consistent with the “Generic Environmental Impact Statement for License Renewal of Nuclear Plants,” NUREG-1437 (2013). The 2013 GEIS addresses the generic environmental impacts of operating a plant for an additional 20 years that are common to all plants or to a specific subgroup of plants.¹²³

A license renewal applicant is generally not required to discuss Category 1 issues in its environmental report, but instead may reference and adopt the Commission’s generic findings set forth in 10 C.F.R. Part 51 and the 2013 GEIS.¹²⁴ In addition, under 10 C.F.R. § 51.53(c)(3)(iv), an applicant’s environmental report “must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware.” These requirements apply to both initial and subsequent license renewal applications.¹²⁵ Thus, an applicant must provide a plant-specific review of the Category 2 issues in its environmental

previous license renewal environmental reviews. See Final Rule, “Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses,” 78 Fed. Reg. 37,281 (June 20, 2013).

¹²² As originally formulated in 1996, the GEIS identified 92 license renewal environmental issues, of which 69 were determined to be generic (*i.e.*, Category 1), 21 were determined to be plant-specific (*i.e.*, Category 2), and two did not fit into either category (*i.e.*, uncategorized). See “Generic Environmental Impact Statement for License Renewal of Nuclear Plants,” NUREG-1437, rev. 0, vol. 1 (May 1996) (ML040690705) (1996 GEIS). The 2013 revision to the GEIS modified this list, identifying 78 environmental impact issues for license renewal, of which 59 were determined to be generic for all sites, 2 are uncategorized, and 17 are site-specific Category 2 issues. 2013 GEIS at 1-36. The findings of the environmental impact analyses conducted for the GEIS (as revised in 2013) are listed in Table B-1 of Appendix B, which lists each issue and its category level.

¹²³ See 2013 GEIS, vols. 1-3 (ML13106A241, ML13106A242, and ML13106A244). The Commission used the findings and analyses contained in the 1996 and 2013 iterations of the GEIS as the technical basis for its revisions of 10 C.F.R. Part 51 defining the scope of its environmental reviews of license renewal under NEPA.

¹²⁴ *Turkey Point*, CLI-01-17, 54 NRC at 11. The Commission has emphasized that generic analysis is an appropriate method of meeting the agency’s statutory obligations under NEPA. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-09-10, 69 NRC 521, 523-25 (2009) (*citing Massachusetts v. NRC*, 522 F.3d 115 (1st Cir. 2008)).

¹²⁵ *Fla. Power & Light Co.* (Turkey Point Generating Units 3 and 4), CLI-20-3, 91 NRC 133, 153-55 (2020); *accord, Peach Bottom*, CLI-20-11, 92 NRC at ___ (slip op. at 8).

report, and must also address any new and significant information that might render the Commission's Category 1 determinations inapplicable in that proceeding.¹²⁶

The Staff's license renewal environmental review is guided by the 2013 GEIS (NUREG-1437, Rev. 1) and the "Standard Review Plan for Environmental Review of Nuclear Power Plants—Operating License Renewal" ("ESRP-LR") (NUREG-1555, Supp. 1, Rev. 1) (June 2013). Like the applicant, the NRC staff is not required to address Category 1 impacts in its plant-specific EIS (SEIS), which it publishes as a supplement to the GEIS. The Staff must, however, address any new and significant information that might affect the applicability of the Commission's generic Category 1 determinations in the proceeding.¹²⁷ The Staff must also address any new and significant information that might affect the Category 2 site-specific findings in its draft or final SEIS, including, as relevant here, any new and significant information that might affect the Staff's previous severe accident mitigation alternatives (SAMA) analysis.¹²⁸

Contentions raising environmental issues in a license renewal proceeding are limited to those issues that are affected by license renewal and have not been addressed by rulemaking or on a generic basis.¹²⁹ As the Commission has stated, Category 1 issues "are not subject to

¹²⁶ See, e.g., *Limerick*, CLI-13-07, 78 NRC at 212-13; *Turkey Point*, CLI-01-17, 54 NRC at 11-12; *Pilgrim/Vermont Yankee*, CLI-09-10, 69 NRC at 527.

¹²⁷ See, e.g., *Limerick*, CLI-13-07, 78 NRC at 216-17; *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-16-8, 83 NRC 417, 439 (2016).

¹²⁸ See, *Limerick*, CLI-13-07, 78 NRC at 211, 216-217, citing *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 373-74 (1989). Following publication of a site-specific supplement to the GEIS, further supplementation is required only "if there are 'significant new circumstances or information' . . . [that] paint[s] a dramatically different picture of impacts compared to the description of impacts in the EIS." *Massachusetts v. NRC*, 708 F.3d 63, 78 (1st Cir. 2013) at 68-69, quoting *Town of Winthrop v. FAA*, 535 F.3d 1, 7, 12 (1st Cir. 2008); accord, *Limerick*, CLI-13-07, 78 NRC at 211, 216-17. The Commission has also indicated that such information "must present 'a seriously different picture of the environmental impact of the proposed action from what was previously envisioned.'" *Ameren Missouri* (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 167-68 (2011) (citing *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 871200), CLI-99-22, 50 NRC 3, 14 (1999)).

¹²⁹ *Turkey Point*, CLI-01-17, 54 NRC at 11-12; see 10 C.F.R. § 51.53(c)(3)(i)-(ii).

site-specific review and thus fall beyond the scope of individual license renewal proceedings.”¹³⁰

The Commission has stated that “because the generic environmental analysis was incorporated into a regulation, the conclusions of that analysis may not be challenged in litigation unless the rule is waived by the Commission for a particular proceeding or the rule itself is suspended or altered in a rulemaking proceeding.”¹³¹ Accordingly, a contention challenging a Category 1 generic determination, even if based on significant new information, can only be admitted if the Commission grants a waiver of its regulations.

E. The NRC’s Consideration of the Environmental Impacts of Severe Accidents in License Renewal Proceedings

As relevant here, in the 2013 GEIS the NRC reached a generic determination that the environmental impacts of severe accidents would be “not significant,” or “small.”¹³² The NRC’s regulations implementing NEPA expressly incorporated the following generic finding: “The probability-weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to ground water, and societal and economic impacts from severe accidents are small for all plants.”¹³³

The Staff performed a site-specific analysis of severe accident mitigation design alternatives (SAMDA) in a NEPA document for North Anna at the renewed operating license

¹³⁰ *Turkey Point*, CLI-01-17, 54 NRC. at 12 (emphasis added); see 10 C.F.R. § 51.53(c)(3)(i)-(ii). In *Turkey Point*, the Commission recognized that the rules “provide a number of opportunities for individuals to alert the Commission to new and significant information that might render a generic finding invalid, either with respect to all nuclear power plants or for one plant in particular. In the hearing process, for example, petitioners with new information showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of the rule.” *Turkey Point*, CLI-01-17, 54 NRC at 12.

¹³¹ *Vermont Yankee*, CLI-07-3, 65 NRC at 17 (footnotes omitted), *reconsid. denied*, CLI-07-13, 65 NRC 211, 214 (2007); *accord. Massachusetts v. NRC*, 708 F.3d at 74. This approach has been found to comply with NEPA. See, e.g., *Id.* at 68-69.

¹³² Based on its assessment of new information, the 2013 GEIS concluded that the generic finding for severe accidents in the 1996 GEIS remain valid. 2013 GEIS at 4-160. See *also* 1996 GEIS at 5.3.3.1.

¹³³ See Table B-1.

stage.¹³⁴ The Commission has made the generic determination, codified in Table B-1 and 10 C.F.R. § 51.53(c)(3)(ii)(L), that if the NRC had conducted a site-specific consideration of SAMA for a plant in a previous EIS or environmental assessment (EA), another SAMA need not be done for license renewal.¹³⁵ Therefore, the Applicant's ER and the Staff's SEIS do not have to reassess this issue for North Anna in this SLR proceeding.

This determination does not mean that the NRC only considers ways to mitigate severe accidents at a given site once. Instead, the NRC considers alternatives for mitigating severe accidents at many sites, including North Anna, on an ongoing basis through a variety of NRC programs. For example, when it promulgated Table B-1, the NRC explained, "the Commission has considered containment improvements for all plants pursuant to its Containment Performance Improvement (CPI) program, ... and the Commission has additional ongoing regulatory programs whereby licensees search for individual plant vulnerabilities to severe accidents and consider cost-beneficial improvements."¹³⁶

V. Petition for Waiver

The Petitioners' contention raises concerns regarding the ER's failure to consider the environmental impacts of operating North Anna during extended operation under risk of an earthquake that would exceed its design basis. The Petitioners assert that a waiver is necessary to allow admission of their contention—and the NRC Staff agrees. As discussed in Section VI below, the Petitioners do not meet the contention admissibility criteria in 10 C.F.R. § 2.309(f)(1). Nevertheless, even if the Petitioners had submitted an admissible contention, for

¹³⁴ See Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 7, regarding North Anna Power Station, Units 1 and 2, Final Report (November 2002) (ADAMS Accession No. ML023380542) [hereinafter NUREG-1437 Supp. 7].

¹³⁵ 1996 GEIS at 5.4.1.5.23.

¹³⁶ Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28,467, 28,481 (June 5, 1996).

the reasons discussed below, they do not meet the NRC's standards governing issuance of a waiver in this proceeding, which, alone, would be sufficient basis to deny the petition.

A. Petitioners Do Not Make a *Prima Facie* Showing for a Waiver

The Petitioners seek a waiver of the NRC's regulations in 10 C.F.R. §§ 51.53(c)(3)(i), 51.71(d), and 51.95(c)(1), to the extent they bar consideration of Category 1 issues in this proceeding.¹³⁷ Specifically, the Petitioners state that these issues include the generic findings regarding the environmental impacts of both design-basis accidents and severe accidents, including accidents caused by or contributed to by earthquakes.¹³⁸ The Petitioners challenge the purported failure of Dominion's ER "to consider the environmental implications of an earthquake in 2011 that exceeded the design-basis for North Anna Units 1 and 2."¹³⁹

The Petitioners do not request a waiver from Table B-1, which codifies the generic Category 1 findings that the Petitioners seek to waive regarding design-basis accidents and severe accidents. A waiver from Table B-1 is required to litigate these issues in this proceeding. Accordingly, the Waiver Petition should be denied. Nevertheless, even assuming the Petitioners had requested a waiver of the Table B-1 requirements, for the reasons described below, the Petitioners have failed to make the required *prima facie* showing that the Commission's regulations should be waived with respect to these issues, and Petitioners do not meet any of the four *Millstone* factors. Accordingly, the Waiver Petition should be denied.

1. Petitioners Fail to Demonstrate that Strict Application of The Rule Would Not Serve the Purposes for Which it was Adopted

The Petitioners argue 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

¹³⁷ Petition at 30.

¹³⁸ *Id.*

¹³⁹ *Id.*

of site-specific license renewals reviews by barring consideration of new and significant information regarding the environmental impacts of operating North Anna Units 1 and 2 in a subsequent license renewal term.”¹⁴⁰ Contrary to the Petitioners assertion, application of the rule excluding Category 1 issues in this proceeding does *not* bar the consideration of new and significant information in the North Anna SLR environmental review. Indeed, an applicant’s environmental report must address any new and significant information that might render the Commission’s Category 1 determinations incorrect in that proceeding,¹⁴¹ and Dominion’s ER includes an assessment of new and significant information.¹⁴² Similarly, in preparing its plant-specific SEIS, the Staff must address any new and significant information that might affect the applicability of the Commission’s Category 1 determinations in the proceeding.¹⁴³ Thus, regardless of whether Petitioners are granted a waiver to litigate purportedly new and significant information, both the Applicant and NRC Staff must address any new and significant information in compliance with NEPA and the NRC’s requirements.¹⁴⁴ Accordingly, the Petitioners have not shown that the exclusion of Category 1 issues from this proceeding would bar consideration of new and significant information related to Category 1 issues in contravention of NEPA.

In addition, the Petitioners do not demonstrate that strict application of the rule “would not serve the underlying purpose” of the Category 1 findings in Table B-1, the purpose of which

¹⁴⁰ *Id.* at 33.

¹⁴¹ 10 C.F.R. § 51.53(c)(3)(iv); *see, e.g., Limerick*, CLI-13-07, 78 NRC at 212-13; *Turkey Point*, CLI-01-17, 54 NRC at 11-12; *Pilgrim/Vermont Yankee*, CLI-09-10, 69 NRC at 527.

¹⁴² *See generally* ER, Sections 4.0 and 5.0. The ER specifically considers new and significant information with respect to the generic findings for design basis accident and severe accidents and for the North Anna SAMA Analysis. ER at E-4-84 – E-4-104.

¹⁴³ *See, e.g., Limerick*, CLI-13-07, 78 NRC at 216-17; *Turkey Point*, LBP-16-8, 83 NRC at 439.

¹⁴⁴ To the extent Petitioners suggest that granting a waiver to adjudicate new and significant information in this proceeding is necessary for the NRC’s compliance with NEPA, the Commission has previously noted that a hearing is not necessary to satisfy the NRC’s NEPA obligations. *See Limerick*, CLI-13-07, 78 NRC at 211, *citing Blue Ridge Env’tl. Def. League v. NRC*, 716 F.3d 183, 196 (D.C. Cir. 2013) (deferring to NRC’s decision not to admit petitioners’ NEPA contentions for hearing where NRC found the contentions did not satisfy 10 C.F.R. Part 2 contention admissibility requirements); *Massachusetts*, 708 F.3d at 78; *Vermont Yankee*, CLI-07-3, 65 NRC at 22.

is to resolve generic issues as part of the Staff's environmental review in the 2013 GEIS.¹⁴⁵ Specifically, the Petitioners do not provide any information to demonstrate that there are environmental impacts resulting from the 2011 Mineral earthquake, let alone significant environmental impacts, that would lead to a determination that (a) the environmental impacts for design-basis accidents or (b) the probability-weighted consequences of a severe accident, would be greater than SMALL for this SLR review.¹⁴⁶

The Petitioners also appear to challenge North Anna's previous SAMA analysis and assert that the 2011 Mineral earthquake should be considered to ensure that appropriate alternatives are implemented that would prevent or mitigate adverse environmental impacts from accidents caused or contributed by earthquakes.¹⁴⁷ Notably, however, a SAMA analysis was conducted in 2003 for the North Anna initial license renewal application;¹⁴⁸ inasmuch as NRC regulations specify that a SAMA analysis is not required where a SAMA analysis was previously conducted, a waiver of 10 C.F.R. § 51.53(c)(3)(ii)(L) (e.g., based upon a showing of new and significant information that invalidates the previous SAMA conclusions) would be required to litigate the adequacy of the previously-conducted SAMA analysis.¹⁴⁹ However, the

¹⁴⁵ See *Limerick*, CLI-13-07, 78 NRC at 212–213 (noting that the designation of an environmental issue as 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.”).

¹⁴⁶ See Table B-1; see also *Fla. Power & Light* (Turkey Point Nuclear Generating Units 3 and 4), LBP-19-8, 90 NRC 139, 169 (2019) (noting that the purpose of NRC’s designation of an issue as a Category 1 issue is satisfied unless the Petitioner shows that the new information is significant insofar as it would lead to a determination that the environmental impact during the SLR period will be greater than “small”).

¹⁴⁷ Petition at 33.

¹⁴⁸ ER at E-4-85 – 87; see NUREG-1437, Supp. 7., Section 5.2.

¹⁴⁹ *Exelon Generation Co.* (Limerick Generating Station, Units 1 and 2), CLI-12-19, 76 NRC 377, 386 (2012). Normally, the SAMA analysis is designated as a Category 2 site-specific issue for license renewal and is subject to challenge in a license renewal adjudicatory proceeding. However, the exception in Section 51.53(c)(3)(ii)(L) operates as the “functional equivalent” of a Category 1 designation for plants for which SAMAs were already considered in an EIS. *Id.*

Petitioners do not request a waiver from 10 C.F.R. § 51.53(c)(3)(ii)(L) or demonstrate that such a waiver should be granted by the Commission.¹⁵⁰

Moreover, the Petitioners do not demonstrate that strict application of the exception in 10 C.F.R. § 51.53(c)(3)(ii)(L) (providing that a SAMA analysis need not be provided if the Staff has previously considered SAMAs in an EIS for the plant) would undermine the purpose of the rule. As the Commission has stated, the purpose of the exception in 10 C.F.R. § 51.53(c)(3)(ii)(L) is to reflect the NRC's view that conducting one SAMA analysis for the plant, as a general matter, satisfies the NRC's NEPA obligation to consider measures to mitigate both the risk and the environmental impacts of severe accidents.¹⁵¹ Moreover, to litigate a SAMA-related issue in an adjudicatory proceeding, the NRC requires the demonstration of "a potentially significant deficiency" in the SAMA analysis "that credibly could render the SAMA analysis unreasonable under NEPA standards."¹⁵² Here, the Petitioners do not directly challenge any portion of North Anna's previous SAMA analysis to show a significant deficiency, nor do they provide any information to demonstrate that consideration of the 2011 Mineral earthquake could render North Anna's previous SAMA analysis unreasonable. For these reasons, to the extent Petitioners seek to raise SAMA-related issues, the Waiver Petition should be denied.

Because the Petitioners have not satisfied the first *Millstone* factor that strict application of the rules excluding consideration of generic issues in this proceeding would not serve the underlying purposes for which it was adopted, the Waiver Petition should be denied.

2. Petitioners Do Not Demonstrate That Special Circumstances, Previously Not Considered, Exist with Respect to this License Renewal Review

¹⁵⁰ The Waiver Petition makes no mention of the exception in 10 CFR § 51.53(c)(3)(ii)(L) and specifically requests "a waiver of 10 C.F.R. §§ 51.53(c)(3)(i), 51.71(d), and 51.95(c)(1), to the extent they bar consideration of NEPA 'Category 1' issues" Petition at 30.

¹⁵¹ *Limerick*, CLI-13-07, 78 NRC at 210.

¹⁵² *Limerick*, CLI-13-07, 78 NRC at 216 (citing *Entergy Nuclear Generating Co.* (Pilgrim Nuclear Power Station), CLI-12-1, 75 NRC 39, 57 (2012)).

The Petitioners argue that special circumstances exist that were previously not considered because the NRC has not prepared an EIS or GEIS that considered the environmental significance of the 2011 Mineral earthquake at North Anna Units 1 and 2.¹⁵³ However, both the 1996 and 2013 GEISs consider the environmental consequences of severe accidents, including the risk of beyond-design-basis earthquakes.¹⁵⁴ Moreover, the North Anna SEIS for initial license renewal contained a SAMA analysis that considered external events, including seismic events.¹⁵⁵ The Petitioners do not provide any explanation or support for the view that the 2011 Mineral earthquake, which was a beyond-design-basis earthquake, would not be encompassed by the GEIS's generic finding for severe accidents or by North Anna's existing SAMA analysis. Thus, the Petitioners have not demonstrated that special circumstances exist that were previously not considered. Because Petitioners do not meet the second *Millstone* factor, the Waiver Petition should be denied.

3. Petitioners Do Not Show That Special Circumstances Exist that are Unique to North Anna Units 1 and 2

The Petitioners argue that the special circumstances raised by their Petition 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.¹⁵⁶ However, the Petitioners' argument suggests that the generic findings for both design-basis accidents and severe accidents, as they relate to earthquakes, should not apply to *any* plant due to the site-specific nature of a plant's seismic design. Thus, the Petitioners' reasoning regarding the site-specific nature of a plant's seismic design is not unique to North Anna and does not establish "special circumstances" here.

¹⁵³ Petition at 34.

¹⁵⁴ 1996 GEIS at Section 5.3.3.1; 2013 GEIS at 1-32 – 1-34, E-4 – E-5.

¹⁵⁵ See NUREG-1437, Supp. 7, at 5–9 to 10.

¹⁵⁶ Petition at 34.

The Petitioners also assert that the circumstances of the 2011 Mineral earthquake are unique to North Anna because “the unprecedented occurrence of the 2011 beyond-design-basis earthquake 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.’”¹⁵⁷ However, as discussed in Section V.A.4 below, the Petitioners have not shown that the findings in the 1996 GEIS have been refuted as a result of the 2011 Mineral earthquake. In this regard, to the extent the Petitioners’ arguments regarding uniqueness focus on the generic findings for design-basis accidents, no showing has been made that the 2011 Mineral earthquake (which exceeded the North Anna DBE) has any bearing on the GEIS’s conclusions regarding the impacts of design basis events. Further, the Petitioners have not shown any special circumstances unique to North Anna that would support waiving application of the generic finding for severe accidents or the SAMA exception in 10 C.F.R. § 51.53(c)(3)(ii)(L). Accordingly, the Petitioners have not met the third *Millstone* factor and the Waiver Petition should therefore be denied.

4. Petitioners Have Not Demonstrated that a Waiver of the Category 1 Findings is Necessary to Reach a Significant Safety or Environmental Issue

The Petitioners assert that the beyond design-basis 2011 Mineral earthquake at North Anna establishes that the environmental impacts of earthquake-related accidents at North Anna “must be considered significant as a matter of law, because the occurrence of the earthquake upended the central conclusion of the original EIS for North Anna and the [1996 GEIS] that environmental impacts of most reactor accidents will be small.”¹⁵⁸ The Petitioners specifically challenge the findings and analysis in the 1996 GEIS for design-basis accidents and state that

¹⁵⁷ *Id.* Although the Petitioners challenge the 1996 GEIS, the Category 1 environmental impacts of this proposed action, subsequent license renewal for North Anna, are addressed in the 2013 GEIS and codified in Table B-1 of 10 CFR Part 51. The Category 2—site specific—environmental impacts of this proposed action will be addressed in a site-specific supplement.

¹⁵⁸ Petition at 35.

the sole basis for the GEIS conclusion of insignificant impacts is that NRC's assumption that reactors will operate within their design bases.¹⁵⁹ The Petitioners assert that because this "key assumption has been refuted," neither Dominion nor the NRC may conclude that the environmental impacts of operating North Anna for a second renewal term are insignificant.¹⁶⁰

Contrary to the Petitioners' arguments, the NRC's findings in the 1996 GEIS have not been "upended" for North Anna based on the occurrence of the 2011 Mineral earthquake. Both the 1996 GEIS and the 2013 GEIS¹⁶¹ assess the environmental impacts of two types of postulated accidents at nuclear power plants—design-basis accidents¹⁶² and severe accidents.¹⁶³ As the Petitioners acknowledge, the 2011 Mineral earthquake was a beyond design-basis accident.¹⁶⁴ Thus, the generic finding for design-basis accidents does not apply here. The Petitioners do not explain why the occurrence of a beyond-design-basis earthquake is relevant to or would otherwise undermine the generic finding for design-basis accidents, which fall under a different category of accidents in the GEIS. Moreover, the Petitioners do not point to any possible environmental impacts from the 2011 Mineral earthquake that could challenge the conclusion in the GEIS that the environmental impacts from design-basis accidents are SMALL for North Anna.

¹⁵⁹ See *id.* (noting that the finding in the 1996 GEIS is based on the conclusion that "[a]ll plants have had a previous evaluation of the environmental impacts of design-basis accidents"); see also *id.* at 34 (challenging the 1996 GEIS conclusion that the environmental impacts of design basis accidents are SMALL because "design and performance criteria" for all operating reactors are "acceptable.").

¹⁶⁰ Petition at 35.

¹⁶¹ The NRC Staff notes that the GEIS revisited the generic findings for both design basis and severe accidents and declined to make these Category 2 site specific issues. Based on its assessment of new information, the 2013 GEIS concludes that the generic finding for both design basis and severe accidents in the 1996 GEIS remain valid. 2013 GEIS at 4-160.

¹⁶² A design-basis accident is defined as "A postulated accident that a nuclear facility must be designed and built to withstand without loss to the systems, structures, and components necessary to ensure public health and safety. 2013 GEIS at 7-15.

¹⁶³ 2013 GEIS at 4-158. Severe accidents (i.e., beyond design-basis accidents) are those that could result in substantial damage to the reactor core, whether or not there are serious off-site consequences. 2013 GEIS at 1-27.

¹⁶⁴ See *e.g.*, Petition at 35.

Likewise, for severe accidents, the Petitioners do not challenge or point to any portion of the severe accident analysis in the 1996 GEIS or the updated analysis in the 2013 GEIS that could be impacted by the 2011 Mineral earthquake. Moreover, the NRC did not state, as suggested by the Petitioners, that a beyond-design basis accident could never occur;¹⁶⁵ and the Petitioners provide no explanation or support for the proposition that there are possible environmental impacts from the 2011 Mineral earthquake that could challenge the generic conclusion in the 2013 GEIS that the probability-weighted consequences for severe accidents is SMALL.

The Petitioners also assert that the NRC must evaluate the probability that more earthquakes will challenge North Anna's design-basis, and the environmental consequences of accidents involving earthquakes. But the 2013 GEIS does analyze both the probability¹⁶⁶ and consequences¹⁶⁷ of design-basis accidents as well as severe accidents. Moreover, the NRC Staff considered the probability and consequences of severe accidents in its SAMA analysis evaluation for North Anna's initial license renewal application.¹⁶⁸ The Petitioners do not specifically challenge these portions of the Staff's analysis in the 2013 GEIS or its evaluation of the North Anna initial license renewal SAMA analysis. The Petitioners also do not challenge

¹⁶⁵ Indeed, the GEIS includes a finding regarding the probability-weighted consequences of severe accidents and establishes the need to consider the mitigation of severe (beyond-design basis) accidents as a Category 2 site-specific issue. 2013 GEIS at 2-15, 4-160. The GEIS also considers the risk of beyond-design-basis earthquakes. 1996 GEIS at Section 5.3.3.1; 2013 GEIS at 1-32 - 1-34, E-4 – E-5.

¹⁶⁶ See 2013 GEIS at 1-6 (noting that “[f]or issues in which the probability of occurrence is a key consideration (i.e., postulated accidents), the probability of occurrence has been factored into the determination of significance”).

¹⁶⁷ See 2013 GEIS at 1-26 – 1-27 (noting that the Staff considered potential consequences of a reactor accident in its findings for design basis accidents and severe accidents); see also *Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 and 3), CLI-15-6, 81 NRC 340, 380 (noting that the Staff did not dispense with the consequences portion of the severe accident analysis in the 1996 GEIS and that “the Staff assessed the severe accident consequences for a large number of facilities in its determination and came to the conclusion that the probability-weighted consequences for a severe accident are small for all plants.”).

¹⁶⁸ See NUREG-1437, Supp. 7, at 5-9 to 10.

Dominion's finding that there is no new and significant information with respect to the generic findings for design-basis accidents, severe accidents, or North Anna's SAMA analysis.¹⁶⁹

The Petitioners argue that the NRC must evaluate the cost-effectiveness of measures to avoid or mitigate accidents involving earthquakes, including upgrading safety equipment to reduce the environmental risks to the level previously assured by the 1996 GEIS.¹⁷⁰ However, the Petitioners provide no basis for their assertion that upgraded safety equipment or other cost-effective measures are warranted or point to any purported deficiencies in North Anna's previous SAMA analysis in this regard. For these reasons and for the reasons discussed in Section V.A.1 above, the Petitioners have not demonstrated a potentially significant deficiency that credibly could render the existing North Anna SAMA analysis unreasonable.¹⁷¹ Thus, the Petitioners have not demonstrated that a waiver of the NRC's generic findings for design-basis accidents and severe accidents or a waiver of the exception in 10 C.F.R. § 51.53(c)(3)(ii)(L)¹⁷² is necessary to reach a significant environmental issue.

The Petitioners have not demonstrated that a waiver of the NRC's generic Category 1 findings is necessary to reach a significant environmental issue; the Petitioners have not satisfied the fourth *Millstone* factor and the Waiver Petition should be rejected.

5. Petitioners Raise Issues That Are Beyond the Scope of this Proceeding and Are Not Relevant to the Waiver Petition

The Petitioners also raise several issues that fall outside the scope of a license renewal proceeding and are not relevant to the waiver they are seeking. For example, the Petitioners note that the NRC's safety findings "are a very significant component of the NRC's environmental analysis, because NRC safety regulations are based on the assumption that a

¹⁶⁹ See ER at E-4-84 – E-4-107.

¹⁷⁰ Petition at 37.

¹⁷¹ *Limerick*, CLI-13-07, 78 NRC at 216 (citing *Pilgrim*, CLI-12-1, 75 NRC at 57).

¹⁷² Petitioners do not request a waiver from Section 51.53(c)(3)(ii)(L). See *supra* note 150.

reactor’s design-basis will protect against most public safety and environmental threats.”¹⁷³ The 2013 GEIS acknowledges that safety issues may become important to the environmental review when they could result in environmental impacts and notes that this “is why the environmental effects of postulated accidents are considered in the GEIS and in plant-specific supplements to the GEIS.”¹⁷⁴ Moreover, the risk from nuclear power plant accidents, and specifically seismic hazard issues, are addressed by the NRC on an ongoing basis as part of its regulatory oversight of licensed nuclear power plants,¹⁷⁵ and are not unique to North Anna—as shown by the NRC’s evaluation of the Fukushima earthquake and tsunami. Therefore, decisions and recommendations concerning seismic risk at nuclear power plants are outside the scope of license renewal.¹⁷⁶ Petitioners do not seek a waiver to challenge the applicable requirements in 10 C.F.R Part 54.

Petitioners also assert that the “environmental significance” of the 2011 Mineral earthquake is confirmed by Dominion’s NRC-approved actions in response to the earthquake for the proposed reactor at the North Anna Unit 3 site.¹⁷⁷ Specifically, Petitioners state that while Dominion proposed safety-related design changes for its combined license (COL) application, Dominion made no design changes to its reactors, but instead provided FLEX equipment for North Anna Units 1 and 2 that is not safety grade.¹⁷⁸ But the seismic analysis for the COL was performed for a proposed, not yet constructed reactor, based on a different design than North

¹⁷³ Petition at 35.

¹⁷⁴ 2013 GEIS at 1-8.

¹⁷⁵ 2013 GEIS at 1-16. The NRC’s ongoing oversight addresses the risk from nuclear power plant accidents, accounts for the effects of proposed changes that may be made as part of power plant operations and considers new information about the facility or its environment when necessary. *Id.* at 1-8.

¹⁷⁶ *Id.* at 1-16.

¹⁷⁷ Petition at 36.

¹⁷⁸ *Id.* (citing *Dominion Va. Power* (N. Anna Power Station, Unit 3) CLI-17-08, 85 NRC 157, 178 (2017)).

Anna Units 1 and 2.¹⁷⁹ The Petitioners make no attempt to demonstrate that any similar changes to the design of the North Anna 1 and 2 reactors were needed following the 2011 Mineral earthquake, nor do they describe the environmental significance of operating the reactor in the absence of any such changes. The Petitioners also fail to acknowledge that Dominion performed a Seismic PRA to determine if plant enhancements were warranted, and that the NRC concluded that no further action is required at North Anna.¹⁸⁰ In any event, Petitioners' assertions regarding the differing response actions taken for the North Anna COL as compared to North Anna Units 1 and 2 following the 2011 Mineral earthquake do not establish the need for further measures at North Anna Units 1 and 2, and are outside the scope of this proceeding and not relevant to the Waiver Petition.

The Petitioners also argue that nothing in the SLRA indicates that Dominion has taken the 2011 Mineral earthquake into account in its evaluation of aging equipment; instead, the Petitioners allege that Dominion's aging analysis assumes the same design-basis earthquake whose inadequacy was demonstrated by the 2011 Mineral earthquake.¹⁸¹ The Petitioners appear to acknowledge that CLB issues regarding North Anna's design-basis related to seismic hazards may not be challenged in this proceeding.¹⁸² And the Petitioners do not seek a waiver from the applicable requirements in 10 C.F.R. Part 54 to raise these issues. Thus, the Petitioners' concerns regarding Dominion's use of the design-basis earthquake in its SLRA are outside the scope of this proceeding and do not support the Waiver Petition. In addition, the Petitioners' concerns regarding Dominion's safety evaluation do not demonstrate that a waiver of the NRC's Category 1 environmental findings is necessary.

¹⁷⁹ See *North Anna*, CLI-17-08, 85 NRC at 160 (noting that Dominion's COL application references the Economic Simplified Boiling Water Reactor (ESBWR) certified design).

¹⁸⁰ "North Anna Power Station, Units 1 and 2—Staff Review of Seismic Probabilistic Risk Assessment Associated with Reevaluated Seismic Hazard Implementation of the Near-Term Task Force Recommendation 2.1: Seismic" at 1, 6 (April 25, 2019) (ML19052A522).

¹⁸¹ Petition at 36-37.

¹⁸² *Id.* at 37.

For the reasons discussed above, the Petitioners have not satisfied any of the four *Millstone* factors. Moreover, the Petitioners do not seek a waiver of the requirements in Table B-1 or the exception in 10 C.F.R. § 51.53(c)(3)(ii)(L), although a waiver from these regulations is needed to litigate the Petitioners' concerns. Accordingly, the Waiver Petition should be denied.

VI. Admissibility of the Petitioners' Proffered Contention

A. Analysis of the Proffered Contention

Under Commission precedent and regulations, generic environmental analyses and conclusions that are incorporated into the NRC's regulations may not be challenged in an adjudicatory proceeding unless the rule is waived for that proceeding or the rule itself is suspended or altered in a rulemaking proceeding.¹⁸³ Here, the Petitioners concede that the Commission must grant a waiver under 10 C.F.R. § 2.335 for their contention to be admitted for hearing. As discussed in Section V above, the Petitioners do not meet the criteria for a waiver. Nonetheless, even if they had satisfied the waiver criteria, the Petitioners' contention fails to meet the admissibility criteria in 10 C.F.R. § 2.309(f)(1) for the reasons discussed below.

Statement of Contention¹⁸⁴

In brief, the Petitioners' contention alleges that Dominion's ER is deficient due to its "failure to address environmental impacts of reactor accidents caused by or contributed to by earthquakes."¹⁸⁵ More expansively, the Petitioners' "statement of contention" reads:

Dominion'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

¹⁸³ *Vermont Yankee*, CLI-07-3, 65 NRC at 17-18.

¹⁸⁴ Although the Petitioners maintain that Dominion's reliance on 10 C.F.R. § 51.53(c)(3) in its ER is "legally erroneous," Petition at 26, the Commission held that the provision applies to applicants in subsequent license renewal proceedings, such as Dominion here. *Turkey Point*, CLI-20-3, 91 NRC at 141-45; *accord Peach Bottom*, CLI-20-11, 92 NRC at ___ (slip op. at 11-12). Thus, to the extent Petitioners seek to relitigate this issue in this proceeding as an aspect of their proffered contention, the Board should find the contention inadmissible for lack of a genuine dispute with the application on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

¹⁸⁵ Petition at 13.

for the reactors. The significance of the environmental risk posed by earthquakes to North Anna was conclusively demonstrated by a 2011 earthquake whose epicenter was a short distance from the two reactors and whose ground motion exceeded the design basis levels for both reactors. By exceeding the reactors' design basis, the earthquake disproved the assumption underlying the NRC's issuance of operating licenses in 1978 (for Unit 1) and 1980 (for Unit 2) and renewal of those licenses in 2003, 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. Because that assumption has been proven wrong, a new [EIS] must be created that analyzes this additional, proven risk.

While the NRC approved restart of the reactors after their post-earthquake shutdown, an operability determination for purposes of enforcing NRC standards is distinct from the review of environmental impacts that must be conducted in the SLR licensing decision that is now before the NRC. Dominion must fully comply with 10 C.F.R. §§ 51.53(c)(2) and 51.45(a) by addressing the probability and consequences of accidents caused or contributed to by earthquakes during a second license renewal term.

The analysis in the [ER] should include a discussion of the cumulative effects of operation during the SLR term, including the effects of earthquakes on SSCs whose ability to prevent or mitigate earthquake effects may be compromised by the long-term aging effects. Aging problems associated with 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, were identified in SECY-14-0016, Memorandum from Mark A. Satorius, NRC Executive Director of Operations, to NRC Commissioners, re: Ongoing Staff Activities to Assess Regulatory Considerations for Power Reactor Subsequent License Renewal at 1 (Jan. 31, 2014) (ML14050A306) and the NRC's five-volume Expanded Materials Degradation Assessment (EMDA), NUREG/CR-7153 (Oct. 2014) ("EMDA Report").¹⁸⁶

Staff Response to the Proffered Contention

The proffered contention fails to satisfy the criteria in 10 C.F.R. § 2.309(f)(1)(iii), (iv) and (vi)—the contention does not demonstrate that the issue raised is within the scope of the proceeding or is material to the findings that must be made to support the action here, nor does the contention provide sufficient information to show that a genuine dispute exists on a material issue of law or fact. Thus, the contention should be not admitted, and the Petition should be denied. In support of their contention Petitioners make the following arguments: (a) Dominion's ER fails to satisfy NEPA and the NRC's NEPA implementing regulations because it does not

¹⁸⁶ *Id.* at 13-14.

address the environmental impacts of operating North Anna during extended operation under risk of an earthquake that would exceed its design basis;¹⁸⁷ and, under *New York v. NRC*,¹⁸⁸ Dominion must comply with 10 C.F.R. §§ 51.53(c)(2) and 51.45(a) “by addressing the probability and consequences of accidents caused or contributed to by earthquakes during the [SLR] term;”¹⁸⁹ (b) Dominion’s ER should discuss the cumulative effects of operation during the renewal period, specifically, the effects of earthquakes on SSCs whose ability to prevent or mitigate these effects may be compromised by the long-term aging effects; and (c) Dominion should discuss aging topics contained in SECY-14-0016 and the NRC’s EMDA report¹⁹⁰ for those SSCs that could have aging problems related to the effects of seismic events;¹⁹¹ and the ER should also address available information regarding the availability of harvested reactor components.¹⁹² The Staff addresses each of these arguments, in turn, below.

¹⁸⁷ The Petitioners point out that the ER relies on the 2013 GEIS and incorporates by reference all applicable Category 1 findings in Table B-1, Appendix B to 10 C.F.R. Part 51 (Table B-1), for design-basis accidents. Petition at 18 (citing ER at E-4-85). The Petitioners seek a waiver for 10 C.F.R. § 51.53(c)(3)(i), which provides that an applicant for license renewal 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,” i.e., Table B-1.

A seismic event that is within a plant’s design basis is considered a “design-basis accident” under Table B-1. However, the Petitioners’ statement of contention seeks to challenge Dominion’s ER on the basis that the ER did not analyze “beyond-design basis” earthquakes, such as the 2011 Mineral Earthquake. Thus, even if Petitioners obtain a waiver to challenge Dominion’s reliance on the Table B-1 “SMALL” finding for *design-basis accidents*, which includes seismic events within the North Anna design basis, the Petitioners do not provide sufficient information to show that a genuine dispute exists on a material issue of law or fact concerning design basis accidents. Nor have Petitioners stated what would be materially different if Dominion did the analysis itself instead of relying on the Table B-1 findings, or why North Anna’s design basis accidents are not encompassed within the GEIS’s design basis accident determinations. Accordingly, this aspect of the contention should be found inadmissible.

¹⁸⁸ *New York v. NRC*, 681 F.3d 471, 479 (D.C. Cir. 2012)

¹⁸⁹ Petition at 14, 28.

¹⁹⁰ The Expanded Materials Degradation Assessment (EMDA) Report (NUREG/CR-7153) (Oct. 2014) vols. 1-5, ML14279A321, ML14279A331, ML14279A349, ML14279A430, and ML14279A461) is a joint report created by the NRC and U.S. Department of Energy (DOE) that builds off a previous report and conducts a comprehensive evaluation of potential aging-related degradation modes for SSCs, including core internals, piping systems, the reactor pressure vessel, electrical cables, and concrete and civil structures. The analytical timeframe for the EMDA Report encompasses the subsequent license renewal period.

¹⁹¹ Petition at 14, 28-29.

¹⁹² *Id.* at 29.

1. The Petitioners' claims that the ER fails to address the environmental impacts of extended operation under the risk of earthquakes are out of scope, not material to required findings, and fail to show a genuine dispute with the Applicant

The Petitioners assert that Dominion's ER fails to satisfy NEPA and the NRC's NEPA implementing regulations because it does not address the environmental impacts of operating the North Anna units for another 20-year term with respect to the risk of an earthquake exceeding the design basis near the North Anna reactors. They argue that because the 2011 Mineral earthquake exceeded North Anna's design basis, the assumption that the North Anna reactors could be operated safely and without significant adverse environmental impacts has been disproved.¹⁹³ Accordingly, the Petitioners assert that a new EIS "must be created that analyzes this additional, proven risk."¹⁹⁴ Petitioners also argue that although Dominion's ER mentions the 2011 Mineral earthquake, the ER contains no specific discussion of earthquake or other accident impacts.¹⁹⁵

This aspect of the contention fails to raise a genuine dispute with the Applicant on a material issue of law or fact. Under 10 C.F.R. § 51.53(c)(3)(iii), Dominion's ER appropriately considered the environmental effects of a beyond-design basis earthquake in the SLR term.¹⁹⁶ And consistent with Section 51.53(c)(iv), Dominion found that there was no new and significant information to incorporate into its ER with respect to severe accidents.¹⁹⁷ Accordingly, Dominion concluded that the NRC's 2013 GEIS generic finding that the probability-weighted consequences of severe accidents, which includes a beyond-design basis earthquake at North

¹⁹³ *Id.* at 13.

¹⁹⁴ *Id.*

¹⁹⁵ Petition at 18 (citing ER at E-3-52 to E-3-53).

¹⁹⁶ ER at E-4-85 to E-4-87.

¹⁹⁷ *Id.*

Anna, are SMALL, applies.¹⁹⁸ Although the Petitioners recognize these sections in the ER,¹⁹⁹ they do not question the adequacy of this review.

Additionally, 10 C.F.R. § 51.53(c)(3)(L) provides that neither Dominion's ER nor the Staff's EIS is required to conduct another SAMA evaluation for the North Anna SLR application. Because Dominion had conducted a SAMA analysis for North Anna in its initial license renewal ER, and because the Staff had previously considered SAMAs in the North Anna initial license renewal SEIS (Initial Renewal SEIS),²⁰⁰ barring new and significant information, Dominion did not need to conduct another SAMA analysis. The exception in Section 51.53(c)(3)(ii)(L) "operates as the functional equivalent of a Category 1 issue, removing SAMAs from litigation."²⁰¹ Any dispute with North Anna's SAMA analysis concerning seismic events is accordingly barred by regulation; and the Petitioners failed to request a waiver of this regulation in their Waiver Petition. Therefore, the Petitioners have not shown a genuine dispute with the ER because: Dominion appropriately relied on the Staff's analyses in the 2013 GEIS, which found the probability-weighted consequences of a severe accident (which included a beyond-design-basis earthquake) to be SMALL; and the Initial Renewal SEIS thoroughly evaluated Dominion's SAMA

¹⁹⁸ Dominion's ER used a screening process to determine if there was new and significant information to ensure that the Staff's generic finding for severe accidents was still appropriate. See ER at E-4-87. Dominion also considered developments such as new internal events information, external events, and risk-beneficial plant changes that were made in response from the Fukushima Daiichi Near Term Task Force. *Id.* Petitioners fail to dispute, much less mention, any of this information in the ER.

¹⁹⁹ Petition at 18-19.

²⁰⁰ The Staff's SAMA analysis for North Anna is at "GEIS for License Renewal of Nuclear Plants: Regarding North Anna Power Station, Units 1 and 2 – Final Report (NUREG-1437, Supplement 7)" (ML023380542) [hereinafter Initial Renewal SEIS]. The NRC Staff's evaluation of Dominion's SAMA analysis in the Initial Renewal SEIS identified potentially cost beneficial mitigation measures for severe accidents at North Anna, including a beyond-design basis earthquake. In considering North Anna's initial license renewal application, the NRC Staff found that Dominion had made a "reasonable, comprehensive effort ... to identify and evaluate SAMAs," and concluded "that none of the candidate SAMAs were cost beneficial" to implement. See Initial Renewal SEIS at xix.

²⁰¹ *Exelon Generation Co.* (Limerick Generation Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 203 (2013).

analysis, which did not have to be revisited in this proceeding under 10 C.F.R. § 51.53(c)(3)(L).

The contention fails to show a genuine dispute with the applicant's ER.²⁰²

In addition, the Petitioners argue that Dominion's ER must include an assessment of the probability and consequences of reactor accidents.²⁰³ However, the Petitioners do not challenge, much less mention, the methodology used in Dominion's ER analysis of severe accident external events that would affect North Anna, such as the 2011 Mineral earthquake. The Petitioners reason that because North Anna experienced an earthquake greater than what was included in its design basis, the North Anna subsequent license renewal EIS must analyze this risk. Contrary to the Petitioners' assertions, the 2013 GEIS's evaluation of the probability-weighted consequences of severe accidents and the Staff's Initial Renewal SEIS's consideration of mitigation measures for severe accidents (including those caused or contributed to by external hazards such as earthquakes) *already address* this risk, and the Petitioners do not challenge or establish how those analyses are deficient.

Further, the ER states that Dominion has conducted additional analyses for external events, such as seismic events.²⁰⁴ Dominion explains in the ER that over North Anna's operating life, "changes are made to the plant design, operation, and maintenance practices," and "periodic updates to the [North Anna probabilistic review assessment (PRA)] have ensured that the PRA includes the relevant changes" and reflects the plant's current design and

²⁰² 10 C.F.R. § 2.309(f)(1)(vi).

²⁰³ Petition at 13. The Petitioners rely on *New York v. NRC*, 681 F.3d 471, 479 (D.C. Cir. 2012) to support this aspect of their contention, but that case does not support the Petitioners' arguments. In *New York*, the court held that the NRC's EA and finding of no significant impact was not supported by evidence on the record because the NRC had failed to properly examine the risk of leaks and failed to examine the potential consequences of spent fuel pool fires. *Id.* Here, Dominion has appropriately relied on the Table B-1 conclusions codified under Part 51 and the Staff's SAMA analysis from the North Anna Initial Licensing SEIS, and has looked for new and significant information that might affect the SAMA analysis if warranted, which included a seismic PRA that included the 2011 Mineral earthquake and considered the applicable risk. The *New York* decision is not analogous here.

²⁰⁴ ER at E-4-91.

operation.²⁰⁵ As required by 10 C.F.R. § 51.53(c)(iv), which requires an applicant to include in its ER a review of new and significant information, Dominion reviewed the North Anna PRA “to determine if there is any new and significant information regarding the SAMA analyses” that would affect the NRC’s decision to renew the licenses for an additional 20-year term.²⁰⁶

In its consideration of new and significant information, Dominion defined “new” information as “data used in a SAMA analysis that have changed or become available since the time the preceding SAMA analysis was performed.”²⁰⁷ To determine the level of “significance” of identified new information, Dominion used a proprietary model.²⁰⁸ Importantly, the model included “a seismic PRA *which takes into account the 2011 Mineral, VA earthquake.*”²⁰⁹ Dominion then used qualitative and quantitative screening processes that included the seismic PRA, which considered earthquakes and other external events.²¹⁰

In its first step of its qualitative screening process, the ER states that Dominion collected 283 industry SAMAs for evaluation.²¹¹ From those, Dominion identified 39 industry SAMAs that were not qualitatively screened out and 51 North Anna-specific SAMAs for further evaluation.²¹² Next, in its evaluation of these SAMAs in its quantitative screening process, Dominion determined that “none of the bounding quantitative screening evaluations resulted in a reduction

²⁰⁵ *Id.* at E-4-85.

²⁰⁶ *Id.*

²⁰⁷ *Id.* at E-4-88.

²⁰⁸ *Id.* The ER explains that a SAMA would be considered “significant” if the maximum benefit calculated for North Anna would be reduced by a factor of two or more if the SAMA were implemented. The ER states that if it can be demonstrated that the SAMA would not reduce the core damage frequency (CDF) or any of the significant Level 2 release category group frequencies in the model of record by more than a factor of two, then that SAMA could not reduce the maximum benefit by a factor or more than two, and the SAMA would thus not be considered potentially significant and not be further evaluated. See *id.* at E-4-89 to 4-90.

²⁰⁹ ER at E-4-89 (citing [Nuclear Energy Institute] Report 17-04, Rev. 1, Model SLR and Significant Assessment Approach for SAMA (Dec. 2019)) (emphasis added).

²¹⁰ *Id.* at E-4-91 to 4-92.

²¹¹ *Id.*

²¹² *Id.* (citing Table E4.15-1 at E-4-93 to E-4-99).

of total CDF [core damage frequency], total LERF [large early release frequency], or total LLRF [large late release frequency] greater than 50 percent.²¹³ Dominion accordingly concluded that there was no new and significant information relevant to the original North Anna SAMA analysis, so no further analysis was needed for subsequent license renewal.²¹⁴ Significantly, the Petitioners do not mention, much less challenge Dominion's methodology and determinations regarding the absence of any "new and significant information" that would alter its SAMA conclusions, and the Petitioners proffered no new and significant information themselves in their Petition.

Despite Petitioners' claim that the Applicant must "address the probability and consequences of accidents caused or contributed by earthquakes"²¹⁵ during the subsequent license renewal term, Dominion did consider the 2011 Mineral earthquake in the seismic PRA used in its screening process for new and significant information.²¹⁶ Accordingly, there is no genuine dispute with the Applicant. The contention is inadmissible because it fails to show a genuine dispute with the applicant.²¹⁷ The Petitioners' contention seeks to litigate an issue that the Applicant addressed in its ER, without specifying any inadequacy in that analysis, and which the NRC Staff already addressed in both the GEIS and the North Anna Initial Renewal SEIS. Accordingly, this aspect of the contention should be rejected as it is outside the scope of this proceeding and is not material to the findings the NRC must make in this licensing action, and

²¹³ *Id.* at E-4-92 (citing Table E4.15-2, ER at E-4-100 to E-4-104).

²¹⁴ *Id.*

²¹⁵ Petition at 13.

²¹⁶ Further, the NRC Staff's analyses in the 2013 GEIS examines the probability and consequences of design basis accidents and severe accidents, which the Applicant relies upon in its ER, and Petitioners do not proffer sufficient information to challenge the 2013 GEIS generic findings. See 2013 GEIS at 1-6 (noting that "[f]or issues in which the probability of occurrence is a key consideration (i.e., postulated accidents), the probability of occurrence has been factored into the determination of significance"); *id.* at 1-26–1-27 (noting that the Staff considered potential consequences of a reactor accident in its findings for design basis accidents and severe accidents).

²¹⁷ 10 C.F.R. § 2.309(f)(1)(vi).

thus fails to demonstrate that the contention is within the scope of the proceeding or material to the findings that the NRC must make to support the proposed action.²¹⁸

2. The Petitioners' arguments that the ER should contain a cumulative impacts analysis concerning the effects of earthquakes on SSCs are out of scope, not material to required findings, and fail to show a genuine dispute with the Applicant

The Petitioners assert that Dominion's ER should include a discussion of the cumulative effects or impacts²¹⁹ of operation during the SLR term, "including the effects of earthquakes on SSCs whose ability to prevent or mitigate earthquake effects may be compromised by the long-term aging effects."²²⁰ Petitioners cite to SSCs and corresponding issues identified in SECY-14-0016,²²¹ which include embrittled reactor pressure vessels, reactor internals, concrete structures, and electrical cables,²²² as well as those issues examined in the NRC's EMDA Report.²²³

²¹⁸ 10 C.F.R. § 2.309(f)(1)(iii) and (iv). In their Petition, the Petitioners appear to challenge the adequacy of the NRC's post-Fukushima and post-Mineral earthquake actions and analyses, by claiming that the environmental impacts of the (beyond-design basis) Mineral earthquake were not adequately considered in the ER. Petition at 15-17. The ER, however, cited the severe accident evaluations and conclusions in the GEIS and the Initial License Renewal SEIS Following the 2011 Fukushima Dai-ichi earthquake in Japan the NRC ordered certain power reactor licensees, including Dominion, to conduct analyses and consider actions under 10 C.F.R. § 50.54(f) as part of the implementation of lessons learned from the accident at Fukushima. In this regard, the NRC requested that Dominion reevaluate the seismic hazards at North Anna using present-day methodologies and guidance. See *supra* n.54. Additionally, after the 2011 Mineral Earthquake, the NRC established further requirements for North Anna to be permitted to restart power operations. See *supra* at n.45. To the extent that the Petitioners seek to challenge the adequacy of the analyses and actions conducted by the NRC and the Applicant after the 2011 Fukushima Dai-ichi and 2011 Mineral earthquakes distinct from consideration of the environmental impacts of beyond-design basis earthquake events in the 2013 GEIS and the Initial Renewal SEIS, see Petition at 15-17, that challenge is outside the scope of this proceeding and should be rejected. 10 C.F.R. § 2.309(f)(1)(iii).

²¹⁹ The Petitioners seem to use "effects" and "impacts" interchangeably. See, e.g., Petition at 28, 29.

²²⁰ Petition at 28-29.

²²¹ *Id.* at 14 (citing Memorandum from Mark A. Satorius, NRC EDO, to NRC Commissioners, re: Ongoing Staff Activities to Assess Regulatory Considerations for Power Reactor [SLR] (Jan. 31, 2014) (ML14050A306) [hereinafter SECY-14-0016]).

²²² *Id.*

²²³ *Id.* (citing the EMDA Report, NUREG/CR-7153 (Oct. 2014)); see Petition at 28-29.

The Petitioners' assertions erroneously conflate reactor safety issues with the consideration of cumulative environmental impacts under NEPA and fail to provide support for the proffered contention. The NRC requires a license renewal applicant such as Dominion to conduct an *environmental* cumulative impacts analysis in its ER under 10 C.F.R. § 51.53(c)(3)(ii)(O).²²⁴ The Petitioners do not challenge, much less mention Dominion's cumulative impacts analysis.²²⁵ Accordingly, the Petitioners' request that Dominion conduct a cumulative impacts analysis of *safety* issues affecting North Anna's operation during the SLR term fails to demonstrate a genuine dispute with the applicant on a material issue of law or fact.²²⁶

The Petitioners claim that Dominion is required to conduct a cumulative impacts analysis of earthquakes on aging SSCs is also inadmissible under 10 C.F.R. § 2.309(f)(1)(iii); the Petitioners demand an analysis that is simply not required by the regulations that govern subsequent license renewal.²²⁷ On this point, the Petitioners' reliance on the licensing board decision in *Interim Storage Partners, LLC* (WCS Consol. Interim Storage Facility) is misplaced.²²⁸ In determining whether a proffered contention that concerned cumulative impacts was admissible for hearing, the Board in that proceeding correctly stated that "under NEPA, an

²²⁴ 10 C.F.R. § 51.53(c)(3)(ii)(O) states, "Applicants 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."

²²⁵ See ER Chapter E4.12, Cumulative Impacts (ER at E-4-62 to 4-79).

²²⁶ 10 C.F.R. § 2.309(f)(1)(vi).

²²⁷ See Petition at 14 ("the [ER] should include a discussion of the cumulative impacts of operation during the SLR term, including *the effects of earthquakes on SSCs*"); Petition at 28-29 ("Cumulative impacts reasonably include *the effects of earthquakes on SSCs*").

²²⁸ Petition at 9 (citing *Interim Storage Partners, LLC* (WCS Consol. Interim Storage Facility), LBP-19-7, 90 NRC 31 (2019)).

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.”²²⁹

The Petitioners likewise cite to the Council of Environmental Quality’s definition of “cumulative impacts,” defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”²³⁰ However, the Petitioners fail to explain, under these or the NRC’s regulations, why a “cumulative impacts” analysis must include a discussion of the cumulative impacts of earthquakes on aging SSCs.²³¹ Thus, the Petitioners are mistaken as to what a “cumulative impact” discussion should include under NEPA and the NRC’s regulations. The contention is not material to the findings the NRC must make nor does it establish a genuine dispute with the application.²³²

3. The Petitioners’ concerns regarding SECY-14-0016 and the EMDA Report are out of scope, not material to required findings, and fail to show a genuine dispute with the Application

In their contention, the Petitioners argue that the ER should address SECY-14-0016, which according to Petitioners had “identified significant knowledge gaps and uncertainties in predicting long-term aging behavior of a number of SSCs, including reactor pressure vessel embrittlement, irradiation-assisted stress corrosion cracking of reactor internals, concrete structure and containments degradation, and electrical cable qualification and condition assessment.”²³³ Petitioners also argue that the ER must address the findings in the NRC’s

²²⁹ *WCS Consol. Interim Storage Facility*, LBP-19-7, 90 NRC at 106 (quoting *Colo. Env’tl. Coal. v. Donbeck*, 185 F.3d 1162, 1176 (10th Cir. 1999) (internal quotations omitted).

²³⁰ Petition at 9 (citing 40 C.F.R. § 1508.7).

²³¹ ER at Chapter E4.12 (E-4-62 to E-4-79).

²³² 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

²³³ Petition at 29.

EMDA Report.²³⁴ They aver that these uncertainties must be addressed under *Limerick Ecology Action v. NRC*,²³⁵ and they further argue that the ER should address the availability of harvested reactor components, as “neither NRC nor the nuclear industry has established” such a program.²³⁶

These arguments should be rejected because the Petition’s generalized discussion of SECY-14-0016 and the EMDA Report fails to make the required showing that the issues raised are material to the findings the Staff must make to support North Anna’s subsequent license renewal.²³⁷ Further, the Petitioners fail to articulate why having the ER address SECY-14-0016 and the EMDA Report would make a difference in the outcome of this proceeding; nor do the Petitioners point to any specific sections of these documents that would be material to the ER’s analysis or the Staff’s eventual findings.²³⁸ Similarly, the Petitioners do not explain why the need for the ER to incorporate these studies constitutes a material dispute with the Application.

Further, although the Petitioners quote language from the 2014 EMDA Report that describes research needs concerning degradation that could occur during post-60-year reactor operation, they overlook publicly available NRC guidance documents that have been revised to address information related to managing the effects of aging during the SLR period.²³⁹ More

²³⁴ See *id.* at 21-24.

²³⁵ *Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 744 (3d. Cir. 1989).

²³⁶ Petition at 24. To the extent the contention challenges the NRC’s regulatory scheme, this grievance is too generalized to be heard in this proceeding. As such, the Petitioners’ proper avenue to pursue this concern is to file a petition for rulemaking under 10 C.F.R. § 2.802.

²³⁷ Moreover, to the extent the contention asserts that the NRC must establish a reactor harvesting program, this is also a generalized concern that is not unique to North Anna and is outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii).

²³⁸ *Holtec Int’l.*, CLI-20-4, 91 NRC at 190 (“Our regulations require an admissible contention to show a genuine dispute exists with the applicant/licensee on a material issue of law or fact. A dispute at issue is material if its resolution would make a difference in the outcome of the licensing proceeding.”) (internal citations and quotation marks omitted).

²³⁹ See Petition at 22; see, e.g., SLRA Chapter 3 at 3-1 (stating that it is based on NUREG-2192, SRP-SLR, ML17188A158) and SLRA Chapter 2 at 2-6 (grouping North Anna SLR systems and structures of guidance from NUREG-2191, GALL-SLR, ML17187A031 (vol.1) and ML17187A204 (vol. 2)); see also SLRA

specifically, Dominion’s SLRA relies upon the GALL-SLR Report and the SLR-SRP²⁴⁰—both of which incorporate revisions “to reflect aging differences for increased operating time from 60-80 years” as well as revisions “to consider new operating experience and provide information identified as missing since the release of GALL Report Revision 2.”²⁴¹ In fact, the GALL-SLR Report specifically states that the Staff “used the results of the [2014] EMDA report to identify gaps in current technical knowledge or issues not being addressed by planned industry or DOE research, and to identify aging management programs that will require modification for SLR.”²⁴² In addition, the Staff considered and reviewed results from aging management program (AMP) audits, domestic and international operating experience, industry viewpoints and recommendations, and public comments in drafting the GALL-SLR Report.²⁴³ As such, the Staff has already addressed Petitioners’ concerns about uncertainties occurring “in predicting long-term aging behavior” of the SSCs listed in their proffered contention.²⁴⁴ Because the Staff used the EMDA report in the GALL-SLR and has addressed uncertainties associated with aging SSCs for subsequent license renewal, the Petitioners’ contention fails to show a genuine dispute with the application.²⁴⁵ To the extent the Petitioners appear to interpret SECY-14-0016 as a regulatory mandate; this is not accurate.²⁴⁶ A Commission paper does not provide direction

Appendix B, Aging Management Programs at B-1 (stating that aging management programs (AMPs) are consistent with the GALL-SLR or SRP-SLR).

²⁴⁰ See, e.g., SLRA Chapter 3 at 3-1 (stating that it is based on NUREG-2192, SRP-SLR) and SLRA Chapter 2 at 2-6 (grouping North Anna SLR systems and structures of guidance from NUREG-2191, GALL-SLR); see also SLRA Appendix B, Aging Management Programs at B-1 (stating that aging management programs (AMPs) are consistent with the GALL-SLR or SRP-SLR).

²⁴¹ Final Guidance Documents for [SLR], 82 Fed. Reg. 32,588 (also noting the incorporation of Interim Staff Guidance documents).

²⁴² See GALL-SLR at xxvii.

²⁴³ GALL-SLR at xxviii.

²⁴⁴ Petition at 13, 29.

²⁴⁵ 10 C.F.R. § 2.309(f)(1)(vi).

²⁴⁶ See Petition at 19-24.

to the staff or establish an agency position—it provides information or recommendations to the Commission.²⁴⁷ For Commission vote papers, the Commission provides direction to the staff through a staff requirements memorandum (SRM).²⁴⁸ In the SRM for SECY-14-0016, the Commission disapproved the Staff’s recommendation to establish a separate rulemaking for subsequent license renewal, finding no such rulemaking to be necessary.²⁴⁹ Instead, the Commission directed the Staff to “address emerging technical issues and operating experience through alternative vehicles,” such as updated guidance, generic communications, voluntary industry initiatives, and inspection enhancements.²⁵⁰

Further, the Petitioners’ contention does not challenge the Applicant’s plans to manage its aging SSCs during the subsequent renewal term.²⁵¹ Although the Petitioners contend that the SLRA “does not reflect consideration of the 2011 earthquake’s ground motion values in Dominion’s aging analysis,”²⁵² the Petitioners do not provide sufficient information to show that a genuine dispute exists with Dominion’s ER.²⁵³ Moreover, under its ongoing regulatory role, the NRC Staff determined that after the 2011 Mineral earthquake North Anna could be operated safely without updating its design basis earthquake (DBE).²⁵⁴ North Anna is not the only power reactor site to have experienced a seismic event that exceeded a design basis, and the Petitioners have not demonstrated that this issue is within the scope of the NRC’s review here

²⁴⁷ See Internal Commission Procedures, ch. II, “Decision Documents” (Mar. 24, 2016), at II-1 to II-3 (ML19296A025).

²⁴⁸ *Id.* at II-8.

²⁴⁹ SRM-SECY-14-0016 at 1 (ML14241A578).

²⁵⁰ *Id.*

²⁵¹ See, e.g., ER at E-25-1, E-2-52; North Anna Application for SLR, Appendix B, Aging Management Programs.

²⁵² Petition at 25.

²⁵³ See SLRA at 3-775 to 780.

²⁵⁴ See *generally* North Anna Power Station, Technical Evaluation Related to Plant Restart (finding that North Anna could be safely restarted and operated without undue risk to the health and safety of the public).

or material to the findings that the NRC must make in a license renewal proceeding.²⁵⁵ Because the NRC Staff already determined that North Anna can be safely restarted and operated without updating North Anna's DBE, this Board should find that Petitioners' argument—that the Applicant's use of DBE seismic ground force in the SLRA was invalidated by the 2011 Mineral earthquake—constitutes an impermissible challenge to the adequacy of North Anna's current licensing basis and as such is not within the scope of the license renewal proceeding.²⁵⁶

Finally, although the Petitioners raise concerns about aging SSCs related to seismic events at North Anna throughout their Petition, not once do they specify or dispute any North Anna AMP or allege any deficiency in any particular North Anna AMP. The Petitioners' failure to thoroughly examine Dominion's application, particularly the sections that discuss the GALL-SLR and relevant AMPs, reveal that the Petitioners' concerns about the impacts of beyond-design basis seismic events are generalized and not adequately supported. Thus, the Petitioners have

²⁵⁵ See, e.g., *Sierra Club v. NRC*, 825 F.2d 1356 (9th Cir. 1987) (NRC required San Onofre Nuclear Generating Station Unit 1 to demonstrate that it met its licensed DBE of 0.5g before the plant, then in an outage, could be permitted to restart, after the NRC was aware of a new fault that could give rise to ground motion of 0.67g); *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), DD-86-4, 23 NRC 211 (1986) (no change to design basis was necessary even though the DBE was exceeded during the operating license hearing); *South Carolina Elec. & Gas Co.* (Virgil C. Summer Nuclear Station, Unit 1), LBP-81-47, 14 NRC 865 (1981) (the plant exceeded its OBE while under construction, but was found acceptable for operation before its license was issued).

²⁵⁶ See 10 C.F.R. § 2.309(f)(1)(iii); see also *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”); *Vt. Yankee*, CLI-07-3, 65 NRC at 17-18; *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-12-06, 75 NRC 352, 357 (2012); See generally, Final rule, “Nuclear Power Plant License Renewal,” 56 Fed. Reg. 64,943, 64,954 (Dec. 13, 1991) (the “license renewal application should not include any changes to the current licensing basis other than those necessary to address age-related degradation unique to license renewal”); Final rule, “Nuclear Power Plant License Renewal; Revisions,” 60 Fed. Reg. 22,461 (May 8, 1995) (“The intent of those provisions in the previous rule [10 C.F.R. 54.29] was to clarify that safety and environmental matters not unique to the period of extended operation would not be the subject of the renewal application or the subject of a hearing in a renewal proceeding absent specific Commission direction. Rather, issues that represent a current problem for operation would have been addressed in accordance with the Commission's regulatory process and procedures. Thus, under the previous rule, a member of the public who believed that a current problem exists with a license or a matter exists that is not adequately addressed by current NRC regulations would have either petitioned the NRC to take appropriate action under Sec. 2.206, or petitioned the NRC to institute rulemaking to address the issue under Sec. 2.802.”).

not provided sufficient information to demonstrate a genuine dispute exists with the Applicant on a material issue.²⁵⁷

Petitioners' contention is not admissible; it raises issues that are outside the scope of this proceeding, not material to the NRC's findings, and that fail to show a genuine dispute with the Application.²⁵⁸

CONCLUSION

For the reasons set forth above, the NRC Staff respectfully submits that the Petitioners have demonstrated standing to intervene in this proceeding, but have not satisfied the NRC's standards for issuance of a waiver under 10 C.F.R. § 2.335 and have not proffered at least one admissible contention as required by 10 C.F.R. § 2.309(f)(1). Accordingly, the Petition should be denied.

Respectfully submitted,

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²⁵⁷ 10 C.F.R. § 2.309(f)(1)(vi).

²⁵⁸ 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

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Dated in Colorado Springs, Colorado
this 8th day of January 2021

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

VIRGINIA ELECTRIC AND POWER
COMPANY

(North Anna Power Station, Units 1 and 2)

Docket No. 50-338-SLR
50-339-SLR

Certificate of Service

Pursuant to 10 C.F.R § 2.305, I hereby certify that copies of the foregoing "NRC STAFF ANSWER TO HEARING REQUEST, PETITION TO INTERVENE, AND PETITION FOR WAIVER FILED BY BEYOND NUCLEAR, SIERRA CLUB, AND ALLIANCE FOR PROGRESSIVE VIRGINIA," dated January 8, 2021, have been served upon the Electronic Information Exchange (the NRC's E-Filing System), in the captioned proceeding, this 8th day of January 2021.

/Signed (electronically) by/

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this 8th day of January 2021