

April 22, 2015

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE SECRETARY OF THE COMMISSION

In the Matter of)
Virginia Electric and Power Co.)
d/b/a Dominion Virginia Power and) Docket No. 52-017-COL
Old Dominion Electric Cooperative)

**BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE’S HEARING REQUEST
AND PETITION TO INTERVENE IN COMBINED LICENSE
PROCEEDING FOR NORTH ANNA UNIT 3 NUCLEAR POWER PLANT**

I. INTRODUCTION

Pursuant to 10 C.F.R. §§ 2.309(c), 2.309(f)(1), and 2.309(f)(2), Blue Ridge Environmental Defense League (BREDL) requests a hearing and seeks leave to intervene in the Nuclear Regulatory Commission’s (NRC’s) combined licensing (COL) proceeding for the North Anna Unit 3 nuclear power plant. This Hearing Request/Petition to Intervene is supported by the attached BREDL’s Motion to Reopen the Record of Combined License Proceeding for North Anna Unit 3 Nuclear Power Plant (Apr. 22, 2015).

BREDL seeks admission of a single place-holder contention challenging the NRC’s reliance, in proposing to license North Anna Unit 3, on the Continued Storage of Spent Nuclear Fuel Rule (79 Fed. Reg. 56,238 (Sept. 19, 2014) (Continued Spent Fuel Storage Rule)) and the Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157, September 2014) (Continued Spent Fuel Storage GEIS).¹ While BREDL

¹ BREDL notes that similar place-holder contentions have been filed in other NRC licensing cases, including license renewal proceeding for Callaway Unit 1 and the Fermi Unit 3 COL proceeding. See Missouri Coalition for the Environment’s Hearing Request and Petition to Intervene in License Renewal Proceeding for Callaway Nuclear Power Plant (Dec. 8, 2014); Beyond Nuclear’s Hearing Request and Petition to Intervene in Combined License Proceeding for Fermi Unit 3 Nuclear Power Plant (Feb. 12, 2015).

seeks admission of its contention, it does not seek to litigate the substantive content in an adjudicatory hearing. Instead, BREDL has already raised its concerns about the Continued Spent Fuel Storage Rule and the Continued Spent Fuel Storage GEIS in comments on draft versions of those documents, and the NRC has already either rejected or disregarded BREDL's comments in the final versions of the Rule and GEIS. BREDL also has appealed the final versions to the U.S. Court of Appeals for the District of Columbia Circuit. *See Beyond Nuclear v. NRC*, Docket No. 14-1216 (filed Oct. 29, 2014).²

The sole purpose of this contention is to lodge a formal challenge to the NRC's complete and unqualified reliance, in the separate license proceeding for North Anna Unit 3, on the legally deficient Continued Spent Fuel Storage Rule and Continued Spent Fuel Storage GEIS. BREDL submits its contention with the reasonable expectation that it will be denied, because the subject matter of the contention is generic. BREDL respectfully submits that nevertheless, the filing of a contention is the only procedural means offered by Commission regulations for ensuring that any court decision resulting from BREDL's appeal of the generic Continued Spent Fuel Storage Rule and GEIS will also be applied to the individual North Anna Unit 3 license proceeding, which relies on the Continued Spent Fuel Storage Rule and GEIS. Upon denial of BREDL's contention, SEED Coalition intends to appeal the decision to the U.S. Court of Appeals and request the Court to hold the appeal in abeyance pending its ruling in *New York II*.³

² *Beyond Nuclear v. NRC* was consolidated with four other cases and is now captioned *New York et al. v. NRC*, Docket Nos. 14-1210, 14-1212, 14-1216, and 14-1217 (Consolidated) (filed October 31, 2014) (“*New York II*”).

³ In this context, BREDL notes that its contention is not accompanied by a petition for a waiver of 10 C.F.R. §§ 51.71(d), 51.95(c)(2), or any of the other regulations on which the Commission

II. DEMONSTRATION OF STANDING

BREDL is a 31-year-old regional, community-based non-profit environmental organization in the southeastern United States, whose founding principles are earth stewardship, environmental democracy, social justice, and community empowerment. BREDL encourages government agencies and citizens to take responsibility for conserving and protecting our natural resources. BREDL advocates grassroots involvement to empower whole communities in environmental issues. BREDL also functions as a watchdog of the environment, monitoring issues and holding government officials accountable for their actions.

BREDL seeks admission of its contention in order to protect its members' interest in a clean and healthy environment, including protection from the health and environmental hazards posed by generation of spent fuel at the proposed North Anna Unit 3 nuclear reactor. The organization has standing to intervene through members who live, work, and/or own property within 50 miles of the proposed North Anna Unit 3 reactor, and their interests may be affected by the results of the proceeding. *Virginia Electric and Power Co. (North Anna Nuclear Power Station, Units 1 and 2)*, ALAB-522, 9 NRC 54, 56 (1979). Their health, safety, property value, and means of livelihood could be adversely affected if the NRC permits North Anna Unit 3 to operate in a manner that is unsafe or harmful to the environment. BREDL has attached a

relies to bar members of the public from litigating generic NEPA issues in individual licensing proceedings. No purpose would be served by such a waiver, because BREDL does not seek an adjudicatory hearing on the NRC's generic environmental findings. Instead, BREDL's only purpose in raising its contention is to ensure that any decision by the U.S. Court of Appeals regarding the validity of the Continued Spent Fuel Storage Rule and GEIS will also be applied to this proceeding, in which the NRC relies on them.

declaration from member John Cruikshank who has authorized BREDL to bring this legal action on his behalf.

III. FACTUAL AND PROCEDURAL BACKGROUND

For several decades, the NRC relied on its "Waste Confidence" decision and Temporary Storage Rule to address, in reactor licensing and re-licensing proceedings, safety and environmental issues associated with spent fuel storage and disposal. In 2010, the NRC published updates to the Waste Confidence decision (the "Waste Confidence Update") and Temporary Storage Rule, which were challenged by several state governments, an Indian tribe, and environmental organizations. Waste Confidence Decision Update, 75 Fed. Reg. 81,037 (Dec. 23, 2010) and Temporary Storage Rule, 75 Fed. Reg. 81,032 (Dec. 23, 2010). In *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012) ("*New York I*"), the U.S. Court of Appeals vacated the Waste Confidence Update and Temporary Storage Rule, and remanded them to the NRC for further proceedings.

In December 2006, the NRC issued NUREG-1811, the Environmental Impact Statement for an Early Site Permit (ESP) at the North Anna ESP Site ("*North Anna 3 ESP FEIS*"). The ESP FEIS did not contain an analysis of spent fuel storage impacts, but in response to comments the NRC stated:

The NRC staff will evaluate the environmental impacts of the uranium fuel cycle including the impacts of fuel manufacturing, transportation, and onsite storage and eventual disposal of spent fuel. The staff's evaluation will account for the Commission's "Waste Confidence" decision embodied in 10 CFR 51.23 to the extent that decision applies to such impacts. The results of this analysis will be presented in Chapter 4 [now Chapter 6] of the EIS.

Id. at ___. In 2010, after Dominion applied for a COL for North Anna Unit 3, the NRC issued

NUREG-1917, Supplemental Environmental Impact Statement for the Combined License (COL) for North Anna Power Station Unit 3 (North Anna Unit 3 FSEIS). The FSEIS contained no additional analysis of spent fuel storage impacts. Instead, in response to comments, the NRC stated:

The staff will evaluate new and significant information concerning the impact of low level waste storage and disposal in Chapter 6.1 of the SEIS. The safety and environmental effects of long-term storage of spent fuel on site has been evaluated by the NRC and, as set forth in the Waste Confidence Rule at 10 CFR 51.23 (available at http://www.nrc.gov/readingrm/doc-collections/cfr/part051/part051_0023.html), the NRC generically determined that "if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel installations. Further, the Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial high-level waste and spent fuel originating in any such reactor and generated up to that time." These comments provide no new and significant information; therefore, they will not be evaluated further.

Id. at D-80.

On July 9, 2012, following on the Court's decision, BREDL submitted a contention in this proceeding, asserting that in the absence of a valid GEIS for spent fuel storage and disposal, the environmental impacts and alternatives must be analyzed in the individual licensing proceeding. Intervenor's Motion for Leave to File a New Contention Concerning Temporary Storage and Ultimate Disposal of Nuclear Waste at Proposed North Anna Unit 3 Nuclear Power Plant. BREDL also petitioned the NRC to suspend the North Anna Unit 3 licensing proceeding pending the agency's compliance with the Court's remand. At the request of BREDL and other

petitioners, the NRC subsequently suspended licensing and re-licensing decisions for all reactors, including North Anna Unit 3. *Calvert Cliffs 3 Nuclear Power Project, LLC et al.*, CLI-12-16, 76 NRC 63 (2012) (öCLI-12-16ö).

Then, on September 13, 2013, in response to the Court's remand in *New York I*, the NRC published a proposed rule entitled Waste Confidence ó Continued Storage of Spent Nuclear Fuel, 78 Fed. Reg. 56,776 (Sept. 13, 2013) (öProposed Waste Confidence Ruleö). The NRC also published a Draft Waste Confidence GEIS (NUREG-2157, noticed at 78 Fed. Reg. 56,621 (Sept. 13, 2013)).

On December 20, 2013, BREDL joined thirty-two other environmental organizations in submitting Comments by Environmental Organizations on Draft Waste Confidence Generic Environmental Impact Statement and Proposed Waste Confidence Rule and Petition to Revise and Integrate All Safety and Environmental Regulations Related to Spent Fuel Storage and Disposal (ADAMS Accession No. ML14030A152, corrected on Jan. 7, 2014 in ML14024A297) (öBREDL et al. Commentsö). The BREDL et al. Comments were supported by expert declarations by Dr. Arjun Makhijani, David Lochbaum, Dr. Gordon Thompson, and Mark Cooper (ADAMS Accession No. ML14030A152). The comments and supporting declarations made detailed and comprehensive criticisms of the Proposed Waste Confidence Rule and Draft Waste Confidence GEIS, charging that they were inadequate to satisfy NEPA or the Atomic Energy Act on both legal and technical grounds. Other organizations, as well as state and local governments, also filed comments critical of the Proposed Rule and Draft GEIS.

Despite receiving significant criticisms of the proposed Waste Confidence Rule and Draft

Waste Confidence GEIS, in September 2014, the NRC published the Final Continued Spent Fuel Storage Rule and Final Continued Spent Fuel Storage GEIS, without changing its environmental analysis in any significant respect. The Final Continued Spent Fuel Storage Rule also omitted "Waste Confidence" safety findings required by the Atomic Energy Act. Upon issuance of the Rule and GEIS, the Commission lifted the suspension of licensing and re-licensing for North Anna Unit 3 and other reactors. *Calvert Cliffs 3 Nuclear Power Project, LLC et al.*, CLI-12-08, 80 NRC 71 (2014).

In October 2014, BREDL joined seven other environmental organizations in seeking judicial review of the Rule and GEIS by the U.S. Court of Appeals for the District of Columbia Circuit under NEPA, the Atomic Energy Act, and the Administrative Procedure Act, *inter alia*. *Beyond Nuclear et al. v. NRC*, No. 14-1216 (filed Oct. 29, 2014). The case was consolidated with similar appeals by the States of New York, Connecticut, Massachusetts, and Vermont; the Prairie Island Indian Community; and Natural Resources Defense Council. *See New York et al. v. NRC*, Docket Nos. 14-1210, 14-1212, 14-1216, and 14-1217 (Consolidated) (filed October 31, 2014) ("New York II"). The parties are now awaiting a briefing schedule.

After the NRC issued the Continued Spent Fuel Storage Rule and GEIS, BREDL reasonably anticipated that the NRC Staff would comply with NEPA and the agency's own implementing regulations by incorporating the Continued Spent Fuel Storage GEIS by reference into the grossly outdated North Anna Unit 3 FEIS. When three months had passed after the effective date of the Rule and the NRC Staff still had not supplemented the North Anna Unit 3 FSEIS (or any other FEIS issued prior to the Continued Spent Fuel Storage GEIS), BREDL

joined four other organizations in petitioning the NRC Commissioners to order the correction of the Staff's legal error. Petition to Supplement Reactor-Specific Environmental Impact Statements to Incorporate by Reference the Generic Environmental Impact Statement for Continued Spent Fuel Storage (Jan. 28, 2015) ("Petition to Supplement"). The Petitioners argued that NEPA and implementing regulations of NRC and the Council on Environmental Quality ("CEQ") require the NRC to supplement the North Anna Unit 3 FEIS and other EISs to incorporate the Continued Spent Fuel Storage GEIS by reference. The Petition is pending before the Commission.

IV. CONTENTION

A. Statement of Contention

While the text of the North Anna Unit 3 FSEIS is grossly outdated with respect to its discussion of spent fuel storage impacts, 10 C.F.R. § 51.23(b) provides that the Continued Spent Fuel Storage GEIS is incorporated by reference into the North Anna Unit 3 FEIS.⁴ For all of the reasons stated in BREDL et al.'s Comments on the Draft Waste Confidence GEIS, however, the Continued Spent Fuel Storage Rule and GEIS fail to provide the NRC with a lawful basis under NEPA for issuing a COL for North Anna Unit 3. As discussed in BREDL et al.'s comments on the Rule and GEIS, they suffer from the following failures:

- In blatant violation of NEPA and the Court's decision in *New York I*, the Continued Spent Fuel Storage GEIS fails to examine the probability and consequences of failure to site a repository. Instead of examining the risk of failing to site a repository, the GEIS rationalizes the risk away, by arbitrarily assuming that spent fuel will be protected by

⁴ 10 C.F.R. § 51.23(b) states that the Continued Spent Fuel Storage GEIS is deemed incorporated into EISs prepared under 10 C.F.R. § 51.95 (which governs preparation of draft and final supplemental EISs for reactor licensing and license renewal).

institutional controls for an infinite period of time at reactor sites. This assumption is not only absurd and inconsistent with the Nuclear Waste Policy Act (NWPA), but it also defeats the Court's purpose of forcing NRC to reckon with the environmental consequences of its failure to site a repository.

- The GEIS fails to acknowledge that the Continued Spent Fuel Storage Rule is a licensing action, and therefore it distorts the statement of purpose and need for the rule as relating to administrative rather than environmental concerns. As a result, the GEIS also mischaracterizes the alternatives that must be considered. Instead of evaluating alternatives related to storage and disposal of spent fuel, the GEIS examines alternatives related to the administrative question of how to prepare an EIS. The result is a farcical cost-benefit analysis that utterly fails to address alternatives for avoiding or mitigating the environmental impacts of storing spent fuel or siting a repository.
- The GEIS's analysis of the environmental impacts of extended spent fuel storage ignores the fact that NRC knows very little about the behavior of spent fuel in long-term or indefinite storage conditions, especially the potentially significant effects of long-term dry cask storage on high burnup fuel integrity. In violation of NEPA, the NRC makes no attempt to quantify these uncertainties.
- The GEIS fails to fully consider the environmental impacts of spent fuel pool leaks and fires. In violation of NEPA, the GEIS relies upon incomplete data, adopts a flawed concept of risk and ignores a range of causes for accidents.
- In violation of NEPA, the GEIS makes no attempt to show how the environmental impacts associated with the Continued Spent Fuel Storage Rule will be quantified and incorporated into cost-benefit analyses for nuclear reactors. Although spent fuel disposal and long-term storage costs are high enough to tip the balance of a cost-benefit analysis for reactor licensing away from licensing, nowhere does the NRC explain how it will take these costs into account in reactor licensing decisions.
- In violation of NEPA, the GEIS fails to support the limited conclusions in the Continued Spent Fuel Storage Rule and GEIS regarding the technical feasibility of spent fuel disposal.
- The NRC has splintered the analysis of environmental impacts associated with storage and disposal of spent fuel into an array of safety findings and environmental analyses. While the issues covered by these separate findings and analyses overlap and involve

cumulative impacts, the NRC refuses to integrate them. The NRC also refuses to correct inconsistencies between them.⁵

B. Statement of Basis for the Contention

The basis for BREDL's contention is provided in the BREDL et al. Comments and attachments (including the declarations of Dr. Arjun Makhijani, Dr. Gordon Thompson, David Lochbaum, and Mark Cooper).

C. Demonstration that the Contention is Within the Scope of the Proceeding

The contention is within the scope of the proceeding because it challenges the adequacy of the NRC's NEPA review for the licensing of North Anna Unit 3.

D. Demonstration that the Contention is Material to the Findings the NRC Must Make to License This Reactor

The contention is material to the findings that the NRC must make in order to license this reactor because it asserts that the environmental findings in the Continued Spent Fuel Storage Rule and the Continued Spent Fuel Storage GEIS are not supported and are legally deficient.

E. Concise Statement of the Facts or Expert Opinion Supporting the Contention, Along with Appropriate Citations to Supporting Scientific or Factual Materials

The statements of fact or expert opinion supporting the contention are set forth in the BREDL et al. Comments and attachments (including the declarations of Dr. Arjun Makhijani,

⁵ As discussed above at page 7, the NRC Staff has not yet updated the North Anna Unit 3 FSEIS to incorporate the Continued Spent Fuel Storage GEIS by reference, as required by NEPA, 10 C.F.R. Part 51, Appendix A and other authorities. *See also* Petition to Supplement at 7-9. In the absence of an accurate FSEIS, BREDL is not able to challenge the North Anna Unit 3 FSEIS with the accuracy and specificity required by 10 C.F.R. §§ 2.309(f)(1)(vi) and (f)(2). *Id.* at 10-11. Nevertheless, in order to ensure that the contention is filed before the NRC licenses North Anna Unit 3, BREDL submits it now, based on the best available information.

Dr. Gordon Thompson, David Lochbaum, and Mark Cooper).

F. A Genuine Dispute Exists with the Applicant on a Material Issue of Law or Fact

This contention raises a genuine dispute with both the applicant and the NRC regarding whether the NRC has satisfied NEPA for the purpose of issuing the COL for North Anna Unit 3.

V. THE CONTENTION IS TIMELY PURSUANT TO 10 C.F.R. §§ 2.309(c) and 2.309(f)(2)

NRC regulations 10 C.F.R. § 2.309(c) and § 2.309(f)(2) call for a showing that:

(i) The information upon which the amended or new contention is based was not previously available;

(ii) The information upon which the amended or new contention is based is materially different than information previously available; and

(iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

This Hearing Request/Petition to Intervene is timely because it does not depend at all on past information. Instead, it is a "placeholder" that depends on an event that will occur in the future: the U.S. Court of Appeals' decision in *New York II*. BREDL's contention seeks the denial (or revocation) of a COL for North Anna Unit 3 in the event that the Court of Appeals reverses the Continued Spent Fuel Storage Rule and/or GEIS.

VI. CONSULTATION CERTIFICATION PURSUANT TO 10 C.F.R. § 2.323(b)

Undersigned representative Louis Zeller certifies that on April 22, 2015, he contacted counsel for the applicants and the NRC Staff in an attempt to obtain their consent to this Hearing Request/Petition to Intervene. Counsel for both parties stated that they would oppose it.

VII. CONCLUSION

For the reasons stated, BREDL respectfully requests that its contention be admitted.

Respectfully submitted,

A handwritten signature in black ink that reads "Louis A. Zeller". The signature is written in a cursive style and is positioned above a horizontal line that extends to the right.

Signed (electronically) by:

Louis A. Zeller

Blue Ridge Environmental Defense League

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Glendale Springs, NC 28629

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BREDL@skybest.com

April 22, 2015

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE SECRETARY OF THE COMMISSION

In the Matter of)
Virginia Electric and Power Co.)
d/b/a Dominion Virginia Power and) Docket No. 52-017-COL
Old Dominion Electric Cooperative)

CERTIFICATE OF SERVICE

I hereby certify that the **BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE'S HEARING REQUEST AND PETITION TO INTERVENE IN COMBINED LICENSE PROCEEDING FOR NORTH ANNA UNIT 3 NUCLEAR POWER PLANT** has been filed through the Electronic Information Exchange system this 22nd day of April, 2015.



Louis A. Zeller
Executive Director
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Phone: (336) 982-2691
Email: bredl@skybest.com

April 18, 2015

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE SECRETARY OF THE COMMISSION

In the Matter of)

VIRGINIA ELECTRIC POWER CO. d/b/a)
DOMINION VIRGINIA POWER and OLD)
DOMINION ELECTRIC COOPERATIVE)
(North Anna Power Station, Unit 3))

Docket No. 52-017-COL

DECLARATION OF John A. Cruickshank

Under penalty of perjury, I, John A. Cruickshank, declare as follows:

1. I make this declaration of my own personal knowledge. If called to testify as a witness, I could and would testify competently regarding its contents.

2. I am a current member of Blue Ridge Environmental Defense League and its chapter Peoples Alliance for Clean Energy ("BREDL"). I agree with BREDL's mission of promoting clean and safe energy, and I believe my health and well-being depend upon the health of the environment in the region where I live. I have authorized BREDL to submit a contention on my behalf challenging the NRC's failure to fully and adequately assess the environmental impacts of storing and disposing of the spent fuel that will be generated by the North Anna Unit 3 nuclear reactor, if it is licensed.

3. I know that BREDL submitted comments to the U.S. Nuclear Regulatory Commission ("NRC") in 2013 regarding the NRC's proposed rule entitled "Waste Confidence Decision - Continued Storage of Spent Nuclear Fuel," which was published at 78 Fed. Reg. 56,776 on September 13, 2013 and its accompanying "Waste Confidence Generic Environmental Impact Statement," published the same day.

4. I live at 324 Parkway St., Charlottesville, VA, 22902. My home lies within 30 miles of the proposed North Anna Unit 3 nuclear reactor. This is less than the fifty-mile radius distance at which the U.S. Nuclear Regulatory Commission ("NRC") presumes a reactor accident will cause harm to my health and safety.

5. I am concerned about the health and environmental risks posed by the spent fuel that will be generated by North Anna Unit 3 if it is licensed. I am aware that Congress has established a policy that the spent fuel should be removed from the North Anna Unit 3 nuclear plant site to a repository for permanent disposal. But, I am concerned that permanent disposal of spent fuel may not be feasible. I am also concerned that the government will not find sufficient capacity in a repository or multiple repositories to accommodate the spent fuel to be generated by North

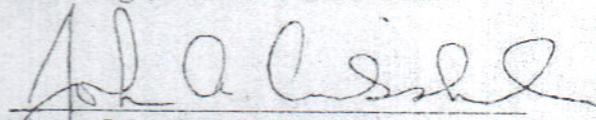
Anna Unit 3. For these reasons, I am concerned that the North Anna Unit 3 reactor site may become a *de facto* long term spent fuel storage depot or even waste disposal site. I am concerned that spent fuel stored for a lengthy period at the North Anna Unit 3 site may leak into the environment and harm my health and threaten my safety. Additionally, I am concerned about the health and safety of future generations in my family, and protection of the environment.

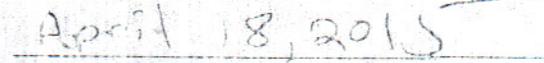
6. I am aware that NRC must conduct a full environmental review whenever it licenses or re-licenses a nuclear power plant. However, I am concerned that NRC has not adequately evaluated the environmental, health, and safety consequences of storing spent nuclear fuel at the North Anna Unit 3 nuclear plant site during the time following the licensed life of the reactor. In the absence of adequate environmental analyses regarding the storage of spent fuel, I do not have confidence that my health and safety or the integrity of my environment will be protected from the adverse effects of exposure to spent reactor fuel.

7. I have authorized BREDL to file a contention that seeks to raise my concerns in this proceeding. I believe this contention will redress my concerns by forcing the NRC to either conduct the required environmental analyses or deny the license application for North Anna Unit 3.

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I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief.


Name: John A. Cruickshank


Date: April 18, 2015