

April 22, 2015

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

In the Matter of)
Tennessee Valley Authority) Docket Nos. 50-327-LR
(Sequoyah Nuclear Plant, Units 1 and 2)) 50-328-LR

**BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE'S HEARING REQUEST
AND PETITION TO INTERVENE IN LICENSE RENEWAL
PROCEEDING FOR SEQUOYAH UNITS 1 AND 2**

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) license renewal proceeding for the Sequoyah Units 1 and 2 nuclear power plant. This Hearing Request/Petition to Intervene is supported by the attached BREDL Motion to Reopen the Record of License Renewal Proceeding for Sequoyah Units 1 and 2 Nuclear Power Plant (April 22, 2015).

BREDL seeks admission of a single place-holder contention challenging the NRC's reliance, in proposing to re-license Sequoyah Units 1 and 2, 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 seeks admission of its contention, it does not seek to litigate the substantive content in

¹ BREDL notes that similar place-holder contentions have been filed in other reactor licensing and license renewal proceedings, including the Callaway Unit 1 license renewal proceeding and the combined license proceeding for Fermi Unit 3. 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).

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 et al. 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 individual license renewal proceeding for Sequoyah Units 1 and 2, 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 Sequoyah Units 1 and 2 license renewal proceeding, which relies on the Continued Spent Fuel Storage Rule and GEIS. Upon denial of BREDL's contention, BREDL intends to appeal the decision to the U.S. Court of Appeals and request that the case be held in abeyance pending the Court's decision 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 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

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 continued generation of spent fuel at the Sequoyah Units 1 and 2 nuclear reactors. The organization has standing to intervene through members who live, work, and/or own property within 50 miles of Sequoyah Units 1 and 2, 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 Sequoyah Units 1 and 2 to operate in a manner that is unsafe or harmful to the environment. BREDL has attached a declaration from member Sandra L. Kurtz, who has authorized BREDL to bring this legal action on her behalf.

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.

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. Shortly thereafter, in response to petitions by BREDL and other parties, the NRC suspended licensing and re-licensing decisions for all reactors, pending completion of the environmental studies ordered by the U.S. Court of Appeals. *Calvert Cliffs 3 Nuclear Power Project, LLC et al.*, CLI-12-16, 76 NRC 63 (2012) (“CLI-12-16”).

On September 13, 2013, in response to the Court’s remand in *New York I*, the NRC published a proposed rule entitled Waste Confidence “Continued Storage of Spent Nuclear Fuel,” 78 Fed. Reg. 56,776 (Sept. 13, 2013) (“Proposed Waste Confidence Rule”). 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) (BREDL et al. Comments). 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 these criticisms, 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 Sequoyah Units 1 and 2 and other reactors. *Calvert Cliffs 3 Nuclear Power Project, LLC et al.*, CLI-12-08, 80 NRC 71 (2014).

In the fall of 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 in *New York II*. See

note 2 above. The parties are now awaiting a briefing schedule.

On March 27, 2015, the NRC made available Supplement 53 to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Sequoyah Nuclear Plant, Units 1 and 2 (NUREG-1437) (Sequoyah Units 1 and 2 FSEIS). See 80 Fed. Reg. 16,463 (March 27, 2015). At page 4-85, the Sequoyah Units 1 and 2 FSEIS states that the Continued Storage of Spent Nuclear Fuel Rule and supporting generic EIS provide the necessary NEPA analyses of the environmental impacts at an onsite or offsite spent nuclear fuel storage facility.

IV. CONTENTION

A. Statement of Contention

For all of the reasons stated in BREDL et al.'s Comments on the Draft Waste Confidence GEIS, the NRC lacks a lawful basis under NEPA for re-licensing Sequoyah Units 1 and 2, because the NRC relies on the generic conclusions of the Continued Spent Fuel Storage Rule and GEIS for its analysis of the environmental impacts of spent fuel storage. 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 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 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.

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 Sequoyah Units 1 and 2.

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, 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 license renewal for Sequoyah Units 1 and 2.

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 renewed license for Sequoyah Units 1 and 2 in the event that the Court of Appeals reverses the Continued Spent Fuel Storage Rule and/or GEIS. Because the NRC may renew the operating license for Sequoyah Units 1 and 2 before the Court reaches a decision in *New York II*, this contention must be filed now to ensure that the Court's decision in *New York II* will be applied to this proceeding.

This contention also has been filed within 30 days of the NRC's notice in the Federal Register of its issuance of the Sequoyah 1-2 FSEIS, March 27, 2015.

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 Tennessee Valley Authority and the NRC Staff in an unsuccessful attempt to obtain their consent to this Hearing Request/Petition to Intervene.

VII. CONCLUSION

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

Respectfully submitted,



Signed (electronically) by:

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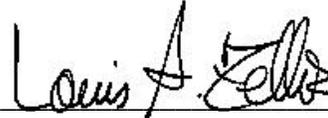
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CERTIFICATE OF SERVICE

I hereby certify that the **BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE'S HEARING REQUEST AND PETITION TO INTERVENE IN LICENSE RENEWAL PROCEEDING FOR SEQUOYAH UNITS 1 AND 2** has been filed through the Electronic Information Exchange system this 22nd day of April, 2015.



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April 20, 2015

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

In the Matter of)
) Docket Nos. 50-327 and
TENNESSEE VALLEY AUTHORITY) 50-328
Sequoyah Nuclear Plant Units 1 and 2)
License Nos. DPR-77 and DPR-79)
)

DECLARATION OF SANDRA L. KURTZ

Under penalty of perjury, I, Sandra L. Kurtz, 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 (BREDL). I agree with BREDL's mission of 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 Sequoyah Nuclear Plant Units 1 and 2 nuclear reactors, if they are relicensed.

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 3701 Skylark Trail, Chattanooga, TN 37416. My home lies within 15 miles of the Sequoyah Nuclear Plant Units 1 and 2 nuclear reactors. 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 Sequoyah Nuclear Plant Units 1 and 2 if they are relicensed. I am aware that Congress has established a policy that the spent fuel should be removed from the Sequoyah 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 Sequoyah Nuclear Plant Units 1 and 2. For these reasons, I am concerned that the

Sequoyah Nuclear Plant 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 Sequoyah Nuclear Plant 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 Sequoyah 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 relicense application for Sequoyah Nuclear Plant Units 1 and 2.

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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.



April 20, 2015

Sandra L. Kurtz