

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

Before the Commission

In the Matter of)	
)	Docket No. 52-047-ESP
Tennessee Valley Authority)	
)	ASLBP No. 17-954-01-ESP-BD01
Clinch River, Early Site Permit)	
)	

**TENNESSEE VALLEY AUTHORITY’S
NOTICE OF APPEAL OF LBP-17-08**

Pursuant to 10 C.F.R. § 2.311(a) and (d)(1), Tennessee Valley Authority (“TVA”) files this Notice of Appeal along with a Petition for Review of the Atomic Safety and Licensing Board’s Memorandum and Order LBP-17-08, dated October 10, 2017 (“Order”). The Order admitted two contentions by the Southern Alliance for Clean Energy and the Tennessee Environmental Council relating to an early site permit application for a small modular reactor project. TVA respectfully requests that the Commission reverse the Order and deny the request for a hearing.

Respectfully submitted,

/signed (electronically) by Ryan C. Dreke/

Ryan C. Dreke, Esq.
Christopher C. Chandler, Esq.
Blake J. Nelson, Esq.
Office of the General Counsel
Tennessee Valley Authority
400 W. Summit Hill Drive, WT 6A-K
Knoxville, TN 37902
Telephone: (865) 632-8960
Fax: 865-632-6147
E-mail: rcdreke@tva.gov
E-mail: ccchandler0@tva.gov
E-mail: bjnelson@tva.gov

Dated: November 6, 2017

Counsel for Tennessee Valley Authority

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Ryan C. Dreke, Esq.
Christopher C. Chandler, Esq.
Blake J. Nelson, Esq.
Office of the General Counsel
Tennessee Valley Authority
400 W. Summit Hill Drive, WT 6A-K
Knoxville, TN 37902
Telephone: (865) 632-8960
Fax: 865-632-6147
E-mail: rcdreke@tva.gov
E-mail: ccchandler0@tva.gov
E-mail: bjnelson@tva.gov

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I. INTRODUCTION

Pursuant to 10 C.F.R. § 2.311(a) and (d)(1), Tennessee Valley Authority (“TVA”) hereby petitions the Commission for interlocutory review of the Atomic Safety and Licensing Board’s (“Board”) Memorandum and Order LBP-17-08, issued October 10, 2017 (“Order”).¹ The Order grants the Southern Alliance for Clean Energy’s and the Tennessee Environmental Council’s (collectively, “Intervenors”) petition to intervene and request for hearing in the proceeding seeking an early site permit (“ESP”) for the Clinch River Nuclear (“CRN”) site. The Order also admits Intervenors’ Contentions 2 and 3.²

With respect to Contention 2, the Order is clearly erroneous as a matter of law because: (1) it finds that required information had been omitted from TVA’s Environmental Report (“ER”) even though such information was included to the extent possible and necessary in an ESP proceeding; and (2) Contention 2 is not supported by the required factual or expert support.

With respect to Contention 3, the Order is clearly erroneous as a matter of law because: (1) the Contention does not raise a material dispute because the statements in the ER that the Board found improper were not a substantive discussion of energy alternatives or a cost-benefit analysis, nor are they impermissible under Federal law or Commission regulations; and (2) the Order admits the contention only because of an unsupported assumption that the NRC Staff’s Environmental Impact Statement (“EIS”) will violate the law, even though the EIS will not be published until 2019 and the Intervenors are free to raise contentions challenging the EIS at that time.

¹ Memorandum and Order (Granting SACE/TEC’s Petition to Intervene), LBP-17-08, ___ N.R.C. ___, slip op. (October 10, 2017) (“LBP-17-08.”).

² Petition to Intervene and Request For Hearing by Southern Alliance for Clean Energy and Tennessee Environmental Council (June 12, 2017) (ADAMS Accession No. ML17163A417) (“SACE/TEC Petition”).

Because Contentions 2 and 3 are not admissible as a matter of law, TVA respectfully requests that the Commission grant this petition, reverse the Order, deny the Intervenor's request to intervene, and terminate the contested portion of this proceeding.

II. STATEMENT OF THE CASE

On May 12, 2016, TVA applied to the Nuclear Regulatory Commission ("NRC") under 10 C.F.R. Part 52, Subpart A for an ESP for the CRN Site.³ The CRN Site is located in Roane County, Tennessee.⁴ The issuance of an ESP is separate from the approval of an application for a construction permit or combined operating license application ("COL" or "COLA").⁵

Therefore, approval to construct and operate a nuclear plant at the CRN Site would require a separate NRC licensing proceeding where Intervenor may propose new contentions. On October 10, 2017, following the submission of pleadings and oral argument, the Board issued the decision that is the subject of this interlocutory appeal. The Order denied the first contention, but admitted the following contentions:

Contention 2: "The Environmental Report fails to satisfy [the National Environmental Policy Act] because it does not address the consequences of a fire in the spent fuel storage pool, nor does it demonstrate that a pool fire is remote and speculative."⁶

Contention 3: The ESP application violates the [National Environmental Policy Act] and NRC implementing regulations because it contains impermissible language comparing the proposed [small modular reactor] to other energy alternatives and discussing the economic and technical advantages of the facility.⁷

³ Letter from J.W. Shea, TVA, to Document Control Desk, NRC, Subject: Application for Early Site Permit for Clinch River Nuclear Site (Letter CNL-16-081) (May 12, 2016) (ADAMS Accession No. ML16139A752).

⁴ TVA's Site Safety Analysis Report ("SSAR"), § 1.1, "Introduction," at 1.1-1 (ADAMS Accession No. ML16144A074).

⁵ 10 C.F.R. §§ 52.12 & 52.71.

⁶ LBP-17-08 at 23 (citing SACE/TEC Petition at 9).

⁷ *Id.* at 28 (citing SACE/TEC Petition at 11-12).

III. APPLICABLE LEGAL STANDARDS

A. Standard of Review Under 10 C.F.R. § 2.311

The Commission gives “substantial deference” to the Board's rulings on threshold procedural matters such as standing and contention admissibility, and will only reverse a decision when there is an error of law or abuse of discretion.⁸

B. Standard for the Admissibility of Contentions

Under 10 C.F.R. § 2.309(f)(1), a hearing request “must set forth with particularity the contentions sought to be raised. Additionally, each contention must: (1) provide a specific statement of the legal or factual issue sought to be raised; (2) provide a brief explanation of the basis for the contention; (3) demonstrate that the issue raised is within the scope of the proceeding; (4) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding; (5) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents that support the petitioner’s position and upon which the petitioner intends to rely; and (6) provide sufficient information to show that a genuine dispute exists with regard to a material issue of law or fact.⁹ These six criteria in § 2.309(f)(1) were adopted by the Commission to “focus litigation on concrete issues and result in a clearer and more focused record for decision.”¹⁰ The Commission’s rules regarding the admissibility of contentions are “strict by design.”¹¹ The rules

⁸ *Pac. Gas & Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), CLI-16-9, 83 N.R.C. 472, 482 (2016) (citing *AmerGen Energy Co. LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 N.R.C. 111, 121 (2006)).

⁹ *See id.*; 10 C.F.R. § 2.309(f)(1)(i)-(vi). The seventh contention admissibility requirement, 10 C.F.R. § 2.309(f)(1)(vii), is applicable to proceedings arising under 10 C.F.R. § 52.103(b) and, therefore, not applicable to proposed contentions in this proceeding.

¹⁰ Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

¹¹ *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 N.R.C. 349, 358 (2001) (citing *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 N.R.C. 328, 334 (1999)).

were “toughened . . . in 1989 because in prior years ‘licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.’”¹² The

Commission’s practice does not permit “notice pleading” with details to be filled in later:

Instead, we require parties to come forward at the outset with sufficiently detailed grievances to allow the adjudicator to conclude that genuine disputes exist justifying a commitment of adjudicatory resources to resolve them.¹³

The Commission has explained that this “strict contention rule” serves multiple purposes, which include putting other parties on notice of the specific grievances being raised and assuring that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions.¹⁴ By raising the threshold for admission of contentions, the NRC intended to obviate lengthy hearing delays caused in the past by poorly defined or supported contentions.¹⁵ A licensing board is not to overlook a deficiency in a contention or assume the existence of missing information.¹⁶

¹² *Id.*

¹³ *N. Atlantic Energy Serv. Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 N.R.C. 201, 219 (1999).

¹⁴ *Oconee*, CLI-99-11, 49 N.R.C. at 334.

¹⁵ *Id.*

¹⁶ *Id.*

IV. ARGUMENT

A. The Board erred in admitting Contention 2.

In admitting Contention 2, the Board committed a clear error of law because it found that the ER improperly omitted a discussion of the risk of a spent fuel pool fire at an SMR. TVA's selection of a Design Basis Accident ("DBA") Envelope based on an operating reactor Loss of Coolant Accident ("LOCA") conservatively bounds the risk of a spent fuel pool fire, as described in Chapter 7 of the ER and detailed in TVA's references to the License Renewal GEIS in ER Chapter 5. This is a sufficient analysis for an ESP application. The Order errs when it requires TVA to go further and show that the risk of a spent fuel pool fire at an SMR site is "necessarily encompassed" by other possible SMR accidents.¹⁷ This type of specific technical analysis requires detailed design information that is not currently available and is not required in an ESP application.

Contentions raising design-related challenges are beyond the scope of an ESP proceeding.¹⁸ At the ESP stage, incomplete information is not a flaw in an environmental document, provided the drafter sets forth and evaluates such information as does exist.¹⁹ The focus of an ESP and the applicant's ER is alternative site analysis, which does not require

¹⁷ LBP-17-08 at 27.

¹⁸ See *Exelon Generation Co., LLC* (Early Site Permit for Clinton Site), LBP-04-17, 60 N.R.C. 229, 244-45 (2004); *Dominion Nuclear N. Anna, LLC* (Early Site Permit for North Anna Site), CLI-07-27, 66 N.R.C. 215, 235-36 (2007) (citing Council on Environmental Quality guidance). For example, NRC Staff have determined that recommendations for spent fuel pool instrumentation are need not be analyzed at the ESP stage "because the applicant has not selected a reactor technology, and instead used a plant parameter envelope (PPE) approach, and there is no spent fuel pool at the ESP stage." NUREG-2202, "Safety Evaluation Report, Related to the Early Site Permit Application in the Matter of PSEG Power, LLC and PSEG Nuclear, LLC for the PSEG Early Site Permit Site," § 20, "Requirement Resulting from Fukushima Near-Term Task Force Recommendations," at 20-4 (Docket No. 52-043)(ADAMS Accession No. ML16280A024).

¹⁹ See *supra* n. 18.; See also Transcript of September 12, 2017 Oral Argument in Docket No. 52-047-ESP (ADAMS Accession No. ML17257A335) ("Tr.") at 25 ("Because there are no complete SMR designs, TVA used a plant parameter envelope, or PPE approach, to bound the analyses for the site with respect to accidents and environmental impacts... because petitioners raise design specific contentions, they are beyond the scope of an early site permit application, and no design specific analyses are required.").

specific design details.²⁰ More specifically, the Board must determine “whether there is an obviously superior alternative site.”²¹ For these reasons, Contention 2 fails to raise a genuine dispute with the ESP application as required under 10 C.F.R. § 2.309(f)(1), and the Board’s admission of that Contention is an error of law.

The Board also erred when it found that the ER omitted necessary information regarding spent fuel pool fires because it implicitly assumed that spent fuel pool fires are not bounded by the severe accident analysis in TVA’s ER.²² The Board did not base this assumption on any factual or expert support in the record, nor did the Intervenors provide any such support as required under 10 CFR § 2.309(f)(1)(v). Therefore, the Board erred in admitting Contention 2.

1. The Board erred when it ignored TVA’s use of a Design Basis Accident Envelope based on a Loss of Coolant Accident at an operating reactor to bound the risk of a spent fuel fire and other severe accident impacts.

According to the Order, “[t]he Environmental Report fails to satisfy NEPA because it does not address the consequences of a fire in the spent fuel storage pool, nor does it demonstrate that a pool fire is remote and speculative.”²³ The fundamental NEPA question during the ESP stage, however, is whether there is an obviously superior alternative site.²⁴ The applicant is not required to address all impacts of operations at the site, nor is it required to prove that spent fuel pool fires are “remote and speculative.”²⁵ Moreover, at no point does the Order address TVA’s selection of a DBA Envelope based on an operating reactor Loss of Coolant Accident (“LOCA”), which sufficiently bounds any risk of a spent fuel pool fire.

²⁰ See *supra* n. 18.

²¹ 10 C.F.R. §§ 51.50(b)(2) & 52.17(a)(2).

²² LBP-17-08 at 26.

²³ *Id.* at 23-27; SACE/TEC Petition at 9.

²⁴ 10 C.F.R. §§ 51.50(b)(2) & 52.17(a)(2)

²⁵ *New York v. Nuclear Regulatory Comm’n (New York II)*, 824 F.3d 1012, 1018-20 (D.C. Cir. 2016).

The NRC developed the DBA Envelope approach for analyzing severe accident environmental impacts in an ESP application. Review Standard RS-002, “Processing Applications for Early Site Permits,” concludes that a severe accident impact analysis is technically feasible at the ESP stage using a Plant Parameter Envelope (PPE) approach, even in the absence of a detailed plant design.²⁶ This approach involves characterizing the spectrum of credible releases from candidate future plant designs and representative source terms.²⁷ Because of the design uncertainties at the ESP application stage of new plant licensing, there are limitations on the relevant analyses that can be conducted for the ER.²⁸

Section 7.1 of TVA’s ER, “Design Basis Accidents,” describes the scope of accidents selected to develop the DBA Envelope. To develop this “CRN Site-specific dose analysis,” TVA selected “the vendor analysis with the highest resultant post-accident dose.”²⁹ TVA relied on six previous ESP applications for traditional light-water reactors to develop its “bounding design basis accident.” Section 7.1 of the ER concluded that “Pressurized Water Reactor (PWR) designs ... have shown that offsite doses due to a postulated loss-of-coolant accident (LOCA) are expected to more closely approach [10 C.F.R. § 52.17] limits than other DBAs that may have a greater probability of occurrence but a lesser magnitude of activity release.”³⁰ The ER also describes the rationale for using a LOCA for its DBA Envelope:

Based on initial design feedback, TVA has reasonably high confidence that the consequences of a LOCA will be shown to be proportionally less than those for large PWR designs, and that no new events of greater consequence will be identified. Each of the four small modular PWR designs under consideration for the CRN

²⁶ Review Standard RS-002, “Processing Applications for Early Site Permits” (May 2004) (ADAMS Accession No. ML040700094).

²⁷ *Id.*; see also ER § 1.1.2.3, “Reactor Information,” at 1-4.

²⁸ *North Anna ESP*, CLI-07-27, 66 N.R.C. at 235-36.

²⁹ ER § 7.1-1, “Accident Selection” at 7.1-1 (citing Nuclear Energy Institute, “Industry Guideline for Developing a Plant Parameter Envelop in Support of an Early Site Permit,” at 10-01, May 2012).

³⁰ ER § 7.1-1, “Accident Selection” at 7.1-1 (citing references 7.1-2 to 7.1-7) & § 7.1.4, “References,” at 7.1-3 to -4.

Site is expected to include advanced design features that would further minimize accident consequences. In particular, based on initial design feedback, **Tennessee Valley Authority (TVA) anticipates that the consequences of a LOCA will be less than those for large PWR designs and that no events of greater consequence will be identified.**

Thus, analysis of postulated DBAs other than a LOCA is not necessary for the ESPA, because the maximum potential offsite doses have been evaluated, demonstrating the ability of the site to comply with the dose limits in 10 CFR 52.17. The COLA will verify that the accident doses provided in this ESPA are bounded or will provide an evaluation of accident radiological consequences.³¹

Critically, the ER also notes that the DBA Envelope based on a LOCA will be re-assessed at the COL stage, using more specific information then available.³²

The ER concludes its analysis of severe accidents at SMRs by noting that the potential impacts are lower than other operating reactors or reactors under construction, which are all analyzed in the same manner without the need for additional spent fuel pool fire analysis where a DBA Envelope analysis already exists. The ER states:

These estimates of the environmental impacts of severe accidents are considered to be bounding for each of the four SMR designs; the power levels of the other SMR designs are lower than the power level of the SMR considered in this analysis. Also, as provided in Tables 7.2-5 and 7.2-6, the 50-mi population dose risks and the population fatality risks are less than those calculated for other operating reactors or new reactors currently under construction and the individual fatality risks are several orders of magnitude below the NRC Safety Goals.³³

³¹ ER § 7.1.1 at 7.1-1 to 7.1-2 (emphasis added).

³² *Id.*; see also SSAR § 13.3.3.1.4, “COLA,” at 13.3-14.

³³ ER § 7.2.5, “Conclusions,” at 7.2-7.

There is no legal basis or practical reason for the Board to require TVA to conduct a design-specific analysis of the risk of a spent fuel pool fire at the ESP stage because the bounding of the DBA Envelope will be re-assessed at the COL stage.³⁴

As the Commission has held, an ESP application need not contain detailed design information because issues that relate to a particular design rather than siting are left for consideration at the COL stage.³⁵ If a contention raises a design-related challenge, it is beyond the scope of an ESP proceeding.³⁶ But, the Order explicitly calls for this type of design information in order to assess the risk of a spent fuel pool fire:

[T]he License Renewal GEIS does not address any aspect of the operation of small modular reactors. Nor has the NRC determined that the spent fuel pool analysis in the GEIS is applicable to small modular reactors. In fact, spent fuel pools may be designed differently for small modular reactors.³⁷

This part of the ESP application is necessarily general, requiring use of the DBA Envelope instead of a design-specific analysis of the risk of a spent fuel pool fire, because: (1) there was no submission for standard design certification for any of the four designs included in the PPE at the time the ER was submitted; (2) final design and probabilistic risk assessment information was not available when the ER was drafted; and (3) not all vendors could provide requested information on severe accident release categories.³⁸ “Therefore, TVA made a reasonable, bounding estimate of the severe accident consequences for the PPE by evaluating the SMR design that represents the largest SMR considered for the CRN site.”³⁹

³⁴ ER § 7.1-1, “Accident Selection” at 7.1-1 (citing Nuclear Energy Institute, “Industry Guideline for Developing a Plant Parameter Envelope in Support of an Early Site Permit,” at 10-01, May 2012); *see also* SSAR § 13.3.3 at 13.3-6 to -14 (discussing inclusion of spent fuel pool accidents in Probabilistic Risk Assessment).

³⁵ *See North Anna ESP*, CLI-07-27, 66 N.R.C. at 236-37.

³⁶ *See Clinton ESP*, LBP-04-17, 60 N.R.C. at 244-45.

³⁷ LBP-17-08 at 27 (emphasis added).

³⁸ ER § 7.2, “Severe Accidents,” at 7.2-1.

³⁹ *Id.* at 7.2-1.

Because sufficient SMR design information is not currently available, TVA’s ER cites to NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants” (“License Renewal GEIS”), which concludes that a Loss-of-Coolant-Accident (LOCA) at an operating reactor reasonably bounds other severe accident impacts, including the risk of a spent fuel pool fire.⁴⁰

Additionally, as discussed above, TVA’s ER cites to six previous ESP applications for traditional light-water reactors that used a LOCA bounding analysis based in part on the License Renewal GEIS.⁴¹ This bounding analysis reasonably encompasses the risk of a spent fuel pool fire for purposes of an ESP application, and the Intervenor do not cite to any facts or expert opinion that could serve as a basis for challenging that conclusion.

Furthermore, the 2013 update of the License Renewal GEIS explicitly finds that the risks and impacts of spent fuel pool fires are less than full-power accidents:

[s]ubsequent analyses performed and mitigative measures employed since 2001 have further lowered the risk of this class of accidents. In addition, the conservative estimates from NUREG-1738 are much less than the impacts from full-power reactor accidents that are estimated in the 1996 GEIS.⁴²

The ER cites to the License Renewal GEIS for this proposition.⁴³

Notwithstanding the analyses contained in these references and the Intervenor’s failure to challenge them, the Board’s Order finds that “the mere mention of the License Renewal GEIS in the Environmental Report for a completely different purpose [in ER Section 5.1.7] is not

⁴⁰ NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants” (“License Renewal GEIS”) (Rev. 0, Apr. 1996) (ADAMS Accession Nos. ML040690705 and ML040690738) and (Rev. 1, Jun. 2013) (ADAMS Accession Nos. ML13106A241, ML13106A242, and ML13106A244) at § E.3.7, “Impact of Spent Fuel Pool Accidents.”

⁴¹ ER §§ 7.1-1 & 7.1.4, “References,” at 7.1-3 to 1-4.

⁴² *Id.*

⁴³ ER §§ 5.1.7 & 7.1.4 (uranium fuel cycle references and internal citations from previous ESP applications for traditional light-water reactors, respectively).

sufficient.” ER Section 5.1.7 addresses impacts from the uranium fuel cycle, which includes storage in spent fuel pools.⁴⁴ TVA’s ER adopted the License Renewal GEIS for the analysis of the risk of a spent fuel pool fire and other uranium fuel cycle impacts “because the SMRs described by the [PPE] in [TVA’s ER] use the same fuel cycle process and the same type of fuel as the reference plant.”⁴⁵ Ultimately, the ER “provides a scaling factor of 0.98 to convert reference plant values to project-specific values at the CRN Site.”⁴⁶ Similarly, the ER relied on six ESPA applications for traditional light-water reactors that used the License Renewal GEIS to bound the risk of a spent fuel pool fire by reference to an operating reactor LOCA.⁴⁷ This approach is not challenged in Contention 2 or addressed in the Order.

Despite these references in TVA’s ER, the Order incorrectly finds that the ER “does not cite the License Renewal GEIS concerning the risk or consequences of spent fuel pool fires” and TVA “must either demonstrate that the risk of a spent fuel pool fire at the proposed site is remote and speculative or, alternatively, address the consequences of such a fire.”⁴⁸ In doing so, the Order relies on *New York v. Nuclear Regulatory Commission* (“*New York I*”): “The United States Court of Appeals for the District of Columbia Circuit required the NRC to evaluate the consequences of spent fuel pool fires for the very reason that the Agency had not ruled them to be remote and speculative.”⁴⁹

⁴⁴ “The evaluation in this subsection addresses ... Disposal of the spent fuel.” ER at 5.7-1 (listing the stages of the uranium fuel cycle).

⁴⁵ ER, § 5.7.1, “Uranium Fuel Cycle Impacts,” at 5.7-3. The 2013 License Renewal GEIS concludes that “the environmental impacts stated in the 1996 GEIS bound the impact from [spent fuel pool fire] accidents.” License Renewal GEIS, Rev. 1 at E-39.

⁴⁶ ER, § 5.7.1, “Uranium Fuel Cycle Impacts,” at 5.7-3.

⁴⁷ The ESP severe accident analyses cited by TVA in Chapter 7 of its ER cite to the License Renewal GEIS in their analyses of severe accident impacts. See ER § 7.1.4, “References,” at 7.1-3 to -4.

⁴⁸ LBP-17-08 at 24-25.

⁴⁹ *Id.* at 26 (citing *New York v. Nuclear Regulatory Comm’n (New York I)*, 681 F.3d 471 (D.C. Cir. 2012)).

According to the Board, *New York I* stands for the proposition that the License Renewal GEIS failed to determine whether the risk of spent fuel pool fires is “remote and speculative,” and therefore it is improper for TVA to rely on it here.⁵⁰ However, *New York I* was decided a year before the NRC published its June 2013 update of the License Renewal GEIS, and this revision is directly responsive to *New York I*.⁵¹

In *New York II*, the subsequent opinion to that proceeding, the D.C. Circuit evaluated the June 2013 revision and reviewed its earlier holdings in *New York I*.⁵² The *New York II* Court held that the updated License Renewal GEIS appropriately analyzed the risk of spent fuel pool fires at operating reactors under NEPA standards.⁵³ The D.C. Circuit further held that *New York I* did not require the NRC to find the risk of spent fuel pool fires “remote and speculative.”⁵⁴

According to the *New York II* Court “the cornerstone of our holding [in *New York I*] was that the NRC may generically analyze risks that are ‘essentially common’ to all plants so long as that analysis is ‘thorough and comprehensive.’”⁵⁵ This is contrary to the Order’s conclusion in this proceeding.

In *New York II*, the D.C. Circuit specifically held that the License Renewal GEIS was “thorough and comprehensive” enough to bound the risks of spent fuel pool fires as “essentially common for all operating reactors.”⁵⁶ The Board’s Order ignores the import of the DBA Envelope, does not analyze the extent of the risks contained therein, and does not compare the established risks of the DBA Envelope to the established risks from the License Renewal GEIS reviewed by the D.C. Circuit.

⁵⁰ *Id.*

⁵¹ *New York I*, 681 F.3d at 483.

⁵² *New York v. Nuclear Regulatory Comm’n (New York II)*, 824 F.3d 1012 (D.C. Cir 2016).

⁵³ *Id.* at 1019 & 1022-23 (“The GEIS sufficiently analyzes the impacts of continued storage of spent nuclear fuel.”).

⁵⁴ *Id.* at 1019.

⁵⁵ *Id.* at 1019.

⁵⁶ *Id.* at 1019-20.

The Board erred by requiring TVA to show that a spent fuel pool fire is “necessarily encompassed by the impacts of a small modular reactor accident” in an ESP proceeding.⁵⁷ Ultimately, only a “thorough and comprehensive” analysis is required to show that there is no “obviously superior alternative site,” which is exactly what the DBA Envelope provides.⁵⁸ Intervenor’s base Contention 2 on the information provided in Contention 1,⁵⁹ which concedes that the analysis it believes should be conducted “would depend on fuel design features, as well as operational factors that are not specified in the ESP application,”⁶⁰ which are design-specific.⁶¹ Contention 2 fails to address the bounding parameters of the DBA Envelope based on a LOCA at an operating reactor. Because it is a design-specific challenge, it is not within the scope of this ESP proceeding.⁶² By requiring TVA to assess the risk of a spent fuel pool fire using design-specific information, the Board undercuts the purpose of an ESP by importing COL requirements that cannot be satisfied at this stage, and may not even be relevant in the future.

For these reasons, the Board erred in finding that the ER cannot rely on references to the License Renewal GEIS to demonstrate, in part, that it has adequately addressed the risks associated with spent fuel pool fires for purposes of this ESP proceeding.

⁵⁷ LBP-17-08 at 27

⁵⁸ *New York II*, 924 F.3d at 1019; 10 C.F.R. §§ 51.50(b)(2) & 52.17(a)(2).

⁵⁹ SACE/TEC Petition at 10.

⁶⁰ *Id.* at 6.

⁶¹ *See also id.* at 8.

⁶² *See Clinton ESP*, LBP-04-17, 60 N.R.C. at 244-45.

2. The Board erred because Contention 2 is not adequately supported by material facts or expert opinion.

Contention 2 states:

“The Environmental Report fails to satisfy [the National Environmental Policy Act] because it does not address the consequences of a fire in the spent fuel storage pool, nor does it demonstrate that a pool fire is remote and speculative.”⁶³

Contention 2 does not challenge TVA’s use of the License Renewal GEIS and previous light-water reactor severe accident analyses to establish the DBA Envelope. Although the Order quotes Contention 2 and purports to consider its admissibility, it actually finds that TVA is required to show that “the environmental impacts of a spent fuel pool fire at a site with small modular reactors are necessarily encompassed by the impacts of a small modular reactor accident.”⁶⁴ This is not the contention Intervenors raised, nor did the Intervenors provide factual or expert support for the admitted Contention as required by 10 C.F.R. § 2.309(f)(1)(v). Under Commission precedent, “while the Board may appropriately view Petitioners’ support for its contention in a light that is favorable to the Petitioner, it cannot do so by ignoring [the contention admissibility requirements].”⁶⁵ Moreover, “a board should not add material not raised by a petitioner in order to render a contention admissible.”⁶⁶

In admitting Contention 2, the Order assumes that the risk of a spent fuel fire at an SMR may be materially different than such a risk for a traditional light-water reactor.⁶⁷ However, the

⁶³ LBP-17-08 at 23 (citing SACE/TEC petition at 9).

⁶⁴ LBP-17-08 at 27.

⁶⁵ *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, & 3), CLI-91-12, 34 N.R.C. 149, 155 (1991).

⁶⁶ *Crow Butte Resources Inc.* (North Trend Expansion Project), CLI-09-12, 69 N.R.C. 535, 553 (2009).

⁶⁷ LBP-17-08 at 27 (“In fact, spent fuel pools may be designed differently for small modular reactors... while the License Renewal GEIS may be relied on for the general proposition that spent fuel pool fires are on a comparable scale as reactor accidents, it does not establish that the environmental impacts of a spent fuel pool fire at a site with small modular reactors are necessarily encompassed by the impacts of a small modular reactor accident.”); *but cf.* ER, § 5.7.1, “Uranium Fuel Cycle Impacts,” at 5.7-3.

only factual information referenced by Intervenor as the basis for Contention 2 is drawn from documents relating to the risk of a spent fuel pool fire at a decommissioned reactor.⁶⁸ An analysis of risks at a decommissioned reactor is immaterial to this ESP proceeding because those accident impacts “are much less than the conservative estimates of full power reactor accidents ... estimated in the 1996 GEIS.”⁶⁹ Intervenor provide no argument as to how the guidance document is relevant to TVA’s use of the DBA Envelope approach laid out in the ER.⁷⁰ Likewise, the expert declarations proffered by Intervenor do not to address these aspects of the DBA Envelope approach, and they are not relied on by the board to admit Contention 2.⁷¹

For these reasons, the Board erred as a matter of law when it admitted Contention 2 because Intervenor did not provide adequate factual support or expert opinion as required under 10 CFR 2.309(f)(1)(v).

B. The Board erred in admitting Contention 3.

According to Intervenor’s Contention 3, TVA included “impermissible language” in its ER that discusses “energy alternatives” and the “economic and technical advantages” of SMRs versus other technologies. Contention 3 also alleges that TVA has “effectively precluded Petitioners from submitting contentions” on those issues by its decision to defer energy alternatives and cost-benefit analyses to a COLA.⁷² Although the adequacy of the NRC Staff’s National Environmental Policy Act (“NEPA”) findings may be within the scope of this

⁶⁸ SACE/TEC Petition at 5 (citing NUREG-1738, “Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants”).

⁶⁹ NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants,” Rev. 1 (June 2013), § E.3.7, “Impacts from Accidents at Spent Fuel Pools,” at E-34 to -35 (“the risk and environmental impact from fires in SFPs as analyzed in NUREG-1738 are expected to be comparable to or lower than those from reactor accidents and are bounded by the 1996 GEIS.”) (citing NUREG-1738, “Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants”).

⁷⁰ See generally SACE/TEC Petition at 9-11.

⁷¹ See LBP-17-08 at 23-27; SACE/TEC Petition, Att. 1 & 2.

⁷² SACE/TEC Petition at 11.

proceeding at a later date, a petitioner is initially required to base its contentions on the applicant's environmental report.⁷³

As discussed below, the Board erred as a matter of law when it admitted Contention 3 because: (1) the statements at issue are neither a substantive discussion of energy alternatives nor a cost-benefit analysis; (2) the Board's decision was based solely on an assumption that the NRC Staff's future EIS might violate the law, even though Intervenors are free to challenge the EIS when it is published; and (3) no law or regulation precludes TVA from making the statements at issue in the ER and a general policy argument cannot form the basis for an admissible contention.

For these reasons, Contention 3, fails to raise a material dispute with the application as required under 10 CFR § 2.309(f)(1).

1. The Board erred because the statements at issue are neither a substantive discussion of energy alternatives nor a cost-benefit analysis.

Intervenors complain of general statements about SMRs in the ER regarding: (1) "meeting reliability needs for national security sites with clean energy that supports carbon reduction directives"; (2) the ability to site SMRs in more places than larger nuclear units; (3) favorable reliability comparisons versus coal, gas, wind, and solar; and (4) passive safety features such as underground containment or core/spent fuel cooling without the need for active heat removal.⁷⁴ These statements come from Section 1.1 of TVA's ER, "The Proposed Action," although some of the discussions in that Section may be re-used in later Sections of the ER.

These allegedly "impermissible" statements are clearly not a substantive discussion of costs and benefits of SMRs that could give rise to an admissible contention because they do not

⁷³ 10 C.F.R. § 2.309(f)(2).

⁷⁴ SACE/TEC Petition at 16-18.

meet the four criteria for assessment under NEPA.⁷⁵ In order to be ripe for assessment, an energy alternative or cost-benefit analysis must be “(1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty.”⁷⁶

Furthermore, TVA has elected under 10 C.F.R. § 51.50(b)(2) to address the required energy alternatives and cost–benefit analysis when it submits a COLA.⁷⁷ The Intervenor expressly acknowledge this, stating: “TVA has chosen not to address the issues of energy alternatives or need for the proposed SMR, and has instead postponed those issues to the [COLA.]”⁷⁸ During a COLA proceeding, members of the public, including the Intervenor, would have the opportunity to seek intervention and challenge that portion of the COLA’s energy alternatives and cost-benefit analysis.

The ESP application before the Board is for a proposed initiative to demonstrate the viability of SMR technology for commercial power generation and transmission resilience and reliability.⁷⁹ TVA’s ER describes the project as a demonstration of “first-of-its-kind” SMR technology, including potential positive outcomes that the project is designed to test.⁸⁰ On their face, it is clear that the statements Contention 3 seeks to challenge are used to describe the purposes and goals of the Clinch River project, not to set forth energy alternatives or a cost-benefit analysis. Furthermore, as discussed below, neither Intervenor nor the Board cite any statutory or regulatory prohibition on the inclusion of purpose language in an ER. According to the “rule of reason,” there is no need to consider impractical alternatives or alternatives that

⁷⁵ *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 & 7), LBP-11-6, 73 N.R.C. 148, 219 (citing NUREG-1555, “Environmental Standard Review Plan, Standard Review Plans for Environmental Reviews for Nuclear Power Plants” at 8.1-2 (Oct. 1999)).

⁷⁶ *Id.*

⁷⁷ ER § 9.2, “Energy Alternatives.”

⁷⁸ SACE/TEC Petition at 14-15.

⁷⁹ ER § 1.1, “The Proposed Action.”

⁸⁰ *Id.*

could only be implemented after significant changes in governmental policy or legislation.⁸¹

Contention 3 is solely a general policy argument that falls into this category, and is therefore not admissible.

For these reasons, Contention 3 does not raise a material dispute with the application as required under 10 CFR 2.309(f)(1), and the Board erred as a matter of law in admitting it.

2. The Board erred because it admits a contention based solely on an assumption that the NRC Staff's future Environmental Impact Statement will violate the law.

According to the Order, Contention 3 “correctly challenges... whether it would be lawful for language similar to that in TVA’s Environmental Report ultimately to be included in the NRC’s [EIS].”⁸² The Order finds that under 10 C.F.R. § 51.75(b) the Staff’s EIS “must not” include the contested statements about SMRs because TVA has elected to defer the energy alternatives and cost-benefit analyses to the COLA stage.⁸³ There is no evidence in the record to support the Boards’ assumption that this regulation may be violated in the future. The NRC Staff has not published its EIS in this proceeding, and they do not expect to publish one before the summer of 2019.⁸⁴ Intervenors are free to challenge the inclusion of any “impermissible language” in the EIS when it is published. The Board’s decision errs because it does not find that Contention 3 raises a material dispute of fact or law with the ESP application, as required under the Commission’s contention admissibility regulations.⁸⁵

⁸¹ *Private Fuel Storage, L.L.C.* (Indep. Spent Fuel Storage Installation), LBP-03-30, 58 N.R.C. 454, 463 & 479 (2003).

⁸² LBP-17-08 at 29.

⁸³ LBP-17-08 at 31.

⁸⁴ The NRC Staff currently estimates that it will not issue a Final Environmental Impact Statement before the summer of 2019, and that its Final Safety Evaluation Report will be issued in September 2019. Tr. at 58.

⁸⁵ 10 C.F.R. § 2.309(f)(2) (“Contentions must be based on documents or other information available at the time the petition is to be filed....”).

In admitting Contention 3, the Order assumes a possible violation of law in a future EIS without citing any basis for that assumption. Admitting contentions based on possible future NRC Staff violations permits a wide range of inchoate contentions that may or may not come to fruition, and many, if not most, of them would later need to be summarily dismissed.

The Board explains its rationale by arguing that efficiency requires admission of Contention 3 by alerting the NRC Staff to the Intervenor's concerns, and to hold otherwise would "carve out a special exception to the Commission's requirement that any problematic issue that can be discerned from the applicant's Environmental Report must be raised at the outset."⁸⁶ The Board's efficiency argument relies on two implicit assumptions: (1) that NRC Staff are unaware of § 51.75(b); and (2) that an intervenor can reasonably predict that NRC Staff will violate Commission regulations based solely on an applicant's ER.⁸⁷ On their face, these assumptions are unreasonable.⁸⁸

As the Commission has held, "Because the adequacy of [Environmental Impact Statements] cannot be determined before they are prepared, contentions regarding their adequacy cannot be expected to be proffered at an earlier stage of the proceeding before the documents are available."⁸⁹ The Board contradicts this rule because it assumes that petitioners have constructive notice of potential violations of law by the NRC Staff once an applicant's ER is submitted. There is no legal or factual basis for this finding, and the decision to issue an ESP is not dependent on an applicant's decision to submit a COLA. Moreover, the presumption of regularity requires a

⁸⁶ LBP-17-08 at 31-32 ("Would the staff prefer not to be alerted to SACE and TEC's concerns before it prepares the Environmental Impact Statement?").

⁸⁷ LBP-17-08 at 31.

⁸⁸ The Board discussed 10 C.F.R. § 51.75(b) with NRC staff attorneys at oral argument, as cited by the Board in its decision. *Id.* at 31 (citing Tr. at 124).

⁸⁹ *Catawba*, CLI-83-19, 17 N.R.C. at 1049.

presumption that NRC Staff will comply with the law in the future.⁹⁰ Instead, the Order takes the opposite approach — it improperly assumes a future violation of section 51.75(b).

The Order also incorrectly applies the “migration tenet” to admit Contention 3.⁹¹

According to the Order:

Under the “migration tenet,” when the information in the NRC Staff’s environmental review document is “sufficiently similar” to the applicant’s Environmental Report, an existing contention based on the Environmental Report can “migrate” to apply to the Staff’s review document as it applied to the Environmental Report. *Strata Energy, Inc.*, (Ross In Situ Recovery Uranium Project), CLI-16-13, 83 N.R.C. 566, 570 n.17 (2016) (citing *Strata Energy, Inc.*, (Ross In Situ Recovery Uranium Project), LBP-13-10, 78 N.R.C. 117, 132–33 (2013)).⁹²

However, the “migration tenet” cannot apply to an unpublished EIS because there is no “sufficiently similar” language that can trigger migration.⁹³ Furthermore, section 51.75(b) only applies to an EIS, not to TVA’s ER, so it cannot be used to find an admissible contention “based on the Environmental Report” that could be admitted into this proceeding. In other words, the “migration tenet” cannot be used by the Board to amend Intervenor’s contention and make it admissible.⁹⁴

⁹⁰ “A ‘presumption of regularity attaches to the actions of Government agencies.’ Absent ‘clear evidence to the contrary,’ we presume that public officers will ‘properly discharge their official duties.’” *U.S. Dept. of Energy* (High-Level Waste Repository), CLI-08-11, 67 N.R.C. 379, 384 (2008) (citing *United States Postal Serv. v. Gregory*, 534 U.S. 1, 10 (2001)); *See also United States v. Chem. Found., Inc.*, 272 U.S. 1(1926). Neither the Board nor the Intervenor have cited to any “clear evidence to the contrary” that could overturn the presumption of regularity.

⁹¹ LBP-17-08 at 31-32 (“...the Staff’s assurances are not a proper basis for rejecting Contention 3 at this time.”).

⁹² LBP-17-08 at 32, n. 153.

⁹³ This is confirmed by the facts of *Ross In Situ Recovery Uranium Project*, where an EIS had already been completed by NRC Staff prior to application of the migration tenet. *See Exs. NRC007 to NRC008*, “Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, Final Report,” NUREG-1910, Vols. 1-2 (May 2009) (cited in *Ross In Situ Recovery Uranium Project*, CLI-16-13, 83 N.R.C. 566, 569 n. 9 (2016)); *Ross In Situ Recovery Uranium Project*, CLI-16-13, 83 N.R.C. 566, 570 n.17 (2016)).

⁹⁴ “This ‘migration tenet does not ... change the basic form of the contention, i.e., whether it challenges the soundness of the information provided or claims that necessary information has been omitted (or some combination of the two).’ *Private Fuel Storage, L.L.C.* (Indep. Spent Fuel Storage Installation), LBP-01-23, 54 N.R.C. 163, 172 n. 3 (Aug. 1, 2001) (holding that an “omission” challenge to include disadvantages in a no-action alternative analysis in an ER could not “migrate” to a draft EIS that did include disadvantages, and a new or amended contention was necessary).

The Order also relies on *Catawba* to support its finding that an EIS does not need not be completed in order for an admissible contention to arise based on its potential language.⁹⁵

However, *Catawba* does not create an independent path to admissibility based on a speculative future violation of law. In *Catawba*, the Commission explains how contentions could be properly filed based solely on statements in an ER **prior to** issuance of an EIS:

...this does not mean that no environmental contentions can be formulated before the staff issues [an EIS]. While all environmental contentions may, in a general sense, ultimately be challenges to the NRC's compliance with NEPA, factual aspects of particular issues can be raised before the DES is prepared. As a practical matter, much of the information in an Applicant's ER is used in the [EIS] ... [and] the Commission expects that the filing of an environmental concern based on the ER will not be deferred because the staff may provide a different analysis in its [EIS].⁹⁶

Catawba assumed there was an admissible “environmental concern based on the ER”⁹⁷ in order to analyze a certified question of law concerning late-filed contentions, and it does not rely on what might be in a future EIS.⁹⁸ In contrast, the Order’s only basis for admitting Contention 3 is the potential inclusion of improper language in a future EIS, and nowhere does it cite to language in TVA’s ER for this purpose.⁹⁹

The Board’s concerns about raising an issue as early as possible and creating a “carve-out” are misplaced, and will create unnecessary complications in this and future proceedings. It is more efficient to limit contentions to only those that are admissible based on actual evidence in the record, as contemplated by the admissibility rules laid out in 10 C.F.R. § 2.309(f). If a

⁹⁵ LBP-17-08 at 31 (citing *Catawba*, CLI-83-19, 17 N.R.C. at 1049).

⁹⁶ *Catawba*, CLI-83-19, 17 N.R.C. at 1049.

⁹⁷ *Id.*

⁹⁸ “Is there ‘good cause’ for filing a late contention when the reason given for late filing is the previous ‘institutional unavailability’ of an agency document, e.g., the FES, but the information relied on was available early enough to provide the basis for a timely-filed contention, e.g., in an applicant's environment report?” *Catawba*, CLI-83-19, 17 N.R.C. at 1044.

⁹⁹ LBP-17-08 at 31.

violation of law does occur in the future, then the Intervenor would have the opportunity to raise that contention at a later time. In any event, an efficiency concern cannot override the admissibility requirements explicitly laid out in NRC regulations.

For these reasons, the Board erred when it admitted Contention 3 because that contention fails to raise a material dispute with the application, as required under 10 C.F.R. § 2.309(f)(1).

3. The Board erred because nothing precludes TVA from making the statements at issue and the contention raises only a general policy argument that, by law, cannot be an admissible contention.

Contention 3 includes a list of statements from TVA's ER that the Intervenor believe are legally "impermissible" because they describe the potential benefits of SMR technology that the project could demonstrate.¹⁰⁰ However, neither the Order nor the Intervenor cite to any legal basis for this supposed rule that applicants are prohibited from describing the scope of their project in an ESP application.

By design, the ESP process is limited to determining an appropriate site for a proposed project.¹⁰¹ Contention 3 is not admissible because it does not contest the proposed site for the demonstration project on the basis of information provided in the ER.¹⁰² Instead, it seeks to argue that SMR technology should not be developed as a new method of generation because other energy alternatives are better.¹⁰³

¹⁰⁰ See SACE/TEC Petition at 16-21.

¹⁰¹ "At the ESP stage of the construction permit process, the boards' 'reasonable alternatives' responsibilities are limited because the proceeding is focused on an appropriate *site*, not the actual construction of a reactor. Thus, boards must merely weigh and compare alternative sites, not other types of alternatives (such as alternative energy sources) (emphasis in original)." *Exelon Generation Co., LLC* (Early Site Permit for Clinton Site), CLI-05-17, 62 N.R.C. 5, 48 (2005) (citing 10 C.F.R. §§ 52.17(a)(2) & 52.18) (cited in *PSEG Power, LLC & PSEG Nuclear, LLC* (Early Site Permit Application), LBP-16-4, 83 N.R.C. 187, 195 (2016)).

¹⁰² SACE/TEC petition at 18-20; 10 C.F.R. §§ 51.50(b)(2) & 52.17(a)(2).

¹⁰³ SACE/TEC Petition at 19 ("TVA compares SMRs with coal, gas, wind and solar on the factor of reliability... [but] it does not make a comprehensive analysis that addresses all relevant factors, such as carbon reduction, water use, air and water impacts, generation of waste products, and costs."); *id.* at 20 ("The Environmental Report fails to acknowledge that solar and wind energy sources can meet all the other objectives listed by TVA."); see generally SACE/TEC Petition 18-20.

The Board's jurisdiction at the ESP stage is limited to evaluating the proposed site to "determine whether there is an obviously superior alternative site."¹⁰⁴ A general policy argument advocating alternatives to SMR technology, as raised in Contention 3, is applicable to every alternative site mentioned in TVA's ER. Thus, Contention 3 cannot be used to determine whether "there is an obviously superior alternative site." Therefore, it is inadmissible in this ESP proceeding.¹⁰⁵

The general policy arguments raised in Contention 3 are not material to the findings the NRC must make to issue the Early Site Permit.¹⁰⁶ In an ESP proceeding, the focus of the environmental review is on those factors relevant to site suitability.¹⁰⁷ In general, during the ESP stage environmental reviews are limited to reactor-siting issues, as based on a Plant Parameter Envelope (PPE) approach.¹⁰⁸ The Commission has previously held:

A Licensing Board's consideration of reasonable alternatives is substantially different when it is adjudicating an application for a license for an actual facility, such as a uranium enrichment facility, than when it is adjudicating an early site permit application. For the early site permit application, consideration of reasonable alternatives looks at only alternative sites; for the license application, the analysis of reasonable alternatives would be substantially broader....¹⁰⁹

The Commission's decision in *Clinton Early Site Permit* illustrates how the ESP process is specifically designed to include a NEPA analysis limited to environmental concerns, and does not include general policy contentions like Contention 3 that are more suited for a cost-benefit analysis conducted at the COL stage:

¹⁰⁴ 10 C.F.R. §§ 51.50(b)(2) & 52.17(a)(2).

¹⁰⁵ 10 C.F.R. §§ 51.50(b)(2) & 52.17(a)(2).

¹⁰⁶ *Clinton ESP*, CLI-05-17, 62 N.R.C. at 48.

¹⁰⁷ *Id.*

¹⁰⁸ *See generally* NRC Review Standard RS-002, "Processing Applications for Early Site Permits" (May 3, 2004) and Att. 3 to RS-002 at pp. 3-15.

¹⁰⁹ *Clinton ESP*, CLI-05-17, 62 N.R.C. at 48.

Licensing Boards in our three currently pending ESP cases cannot perform cost-benefit “weighing” -- because an ESP is only a “partial” construction permit and 10 C.F.R. § 52.21 explicitly exempts both the NRC Staff and the applicant from assessing the ESP's benefits. Because the environmental report will lack such an assessment, neither the NRC staff nor the Licensing Boards can conduct the “weighing” in its EIS ordinarily required under NEPA. **This does not equate to evading the NEPA cost-benefit analysis, but merely postpones the analysis until the next (combined operating license) phase of licensing.** At that time, the NRC staff and ESP applicants will have much more cost-benefit information to provide reviewing licensing boards. Postponing the NEPA cost-benefit balancing simply reflects the limited scope of an ESP proceeding, as compared with that of a full construction permit case (addressing both site and plant design) or a combined license proceeding (such as [two then-pending uranium enrichment facility COLs]).¹¹⁰

The Commission’s decision in *Clinton* means that an applicant’s explicit decision to defer the “reasonable alternatives” issue or a cost-benefit analysis to the COL stage, per 10 C.F.R. § 51.50(b)(2), is controlling, not what might happen in a future EIS. As the Commission has stated, “[the ESP applicant] chose not to perform the [cost-benefit] analysis, and it is not intervenor’s prerogative to introduce the issue at this juncture.”¹¹¹

For these reasons, the Board erred when it admitted Contention 3 because that contention fails to raise a material dispute with the application, as required under 10 CFR 2.309(f)(1).

¹¹⁰ *Clinton ESP*, CLI-05-17, 62 N.R.C. at 47 (emphasis added).

¹¹¹ *Exelon Generation Co., LLC* (Early Site Permit for Clinton Site), CLI-05-29, 62 N.R.C. 801, 812 (Dec. 12, 2005) (citing *Clinton ESP*, CLI-05-17, 62 N.R.C. at 147-48) (holding that a contention calling for discussion of other alternative energy sources was properly dismissed).

V. CONCLUSION

With respect to Contention 2, the Order is clearly erroneous as a matter of law because:

(1) it finds that required information had been omitted from TVA's Environmental Report ("ER") even though such information was included to the extent possible and necessary in an ESP proceeding; and (2) Contention 2 is not supported by the required factual or expert support.

With respect to Contention 3, the Order is clearly erroneous as a matter of law because:

(1) the Contention does not raise a material dispute because the statements in the ER that the Board found improper were not a substantive discussion of energy alternatives or a cost-benefit analysis, nor are they impermissible under Federal law or Commission regulations; and (2) the Order admits the contention only because of an unsupported assumption that the NRC Staff's Environmental Impact Statement ("EIS") will violate the law, even though the EIS will not be published until 2019 and the Intervenors are free to raise contentions challenging the EIS at that time.

The Order is unnecessarily concerned with the possibility that Intervenors could be held to a higher reopening standard later in this ESP proceeding. However, the issues Intervenors raise in Contentions 2 and 3 may only be addressed at the COL stage. Therefore, TVA respectfully requests that the Commission grant this petition, reverse LBP-17-08, deny intervention, and terminate the contested portion of the CRN ESP application proceeding.

November 6, 2017

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

Before the Commission

In the Matter of)	
)	Docket No. 52-047-ESP
Tennessee Valley Authority)	
)	
Clinch River, Early Site Permit)	ASLBP No. 17-954-01-ESP-BD01
)	

CERTIFICATE OF SERVICE

I certify that, on November 6, 2017, a copy of “Tennessee Valley Authority’s Notice of Appeal of LBP-17-08” and “Tennessee Valley Authority’s Petition for Review of LBP-17-08” were served electronically through the E-Filing system on the participants in the above-captioned proceedings.

/signed electronically by/
Ryan C. Dreke