

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

LBP-18-4

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Paul S. Ryerson, Chairman
Dr. Gary S. Arnold
Dr. Sue H. Abreu

In the Matter of

TENNESSEE VALLEY AUTHORITY

(Clinch River Nuclear Site Early Site Permit
Application)

Docket No. 52-047-ESP

ASLBP No. 17-954-01-ESP-BD01

July 31, 2018

MEMORANDUM AND ORDER

(Ruling on Motions to Dismiss and Motion for Leave to File New Contentions)

Before the Board are (1) two unopposed motions to dismiss Contention 2;¹ and (2) intervenors' motion for leave to file two new contentions.² Because Contention 2 is now moot, we grant the motions to dismiss it. Because neither proffered new contention is admissible, we deny intervenors' motion for leave to file. There being no contention pending, this proceeding is terminated.

¹ Tennessee Valley Authority's [TVA] Motion to Dismiss Contention 2 as Moot (June 11, 2018) [hereinafter TVA Motion to Dismiss]; NRC Staff Motion to Dismiss Contention 2 as Moot and Answer to Intervenors' Motion for Leave to File Contention 4 and Contention 5 (June 11, 2018) [hereinafter NRC Staff Motion to Dismiss and Response]. Intervenors do not oppose the motions to dismiss. Intervenors' Response to Motions to Dismiss Contention 2 as Moot (June 12, 2018) at 2 [hereinafter Intervenors' Response to Motions to Dismiss].

² Intervenors' Motion for Leave to File Contention 4 (Inadequate Discussion of Environmental Impacts of Spent Fuel Pool Fires) and Contention 5 (Impermissible Discussion of Energy Alternatives and Need for the Proposed SMR) (May 21, 2018) [hereinafter Intervenors' Motion to File New Contentions].

I. BACKGROUND

The background of this proceeding is set forth in detail in earlier decisions of this Board and of the Commission,³ but is summarized below.

On May 12, 2016, the Tennessee Valley Authority (TVA) submitted an early site permit (ESP) application for two or more small modular reactors (SMRs) at the Clinch River Nuclear Site in Oak Ridge, Tennessee.⁴ Because TVA has not yet selected a design for any reactors that might be constructed at the site, its application uses a plant parameter envelope (PPE) that is based on several SMR designs currently under development.⁵ Approval to construct and operate a nuclear power plant at the Clinch River site would require a separate NRC authorization and would be the subject of a separate licensing proceeding, including an additional hearing opportunity.

The Southern Alliance for Clean Energy (SACE) and the Tennessee Environmental Council (TEC) (collectively, Intervenor) filed a timely petition challenging TVA's application and proffering three contentions.⁶ The Board ruled two contentions were admissible: Contention 2, challenging the failure of TVA's Environmental Report to address the consequences of spent fuel pool fires; and Contention 3, challenging allegedly impermissible discussion in the Environmental Report of energy alternatives and the need for power.⁷ The Commission affirmed the Board's admission of Contention 2, but reversed the admission of Contention 3.⁸

³ See generally CLI-18-05, 87 NRC ___ (May 3, 2018); LBP-17-8, 86 NRC 138 (2017).

⁴ See TVA; Clinch River Nuclear Site, 81 Fed. Reg. 40,929, 40,929 (June 23, 2016).

⁵ TVA, Clinch River Nuclear Early Site Permit [ESP] Application, Part 2: Site Safety Analysis Report, at 2.0-1 (Rev. 0 May 2016) (ADAMS Accession No. ML16144A037).

⁶ Petition to Intervene and Request for Hearing (June 12, 2017) [hereinafter SACE/TEC Pet.].

⁷ LBP-17-8, 86 NRC at 138, 158, 161.

⁸ CLI-18-05, 87 NRC at ___ (slip op. at 11–12, 16).

On April 26, 2018, the NRC published notice in the Federal Register of the availability of the Clinch River ESP Draft Environmental Impact Statement (DEIS).⁹ On May 21, 2018, intervenors moved to file two new contentions.¹⁰ Although the DEIS now sets forth for the first time a separate discussion of the risks of spent fuel pool fires, proposed Contention 4 claims that discussion is inadequate.¹¹ Proposed Contention 5 challenges the DEIS for including an allegedly “impermissible discussion” of the need for power and energy alternatives.¹²

TVA and the NRC Staff oppose admission of either new contention, and also have moved without opposition to dismiss Contention 2 as moot.¹³

II. ANALYSIS

A. Motions to Dismiss Contention 2 as Moot

In LBP-17-8, the Board admitted Contention 2, which asserts that TVA’s 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.”¹⁴ We admitted the contention “strictly [as] a contention of omission” with the caveat that any future discussion addressing spent fuel

⁹ ESP Application: TVA; Clinch River Nuclear Site, 83 Fed. Reg. 18,354 (Apr. 26, 2018); Office of New Reactors, Environmental Impact Statement for an ESP at the Clinch River Nuclear Site, NUREG-2226 (Vol. 1 Apr. 2018) (ADAMS Accession No. ML18092A515) [hereinafter DEIS].

¹⁰ Intervenor’s Motion to File New Contentions.

¹¹ Id. at 3–12.

¹² Id. at 12–28.

¹³ TVA’s Answer Opposing Intervenor’s Motion for Leave to File Contention 4 and Contention 5 (June 15, 2018) [hereinafter TVA Response]; TVA Motion to Dismiss at 1; NRC Staff Motion to Dismiss and Response at 1–2; see also Intervenor’s Response to Motions to Dismiss at 2; Intervenor’s Reply to Responses in Opposition to Motion for Leave to File Contention 4 (Inadequate Discussion of Environmental Impacts of Spent Fuel Pool Fires) and Contention 5 (Impermissible Discussion of Energy Alternatives and Need for the Proposed SMR) (June 22, 2018) [hereinafter Intervenor’s Reply].

¹⁴ LBP-17-8, 86 NRC at 158.

pool fires by TVA would moot the contention.¹⁵ As the Commission quoted from the Board's decision when it affirmed admission of Contention 2: "TVA might not be able to say very much about the risk of spent fuel pool fires[] at this early stage, but SACE and TEC have made a plausible case that TVA must say something."¹⁶

As all parties agree,¹⁷ the DEIS now addresses the consequences of a spent fuel pool fire.¹⁸ The NRC Staff has cured the omission. Contention 2 is now moot and is dismissed.

B. Good Cause

Because the initial deadline for filing contentions has passed,¹⁹ Intervenors must satisfy the "good cause" standard in 10 C.F.R. § 2.309(c)(1).²⁰ "Good cause" exists when (1) the information upon which the amended or new contention is based was not previously available; (2) the information upon which the filing is based is materially different from information previously available; and (3) the filing has been submitted in a timely fashion based on the availability of the subsequent information.²¹

¹⁵ Id. at 160. Although the Board stated that "TVA must say something" to cure the omission, id. at 160–61, the NRC Staff may also moot a contention of omission through its later issued environmental document. See USEC, Inc. (Am. Centrifuge Plant), CLI-06-9, 63 NRC 433, 444-45 (2006).

¹⁶ CLI-18-05, 87 NRC at __ (slip op. at 9) (quoting LBP-17-8, 86 NRC at 160–61).

¹⁷ NRC Staff Motion to Dismiss and Response at 1; TVA Motion to Dismiss at 1–2; Intervenors' Response to Motions to Dismiss at 2.

¹⁸ DEIS at 5-85 to -87.

¹⁹ TVA; Clinch River Nuclear Site ESP Application and Associated Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information, 82 Fed. Reg. 16,436, 16,437 (Apr. 4, 2017).

²⁰ See 10 C.F.R. § 2.309(b); see also id. § 2.309(f)(2).

²¹ Id. § 2.309(c)(1).

Although TVA and the NRC Staff argue otherwise,²² Intervenor's satisfy the "good cause" test for each of their proffered contentions. Consistent with the Board's Initial Scheduling Order, Intervenor's proffered their new contentions within thirty days of the availability of the DEIS.²³ This was the first opportunity to challenge the adequacy of any discussion of spent fuel pool fires, which appeared for the first time in the DEIS. This was also the first opportunity to challenge language in the DEIS that was similar to language in TVA's Environmental Report that Intervenor's had tried to challenge through Contention 3.

C. Contention Admissibility

Although Intervenor's have shown good cause for proffering their new contentions after the initial deadline, their contentions must also satisfy the usual standard for contention admissibility.

To be admissible, a contention must (1) state the specific legal or factual issue to be raised or controverted; (2) provide a brief explanation for the contention's basis; (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) concisely state the alleged facts or expert opinions that support the requestor's position and on which the proponent intends to rely at hearing, including references to specific sources and documents on which the contention's requestor intends to rely; and (6) show that a genuine dispute exists on a material issue of law or fact by referring to specific portions of the application that the requestor disputes or, if the application is alleged to be deficient, by

²² TVA Response at 15–18 (arguing Contention 4 is untimely); NRC Staff Motion to Dismiss and Response at 28–29 (arguing Contention 5 lacks good cause).

²³ Licensing Board Initial Scheduling Order (Dec. 7, 2018) at 4 (unpublished).

identifying such deficiencies and the supporting reasons for this allegation.²⁴ This rule is “strict by design,”²⁵ and “failure to fulfill any one of the contention admissibility requirements renders a contention inadmissible.”²⁶

Neither Contention 4 nor Contention 5 satisfies this standard.

1. Contention 4

Contention 4 “challenges the adequacy of the [DEIS’s] discussion of the environmental impacts of spent fuel pool accident risks.”²⁷ It states:

The Draft EIS is inadequate to satisfy the National Environmental Policy Act (“NEPA”) because its conclusion that environmental impacts of a spent fuel pool accident are small is based on non-conservative or otherwise invalid assumptions that are based on the design characteristics of a light water reactor (“LWR”) and compliance by TVA with all current emergency planning requirements.

First, the NRC Staff makes assumptions about patterns of fuel usage and storage at LWRs that differ significantly from the characteristics of at least one SMR design included in the proposed “plant parameter envelope” (“PPE”) on which the Staff’s environmental analysis is based. The Draft EIS fails to analyze those key differences. Second, the NRC Staff makes assumptions in the Draft EIS about the PPE with respect to the quantity of fuel stored in the pool that are neither conservative nor bounding for at least one of the SMR designs that comprise the PPE. Finally, the Draft EIS’s environmental analysis is based on the non-conservative assumption that the ten-mile emergency planning zone (“EPZ”) around the proposed SMR will be evacuated, when in fact the NRC currently is considering a request by TVA to relax that requirement. Accordingly, the Draft EIS fails to support its assertion that the risk profile for spent fuel pool fires at an LWR is bounding for the proposed SMR.²⁸

²⁴ 10 C.F.R. § 2.309(f)(1)(i)–(vi); see also LBP-17-8, 86 NRC at 149–51.

²⁵ Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001), pet. for reconsideration denied, CLI-02-1, 55 NRC 1 (2002).

²⁶ Entergy Nuclear Operations, Inc. (Indian Point, Unit 2), CLI-16-5, 83 NRC 131, 136 (2016).

²⁷ Intervenor’s Motion to File New Contentions at 4.

²⁸ Id. at 3.

In other words, intervenors contend that the DEIS's spent fuel pool accident analysis violates the National Environmental Policy Act (NEPA) because the PPE was not sufficiently conservative. Intervenors identify some parameters associated with the NuScale and mPower SMR designs that they claim should have been used.²⁹ They also claim the DEIS needs to further analyze the impacts of spent fuel pool fires for two-mile and site-boundary emergency planning zones (EPZs) because these EPZs allegedly have "been requested by TVA in Part 6 of its [ESP] application."³⁰

Intervenors cite no support for their claim that the DEIS's analyses must use more conservative parameters. In an ESP proceeding, it is the applicant's prerogative to set the PPE. Under 10 C.F.R. § 51.75(b), it is then the responsibility of the NRC Staff to provide "an evaluation of the environmental effects of construction and operation of a reactor, or reactors, which have design characteristics that fall within the site characteristics and design parameters for the early site permit application."

As NRC Staff guidance correctly interprets the regulatory scheme: "A PPE is a set of values of plant design parameters that an ESP applicant expects will bound the design characteristics of a reactor or reactors that might be constructed at a given site, and it serves as a surrogate for actual reactor design information."³¹ "PPE values do not reflect a specific design

²⁹ For example, intervenors identify concerns with (1) spent fuel inventory decay time (NuScale), id. at 7; (2) refueling patterns (NuScale), id. at 9; and (3) the quantity of fuel stored in the spent fuel pool (NuScale and mPower), id. at 10.

³⁰ Id. at 11 (citing TVA, Clinch River ESP Application, Part 6: Exemptions and Departures, at 2 (Rev. 0 May 2016) (ADAMS Accession No. ML16144A151) [hereinafter Application Exemptions and Departures] (requesting an exemption from standard dose methodology to possibly arrive at a justification for a two-mile or site-boundary EPZ)). Intervenors erroneously cited part 6 of TVA's "COL" application, but clearly intended to refer to its ESP application.

³¹ Office of Nuclear Reactor Regulation [NRR], Review Standard RS-002, Processing Applications for Early Site Permits, at 16 (May 2004) (ADAMS Accession No. ML040700236) [hereinafter RS-002]; see also NRR, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition, NUREG-0800, at 1.0-12. (Rev. 2 Dec. 2011).

and are not to be reviewed by the NRC staff for correctness.”³² The NRC Staff must instead focus on whether the PPE information is sufficient and “whether the PPE values are not unreasonable.”³³ “The combination of site characteristics and PPE values will comprise the ESP bases that will be the focus for comparison should a [combined license] application be submitted for the site.”³⁴

TVA bears the risk if its final selected design falls outside the terms and conditions of the PPE within its ESP. If TVA elects to submit a combined license (COL) application featuring design characteristics that are not bounded by the PPE for the ESP, those issues will be reviewed by the NRC Staff, and would be subject to challenge in a hearing request at that time.³⁵

Intervenors also seize upon statements in the DEIS to the effect that the PPE “encompasses” four different SMR designs, including NuScale and mPower,³⁶ to advance an argument that the PPE must cover every aspect of each of the four designs.³⁷ They claim that, because one definition of “encompass” is “[t]o form a circle or ring around; surround,”³⁸ use of the word “encompass” violates “NEPA’s standard of veracity and reliability.”³⁹

Other phrasings in the DEIS demonstrate that the NRC Staff uses “encompass” interchangeably with similar terms. In context, it is clear that the DEIS states that the PPE is

³² RS-002, attach. 3, ESP Scope and Review Criteria for Environmental Report, at 2 (ADAMS Accession No. ML040700772).

³³ Id.

³⁴ RS-002, at 16.

³⁵ CLI-18-05, 87 NRC at ___ (slip op. at 15–16).

³⁶ DEIS at 1-3.

³⁷ Intervenors’ Motion to File New Contentions at 6; Intervenors’ Reply at 3–5.

³⁸ Intervenors’ Reply at 5 (alteration in original).

³⁹ Id. at 4, 6.

based upon the characteristics of SMR designs as they currently exist, but not that every aspect of each such design is necessarily bounded by the PPE. For example, section 3.2 of the DEIS states that the PPE was developed “using input from vendors of four SMR technologies.”⁴⁰ Section 5.11 of the DEIS states that the PPE was developed “considering four potential SMR technologies.”⁴¹ TVA does not yet know which design it might select, how that design might evolve, or even whether it might select a future design that does not yet exist.

Finally, Intervenor’s claims concerning the size of the EPZ are speculative and premature.⁴² Although TVA has requested a waiver to use a different methodology for determining the size of the EPZ,⁴³ the NRC Staff has not yet acted on its request. Even if its waiver request is granted, what size EPZ might be required is not yet known.

Although TVA’s PPE may not strictly bound all facets of all referenced SMRs as they exist today (or tomorrow), all possible spent fuel pool designs, or multiple EPZ options, the DEIS is based on TVA’s chosen PPE. That basis is sufficient for an ESP. Once TVA chooses a specific reactor design for the COL application, the public will have another opportunity to challenge alleged deficiencies.⁴⁴ Contention 4 does not identify a genuine dispute on a material issue of law or fact,⁴⁵ and therefore Contention 4 is not admitted.⁴⁶

⁴⁰ DEIS at 3-2 (emphasis added).

⁴¹ Id. at 5-68 (emphasis added); see also id. at 6-38 (referring to NUREG-0586 Supplement 1’s application to “SMR designs included in TVA’s PPE” (emphasis added)).

⁴² See Intervenor’s Motion to File New Contentions at 11.

⁴³ See LBP-17-8, 86 NRC at 152–57; see also Application Exemption and Departures at 1–2.

⁴⁴ See 10 C.F.R. § 52.39(c) (providing a hearing where, e.g., the reactor proposed in the COL does not fit the characteristics or design parameters from the ESP); see also id. § 51.75(c) (requiring an environmental impact statement, and therefore a hearing opportunity, if a COL does not reference an ESP).

⁴⁵ Id. § 2.309(f)(1)(vi).

⁴⁶ In ruling on Contention 4, the Board has considered the supporting affidavit of Dr. Edwin S. Lyman, who attests that “[t]he factual assertions in the contention are true and correct to the

2. Contention 5

Contention 5 challenges the DEIS's allegedly "impermissible inclusion of information about the technical and economic benefits of building and operating the proposed SMR."⁴⁷ It states:

The Draft EIS violates NEPA and NRC implementing regulations 10 C.F.R. §§ 51.75(b), 51.20(b), 51.104, and 52.21, by impermissibly incorporating and claiming to be "informed by" assertions by TVA regarding the economic, technical, and other benefits of the proposed SMR, including need for power and alternative energy sources. The Draft EIS also violates these NEPA regulations by presenting the "no-action" alternative as foregoing benefits (including the asserted benefits of operating the SMRs) rather than avoiding environmental impacts.

Because TVA elected not to address the need for power and energy alternatives in its Environmental Report discussion of the benefits associated with building and operating the SMR is prohibited from the Draft EIS by section 51.57(b) [sic]. By the same token, the Draft EIS' inclusion of construction and operation-related benefits in its "Purpose and Need" statement (Draft EIS at 1-9 – 1-10) goes far beyond the siting related benefits that are may be listed [sic] under 10 C.F.R. § 51.75(b) and the Commission's supporting rationale.

In addition, by incorporating TVA's assertions regarding the construction and operation-related benefits of the proposed SMR, at the same time as it claims not to have evaluated the need for power and energy alternatives, the NRC Staff raises a strong inference that it has included TVA's information in the Draft EIS without conducting its own independent evaluation, in violation of 10 C.F.R. § 51.70.

Finally, Intervenors contend that the Draft EIS' assertions regarding the need for the proposed SMR and the benefits of the proposed SMR in relation to other energy alternatives are not supported, adequately analyzed, or valid. Yet, Intervenors are prohibited by 10 C.F.R. § 52.21 from challenging the assertions as a result of TVA's and NRC Staff's formal claims not to have addressed them in the

best of my knowledge, and the opinions expressed therein are based on my best professional judgment." Intervenors' Motion to File New Contentions, attach. 3, Decl. of Dr. Edwin S. Lyman In Support of Intervenors' Contention 4 (Inadequate Discussion of Environmental Impacts of Pool Fires) ¶ 5 (May 21, 2018). We find unpersuasive TVA's challenge to the form of the affidavit. Apparently TVA would prefer that the affidavit repeat verbatim each and every fact and opinion set forth in the contention itself. TVA Response at 24–25. A similar challenge to the form of affidavits was rejected in U.S. Dep't of Energy (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 406–12 (2009).

⁴⁷ Intervenors' Motion to File New Contentions at 1.

Draft EIS. Intervenor respectfully submit that the NRC would violate NEPA's public participation requirements by including and claiming to rely on technical information in the Draft EIS, without permitting interested members of the public an opportunity to challenge the reliability of that information in a hearing.⁴⁸

Contention 5 asserts essentially two challenges: (1) that the DEIS improperly addresses construction and operation benefits despite stating it did not assess the need for power or energy alternatives;⁴⁹ and (2) that its presentation of the no-action alternative improperly focuses on foregone benefits rather than avoided adverse environmental impacts, and that the benefits discussed are those of future construction and operation, rather than of the ESP process itself.⁵⁰ At its core, Contention 5 challenges the DEIS for using information from TVA's Environmental Report that pertains to the "benefits" of SMR technology.

Intervenor contend the DEIS violates section 51.75(b),⁵¹ which prohibits the DEIS from including "an assessment of the economic, technical, or other benefits (for example, need for power) . . . or an evaluation of alternative energy sources, unless these matters are addressed in the early site permit environmental report."⁵² They claim the purpose and need section contains such an assessment.⁵³ We disagree.

⁴⁸ Id. at 12–13 (citations omitted).

⁴⁹ Id. at 16–19. This contention also makes several related subsidiary claims, including (1) an alleged lack of an independent evaluation of these benefits by the NRC Staff, id. at 21–22; (2) inclusion in the DEIS of unsupported, inadequate, and invalid information, id. at 22–27; and (3) an allegedly improper insulation from public challenge of assessments in the DEIS of benefits of construction and operation of SMRs in violation of 10 C.F.R. § 51.104. Id. at 22. Each argument fails to show a genuine dispute of law or fact because it relies on the incorrect assertion, as explained infra, that there is an assessment of SMR benefits in the DEIS. 10 C.F.R. § 2.309(f)(1)(vi).

⁵⁰ Intervenor's Motion to File New Contentions at 19–21.

⁵¹ Id. at 12.

⁵² 10 C.F.R. § 51.75(b).

⁵³ Intervenor's Motion to File New Contentions at 17–18; see also DEIS at 1-9 to -10.

In its Environmental Report, TVA explicitly deferred consideration of the economic, technical, or other SMR benefits.⁵⁴ In admitting Intervenors' Contention 3, which was very similar to Contention 5, the Board opined that the eventual inclusion of the challenged language in the DEIS could "arguably violate 10 C.F.R. § 51.75(b)."⁵⁵ The Commission disagreed, explaining that "the determining factor" was "TVA's express statement" that it had "exercised its option not to formally address these issues now."⁵⁶ Therefore, there was "no reason to believe that TVA (or the Staff, for that matter) w[ould] recast the discussion of the project's purpose into a need for power or energy alternatives discussion."⁵⁷ And, indeed, the NRC Staff has not done so in the DEIS.

Although the DEIS does include the language from TVA's Environmental Report that Intervenors originally challenged,⁵⁸ for the reasons the Commission rejected Contention 3 the Board must also reject Contention 5. Like TVA's Environmental Report statement, the determining factor is the NRC Staff's express statement in the DEIS that it "does not include an assessment of the need for power or energy alternatives."⁵⁹ Although the challenged paragraphs arguably sound like conclusions regarding the "benefits" of SMRs, TVA and the NRC Staff clearly state that the four points are merely "objectives" of the Clinch River SMR demonstration project.⁶⁰ The inclusion of these "extraneous statements" on the project's

⁵⁴ TVA, Clinch River ESP Application, Part 3: Environmental Report, at 8-1, 9.2-1 (Rev. 1 Dec. 2017) (ADAMS Accession No. ML18003A447) [hereinafter Environmental Report].

⁵⁵ LBP-17-8, 86 NRC at 164.

⁵⁶ CLI-18-05, 87 NRC at ___ (slip op. at 15).

⁵⁷ Id.

⁵⁸ Compare, e.g., SACE/TEC Pet. at 16–18, with DEIS at 1-9 to -10.

⁵⁹ DEIS at 1-4; see also id. at 8-1.

⁶⁰ Id. at 1-9 ("TVA provided the following four main objectives of the CRN SMR Project.") (emphasis added); Environmental Report at 9.1-1.

purpose is irrelevant.⁶¹ Consistent with the Commission's ruling on Contention 3, the Board takes the NRC Staff at its word. Because there is no assessment of benefits, Intervenor raise no genuine dispute with the DEIS.⁶²

Intervenor's claim that the DEIS inappropriately presents the no-action alternative also fails. Intervenor make two connected arguments. First, Intervenor maintain that the DEIS "characteriz[es] [the no-action alternative] as an action that would forego benefits rather than avoid adverse impacts."⁶³ Second, Intervenor argue that the discussed foregone benefits impermissibly include benefits from construction and operation of an SMR, rather than benefits from the ESP process itself.⁶⁴ But neither is so.

DEIS section 9.1, "No-Action Alternative," explicitly acknowledges the avoided environmental impacts:

Under the no-action alternative the NRC would not issue the ESP. There are no environmental impacts associated with not issuing the ESP, and the impacts predicted in this EIS associated with building and operating two or more SMRs at the CRN Site or at any one of the alternative sites would not occur.⁶⁵

The no-action alternative also does not reference benefits of future construction and operation. Intervenor challenge language on pages 1-12 and 9-1 to 9-2,⁶⁶ but these portions of the DEIS only reference benefits of the ESP process itself. In fact, the challenged paragraph from pages 9-1 to 9-2 follows the basic format of the paragraph that Intervenor quote from the

⁶¹ CLI-18-05, 87 NRC at ___ (slip op. at 15).

⁶² 10 C.F.R. § 2.309(f)(1)(vi).

⁶³ Intervenor's Motion to File New Contentions at 19.

⁶⁴ Id. at 20–21.

⁶⁵ DEIS at 9-1.

⁶⁶ Intervenor's Motion to File New Contentions at 20.

preamble to the 2007 amendments to the NRC's Part 52 regulations, which provides examples of the benefits that are associated with the ESP process and may be included in the EIS.⁶⁷

Intervenors are therefore wrong when they claim the no-action alternative addresses only lost benefits, rather than avoided impacts, and also are wrong when they claim the no-action alternative addresses anything other than benefits of the ESP process itself. There is no genuine dispute with the DEIS.⁶⁸ Intervenors will have the opportunity to address these issues if and when TVA files a COL (or construction permit) application.⁶⁹ Contention 5 is not admitted.⁷⁰

⁶⁷ Compare Final Rule: Licenses, Certifications, and Approvals for Nuclear Power Plants, 72 Fed. Reg. 49,352, 49,430 (Aug. 28, 2007) (stating the benefits of the ESP process that may be discussed in the EIS), with DEIS at 9-1 to -2 (stating the foregone benefits of the no-action alternative).

⁶⁸ 10 C.F.R. § 2.309(f)(1)(vi).

⁶⁹ See CLI-18-05, 87 NRC at ___ (slip op. at 15–16). Intervenors claim that these issues are improperly “insulated from challenge in this proceeding by § 52.21.” Intervenors’ Motion to File New Contentions at 22. However, because an assessment of benefits is neither required nor included in the DEIS, the Board must refuse to “admit contentions proffered by any party concerning an assessment of the benefits . . . or an analysis of alternative energy sources.” 10 C.F.R. § 52.21. Further, because Intervenors will have an opportunity to raise concerns at the COL stage, including on the issue of need for power and energy alternatives, there is no violation of section 51.104(a)(2), as Intervenors claim. Intervenors’ Motion to File New Contentions at 22. Intervenors also allege a violation of section 51.20(b), which requires an EIS for an ESP, but do not explain how this regulation has allegedly been violated. Intervenors’ Motion to File New Contentions at 12, 28.

⁷⁰ In ruling on Contention 5, the Board has not considered the supporting affidavit of Dr. M.V. Ramana insofar as it attempts to interpret “NEPA and NRC implementing regulations 10 C.F.R. §§ 51.75(b), 51.20(b), and 52.21.” Intervenors’ Motion to File New Contentions, attach. 4, Decl. of Dr. M.V. Ramana in Support of Intervenors’ New Contention 4 [sic] (Impermissible Discussion of Energy Alternatives and Need for Proposed SMR) ¶ 4 (May 18, 2018). Interpretations of statutes and regulations are fair subjects for arguments by counsel or a party representative, but are not a proper subject of an expert opinion. Even a lawyer may not offer expert testimony on these subjects, much less a non-lawyer trained in theoretical physics. See, e.g., United States v. McIver, 470 F.3d 550, 561–62 (4th Cir. 2006) (“[O]pinion testimony that states a legal standard or draws a legal conclusion by applying law to the facts is generally inadmissible.”); cf. Nieves-Villanueva v. Soto-Rivera, 133 F.3d 92, 99–100 (1st Cir. 1997) (recognizing that the “well-recognized exception” to excluding expert testimony on purely legal issues is for questions of foreign law).

III. ORDER

For the foregoing reasons:

A. TVA's and the NRC Staff's motions to dismiss Contention 2 as moot are granted.
Contention 2 is dismissed.

B. Intervenors' motion for leave to file new contentions is denied. Contention 4 and
Contention 5 are not admitted.

C. This proceeding is terminated.

Any appeal of this decision to the Commission shall be filed in conformity with 10 C.F.R.
§ 2.311.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD

/RA/

Paul S. Ryerson, Chairman
ADMINISTRATIVE JUDGE

/RA/

Dr. Gary S. Arnold
ADMINISTRATIVE JUDGE

/RA/

Dr. Sue H. Abreu
ADMINISTRATIVE JUDGE

Rockville, Maryland
July 31, 2018

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
TENNESSEE VALLEY AUTHORITY) Docket No. 52-047-ESP
)
(Early Site Permit Application)
for Clinch River Nuclear Site))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **MEMORANDUM AND ORDER (Ruling on Motions to Dismiss and Motion for Leave to File New Contentions) - (LBP-18-4)** have been served upon the following persons by Electronic Information Exchange.

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Docket No. 52-047-ESP

MEMORANDUM AND ORDER (Ruling on Motions to Dismiss and Motion for Leave to File New Contentions) - (LBP-18-4)

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[Original signed by Herald M. Speiser _____]
Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 31st day of July, 2018