

November 23, 2022

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

NUCLEAR FUEL SERVICES, INC.

Docket No. 70-143-LA

(Application to amend Special Nuclear
Material License, Erwin, Tennessee)

**NRC STAFF ANSWER TO ERWIN CITIZENS AWARENESS NETWORK'S PETITION TO
INTERVENE AND REQUEST FOR HEARING**

INTRODUCTION

Pursuant to 10 C.F.R. § 2.309, the U.S. Nuclear Regulatory Commission (NRC or Commission) Staff hereby responds to the petition to intervene and request for hearing submitted by the Erwin Citizens Awareness Network (ECAN).¹ As further discussed below, ECAN has demonstrated representational standing but has not submitted an admissible contention; therefore, ECAN's Petition should be denied.

BACKGROUND

On November 18, 2021, Nuclear Fuel Services, Inc. (NFS) submitted a license amendment request (LAR) seeking to amend its 10 C.F.R. Part 70 special nuclear materials license—SNM-124—for its Erwin, Tennessee nuclear fuel fabrication facility. The requested amendment would authorize NFS to perform uranium purification and conversion services at the NFS facility pursuant to a contract with the U.S. Department of Energy's National Nuclear

¹ Amended Petition of Erwin Citizens Awareness Network for Leave to Intervene in Nuclear Fuel Services, Inc. License Amendment Proceeding, and Request for Hearing (Oct. 31, 2022) (ADAMS Accession No. ML18317A411) (ECAN Petition).

Security Administration (NNSA). NFS states that the purpose of the activities under the contract would be to allow NNSA to maintain capacity between shutting down legacy uranium processing equipment and starting up a new electrowinning technology process at the NNSA Y-12 National Security Complex (Y-12) in Oak Ridge, TN. During this transition, by contract, NFS would produce highly enriched uranium metal (U-Metal) that would otherwise be produced at Y-12.

The Staff published a *Federal Register* notice of opportunity to request a hearing on the NFS license amendment application on August 31, 2022.² ECAN timely filed its Petition on October 31, 2022.

DISCUSSION

For a petition to intervene and hearing request to be granted, a petitioner must demonstrate that it has standing to intervene in the proceeding and submit at least one admissible contention.³

I. Standing to Intervene

A. Applicable Legal Requirements

In accordance with the Atomic Energy Act (AEA), “the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding.”⁴ The Commission will grant a request for hearing if the petitioner meets the standing requirements of 10 C.F.R. § 2.309(d) and submits

² NFS License amendment application; opportunity to request a hearing and to petition for leave to intervene; order imposing procedures, 87 Fed. Reg. 53,507 (Aug. 31, 2022). This was the second *Federal Register* notice on the opportunity to request a hearing on the NFS license amendment application. The Staff published it to provide procedures for requesting access to non-public sensitive unclassified non-safeguards information (SUNSI), which were inadvertently omitted from the first such notice published on April 27, 2022. See 87 Fed. Reg. 25,054 (Apr. 27, 2022).

³ 10 C.F.R. § 2.309(a).

⁴ Hearings and Judicial Review, Atomic Energy Act § 189a(1)(A), 42 U.S.C. § 2239(a)(1)(A).

at least one admissible contention pursuant to 10 C.F.R. § 2.309(f).⁵ The petitioner's hearing request must contain:

- (i) The name, address and telephone number of the requestor or petitioner;
- (ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;
- (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding; and
- (iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.⁶

1. Traditional Standing Principles

In addition to fulfilling the general standing requirements of 10 C.F.R. § 2.309(d)(1), a petitioner "must demonstrate that it has an interest that may be affected by the proceeding."⁷ The Commission applies contemporaneous judicial concepts of standing to evaluate whether the petitioner has demonstrated the requisite interest.⁸ To this end, "a petitioner must (1) allege an injury in fact that is (2) fairly traceable to the challenged action and (3) is likely to be redressed by a favorable decision."⁹ The injury claimed by the petitioner must be actual or threatened and both concrete and particularized.¹⁰ Further, the injury alleged must be "to an interest arguably within the zone of interests protected by the governing statute"—here, the AEA

⁵ See 10 C.F.R. § 2.309(a).

⁶ 10 C.F.R. § 2.309(d).

⁷ See *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-15-25, 82 NRC 389, 394 (2015).

⁸ See *id.*; see also *Calvert Cliffs 3 Nuclear Project, LLC, & UniStar Nuclear Operating Services, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009).

⁹ *Turkey Point*, CLI-15-25, 82 NRC at 394; see also *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 71–72 (1994); *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992).

¹⁰ *Int'l Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 250 (2001); see also *Sequoyah Fuels Corp.*, CLI-94-12, 40 NRC at 71 (stating that "standing has been denied when the threat of injury is too speculative").

or the National Environmental Policy Act (NEPA).¹¹ The causation element of standing requires a petitioner to show “that the injury is fairly traceable to the proposed action.”¹² The redressability element of standing “requires the intervenor to show that its actual or threatened injuries can be cured by some action of the tribunal.”¹³ The petitioner has the burden to demonstrate standing requirements are met.¹⁴ However, a licensing board will “construe the [intervention] petition in favor of the petitioner” when making a standing determination.¹⁵

2. Proximity Plus Standing

In cases involving reactor facilities, the Commission will apply a standing presumption based on proximity to the site.¹⁶ No such presumption exists for nuclear materials proceedings.¹⁷ In such cases, to obtain standing based on geographic proximity to a facility, a petitioner must demonstrate that “the proposed action involves a significant source of radioactivity producing an obvious potential for offsite consequences.”¹⁸ This “proximity-plus” standard is applied on a “case-by-case basis, taking into account the nature of the proposed action and the significance of the radioactive source.”¹⁹ If “there is no ‘obvious’ potential for radiological harm at a particular distance frequented by the petitioner, it becomes the petitioner’s burden to show a specific and plausible means of how the challenged action may harm him or

¹¹ *Calvert Cliffs*, CLI-09-20, 70 NRC at 915 (citing *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993) (internal quotations omitted)).

¹² *Sequoyah Fuels Corp.*, CLI-94-12, 40 NRC at 75.

¹³ *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site Decommissioning), CLI-01-02, 53 NRC 9, 15 (2001).

¹⁴ *See Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-00-5, 51 NRC 90, 98 (2000).

¹⁵ *Turkey Point*, CLI-15-25, 82 NRC at 394 (quoting *Ga. Institute of Tech.* (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 115 (1995) (internal quotations omitted)).

¹⁶ *See Fla. Power and Light Co.* (St. Lucie, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989).

¹⁷ *See Nuclear Fuel Servs., Inc.* (Erwin, Tennessee), CLI-04-13, 59 NRC 244, 248 (2004).

¹⁸ *Georgia Tech Research Reactor*, CLI-95-12, 42 NRC at 116.

¹⁹ *Id.* at 116–17.

her.”²⁰ “[C]onclusory allegations about potential radiological harm” are insufficient for this showing.²¹ Where a petitioner is unable to demonstrate “proximity-plus” standing to intervene, traditional standing principles will apply.²²

3. Organizational and Representational Standing

When an organization requests a hearing, it must demonstrate either organizational or representational standing. To demonstrate organizational standing, the petitioner must show an “injury-in-fact” to the interests of the organization itself.²³ Where an organization seeks to establish representational standing, it must demonstrate that at least one of its members would be affected by the proceeding and identify any such members by name and address. Also, the organization must show that the identified members would have standing to intervene in their own right, and that these members have authorized the organization to request a hearing on their behalf.²⁴ In addition, the interests that the representative organization seeks to protect must be germane to its own purpose, and neither the asserted claim nor the required relief must require an individual member to participate in the organization's legal action.²⁵

²⁰ *USEC, Inc.* (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 311–12 (2005) (quoting *Nuclear Fuel Servs.*, CLI-04-13, 59 NRC at 248 (internal quotations omitted)).

²¹ *Nuclear Fuel Servs.*, CLI-04-13, 59 NRC at 248.

²² See *U.S. Army Installation Command* (Schofield Barracks, Oahu, Hawaii, and Pohakuloa Training Area, Island of Hawaii, Hawaii), CLI-10-20, 72 NRC 185, 189 (2010).

²³ See *EnergySolutions, LLC* (Radioactive Waste Import/Export Licenses), CLI-11-3, 73 NRC 613, 621 (2011).

²⁴ See *Detroit Edison Company* (Fermi Power Plant Independent Spent Fuel Storage Installation), CLI-10-3, 71 NRC 49, 51–52 (2010); see also *Sequoyah Fuels Corp.*, CLI-94-12, 40 NRC at 72 (citing *Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535, 9 NRC 377, 389–400 (1979)) (“An organization seeking representational standing on behalf of its members may meet the ‘injury-in-fact’ requirement by demonstrating that at least one of its members, who has authorized the organization to represent his or her interest, will be injured by the possible outcome of the proceeding.”).

²⁵ *Consumers Energy Co.* (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 409 (2007).

B. The Petitioner's Standing to Intervene

Based on the specific allegations contained in the Petition, ECAN has made a sufficient showing to establish representational standing to intervene based on the NRC's requirements. ECAN seeks representational standing based on a declaration submitted by one of its members and alleges that the proximity of this member's residence to the NFS facility is sufficient to show standing to intervene in this proceeding. In support, ECAN proffers a declaration of its member, Mr. Davies, who resides within 1 mile of the NFS facility and expresses concern regarding the potential for offsite radiological effects to him from criticality and uranium hexafluoride accidents.²⁶ In this case, based on the 1-mile proximity of Mr. Davies' residence to the NFS facility and his concerns about injury due to criticality and uranium hexafluoride accidents, which are among the accidents with potential offsite consequences specified in the NFS Emergency Plan submitted with the license amendment request,²⁷ the Staff concludes that he satisfies the "proximity-plus" standing requirements.²⁸ Accordingly, the NRC Staff does not oppose the representational standing of ECAN here.

II. Admissibility of the Petitioners' Proffered Contentions

A. Legal Requirements for Contentions

10 C.F.R. § 2.309(f)(1) establishes the "basic criteria that all contentions must meet in order to be admissible."²⁹ Pursuant to that section, a contention must:

- (i) provide a specific statement of the issue of law or fact to be raised or controverted;
- (ii) provide a brief explanation of the basis for the contention;

²⁶ See Declaration of Alfred John "Buzz" Davies.

²⁷ See NFS Supplemental Environmental Report (ER) at 7.

²⁸ See U.S. Army, CLI-10-20, 72 NRC at 189.

²⁹ *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 571–72 (2006); see also *USEC, Inc.* (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 436–437 (2006) (stating that the Commission "will reject any contention that does not satisfy the requirements").

- (iii) demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) 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 at hearing; and
- (vi) provide information sufficient to show that a genuine dispute with the applicant/licensee exists in regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case of an application that is asserted to be deficient, the identification of such deficiencies and supporting reasons for this belief.³⁰

The failure to comply with any one of the 10 C.F.R. § 2.309(f)(1) requirements is grounds for the dismissal of a contention.³¹

The contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) are intended to “focus litigation on concrete issues and result in a clearer and more focused record for decision.”³² The Commission has stated that it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing” as indicated by a proffered contention that satisfies all of the 10 C.F.R. § 2.309(f)(1) requirements.³³ The Commission has emphasized that the 10 C.F.R. § 2.309(f)(1) requirements are “strict by design.”³⁴ Attempting to satisfy these requirements by “[m]ere ‘notice pleading’ does not suffice.”³⁵ A contention must be rejected where, rather than

³⁰ See 10 C.F.R. § 2.309(f)(1).

³¹ *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

³² Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

³³ *Id.*

³⁴ *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001), petition for reconsideration denied, CLI-02-01, 55 NRC 1 (2002).

³⁵ *Amergen Energy Co., L.L.C.* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006) (quoting *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808 (2005)).

raising an issue that is concrete or litigable, it reflects nothing more than a generalization regarding the petitioner's view of what the applicable policies ought to be.³⁶

Pursuant to 10 C.F.R. § 2.309(f)(1)(iii), a proposed contention must be rejected if it raises issues beyond the scope of the proceeding as dictated by the Commission's hearing notice.³⁷ Thus, a proposed contention that challenges a license amendment must confine itself to "health, safety or environmental issues fairly raised by [the license amendment]."³⁸ The adequacy of the Staff's review, as opposed to the adequacy of the application, cannot be challenged.³⁹ Also, to show that a dispute is "material" pursuant to 10 C.F.R. § 2.309(f)(1)(iv) a petitioner must show that its resolution would make a difference in the outcome of the proceeding.⁴⁰

Further, pursuant to 10 C.F.R. § 2.309(f)(1)(v), a proposed contention must be rejected if it does not provide a concise statement of the facts or expert opinions that support the proposed contention together with references to specific sources and documents. Neither mere speculation nor bare or conclusory assertions, even by an expert, suffices to allow the admission of a proposed contention.⁴¹ Additionally, simply attaching material or documents as a

³⁶ See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 129 (2004) (citing *Philadelphia Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20–21 (1974)).

³⁷ See *Pub. Serv. Co. of Ind., Inc.* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170–71 (1976).

³⁸ *Commonwealth Edison Co.* (Dresden Nuclear Power Station, Unit 1), CLI-81-25, 14 NRC 616, 624 (1981).

³⁹ See *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 493 n.56 (2010) ("The contention . . . inappropriately focused on the Staffs [sic] review of the application rather than upon the errors and omissions of the application itself. Such challenges are not permitted in our adjudications."); *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 123 n.39 (2009); 69 Fed. Reg. at 2202.

⁴⁰ See *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3) CLI-99-11, 49 NRC 328, 333–34 (1999).

⁴¹ See *USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006); *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003).

basis for a contention, without setting forth an explanation of that information's significance, is inadequate to support the admission of the contention.⁴² The Board is not expected to sift through attached material and documents in search of factual support.⁴³

Finally, pursuant to 10 C.F.R. § 2.309(f)(1)(vi), a proposed contention must be rejected if it does not present a genuine dispute with the applicant on a material issue of law or fact. The Commission has emphasized that “contentions shall not be admitted if at the *outset* they are not described with reasonable specificity or are not supported by some alleged fact or facts *demonstrating* a genuine material dispute” with the applicant.⁴⁴ The hearing process is reserved “for genuine, material controversies between knowledgeable litigants.”⁴⁵

B. Analysis of the Petitioners’ Proposed Contentions

1. Contention A—A Nuclear weapons proliferation review is required by NEPA and AEA

(a) Summary

In its statement of the contention for Contention A, ECAN asserts that the new process proposed at NFS will provide purified highly enriched uranium (HEU) for inclusion in nuclear weapons, that this has unacceptable international policy ramifications, and that NEPA requires the NRC to conduct a nuclear weapons proliferation assessment discussing the impacts of the proposed action on the U.S. weapons program.⁴⁶ ECAN points to global events and a recent military reference text as underscoring the increasing risk of the use of nuclear weapons in war.⁴⁷ ECAN states that “at least two treaties call into question” the activities proposed under

⁴² See *Fansteel*, CLI-03-13, 58 NRC at 204–05.

⁴³ *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 332 (2012).

⁴⁴ *Id.* at 307 (quoting *Oconee*, CLI-99-11, 49 NRC at 335).

⁴⁵ *Seabrook*, CLI-12-5, 75 NRC at 307 (quoting *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 219 (2003)).

⁴⁶ ECAN Petition at 8.

⁴⁷ *Id.* at 9.

the LAR—the Nuclear Nonproliferation Treaty and the Treaty on the Prohibition of Nuclear Weapons.⁴⁸ It also asserts that the Commission’s required finding regarding whether a licensing action would be inimical to the common defense and security encompasses “the NFS contributions to the nuclear weapons complex.”⁴⁹ ECAN cites several examples it claims support its contention that NEPA requires the NRC to conduct a nuclear weapons proliferation assessment in connection with its review of the LAR.⁵⁰ Finally, ECAN claims that the NFS Supplemental Environmental Report (ER) omits references to international treaty obligations and federal statutory obligations and is fundamentally incomplete by not “reveal[ing] the practical role the proposed uranium purification process would play in the U.S. nuclear weapons complex, nor how that would alter U.S. nuclear weapons readiness or U.S. national security.”⁵¹

(b) Discussion

In Contention A, ECAN misstates the scope of and relevant regulatory landscape involved in this license amendment proceeding. Consequently, the issues it raises are outside the scope of the proceeding, are not material to the findings the NRC must make to issue the LAR, do not allege facts that support ECAN’s position in Contention A, and do not show a genuine dispute with the applicant on a material issue of law or fact, as discussed in detail below.⁵²

(i) Proliferation, NRC Authority, and Scope

As an initial matter, ECAN is imprecise both in how it defines “proliferation” and the specific nature of the impacts it believes should be assessed under NEPA and the AEA.⁵³ As a

⁴⁸ *Id.* at 10-11.

⁴⁹ *Id.* at 12.

⁵⁰ *Id.* at 13-15.

⁵¹ *Id.* at 15-16.

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

⁵³ “Proliferation” is generally understood to mean the spread of nuclear weapons or fissionable nuclear material to other countries. Throughout Contention A, however, ECAN conflates the concept of

result, ECAN overlooks the framework through which the NRC reviews considerations important to proliferation in its safety review and attempts to graft onto NEPA an incongruous review requirement when no such requirement exists. For this LAR proceeding, Staff will review safety and security matters in accordance with applicable NRC regulations, and this review will ultimately inform the NRC's finding under the AEA of whether the proposed activity will be inimical to the common defense and security. The Staff's review will cover issues such as physical security and protection against radiological sabotage, theft, and diversion—subjects that involve proliferation considerations.⁵⁴ In recognition of these requirements, the Commission has expressly declined to require proliferation assessments at fuel cycle facilities because it has determined that the existing NRC licensing framework is already adequate to address proliferation concerns associated with these facilities.⁵⁵ In accordance with the Commission's reasoning, no specific proliferation assessment is required by the AEA or NRC regulations in this proceeding.

nuclear proliferation with the U.S. nuclear weapons program, such as when it asserts that NEPA requires a proliferation assessment and that such an assessment must discuss the impacts and policy implications of the proposed action on "the U.S. weapons program and prospects." ECAN Petition at 8.

⁵⁴ See *GE-Hitachi Global Laser Enrichment LLC* (GLE Commercial Facility) LBP-12-21, 76 NRC 218, 241 (Sept. 19, 2012) ("Nuclear proliferation and terrorism are addressed in very specific ways by the NRC. . . . Although the Act does not grant express nonproliferation authority, key NRC regulations, such as 10 C.F.R. Parts 73, 74, and 95, clearly have nonproliferation, security, and terrorism objectives.")

⁵⁵ See Denial of petition for rulemaking; Nuclear Proliferation Assessment in Licensing Process for Enrichment or Reprocessing Facilities, 78 Fed. Reg. 33,995, 34,007 (Jun. 6, 2013) (Docket No. PRM-70-9; NRC-2010-0372). In response to Comment Category 16 that all fuel cycle facilities should be required to perform proliferation assessments, the Commission disagreed, reasoning that the NRC licensing framework is adequate to address proliferation concerns "by including requirements to prevent the unauthorized disclosure of classified matter and sensitive technologies and provide physical protection of nuclear equipment and materials." *Id.*

Neither does NEPA or 10 CFR Part 51 require the NRC or NFS to conduct a proliferation assessment. NEPA's assessment requirements are governed by a rule of reason;⁵⁶ NEPA requires the evaluation of reasonably foreseeable environmental impacts, not remote and speculative matters⁵⁷ or "worst-case" scenarios.⁵⁸ Dispositively, in the *National Enrichment Facility* licensing proceeding for a uranium enrichment facility, the Commission, relying on fundamental NEPA principles, rejected the idea that NRC licensing actions have sufficient causal links to proliferation to require consideration of it in environmental reviews.⁵⁹ In the *American Centrifuge Plant* enrichment facility proceeding, the Commission determined that nonproliferation concerns were outside the scope of the licensing proceeding because they relate to international policy⁶⁰ and "span a host of factors far removed from the licensing action at issue."⁶¹ Overall, nonproliferation policy involves a multilayered domestic and international framework, and "achieving nonproliferation goals depends on independent future actions by numerous third parties, including the President, Congress, and officials of other nations."⁶²

As in *National Enrichment Facility* and *American Centrifuge Plant* described above, the NFS LAR before the NRC is many causal links removed from nuclear proliferation or the specter

⁵⁶ 51 Fed. Reg. at 15,621; see also Council on Environment Quality, Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, Final Rule, 85 Fed. Reg. 43,304, 43,332 (Jul. 6, 2020) (reiterating that the rule of reason applies when discussing incomplete or unavailable information).

⁵⁷ *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-90-4, 31 NRC 333 (1990).

⁵⁸ See *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 354-55 (1989) (considering "worst-case" scenarios simply creates a distorted picture of a project's impacts and wastes agency resources).

⁵⁹ *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-05-28, 62 NRC 721, 724 (2005).

⁶⁰ The NRC's regulations implementing NEPA in 10 C.F.R. Part 51 state that they do not apply "to any environmental effects which NRC's domestic licensing and related regulatory functions may have upon the environment of foreign nations."

⁶¹ *American Centrifuge Plant*, CLI-06-10, 63 NRC at 463 (citing *National Enrichment Facility*, CLI-05-28, 62 NRC at 724).

⁶² *Id.*

of an accelerating arms race conjured by ECAN. The proposed action involves only domestic activity, and the diversion of any U-Metal produced at NFS to another nation (i.e., proliferation) would involve illicit acts in violation of law and NRC regulations—circumstances that are not reasonably foreseeable. NFS, the applicant here, is also not the end user of the U-Metal; NNSA (an agency of the United States government), not NFS, is the decisionmaker in how this material would ultimately be used. Moreover, despite ECAN's assumptions, NFS-produced U-Metal would not necessarily be destined for use in the nuclear weapons complex. NNSA has a multifaceted mission that, among other things, includes providing the U.S. Navy with nuclear fuel. Importantly, ECAN fails to explain how approval of the proposal would or could result in "proliferation."

The causal path between this LAR proceeding and the proliferation concerns ECAN refers to is speculation only, as the Commission observed in *National Enrichment Facility*⁶³ and *American Centrifuge Plant*.⁶⁴ Engaging in the assessment that ECAN asserts NEPA requires would in turn require the NRC to speculate about information unknown to NFS or the NRC regarding a number of policy matters remote from NRC decision-making and statutory requirements. This would be a speculative endeavor that NEPA's rule of reason does not require, and it would not serve the purpose of informing agency decision-making in this proceeding. Contention A is, therefore, outside the scope of the proceeding⁶⁵ and does not raise information material to the findings the NRC must make to issue the requested license amendment.⁶⁶

⁶³ *National Enrichment Facility*, CLI-05-28, 62 NRC at 724

⁶⁴ *American Centrifuge Plant*, CLI-06-10, 63 NRC at 463

⁶⁵ See 10 C.F.R. § 2.309(f)(1)(iii).

⁶⁶ See 10 C.F.R. § 2.309(f)(1)(iv).

(ii) *Precedent*

ECAN references a number of cases that it claims support its contention,⁶⁷ but none of these support the proposition that NEPA requires a proliferation assessment for this LAR. The first case cited by ECAN,⁶⁸ *Scientists' Institute for Public Information, Inc. v. Atomic Energy Commission*, includes no discussion of proliferation or nuclear weapons.⁶⁹ The second case, *West Michigan Env'tl. Action Council, Inc. v. NRC*, is a case concerning mootness and the awarding of attorney's fees where the NRC voluntarily elected to prepare an Environmental Impact Statement after the plaintiff had filed suit seeking a declaratory ruling to that effect. The other examples provided by ECAN are merely instances of agencies voluntarily discussing nuclear weapons or proliferation in the context of taking direct agency action with respect to nuclear weapons or proliferation.⁷⁰ None of these cases or examples support the proposition that the NRC has a duty to consider proliferation in a NEPA analysis for this LAR proceeding, and therefore, Contention A does not meet 10 C.F.R. § 2.309(f)(1)(v).

(iii) *Dispute With Supplemental ER*

While ECAN largely focuses Contention A on what it believes the NRC must do, it asserts that the Supplemental ER omits references to international nonproliferation treaty obligations and does not “reveal the practical role the proposed uranium purification process would play in the U.S. nuclear weapons complex.”⁷¹ ECAN neither demonstrates that NFS is

⁶⁷ ECAN Petition at 13-15.

⁶⁸ *See Id.* at 13.

⁶⁹ Moreover, the D.C. Circuit has questioned whether the NEPA holdings in this case have any remaining vitality. In *National Wildlife Federation v. FERC*, 912 F.2d 1471, 1478 (D.C. Cir. 1990), the Court observed that the key reasoning in *Scientists' Institute*—that “future, yet unproposed projects” should be considered in an Environmental Impact Statement “if the envisioned future projects would impact the relevant environment”—was likely supplanted by the Supreme Court's decision in *Kleppe v. Sierra Club*, which held that NEPA does not require an Environmental Impact Statement in the absence of an actual proposed federal action. U.S. 390, 404-05 (1976).

⁷⁰ ECAN Petition at 13-15. Among the examples cited are agencies considering actions of nuclear weapons storage and nuclear weapons testing.

⁷¹ *Id.* Petition at 16

required to include treaty references in its Supplemental ER, nor does ECAN cite a specific treaty or statute that would preclude the NRC from granting the requested license amendment. Thus, Contention A does not demonstrate a genuine dispute with the application.⁷²

(c) Conclusion

For the foregoing reasons, Contention A does not satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iii)-(vi), and the Board should dismiss this contention.

2. Contention B—Narrow scope of purpose and need statement undercuts consideration of alternatives

(a) Summary

In Contention B, ECAN states that the “narrow scope of [the] purpose and need statement undercuts consideration of alternatives.”⁷³ ECAN asserts that “[t]he purpose and need for the project is expressed in unduly narrow and time-limited terms, which has caused inadequate consideration of the no-action alternative, with the result of biasing the NEPA inquiry and decision to be made by NFS and the NRC in favor of amending the license and proceeding with the proposed project.”⁷⁴

(b) Discussion

This contention should not be admitted because Contention B does not contradict the stated purpose and need in the Supplemental ER, and therefore does not raise a material dispute with the application.

In accordance with its NEPA responsibilities, the NRC is required to take a “hard look” at the environmental impacts of a proposed major Federal action that could significantly affect the environment, as well as reasonable alternatives to that action.⁷⁵ This hard look is tempered by

⁷² See 10 C.F.R. § 2.309(f)(1)(vi).

⁷³ ECAN Petition at 16.

⁷⁴ *Id.*

⁷⁵ See *Crow Butte Resources, Inc.* (Marsland Expansion Area), LBP-19-2, 89 NRC 18, 40 (2019) (citing *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87–88 (1998)).

“a ‘rule of reason’ in that consideration of environmental impacts need not address ‘all theoretical possibilities,’ but rather only those that have some ‘reasonable possibility’ of occurring.”⁷⁶ As the Commission has observed, “NEPA requires consideration of ‘reasonable’ alternatives, not all conceivable ones.”⁷⁷ Ultimately, the alternatives that the applicant selects are informed by the project and its goals⁷⁸ and the goals of a proposed action are driven by the applicant—not the NRC.⁷⁹

When defining the scope of alternatives for review, NEPA requires that the objective of the action not be artificially narrowed to circumvent the requirement that relevant alternatives be considered.⁸⁰ The primary issue in evaluating a purpose and need statement is that it not be defined “so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency’s power would accomplish the goals of the agency’s action....”⁸¹

(i) Purpose and Need statement

ECAN argues that the purpose and need expressed in the Supplemental ER is overly narrow and that because the ER does not contain timely information regarding the status of the Y-12 replacement project, the need for this amendment may no longer exist.⁸² However, ECAN’s argument does not meaningfully respond to the full purpose and need statement

⁷⁶ *Id.* (quoting *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-156, 6 AEC 831, 836 (1973)).

⁷⁷ *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 338 (quoting *Natural Resources Defense Council, Inc. v. Morton*, 458 F.2d 827, 834, 837, 838 (D.C. Cir. 1972)).

⁷⁸ *See Dominion Nuclear North Anna, L.L.C.* (Early Site Permit for North Anna ESP Site), LBP-07-9, 65 NRC 539, 607–08 (2007) (citations omitted).

⁷⁹ *Id.* (citing *City of Grapevine*, 17 F.3d at 1506, *cert. denied*, 513 U.S. 1003 (1994); *see also Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 199, *cert. denied*, 502 U.S. 994 (1991) (noting that “[a]n agency cannot redefine the goals of the proposal that arouses the call for action”).

⁸⁰ *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-90-8, 32 NRC 201, 206 (1991).

⁸¹ *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1990).

⁸² ECAN Petition at 16-17.

(reproduced in the petition on p.19) in NFS' Supplemental ER.⁸³ ECAN is correct that NFS' purpose and need statement asserts, in part, that the amendment is intended to "maintain the ability to convert oxides to metal" while the new electrorefining technology is developed at Y-12, but that is not all that it contains.⁸⁴ The purpose and need statement also notes that the action is intended to create redundant production capacity to "hedge against" the risks of adopting new technology.⁸⁵ In addition, it notes that, independent of the status of NNSA's electrorefining technology, NFS anticipates needing to design, license, and demonstrate the capability to perform uranium purification and conversion services.⁸⁶ In Contention B, ECAN does not address these statements. Thus, ECAN has not demonstrated a genuine dispute with the application on a material issue of fact or law.⁸⁷

(ii) ECAN appears to challenge NNSA's contracting decision, not NFS' application

ECAN also casts its contention as a challenge to whether there is a need for NNSA to contract for additional uranium purification and conversion services. However, that determination has already been made by NNSA, as is evidenced by the contract NNSA entered into with NFS and is not within the scope of this licensing proceeding. At issue here is only NFS' application to amend its license. Thus, ECAN's challenge to NNSA's contracting decision is not material to the findings that the NRC must make.⁸⁸ Accordingly, this aspect of the contention should be dismissed.

⁸³ See Supplemental ER at 1. ECAN overlooks both the fact that the amendment is meant to "hedge against" the technology risk by creating redundant production capacity and that NNSA only plans to partially replace its current uranium processing system capability with the new electrorefining technology. The only portion of ECAN's petition that mentions this portion of the purpose and need statement is on page 19, where ECAN quotes the entire purpose and need statement from NFS' ER.

⁸⁴ *Id.*

⁸⁵ *See id.*

⁸⁶ *Id.*

⁸⁷ 10 C.F.R. §§ 2.309(f)(1)(iv), (vi).

⁸⁸ *See* 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv).

(c) Conclusion

For the foregoing reasons, Contention B fails to provide sufficient information to show that a genuine dispute exists with the application on a material issue of law or fact, is not within the scope of this proceeding, and fails to demonstrate that the issue being raised is material to the findings that must be made in this proceeding. Therefore, this contention should be dismissed.⁸⁹

3. Contention C—Legacy contamination is understated, uninvestigated and missing from cumulative effects analysis in the ER

(a) Summary

In Contention C, ECAN asserts that the Supplemental ER omits required information related to past, present, and potential future contamination at the NFS site and the local area, which it states leads to an inadequate cumulative impacts analysis.⁹⁰ ECAN states that “documented presence of radioisotopes identified with NFS for miles downstream in the Nolichucky River is unmentioned.”⁹¹ As support for this, ECAN provided a declaration from Dr. Michael Ketterer, who describes sampling and analyses he performed near the NFS facility that he concludes reflect the presence of uranium and plutonium particles from NFS in the Nolichucky River environment.⁹² ECAN asserts PFAS chemicals could be present in the groundwater and that this “mitigates in favor of investigating whether such contamination is present, proximate to NFS.”⁹³ ECAN also questions the adequacy of groundwater characterization at the NFS site, pointing to historical groundwater contamination, the

⁸⁹ See 10 C.F.R. §§ 2.309(f)(1)(iii), (iv), (vi).

⁹⁰ ECAN Petition at 22. ECAN specifically refers to “high concentrations of TCE [trichloroethylene] and PCE [tetrachloroethylene] chemicals,” “particles of radioisotopes handled at the NFS plant, including plutonium and U-235,” and “PFAS [per- and polyfluoroalkyl substances] chemicals.”

⁹¹ *Id.* at 21-22.

⁹² Declaration of Michael E. Ketterer, PhD (ADAMS Accession No. ML22319A251).

⁹³ See ECAN Petition at 26-28.

appearance of a sinkhole at a nearby school in Erwin, and uncertainty about groundwater flow paths.⁹⁴

(b) Discussion

In Contention C, ECAN asserts that the NFS Supplemental ER does not address information about the cumulative impacts of specific effluents or contamination. But ECAN overlooks applicable information in the application and its references—particularly, the Supplemental ER and NFS’ responses to NRC environmental requests for additional information (RAIs).⁹⁵ Contention C also speculates about the presence of PFAS and other contaminants but does not substantiate its claims so as to raise a genuine dispute with the application. Therefore, Contention C is inadmissible because it does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

(i) Radioisotopes

While ECAN takes issue with what it alleges to be NFS’ failure to sufficiently describe the presence of radioisotopes in the Nolichucky River downstream of the NFS facility, ECAN does not address the applicable data and information that NFS provides in the Supplemental ER and RAI responses. Rather, the information ECAN provides about the presence of small amounts of radioisotopes in the environment near NFS is materially consistent with the information disclosed by NFS in its application.

For example, ECAN states “NFS’ Supplemental ER insufficiently and inaccurately discusses the scientifically verified escape of Uranium and Plutonium radioisotopes into the

⁹⁴ See *id.* at 29-33.

⁹⁵ Response to NRC Request for Additional Information to Support Environmental Review of NFS Application to Amend SNM-124 to Construct and Operate A Uranium Metal Process (Jun. 30, 2022) (ADAMS Accession No. ML22193A034) (NFS RAI responses). The NFS RAI responses were received by the NRC prior to the publication of the August 30, 2022, notice of opportunity for hearing for this proceeding.

Nolichucky River.”⁹⁶ ECAN also provides the declaration of Dr. Ketterer, who discusses his collection of “extensive data from environmental samples of water, soil, sediment, and mollusks in and about the Nolichucky commencing in 2010” and performance of laboratory measurements of these samples, about which he states “[e]xtensive evidence conclusively demonstrates releases of enriched uranium (U) and plutonium (Pu) from NFS’s operations into the ambient environment.”⁹⁷ But contrary to ECAN’s suggestions otherwise, NFS provides numerous discussions, figures, and tables that identify the timing and amounts of past releases—pursuant to the requirements of NRC (and Tennessee Department of Environment and Conservation (TDEC)) regulatory permits—of the radioisotopes that ECAN purports to reveal, including uranium isotopes and plutonium.⁹⁸ Moreover, NFS presents radiological pathway assessments in Supplemental ER Section 4.12.2 and associated tables for air, soil, vegetation, sediment, and surface water. Table 22B “Stream Sediment Average Radioactivity 2009-2020” reflects NFS’ data on cumulative deposition of gross alpha emitters, gross beta emitters, and total uranium.⁹⁹

But rather than state in what ways its proffered analysis reveals a dispute with information provided in the application, ECAN asserts that NFS has released detectable

⁹⁶ ECAN Petition at 24.

⁹⁷ *Id.* at 24.

⁹⁸ The following are several examples of information NFS provided about radioisotope releases: 1) in the Supplemental ER, Section 4.4 at Figure 5, provides results on radiological surface water quality testing reflecting total uranium concentrations for years 2009-2020 for Martin Creek Upstream, Martin Creek Downstream, Nolichucky River Upstream, and Nolichucky River Downstream being significantly below regulatory limits, 2) Supplemental ER Section 2.1.2 describes current operations, which NFS states “are inclusive of those associated with this amendment request;” regarding liquid effluents, NFS states that treated wastewater is only discharged “if levels are below 10 CFR 20.1301 [‘Dose limits for individual members of the public’] and in compliance with the Facility’s NPDES Permit,” 3) Enclosure B of the NFS RAI responses provides NFS’ NPDES permit for its wastewater treatment facility; the permit includes Table 5 (pdf pp. 91-98) reflecting the small quantities of radionuclides in NFS Wastewater Treatment Facility effluent—the listed radionuclides include isotopes of plutonium, uranium, thorium, technetium and others.

⁹⁹ See Supplemental ER at 37.

radioisotopes into the environment—a point also made in NFS’ application—as sufficient to sustain its contention. ECAN does not contrast its information from the information in the application. In sum, ECAN alleges omissions from the application that are, in fact, contained within the application, and ECAN fails to raise a dispute with the adequacy of what NFS provided by referencing specific portions of the application and how its information differs.¹⁰⁰ Thus, this portion of the contention does not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

(ii) *PFAS chemicals*

ECAN also asserts that the ER is deficient because “[t]here is no recognition nor investigation in the Supplemental ER of the likely contamination of groundwater and the Nolichucky River with PFAS chemicals as a result of activities at NFS over 65 years.”¹⁰¹ ECAN highlights that the U.S. Environmental Protection Agency’s (EPA) issued an interim health advisory regarding certain PFAS chemicals in June 2022 and also cites a 2020 presentation on PFAS contamination in Tennessee by TDEC.¹⁰² Additionally, while ECAN “does not have direct evidence that PFAS chemicals are present in the groundwater beneath, or in the vicinity of the NFS complex in Erwin,” ECAN asserts that because of NFS’ industrial history, PFAS contamination should be considered a possibility and investigated.¹⁰³

ECAN’s assertions about the potential presence of PFAS at NFS are, by ECAN’s admission, only speculation, and therefore cannot be sufficient to support an admissible contention.¹⁰⁴ ECAN offers no tangible evidence of PFAS use or PFAS contamination at NFS, but only a bare assertion that PFAS chemicals are common and that TDEC detected PFAS

¹⁰⁰ See *Shieldalloy Metallurgical Corp.* (Licensing Amendment Request for Decommissioning of the Newfield, New Jersey Facility) LBP-07-5, 65 NRC 341, 347 (Mar. 28, 2007) (for a contention of adequacy, a contention must include specific references to the application to demonstrate a genuine dispute.)

¹⁰¹ ECAN Petition at 33.

¹⁰² *Id.* at 26-28.

¹⁰³ *Id.* at 28

¹⁰⁴ See *Fansteel*, CLI-03-13, 58 NRC at 203.

chemicals in fish tissue samples in several Tennessee rivers, including the Nolichucky, in 2008-2009.¹⁰⁵ Although ECAN states that its expert “recommended that there be an inquiry into the presence of PFAS at NFS,” this recommendation and the assessment that PFAS chemicals may be present at the site are not supported by any information specific to NFS.¹⁰⁶ Under the requirement of 10 CFR § 2.309(f)(1)(v) that an admissible contention must include alleged facts or expert opinions that support the petitioner’s position, “neither mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention.”¹⁰⁷

(iii) Groundwater assessment

ECAN next argues that the groundwater resources at the NFS site are inadequately investigated in several respects. First, ECAN suggests that undiscovered latent chemical and radiological contamination may be present—specifically, PFAS chemicals (see staff discussion above),¹⁰⁸ as well as chemicals remaining from remediation projects, including plutonium and thorium. Second, ECAN asserts that there may be contamination in the Banner Hill Spring, based on “[t]estimony given in the [1986] Markey Hearings.”¹⁰⁹ Third, ECAN claims there is uncertainty regarding the groundwater flow patterns and the potential for karst formations to give rise to sinkholes at the NFS site.¹¹⁰

But as in the discussion above, NFS’ application includes extensive discussion of groundwater contamination that ECAN does not address. For example, NFS states that

¹⁰⁵ ECAN Petition at 28.

¹⁰⁶ *Id.* at 28.

¹⁰⁷ *Southern Nuclear Operating Company* (Early Site Permit for Vogtle ESP Site) LBP-07-3, 65 NRC 237, 253 (Mar. 12, 2007) (citing *Fansteel*, CLI-03-13, 58 NRC at 203).

¹⁰⁸ See Staff discussion regarding the inadmissibility of ECAN’s discussion of PFAS chemicals *supra* at 21-22.

¹⁰⁹ ECAN Petition at 30.

¹¹⁰ *Id.* at 31-33.

“[g]roundwater is not expected to be impacted by either construction or normal process activities; historically groundwater has been measured at depths greater than 10 ft below the ground surface in the construction area” and control procedures would be applied to any spills and releases in accordance with site procedures.¹¹¹ NFS also stated that “the impact of the additional U-Metal process on liquid effluent and/or runoff will be minimal” and the process “will not generate any new chemical or radiological attributes with the potential to enter surface waterways.”¹¹²

ECAN also does not substantiate its assertion that remediation activities for PCE have “gone wrong” and that byproduct contaminant plumes may have migrated.¹¹³ Without more than the suggestion of a mere possibility of contamination, ECAN’s arguments are just speculation.¹¹⁴ Contention C does not raise specific disagreements with NFS’ Supplemental ER, and therefore, this aspect of the contention is inadmissible per 10 C.F.R. § 2.309(f)(1)(v) and (vi).

Similarly, ECAN’s assertions about potential contamination in Banner Hill Spring present no concrete facts or dispute with the application. The sum of ECAN’s supporting information is unverified testimony from 1986 that “monitoring wells had detected contaminants ‘leaking in Banner Hill Spring.’”¹¹⁵ The Supplemental ER notes that Banner Hill Spring is the source of Banner Spring Branch and that the latter discharges to Martin Creek on the north side of the NFS site.¹¹⁶ Regarding the history of monitoring and water quality of Banner Spring Branch and

¹¹¹ NFS RAI Responses at 25.

¹¹² *Id.* at 40.

¹¹³ ECAN Petition at 30.

¹¹⁴ See *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station, Units 1, 2, and 3 and ISFSI), CLI-21-1, 93 NRC 1, 20 (2021) (raising the mere possibility of additional contamination without any specific information regarding its scope did not state a genuine dispute with the applicant in a decommissioning proceeding).

¹¹⁵ ECAN Petition at 29-30

¹¹⁶ Supplemental ER, Section 4.12.1 at 34.

Martin Creek, NFS states “[h]istorical data associated with these water bodies has identified (2009 Environmental Report) that water quality and sampling data are below National Primary Drinking Water Standards and demonstrate no significant trends or changes due to Facility operations.”¹¹⁷ ECAN does not address this Supplemental ER information, but only speculates regarding the potential presence of contamination without basis—thus, this portion of the contention is also inadmissible per 10 C.F.R. § 2.309(f)(1)(v) and (vi).¹¹⁸

ECAN’s discussion of complex groundwater flow references the 2011 NRC Final Environmental Assessment for the Renewal of NRC License No. SNM-124 for NFS, but this reference does not support, and indeed contradicts, ECAN’s claim that complex groundwater flow could lead to unpredictable contamination transport by the groundwater. In the same paragraph cited by ECAN, that EA states “based on a comparison of extensive monitoring well data and the NFS groundwater flow model, NFS indicated that flow in the bedrock obeys effective porous medium flow (similar to flow through a sponge) rather than fracture flow.”¹¹⁹ As such, ECAN has again provided no support for its position beyond speculation and has not raised a genuine dispute with the application.

Finally, ECAN asserts that NFS failed “to address sinkhole activity and karst terrain in the Rome Formation underlying the site[,]” given the occurrence of a sinkhole in 2012 nearby the NFS site in Erwin results in a “dangerously incomplete assessment of the proposed action’s potential impacts on the environment.”¹²⁰ But merely referencing the occurrence of a sinkhole in the general vicinity of the NFS site does not establish ECAN’s claims regarding the site.¹²¹ ECAN does not raise a specific dispute regarding NFS’ characterization of the foundation

¹¹⁷ *Id.*

¹¹⁸ See 10 C.F.R. § 2.309(f)(1)(v) and (vi).

¹¹⁹ 2011 NFS EA at 3-18 (ADAMS Accession No. ML112560265).

¹²⁰ ECAN Petition at 32.

¹²¹ See *Vermont Yankee*, CLI-90-4, 31 NRC at 333.

geology underlying the NFS site. Indeed, once again, ECAN does not confront the discussions on this topic in the application.¹²² Accordingly, ECAN's speculative assertions regarding sinkholes and reference to an incident near the site 10 years ago do not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

(c) Conclusion

For the foregoing reasons, Contention C is inadmissible. Subparts of this contention fail to meet the requirements in 10 C.F.R. § 2.309(f)(1)(v) and (vi). Therefore, this contention should be dismissed.

4. Contention D—Fuel cycle facility regulations are insufficient to protect public health, safety, and security because they lack stringent quality assurance requirements

(a) Summary

Contention D states that the NRC's "fuel cycle facility regulations are insufficient to protect public health, safety, and security because they lack stringent quality assurance requirements."¹²³

ECAN asserts that NFS has a "considerable history [] of safety violations," and therefore the NRC's Fuel Cycle Regulations have failed to achieve a sustained safety culture at NFS.¹²⁴ ECAN argues that "a dramatic upgrade in safety and quality culture at NFS is urgently needed ahead of the installation of the purification and conversion process"¹²⁵ because NRC's regulations are insufficient to protect the public health and safety.¹²⁶ Finally, ECAN argues that

¹²² Supplemental ER, Section 3.3.2 "Foundation Geology" at 15, states "bedrock strata at the NFS site are consolidated, providing firm foundations for buildings that lie directly on the strata or that are supported by footings."

¹²³ ECAN Petition at 35.

¹²⁴ *Id.*

¹²⁵ *Id.* at 41.

¹²⁶ *Id.* at 35.

NFS is “required to implement and maintain a graded QA program commensurate with the risk posed by the facility” and that currently, NFS is not doing so.¹²⁷

(b) Discussion

NRC regulations preclude challenges to Commission rules or regulations in adjudicatory proceedings, absent a waiver granted by the Commission.¹²⁸ Contentions that merely present the petitioner’s view of what applicable policies ought to be must be rejected.¹²⁹ Further, attempts to advocate for requirements stricter than those imposed by regulation are impermissible and outside the scope of the proceeding, and therefore inadmissible.¹³⁰

In this contention, ECAN asserts that certain NRC regulations applicable to fuel cycle facilities are inadequate and argues that requirements other than those imposed by regulation should govern the review of NFS’ application.¹³¹ For example, ECAN states that “it is ironic that a private production facility ... is not regulatorily held to the strictest standards of Quality Assurance”¹³² and that “a dramatic upgrade in safety and quality culture at NFS is urgently needed.”¹³³ Specifically, ECAN asserts that NFS does not have adequate regulation and oversight, and that a QA regime similar to the ASME Nuclear Quality Assurance (NQA)—1

¹²⁷ *Id.* at 38-39. ECAN states that there are “inherent weakness[es] in the QA approach at Nuclear Fuel Services” and that “no one” performs certain functions of the QA program that should be being done. *See id.* at 39.

¹²⁸ As set forth in 10 C.F.R. § 2.335(a), “no rule or regulation of the Commission ... is subject to attack ... in any adjudicatory proceeding” in the absence of a waiver petition granted by the Commission. *See also Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003). Accordingly, any contention that amounts to an attack on applicable statutory requirements or represents a challenge to the basic structure of the Commission’s regulatory process without a waiver must be rejected. *Id.*

¹²⁹ *Millstone*, CLI-03-14, 58 NRC at 218; *see also NextEra Energy Point Beach, LLC* (Point Beach Nuclear Plant, Units 1 and 2), CLI-22-5, 95 NRC 97, 101 (2022).

¹³⁰ *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 01, 315 (2012) (citations omitted); *See Peach Bottom*, ALAB-216, 8 AEC at 20-21 (explaining that a contention that seeks to raise an issue that is not proper for adjudication in the proceeding must also be rejected.)

¹³¹ *See* ECAN Petition at 40-41.

¹³² *Id.* at 40.

¹³³ *Id.* at 41.

certification should apply to NFS.¹³⁴ ECAN then suggests, without providing any evidence or support, that “risks are highly likely to increase as a consequence of the new uranium purification process,” and therefore, NFS should have to meet higher standards than what are currently required.¹³⁵

The QA requirements that are applicable to the NFS facility, including the new process proposed by the requested license amendment, are contained in 10 C.F.R. § 74.59.¹³⁶ As stated above, contentions that merely present the petitioner’s view of what applicable policies ought to be or attempt to advocate for stricter requirements than those imposed by regulation are impermissible and outside the scope of the proceeding.¹³⁷

(c) Conclusion

Therefore, Contention D is an impermissible challenge to NRC regulations¹³⁸ and is outside the scope of this proceeding.¹³⁹

¹³⁴ See *id.* at 38-39.

¹³⁵ *Id.* at 39.

¹³⁶ If ECAN believes that these requirements are insufficient, it has options available to it outside of the adjudicatory process to petition for changes to regulations or to modify, suspend, or revoke a license. See 10 C.F.R. §§ 2.802 and 2.206.

¹³⁷ See *Millstone*, CLI-03-14, 58 NRC at 218; see also *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC at 315.

¹³⁸ 10 C.F.R. § 2.335(a).

¹³⁹ 10 C.F.R. § 2.309(f)(1)(iii).

III. CONCLUSION

For the reasons explained above, ECAN satisfies the requirements for representational standing, but it does not meet the requirements for an admissible contention under 10 CFR § 2.309(f)(1). As such, pursuant to 10 CFR § 2.309(a), the Board should deny ECAN's Petition.

/Signed (electronically) by/

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Executed in Accord with 10 CFR 2.304(d)

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Dated in Atlanta, GA
this 23rd day of November 2022

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

NUCLEAR FUEL SERVICES, INC.

(Application to amend Special Nuclear
Material License, Erwin, Tennessee)

Docket No. 70-143-LA

Certificate of Service

Pursuant to 10 C.F.R § 2.305, I hereby certify that copies of the foregoing NRC STAFF ANSWER TO ERWIN CITIZEN'S AWARENESS NETWORK'S PETITION TO INTERVENE AND REQUEST FOR HEARING, dated November 23, 2022, have been served upon the Electronic Information Exchange (the NRC's E-Filing System), in the captioned proceeding, this 23rd day of November 2022.

/Signed (electronically) by/

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Dated in Atlanta, GA
this 23rd day of November 2022