

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

LBP-19-07

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Paul S. Ryerson, Chairman
Nicholas G. Trikouros
Dr. Gary S. Arnold

In the Matter of

INTERIM STORAGE PARTNERS LLC

(WCS Consolidated Interim Storage Facility)

Docket No. 72-1050-ISFSI

ASLBP No. 19-959-01-ISFSI-BD01

August 23, 2019

MEMORANDUM AND ORDER

(Ruling on Petitions for Intervention and Requests for Hearing)

TABLE OF CONTENTS

I.	BACKGROUND	2
A.	General	2
B.	Procedural History.....	6
II.	STANDING ANALYSIS	12
A.	Beyond Nuclear.....	14
B.	Sierra Club	16
C.	Joint Petitioners.....	17
D.	Fasken	18
III.	LEGAL STANDARDS	20
A.	Legal Standards Governing Contention Admissibility	20
B.	NEPA Legal Standards	22
C.	The Continued Storage Rule.....	24
IV.	CONTENTION ANALYSIS	25
A.	Beyond Nuclear.....	25
B.	Sierra Club	29
C.	Joint Petitioners.....	67
D.	Fasken	94
V.	RULING ON PETITIONS	105
VI.	ORDER	106

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

LBP-19-07

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Paul S. Ryerson, Chairman
Nicholas G. Trikouros
Dr. Gary S. Arnold

In the Matter of

INTERIM STORAGE PARTNERS LLC

(WCS Consolidated Interim Storage Facility)

Docket No. 72-1050-ISFSI

ASLBP No. 19-959-01-ISFSI-BD01

August 23, 2019

MEMORANDUM AND ORDER

(Ruling on Petitions for Intervention and Requests for Hearing)

Before the Board are four petitions to intervene and requests for a hearing concerning a license application by Interim Storage Partners LLC (ISP) to construct and operate a consolidated interim storage facility for spent nuclear fuel and greater-than-Class C (GTCC) waste in Andrews County, Texas. The petitioners are: (1) Beyond Nuclear, Inc. (Beyond Nuclear); (2) Sierra Club; (3) a coalition of Don't Waste Michigan, Citizens' Environmental Coalition, Citizens for Alternatives to Chemical Contamination, Nuclear Energy Information Service, Public Citizen, Inc., San Luis Obispo Mothers for Peace, Sustainable Energy and Economic Development Coalition, and Leona Morgan, individually (collectively, Joint Petitioners); and (4) Fasken Land and Minerals, and Permian Basin Land and Royalty Organization (together, Fasken).

As ISP has revised its license application in response to petitioners' contentions and to the NRC Staff's requests for additional information, both the Board's and the NRC Staff's views as to the admissibility of various contentions have changed. The NRC Staff now contends that

only one of the four petitions for a hearing should be granted because, in the Staff's view, only Beyond Nuclear has both demonstrated standing and proffered an admissible contention.¹ ISP opposes the standing of all petitioners and asserts that none of their proffered contentions is admissible.

The Board concludes that Sierra Club has demonstrated standing and has proffered one admissible contention. In accordance with 10 C.F.R. § 2.309(a), we grant Sierra Club's petition and admit it as a party to this proceeding. The admitted contention will be adjudicated under the procedures in 10 C.F.R. Part 2, Subpart L.

The other three petitions are denied. Although Beyond Nuclear has demonstrated standing, it has not proffered an admissible contention. Among the eight Joint Petitioners, only Sustainable Energy and Economic Development Coalition (SEED) has demonstrated standing. SEED's petition, however, must be denied for lack of an admissible contention. Although Fasken has established standing, it has not proffered an admissible contention.

I. BACKGROUND

A. General

Typically, after nuclear fuel is used at a nuclear plant, it is cooled and stored in a spent fuel pool. After a certain amount of time, the spent fuel is loaded into canisters, welded shut, and then stored in casks at an onsite independent spent fuel storage installation.² When a plant owner chooses to permanently shut down its nuclear plant, it may initiate the decommissioning

¹ See NRC Staff's Consolidated Response to Petitions to Intervene and Requests for Hearing Filed By: Sierra Club; [Joint Petitioners] (Dec. 10, 2018) [hereinafter NRC Staff Consol. Answer] (asserting that Sierra Club Contentions 4 and 9 and Joint Petitioners Contention 3 are partly admissible); NRC Staff's Response to Petitions to Intervene and Requests for Hearing Filed by [Fasken] (Nov. 23, 2018) [hereinafter NRC Staff Answer to Fasken] (asserting that Fasken Contention 2 is partly admissible). But see Tr. at 201-05 (NRC Staff counsel stating at oral argument that only Beyond Nuclear proffers an admissible contention in part).

² See NRC, Safety of Spent Fuel Storage, NUREG/BR-0528, at 1-2 (Apr. 2017).

process immediately, or it may wait years to start the process. Regardless of how the company proceeds, the spent nuclear fuel accumulated by the plant over its lifetime will remain at the plant site. The storage of spent nuclear fuel costs money for security and maintenance.

Congress likely did not envision this situation when it passed the Nuclear Waste Policy Act of 1982 (NWPAA).³ Congress contemplated that the U.S. Department of Energy (DOE) would build a national nuclear waste repository, and that the nuclear power companies would help pay for it. Under section 302 of the NWPAA, power reactor licensees were required to pay into a nuclear waste fund for construction of the repository.⁴ In exchange, section 302(a)(5)(B) committed DOE to begin disposing of the nuclear power plants' spent fuel no later than January 31, 1998. When a permanent repository failed to materialize, the power plant licensees sued and began to recover from the federal government substantial damages to cover the cost of continuing to store spent fuel at their sites.⁵ Contract damage lawsuits under the NWPAA are now commonplace, and the federal government pays out damages on a regular basis.⁶

Shortly after DOE's application for authorization to construct a geologic repository at Yucca Mountain, Nevada was eventually submitted to the NRC in June 2008,⁷ Congress stopped funding the Yucca Mountain project, and a pending adjudication before a licensing board was suspended in September 2011.⁸ To date, almost eight years later, Congress has

³ Nuclear Waste Policy Act of 1982, 42 U.S.C. §§ 10101–10270 (1983) [hereinafter NWPAA].

⁴ 42 U.S.C. § 10222.

⁵ See, e.g., Nat'l Ass'n of Regulatory Util. Comm'rs v. U.S. Dep't of Energy, 736 F.3d 517, 520 (D.C. Cir. 2013); Me. Yankee Atomic Power Co. v. United States, 225 F.3d 1336, 1341–42 (Fed. Cir. 2000); Ind. Mich. Power Co. v. U.S. Dep't of Energy, 88 F.3d 1272, 1276–77 (D.C. Cir. 1996).

⁶ See, e.g., Nat'l Ass'n of Regulatory Util. Comm'rs, 736 F.3d at 520.

⁷ See Letter from Edward F. Sproat III, Director, DOE Office of Civilian Radioactive Waste Management, to Michael F. Weber, Director, NRC Office of Nuclear Material Safety and Safeguards (NMSS) (June 3, 2008) (ADAMS Accession No. ML081560407).

⁸ U.S. Dep't of Energy (High-Level Waste Repository), LBP-11-24, 74 NRC 368 (2011).

provided no new funding for a permanent nuclear waste repository at Yucca Mountain. As lack of congressional funding for a permanent repository persists, spent fuel is likely to be stored at decommissioned sites across the country, and will continue to accumulate at the sites of the nation's operating reactors.

This proceeding concerns a possible temporary solution: interim, consolidated storage of spent nuclear fuel by private industry. Both DOE and nuclear power plant owners potentially have an interest in contracting to use such a facility. DOE might want to take responsibility for the nuclear plants' spent fuel, pay a private company to store it, and stop paying out damages. The nuclear plant owners, on the other hand, might be willing to apply their ongoing damage payments toward paying a private company to store their spent fuel offsite, so that it would no longer be their responsibility to keep onsite and secure. Because the NWPA was drafted on the premise that DOE would not accept the spent fuel until a permanent repository becomes operational,⁹ however, as discussed infra only the second option would be consistent with the terms of the statute.

Two companies—Holtec International and Interim Storage Partners LLC—apparently see a business opportunity in the congressional stalemate that has resulted in DOE's inability to take ownership of spent fuel. Both companies submitted applications to the NRC proposing to construct consolidated interim storage facilities (CISFs) to initially store spent fuel for a forty-year term.

As the licensing board in the Holtec proceeding observed (and as relevant here to ISP), there are substantial differences between the licensing and regulatory requirements for a CISF and for the Yucca Mountain permanent repository.¹⁰ For example, NRC's regulations require

⁹ See 42 U.S.C. § 10222(a)(5)(A).

¹⁰ Holtec Int'l (HI-STORE Consol. Interim Storage Facility), LBP-19-4, 89 NRC __, __ (slip op. at 3) (May 7, 2019).

DOE to demonstrate a reasonable expectation that its repository would meet specified performance standards throughout the “period of geologic stability,” defined to “end 1 million years after disposal,”¹¹ while the requirements for a CISF under Part 72 apply to renewable terms of no more than “40 years from the date of issuance.”¹² Moreover, while Yucca Mountain was authorized by statute to store 70,000 metric tons of high-level radioactive waste,¹³ ISP is initially requesting to store no more than 5,000 metric tons of spent fuel and GTCC waste.¹⁴ While DOE’s permanent repository would be constructed at least 700 feet below the surface,¹⁵ ISP’s spent fuel would be stored above ground on a concrete pad.¹⁶ And, all parts of ISP’s storage system use canisters and casks that have been separately approved and issued certificates of compliance by the NRC, and therefore are not part of ISP’s license application for the Texas storage facility.¹⁷

¹¹ 10 C.F.R. § 63.302.

¹² Id. § 72.42(a).

¹³ 42 U.S.C. § 10134(d).

¹⁴ WCS Consolidated Interim Spent Fuel Storage Facility Environmental Report, Docket No. 72-1050 (rev. 2 July 2018) at 1-1 [hereinafter ER] (ADAMS Accession No. ML18221A405 (package)). ISP’s Environmental Report, however, analyzes the potential full 8-phase capacity of up to 40,000 metric tons of uranium (MTU).

¹⁵ DOE, Office of Civilian Radioactive Waste Management, Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada, Summary at S-7 (June 2008).

¹⁶ Interim Storage Partners LLC License Application, Docket 72-1050, Andrews County, Texas, (rev. 2 July 2018) at 3-1 [hereinafter ISP License Application] (“The dry cask storage systems will be located on top of the concrete pads constructed at the CISF.”) (ADAMS Accession No. ML18206A483).

¹⁷ See ISP License Application at 2-1 (tbl 2-1) (listing only six NRC-approved cask systems to be stored at the ISP CISF).

Holtec filed its application for a New Mexico-sited CISF in March 2017, and the public was afforded an opportunity to request a hearing and petition to intervene.¹⁸ In Holtec,¹⁹ six groups of petitioners across seven states lodged petitions. Although more than forty contentions were proffered, the Holtec board held that none met the Commission's standards for a hearing.²⁰ Notwithstanding termination of the Holtec adjudicatory proceeding at the board level, the NRC Staff continues to review the company's application for a HI-STORE CISF in New Mexico. Multiple appeals of the Holtec board's decision are currently pending before the Commission.

Most petitioners in this case also petitioned in Holtec. Many of the contentions that were proffered in Holtec are similar if not identical to those proffered in this proceeding, and for good reason: Both proposed interim storage facilities must meet the safety requirements in 10 C.F.R. Part 72 and the environmental requirements in 10 C.F.R. Part 51. Moreover, the proposed sites are similar geographically—they would be built approximately 40 miles from each other. Despite these similarities, however, the Board recognizes that the sites and the applications in these two proceedings are not the same.

B. Procedural History

In April 2016, Waste Control Specialists LLC (WCS) submitted its initial license application to the NRC to construct and operate a CISF for a term of forty years.²¹ A year later, WCS requested that the NRC suspend its safety and environmental reviews and public

¹⁸ Holtec International's HI-STORE Consolidated Interim Storage Facility for Interim Storage of Spent Nuclear Fuel, 83 Fed. Reg. 32,919, 32,919–24 (July 16, 2018).

¹⁹ Holtec, LBP-19-4, 89 NRC at __ (slip op. at 1).

²⁰ Id. at __ (slip op. at 135); see 10 C.F.R. § 2.309(f)(1).

²¹ Waste Control Specialists LLC, Application for a License for a Consolidated Interim Spent Fuel Storage Facility (Apr. 28, 2016) (ADAMS Accession No. ML16133A100).

participation concerning its application.²² Accordingly, the NRC halted all activities.²³ During this period, WCS and Orano CIS LLC joined together to form ISP, with its sole corporate purpose “to license, design, construct and operate the CISF at the Waste Control Specialists site in Andrews, Texas.”²⁴

On August 29, 2018, after receiving a revised license application from ISP,²⁵ the NRC issued a Federal Register notice that allowed the public to request a hearing and petition to intervene by October 29, 2018.²⁶ The Secretary of the Commission (SECY) later extended this deadline to November 13, 2018.²⁷ ISP’s application states that it intends to construct and operate its CISF on approximately 100 acres in Andrews County, Texas.²⁸ In the first phase of its storage project, ISP seeks to store 5,000 metric tons of uranium (MTUs) (including some mixed oxide fuel and GTCC waste) in six canister systems for a 40-year term.²⁹ If its initial license is granted, ISP plans to request license amendments for “authorization to possess and store an additional 5,000 MTUs of [spent nuclear fuel] for each of seven subsequent expansion phases to be completed over the course of 20 years.”³⁰ ISP thus anticipates that, after

²² Joint Request to Withdraw the Federal Register Notice Providing an Opportunity to Submit Hearing Requests (Apr. 19, 2017), Attach. 1, Letter from Rod Baltzer, WCS President and CEO, to NRC Document Control Desk (Apr. 18, 2017) (ADAMS Accession No. ML17109A480).

²³ See Waste Control Specialists LLC (Consol. Interim Storage Facility), CLI-17-10, 85 NRC 221, 222 (2017) (granting WCS’s and NRC Staff’s request to suspend all activity and withdraw the hearing opportunity on the WCS CISF application).

²⁴ ISP License Application at 1-4.

²⁵ Letter from Jeffery D. Isakson, ISP, to NRC Document Control Desk (June 8, 2018) (ADAMS Accession No. ML18166A003).

²⁶ Interim Storage Partners Waste Control Specialists Consolidated Interim Storage Facility, 83 Fed. Reg. 44,070, 44,070–75 (Aug. 29, 2018), corrected, 83 Fed. Reg. 44,680 (Aug. 31, 2018) (correcting the deadline date for petitioners to request a hearing to October 29, 2018).

²⁷ Order of the Secretary (Oct. 25, 2018) at 2.

²⁸ ER at 1-1.

²⁹ Id.

³⁰ Id.

completion of its eight planned phases, its CISF would store 40,000 MTUs of spent fuel and GTCC waste, which is the amount analyzed in ISP's Environmental Report.³¹

On September 14, 2018, the Commission received simultaneous motions from Beyond Nuclear and Fasken to dismiss both this proceeding and the Holtec proceeding as violating the NWPA.³² ISP³³ and the NRC Staff opposed.³⁴ Although SECY denied both motions on procedural grounds,³⁵ SECY observed that Beyond Nuclear had also filed a hearing petition³⁶ specific to this proceeding that incorporated by reference arguments contained in its motion to dismiss.³⁷ SECY then referred Beyond Nuclear's petition to intervene and Fasken's motion to the Atomic Safety and Licensing Board Panel to be considered under the Commission's contention admissibility standards in 10 C.F.R. § 2.309.³⁸

³¹ Id.

³² Beyond Nuclear, Inc.'s Motion to Dismiss Licensing Proceedings for HI-STORE [CISF] and WCS [CISF] for Violation of the [NWPA] (Sept. 14, 2018). Because Fasken's initial motion to dismiss both CISF proceedings was only filed and served in the Holtec docket, Fasken filed its identical motion to dismiss in this docket on September 28, 2018. Motion of [Fasken] to Dismiss Licensing Proceedings for HI-STORE [CISF] and WCS [CISF] (Sept. 28, 2018).

³³ [ISP's] Response Opposing Beyond Nuclear, Inc.'s Unauthorized September 14, 2018 Filing (Sept. 24, 2018); [ISP's] Response Opposing [Fasken's] Unauthorized September 28, 2018 Filing (Oct. 5, 2018).

³⁴ Because the NRC Staff was a party in Holtec, the NRC Staff filed its single response to both Beyond Nuclear and Fasken in Holtec and in this proceeding. NRC Staff's Response to Motions to Dismiss Licensing Proceedings (Sept. 24, 2018).

³⁵ Order of the Secretary, In the Matters of Holtec International (HI-STORE [CISF]) Docket 72-1051; Interim Storage Partners LLC (WCS [CISF]) Docket 72-1050 (Oct. 29, 2018) [hereinafter Order Denying Motions to Dismiss].

³⁶ Beyond Nuclear, Inc.'s Hearing Request and Petition to Intervene (Oct. 3, 2018) [hereinafter Beyond Nuclear Pet.].

³⁷ Order Denying Motions to Dismiss at 2.

³⁸ Id. at 2–3. On December 27, 2018, Beyond Nuclear petitioned the United States Court of Appeals for the District of Columbia Circuit to review SECY's order denying Beyond Nuclear's motion to dismiss and referring it as a petition to this Board. That appeal remains pending, although Beyond Nuclear has requested it be held in abeyance pending the outcome of this proceeding. See Notice of Beyond Nuclear's Petition for Review of NRC Order in D.C. Circuit U.S. Court of Appeals, Docket Nos. 72-1050 & 72-1051 (Jan. 16, 2019).

On October 29, 2018, ISP³⁹ and the NRC Staff⁴⁰ filed answers to Beyond Nuclear's petition, and Beyond Nuclear replied.⁴¹

Fasken filed its petition for hearing on October 29, 2018.⁴² On November 20, 2018, ISP filed answers opposing both Fasken's motion to dismiss this proceeding as referred to the Board by SECY (i.e., its referred contention) and Fasken's hearing petition.⁴³ The NRC Staff filed its answer to both Fasken's hearing petition and Fasken's referred contention on November 23, 2018.⁴⁴ Fasken filed separate replies to ISP and to the NRC Staff on November 28 and 30, 2018, respectively.⁴⁵ Also on November 30, Fasken filed a single reply to both ISP and to the NRC Staff concerning its referred contention.⁴⁶

³⁹ [ISP's] Answer Opposing Beyond Nuclear, Inc.'s Hearing Request and Petition to Intervene (Oct. 29, 2018) [hereinafter ISP Answer to Beyond Nuclear].

⁴⁰ NRC Staff's Response to Beyond Nuclear, Inc.'s Hearing Request and Petition to Intervene (Oct. 29, 2018) [hereinafter NRC Staff Answer to Beyond Nuclear].

⁴¹ Beyond Nuclear's Reply to Oppositions to Hearing Request and Petition to Intervene (Nov. 5, 2018).

⁴² Petition of [Fasken] for Intervention and Request for Hearing (Oct. 29, 2018) [hereinafter Fasken Pet.]. On November 9, 2018, the ASLBP's Chief Administrative Judge granted a jointly-filed motion to establish a briefing schedule to Fasken's referred contention. The order set a separate deadline for ISP and the NRC Staff to file respective answers to the referred contention on November 23, 2018, and established Fasken's reply deadline for no later than November 30, 2018. Chief Administrative Judge Order (Granting Joint Motion to Establish Briefing Schedule) (Nov. 9, 2018) (unpublished).

⁴³ [ISP's] Answer Opposing [Fasken's] Motion to Dismiss as Referred to the ASLBP for Consideration Under 10 C.F.R. § 2.309 (Nov. 20, 2018); [ISP's] Answer Opposing Hearing Request and Petition to Intervene Filed by [Fasken] (Nov. 20, 2018) [hereinafter ISP Answer to Fasken].

⁴⁴ NRC Staff's Response to Petitions to Intervene and Requests for Hearing Filed by [Fasken] (Nov. 23, 2018) [hereinafter NRC Staff Answer to Fasken].

⁴⁵ [Fasken's] Reply to ISP's Opposition to Hearing Request and Petition to Intervene (Nov. 28, 2018); [Fasken's] Reply to NRC Staff's Opposition to Hearing Request and Petition to Intervene (Nov. 30, 2018).

⁴⁶ Reply of [Fasken] to [ISP's] and Staff's Oppositions to Motion to Dismiss (Nov. 30, 2018).

On December 10, 2018, ISP moved to strike portions of Fasken's reply concerning its standing on its referred contention, and portions of Fasken's replies to ISP and to the NRC Staff concerning all of Fasken's proffered contentions.⁴⁷ Fasken opposed.⁴⁸

On November 13, 2018, Sierra Club and Joint Petitioners filed their petitions to intervene and hearing requests.⁴⁹ On December 10, 2018, the NRC Staff submitted a consolidated answer⁵⁰ and ISP filed separate answers to Sierra Club⁵¹ and Joint Petitioners.⁵² Sierra Club and Joint Petitioners replied.⁵³

On December 27, 2018, ISP filed separate motions to strike portions of Sierra Club's and Joint Petitioners' replies.⁵⁴ Sierra Club and Joint Petitioners opposed.⁵⁵

⁴⁷ [ISP's] Motion to Strike Portions of the Replies Filed by [Fasken] (Dec. 10, 2018).

⁴⁸ [Fasken's] Opposition to [ISP's] Motion to Strike (Dec. 17, 2018).

⁴⁹ Petition to Intervene and Request for Adjudicatory Hearing by Sierra Club (Nov. 13, 2018) [hereinafter Sierra Club Pet.]; Petition of [Joint Petitioners] to Intervene, and Request for an Adjudicatory Hearing (Nov. 13, 2018) [hereinafter Joint Pet'rs Pet.]. Thereafter, Sierra Club and Joint Petitioners moved to disqualify this Board because the administrative judges in this proceeding are the same as those on the Holtec board. Motion of Sierra Club, [Joint Petitioners] for Disqualification of Atomic Safety and Licensing Board [(ASLB)] (Nov. 26, 2018). The Board denied the motion to disqualify and referred its decision to the Commission. Licensing Board Memorandum and Order (Denying and Referring Motion to Disqualify Board), LBP-18-6, 88 NRC 177, 180 (2018). The Commission affirmed. CLI-19-3, 89 NRC __ (Mar. 11, 2019).

⁵⁰ NRC Staff's Consolidated Response to Petitions to Intervene and Requests for Hearing Filed By: Sierra Club; [Joint Petitioners] (Dec. 10, 2018) [hereinafter NRC Staff Consol. Answer].

⁵¹ [ISP's] Answer Opposing Hearing Request and Petition to Intervene Filed by Sierra Club (Dec. 10, 2018) [hereinafter ISP Answer to Sierra Club].

⁵² [ISP's] Answer Opposing Hearing Request and Petition to Intervene Filed by [Joint Petitioners] (Dec. 10, 2018) [hereinafter ISP Answer to Joint Pet'rs].

⁵³ Sierra Club's Reply to Answers filed by [ISP] and NRC Staff (Dec. 17, 2018) [hereinafter Sierra Club Reply to ISP and NRC Staff]; Combined Reply of [Joint Petitioners] to [ISP] and NRC Answers [hereinafter Joint Pet'rs Reply].

⁵⁴ [ISP's] Motion to Strike Portions of the Reply Filed by Sierra Club (Dec. 27, 2018); [ISP's] Motion to Strike Portions of the Reply Filed by [Joint Petitioners] (Dec. 27, 2018).

⁵⁵ Sierra Club's Answer to [ISP's] Motion to Strike Portions of Sierra Club's Reply (Jan. 2, 2019); Opposition of [Joint Petitioners] to [ISP] Motion to Strike (Dec. 30, 2018).

On June 3, 2019, ISP's counsel submitted a letter to the Board.⁵⁶ The letter informed the Board and participants that ISP had submitted a partial response to the NRC Staff's Request for Additional Information (RAI) Part 1 and made two unrelated modifications to its license application that, it stated, could affect some of the proffered contentions in this proceeding.⁵⁷ First, ISP removed its request for an exemption under 10 C.F.R. § 72.30 concerning financial assurance.⁵⁸ Second, ISP revised its Environmental Report to "reflect the correct status of the lesser prairie chicken."⁵⁹ Finally, the letter stated that ISP's response to the Staff's RAI 2.2-2 includes a discussion of gas and oilfield operations in the vicinity of the proposed facility.⁶⁰

On June 28, 2019, ISP submitted a second letter to the Board.⁶¹ As in the earlier letter, ISP informed the Board and participants of new responses to the NRC Staff's RAIs, which in turn might affect participants' proffered contentions. ISP stated that it had submitted a partial response to the NRC Staff's RAI Part 3 and the NRC Staff's Transportation RAIs TR-1 through

⁵⁶ Letter from Timothy P. Matthews, Counsel for [ISP], to Licensing Board (June 3, 2019) [hereinafter ISP June 3, 2019 Letter].

⁵⁷ Id. at 1.

⁵⁸ Id. ("The Board and the parties may view this change as relevant to Beyond Nuclear's Proposed Contention, [Fasken's] Referred Motion to Dismiss, Sierra Club's Proposed Contentions 1 and 9, and [Joint Petitioners] "Objection" and Proposed Contention 3.").

⁵⁹ Id. at 2 ("The Board and the parties may view this change as relevant to Sierra Club's Proposed Contention 13, and [Fasken's] Proposed Contention 5.").

⁶⁰ Id. ("The Board and the parties may view this information as relevant to [Fasken's] Proposed Contention 2 and Joint Petitioners' Proposed Contention 6.").

⁶¹ Letter from Timothy P. Matthews, Counsel for [ISP], to Licensing Board (June 28, 2019) [hereinafter ISP June 28, 2019 Letter].

TR-10.⁶² Additionally, ISP advised that it had revised sections 4.2.6, 4.2.7, 4.2.8, 4.2.9 and Attachment 4-1 of its Environmental Report to correspond with its RAI answers.⁶³

Also on June 28, ISP submitted a written response to this Board's June 7 question as to whether, absent new legislation, DOE could lawfully assume ownership of the spent nuclear fuel in ISP's proposed facility.⁶⁴ ISP stated it agreed that "absent new legislation, the DOE could not lawfully assume ownership of the spent nuclear fuel" in its proposed CISF,⁶⁵ and, citing Holtec, contended that no admissible contention as to this issue remains in this proceeding.⁶⁶

The Board heard oral arguments concerning standing and contention admissibility on July 10 and 11, 2019 in Midland, Texas. The Board encouraged, but did not require, each petitioner to address what it contends are relevant differences between this proceeding and the Holtec proceeding.⁶⁷

II. STANDING ANALYSIS

In a licensing proceeding such as this, the NRC must grant a hearing "upon the request of any person whose interest may be affected by the proceeding."⁶⁸ However, to determine whether a petitioner has a sufficient interest, the Commission applies contemporaneous judicial

⁶² Id. at 1.

⁶³ Id.; id. at 2 ("The Board and hearing participants may view portions of the revised ER Sections and Attachment 4-1 as relevant to [Joint Petitioners'] Proposed Contention 1, Sierra Club's Proposed Contentions 4 and 16, and/or ISP's answers to those proposed contentions.").

⁶⁴ [ISP's] Response to the [ASLB's] Questions Regarding the U.S. [DOE's] Authority under the [NWPA] (June 28, 2019) [hereinafter ISP June 28, 2019 Response to Board].

⁶⁵ Id. at 1.

⁶⁶ Id. (citing Holtec, LBP-19-4, 89 NRC at ___ (slip op. at 26–34)); id. at 3.

⁶⁷ Licensing Board Order (Establishing Format for Oral Argument) (June 7, 2019) at 2 (unpublished).

⁶⁸ 42 U.S.C. § 2239(a)(1)(A).

concepts of standing.⁶⁹ Although the Commission instructs us to construe the petition in favor of the petitioner when we determine standing,⁷⁰ it is nonetheless each petitioner's burden to demonstrate that standing requirements are met.⁷¹ As relevant here, a petitioner may satisfy this burden in one of three ways.

First, a petitioner may show traditional standing. This requires a showing that a person or organization has suffered or might suffer a concrete and particularized injury that is: (1) fairly traceable to the challenged action; (2) likely redressable by a favorable decision; and (3) arguably within the zone of interests protected by the governing statutes⁷²—here primarily the Atomic Energy Act (AEA) and the National Environmental Policy Act (NEPA).⁷³

Second, a petitioner may take advantage of proximity presumptions the Commission has created to simplify standing requirements for individuals who reside within, or have frequent contacts with, a geographic zone of potential harm. In proceedings that involve construction or operation of a nuclear power plant, the zone is deemed to be the area within a 50-mile radius of the site.⁷⁴ In other proceedings, such as this one, a “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.”⁷⁵ The smaller the risk of offsite consequences, the closer a petitioner

⁶⁹ Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-15-25, 82 NRC 389, 394 (2015).

⁷⁰ Id.

⁷¹ See Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 & 2), CLI-00-5, 51 NRC 90, 98 (2000). 10 C.F.R. § 2.309(d) specifies information that a petitioner should include in its petition to establish standing but does not set a standard a licensing board must apply when deciding whether that information is sufficient.

⁷² Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009).

⁷³ 42 U.S.C. §§ 2011–2297; id. §§ 4321–4347.

⁷⁴ PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 138–39 (2010).

⁷⁵ Ga. Inst. of Tech. (Ga. Tech Research Reactor, Atlanta, Ga.), CLI-95-12, 42 NRC 111, 116–17 (1995); see Sequoyah Fuels Corp. (Gore, Okla. Site), CLI-94-12, 40 NRC 64, 75 n.22 (1994)

must be to be realistically threatened. Although the Commission has not established a clear standard, the relevant distance from a CISF is likely less than 50 miles because such a storage facility “is essentially a passive structure rather than an operating facility, and . . . therefore [has] less chance of widespread radioactive release.”⁷⁶

Third, like most petitioners here, an organization may try to establish representational standing based on the standing of one or more individual members. To establish representational standing, an organization must: (1) show that the interests it seeks to protect are germane to its own purpose; (2) identify at least one member who qualifies for standing in his or her own right; (3) show that it is authorized by that member to request a hearing on his or her behalf; and (4) show that neither the claim asserted nor the relief requested requires an individual member’s participation in the organization’s legal action.⁷⁷

A. Beyond Nuclear

Beyond Nuclear states that it is “a nonprofit, nonpartisan membership organization that aims to educate and activate the public about the connections between nuclear power and nuclear weapons and the need to abolish both to protect public health and safety, prevent environmental harms, and safeguard our future.”⁷⁸ Of especial relevance, “Beyond Nuclear advocates for an end to the production of nuclear waste and for securing the existing reactor

(“[A] presumption based on geographic proximity is not confined solely to Part 50 reactor licenses, but is also applicable to materials cases where the potential for offsite consequences is obvious.”).

⁷⁶ Consumers Energy Co. (Big Rock Point Indep. Spent Fuel Storage Installation), CLI-07-19, 65 NRC 423, 426 (2007).

⁷⁷ Consumers Energy Co. (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007).

⁷⁸ Beyond Nuclear Pet. at 2.

waste in hardened on-site storage until it can be permanently disposed of in a safe, sound, and suitable underground repository.”⁷⁹

Beyond Nuclear claims standing on several theories,⁸⁰ but we need consider only one. Beyond Nuclear submits the declaration of its member Rose M. Gardner, who lives within seven miles of the proposed facility and authorizes Beyond Nuclear to represent her.⁸¹

The NRC Staff does not oppose Beyond Nuclear’s claim of standing,⁸² and the Board agrees. Ms. Gardner’s residence is well within the distance that has been found sufficient in other proceedings that involved spent fuel facilities.⁸³

ISP opposes Beyond Nuclear’s standing.⁸⁴ ISP argues that standing should not be presumed unless a petitioner resides within a facility’s required offsite emergency planning zone.⁸⁵ Because the Commission does not impose any offsite emergency planning requirements on away-from-reactor facilities for dry storage of aged fuel, ISP claims that the Commission has determined generically that such facilities pose no significant offsite risks to

⁷⁹ Id. at 2–3.

⁸⁰ See id. at 3–8.

⁸¹ See id., Ex. 2, Decl. of Rose M. Gardner (Sept. 13, 2018).

⁸² NRC Staff Consol. Answer at 7.

⁸³ See, e.g., Pac. Gas & Elec. Co. (Diablo Canyon Indep. Spent Fuel Storage Installation), LBP-02-23, 56 NRC 413, 429 (2002) (ruling 17 miles sufficient and citing other NRC approvals of standing for petitioners within 10 miles of proposed spent fuel facility expansions); Ne. Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), LBP-00-2, 51 NRC 25, 28 (2000) (finding standing of individual with part-time residence located 10 miles from spent fuel facility); Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), LBP-99-25, 50 NRC 25, 29–31 (1999) (finding standing of petitioner 17 miles from spent fuel facility); Fla. Power & Light Co. (St. Lucie Nuclear Power Plant, Unit 1), LBP-88-10A, 27 NRC 452, 454–55, aff’d, ALAB-893, 27 NRC 627 (1988) (granting standing of individual living within 10 miles of spent fuel facility).

⁸⁴ ISP Answer to Beyond Nuclear at 5–21.

⁸⁵ Id. at 10–11.

health and safety.⁸⁶ Accordingly, ISP argues, no one who lives any distance beyond the fence line of its proposed site is entitled to a presumption of standing.

The Board disagrees. We decline to rule that the level of risk appropriate to triggering emergency planning requirements is necessarily the same as that sufficient to permit a concerned neighbor to file a petition. Among other things, a petitioner may be concerned about potential long-term effects that have nothing to do with a sudden emergency.

ISP would apparently have us deny standing to Ms. Gardner to challenge the storage of potentially up to 40,000 metric tons of spent fuel even if her home were located directly across the street. This seems neither realistic nor consistent with the Commission's direction to construe standing in favor of the petitioner.⁸⁷ Ms. Gardner is a person "whose interest may be affected" under section 189a of the AEA.

Beyond Nuclear has demonstrated standing. However, because Beyond Nuclear has not proffered an admissible contention, as discussed infra, its request for an evidentiary hearing must nonetheless be denied.

B. Sierra Club

Sierra Club is a well-known environmental organization. Like Beyond Nuclear, Sierra Club submits supporting declarations from several members who live in the vicinity of the proposed facility.⁸⁸ One member—Shirley Henson—states that she lives about six miles away.⁸⁹

⁸⁶ Id.

⁸⁷ Turkey Point, CLI-15-25, 82 NRC at 394.

⁸⁸ See Sierra Club Pet., Decl. of Rose Gardner (Oct. 18, 2018); id., Decl. of Shirley Henson (Oct. 23, 2018); id., Decl. of Deanna Maria Dyer (Sept. 13, 2018); id., Decl. of Gordon Wayne Dyer (Sept. 13, 2018); id., Decl. of Danielle Marie Dyer (Sept. 13, 2018).

⁸⁹ See id., Decl. of Shirley Henson (Oct. 23, 2018) ¶ 1. Rose Gardner also states that she lives six miles away; however, because Ms. Gardner submitted similar declarations on behalf of both Sierra Club and Beyond Nuclear, we consider her declaration only in connection with the

As discussed supra, this distance is well within the limits that have been found to confer standing to challenge much smaller storage facilities, and the NRC Staff agrees that Sierra Club has established standing.⁹⁰ And again, we are not persuaded by ISP's argument⁹¹ that, even to commence a challenge, an individual who lives that close to a potentially massive facility for storing much of the nation's spent nuclear fuel must first demonstrate more.

Sierra Club has demonstrated standing.

C. Joint Petitioners

Joint Petitioners are comprised of seven different organizations and one individual. Except for SEED, they each present a similar standing issue. They do not base their standing claims on their members' proximity to the proposed facility, but rather on their proximity to potential transportation routes by which spent nuclear fuel might travel to the proposed facility.⁹²

This is too remote and speculative an interest on which to establish standing. As the Commission has stated: "[M]ere geographical proximity to potential transportation routes is insufficient to confer standing."⁹³

SEED, on the other hand, has submitted the supporting declaration of one member—Brigitte Gardner-Aguilar—who lives in Eunice, New Mexico about five miles from the proposed

standing of Beyond Nuclear. See Big Rock Point ISFSI, CLI-07-19, 65 NRC at 426 (explaining that "multiple representation might lead to confusion").

⁹⁰ NRC Staff Consol. Answer at 11.

⁹¹ ISP Answer to Sierra Club at 7–14.

⁹² Joint Pet'rs Pet. at 11–20.

⁹³ U.S. Dep't of Energy (Plutonium Export License), CLI-04-17, 59 NRC 357, 364 n.11 (2004) (quoting Diablo Canyon ISFSI, LBP-02-23, 56 NRC at 434); see also EnergySolutions, LLC (Radioactive Waste Import/Export Licenses), CLI-11-3, 73 NRC 613, 623 (2011) (denying petitioners' standing claim for failing to show there would be any impact from the transport of radioactive materials to be imported); Holtec, LBP-19-4, 89 NRC at __ (slip op. at 14–15) (discussing cases).

facility.⁹⁴ As discussed supra, this distance is well within the limits that have been found to confer standing to challenge much smaller storage facilities. At oral argument, the NRC Staff agreed that, through Ms. Gardner-Aguilar's declaration, SEED has submitted sufficient facts to establish standing.⁹⁵

Although the other Joint Petitioners have not, SEED has demonstrated standing. However, because Joint Petitioners have not proffered an admissible contention, as discussed infra, SEED's request for an evidentiary hearing nonetheless must also be denied.

D. Fasken

As set forth in the supporting Declaration of Tommy E. Taylor, Mr. Taylor is Vice President of Fasken Management, LLC, which is the general partner of Fasken Land and Minerals, Ltd.⁹⁶ Fasken is a member of Permian Basin Land and Royalty Organization (PBLRO), which is an association of oil and gas producers and royalty owners formed specifically in response to ISP's proposed facility.⁹⁷

As stated in Mr. Taylor's Declaration, Fasken owns property that is within eighteen miles of the proposed facility. Mr. Taylor's employment duties require him to travel to and spend time in the area of the proposed CISF site.⁹⁸ Additionally, he is personally aware of other Fasken employees who "often" travel to the area for employment reasons.⁹⁹ As an officer of Fasken, he

⁹⁴ Joint Pet'rs Pet. at 33, id., Decl. of Brigitte Gardner-Aguilar (Oct. 22, 2018).

⁹⁵ Tr. at 204. Initially, the NRC Staff opposed the standing of all Joint Petitioners, including SEED. NRC Staff Consol. Answer at 7–11. Because Joint Petitioners focused their standing claims primarily on proximity to potential transportation routes, rather than proximity to the proposed facility, it perhaps was not apparent that Ms. Gardner-Aguilar lives just as close or closer to the proposed facility as do Sierra Club members whose standing the Staff did not oppose. See NRC Staff Consol. Answer at 11.

⁹⁶ Fasken Pet., Ex. 1, Decl. of Tommy E. Taylor ¶ 1 (Oct. 29, 2018).

⁹⁷ Id. ¶¶ 1, 4.

⁹⁸ Id. ¶ 3.

⁹⁹ Id.

is concerned about the potential human health effects on Fasken employees, including the costs associated with medical care and treatment of radiation-related conditions.¹⁰⁰

As stated in the supporting Declaration of D.K. Boyd, Mr. Boyd is an individual member of PBLRO.¹⁰¹ He owns and ranches the Frying Pan Ranch, the closest part of which is only four miles from the proposed facility.¹⁰²

Initially, the NRC Staff concluded that both Fasken and PBLRO had established standing.¹⁰³ At oral argument, however, the Staff revised its position to say that it found Mr. Boyd's declaration sufficient to establish standing for PBLRO but did not find Mr. Taylor's declaration sufficient to establish standing for Fasken. Thus, the Staff would now have the Board grant standing to PBLRO, but not to Fasken.¹⁰⁴

Although the standing of Fasken and of Mr. Boyd is not as clear as the standing of the individual representatives of Beyond Nuclear, Sierra Club and SEED, the Board concludes their proximity to the proposed facility is sufficient to confer standing on Fasken and representative standing on PBLRO. In light of the Commission's direction to construe standing claims in favor of the petitioner,¹⁰⁵ we agree with the NRC Staff's original view¹⁰⁶ that they both have shown enough.¹⁰⁷

¹⁰⁰ Id. ¶ 11.

¹⁰¹ Id., Ex. 2, Decl. of D.K. Boyd (Oct. 29, 2018) ¶ 2.

¹⁰² Id. ¶ 4.

¹⁰³ NRC Staff Answer to Fasken at 6–7.

¹⁰⁴ Tr. at 316–17.

¹⁰⁵ Turkey Point, CLI-15-25, 82 NRC at 394.

¹⁰⁶ NRC Staff Answer to Fasken at 6–7.

¹⁰⁷ It would seem desirable, however, for the Commission to provide more specific guidance concerning how licensing boards should balance the relevant considerations when standing to challenge a fuel storage facility is not based simply upon nearby residence. See Strata Energy, Inc. (Ross In Situ Recovery Uranium Project), LBP-12-3, 75 NRC 164, 189 n.27, aff'd, CLI-12-12, 75 NRC 603 (2012).

Fasken and PBLRO have demonstrated standing.¹⁰⁸ However, as discussed infra, because Fasken and PBLRO have not proffered an admissible contention, their request for an evidentiary hearing nonetheless must be denied.

III. LEGAL STANDARDS

A. Legal Standards Governing Contention Admissibility

For its hearing request to be granted, in addition to demonstrating standing, a petitioner must proffer at least one admissible contention.¹⁰⁹

An admissible contention must: (1) state the specific legal or factual issue to be raised or controverted; (2) provide a brief explanation for the basis of the contention; (3) demonstrate that the issue raised in the contention is within the scope of the proceeding; (4) 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; (5) concisely state the alleged facts or expert opinions that support the petitioner's position and on which the petitioner intends to rely at an evidentiary hearing, including references to the specific sources and documents on which the petitioner 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 petitioner disputes or, if the application is alleged to be deficient, by identifying such deficiencies and the supporting reasons for this allegation.¹¹⁰

A further requirement applies to several contentions addressed infra. No NRC rule or regulation may be challenged in a contention unless the petitioner seeks and obtains a waiver

¹⁰⁸ Because Fasken has demonstrated standing based on its original petition and supporting declarations, we deny as moot ISP's motion to strike as it pertains to the standing portion of Fasken's replies.

¹⁰⁹ 10 C.F.R. § 2.309(a).

¹¹⁰ Id. § 2.309(f)(1)(i)–(vi).

from the Commission in accordance with 10 C.F.R. § 2.335. No petitioner in this proceeding has sought such a waiver.

The contention admissibility rules are “strict by design.”¹¹¹ The Commission has observed that they “properly ‘reserve [the] hearing process for genuine, material controversies between knowledgeable litigants.’”¹¹² Failure to satisfy even one of the requirements requires the Board to reject the contention.¹¹³

This six-factor standard resulted from the Commission’s effort to “raise the threshold bar for an admissible contention.”¹¹⁴ Previously, licensing boards would sometimes admit contentions “that appeared to be based on little more than speculation,” and petitioners would try to “unearth” admissible contentions “through cross-examination.”¹¹⁵ Rather than expend agency time and resources on vague and unsupported claims,¹¹⁶ the Commission strengthened the contention admissibility standards to what they are today—standards that afford evidentiary hearings only to those who “proffer at least some minimal factual and legal foundation in support of their contentions.”¹¹⁷

¹¹¹ Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001).

¹¹² FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), CLI-12-8, 75 NRC 393, 396 (2012) (quoting Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 219 (2003)).

¹¹³ See Entergy Nuclear Operations, Inc. (Indian Point, Unit 2), CLI-16-5, 83 NRC 131, 136 (2016).

¹¹⁴ Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 334 (1999).

¹¹⁵ Id.

¹¹⁶ See Changes to the Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

¹¹⁷ Oconee, CLI-99-11, 49 NRC at 334.

Therefore, although a petitioner need not prove its contention at this stage, mere notice pleading of proffered contentions is insufficient.¹¹⁸ Rather, the NRC requires a petitioner to read the pertinent portions of the license application, including the Safety Analysis Report (SAR) and the Environmental Report, state the applicant's position and the petitioner's opposing view, and explain why it disagrees with the applicant.¹¹⁹

B. NEPA Legal Standards

NEPA mandates that federal agencies prepare an environmental impact statement (EIS) before undertaking any "major Federal actions significantly affecting the quality of the human environment."¹²⁰ The preparation of an EIS is meant to ensure that federal agencies "will not act on incomplete information, only to regret [their] decision after it is too late to correct."¹²¹ NEPA requires agencies to take a "hard look" at environmental consequences" of the proposed action,¹²² and imposes a duty upon the agency to both "consider every significant aspect of the environmental impact of a proposed action"¹²³ and "inform the public" of its analysis and conclusion.¹²⁴

¹¹⁸ Fansteel, Inc. (Muskogee, Okla. Site), CLI-03-13, 58 NRC 195, 203 (2003).

¹¹⁹ Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,170–71 (Aug. 11, 1989).

¹²⁰ 42 U.S.C. § 4332(2)(C); see also Nat. Res. Def. Council v. NRC, 823 F.3d 641, 643 (D.C. Cir. 2016).

¹²¹ Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 371 (1989).

¹²² Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) (quoting Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976)).

¹²³ Balt. Gas & Elec. v. Nat. Res. Def. Council, Inc., 462 U.S. 87, 97 (1983) (quoting Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc., 435 U.S. 519, 553 (1978)).

¹²⁴ Id. (citing Weinberger v. Catholic Action of Haw./Peace Educ. Project, 454 U.S. 139, 143 (1981)).

NEPA's "hard look" mandate notwithstanding, the agency is not obligated to analyze every conceivable aspect of the project before it.¹²⁵ Instead, this "hard look" is subject to a "rule of reason,"¹²⁶ meaning that the agency need not perform analyses concerning events that would be considered "worst-case" scenarios involving the project,¹²⁷ or those considered "remote and highly speculative."¹²⁸ NEPA does not necessitate "certainty or precision" nor does it mandate particular results from the agency.¹²⁹ Rather, NEPA requires "an estimate of anticipated (not unduly speculative) impacts" from the agency.¹³⁰ The statutory obligations seek to "guarantee process, not specific outcomes."¹³¹

At this stage of the proceeding, the NRC Staff has not issued an EIS for the proposed ISP facility. NRC regulations nonetheless require petitioners to file environmental contentions "based on documents or other information at the time the petition is to be filed," i.e., the applicant's environmental report.¹³² Although it is the NRC Staff's responsibility to comply with NEPA in its later-issued EIS,¹³³ we analyze contentions challenging the Environmental Report now as if those contentions will migrate as challenges to the Staff's later-issued EIS.¹³⁴

¹²⁵ Private Fuel Storage, L.L.C. (Indep. Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002).

¹²⁶ Nat. Res. Def. Council, Inc. v. Morton, 458 F.2d 827, 834 (D.C. Cir. 1972).

¹²⁷ Private Fuel Storage, CLI-02-25, 56 NRC at 352.

¹²⁸ Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 754–55 (3d Cir. 1989).

¹²⁹ La. Energy Servs., L.P. (Nat'l Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005).

¹³⁰ Id. (emphasis in original).

¹³¹ Massachusetts v. NRC, 708 F.3d 63, 67 (1st Cir. 2013) (citing Town of Winthrop v. FAA, 535 F.3d 1, 4 (1st Cir. 2008)).

¹³² 10 C.F.R. § 2.309(f)(2); see also Powertech (USA), Inc. (Dewey-Burdock In Situ Uranium Recovery Facility), CLI-16-20, 84 NRC 219, 231 (2016).

¹³³ 42 U.S.C. §§ 4321 et seq.

¹³⁴ See Powertech, CLI-16-20, 84 NRC at 231; see also Crow Butte Res., Inc. (In Situ Leach Facility, Crawford, Neb.), CLI-15-17, 82 NRC 33, 42 n.58 (2015) ("[A] contention 'migrates' when a licensing board construes a contention challenging [an environmental report] . . . as a

C. The Continued Storage Rule

In New York v. NRC,¹³⁵ four states, an Indian community, and a number of environmental groups challenged a 2010 revision to the NRC's Waste Confidence Decision.¹³⁶ The United States Court of Appeals for the District of Columbia Circuit held that the NRC had inadequately performed its NEPA evaluation by not considering the "environmental effects of failing to secure permanent storage" and ruled that the agency "must conduct a true [environmental assessment] regarding the extension of temporary storage."¹³⁷ In response, the NRC developed the Generic Environmental Impact Statement (GEIS) for Continued Storage of Spent Nuclear Fuel¹³⁸ and promulgated the Continued Storage Rule.¹³⁹

The Continued Storage GEIS considers, among other things, environmental impacts of short-term storage (60 years beyond the cessation of reactor operations), long-term storage (100 years after that period), and indefinite storage of spent nuclear fuel for both at-reactor and away-from-reactor sites.¹⁴⁰ The Continued Storage Rule incorporates the analyses and impact

challenge to a subsequently issued Staff NEPA document without the petitioner amending the contention.").

¹³⁵ 681 F.3d 471 (D.C. Cir. 2012).

¹³⁶ In 2010, the Commission promulgated a rule that made five findings: (1) safe disposal of high-level waste and spent nuclear fuel in a mined geologic repository is technically feasible; (2) at least one mined geologic repository will be available when necessary; (3) high-level waste and spent nuclear fuel will be safely managed until a repository is available; (4) spent fuel can be stored safely and without significant environmental impacts for at least 60 years beyond the licensed life for operation of that reactor in a combination of storage in its spent fuel storage basin and either onsite or offsite spent fuel storage facilities; and (5) onsite or offsite storage for spent nuclear fuel will be made available if needed. See 10 C.F.R. § 51.23 (2010) (75 Fed. Reg. 81,037, 81,037–76 (Dec. 23, 2010)).

¹³⁷ New York, 681 F.3d at 473, 483.

¹³⁸ 1 NMSS, [GEIS] for Continued Storage of Spent Nuclear Fuel, NUREG-2157 (Sept. 2014) (ADAMS Accession No. ML14196A105) [hereinafter Continued Storage GEIS].

¹³⁹ Final Rule, Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. 56,238, 56,238–63 (Sept. 19, 2014); 10 C.F.R. § 51.23 [hereinafter Continued Storage Rule].

¹⁴⁰ Continued Storage GEIS at 1-13 to -15, 4-1 to 5-65.

determinations from the Continued Storage GEIS.¹⁴¹ Of especial importance is that neither the Continued Storage Rule nor the Continued Storage GEIS states a preference for any particular storage method (i.e., spent fuel pool storage versus dry cask storage).

The Continued Storage Rule provides that applicants for reactor or spent fuel storage facility licenses “are not required to discuss the environmental impacts of spent nuclear fuel storage” for the period following the term of their license.¹⁴² Instead, the NRC’s EIS is deemed to incorporate the impact determinations of the Continued Storage GEIS.¹⁴³

As with all challenges to the Commission’s regulations, a petitioner is barred from challenging the Continued Storage Rule unless the petitioner obtains a waiver from the Commission.¹⁴⁴

IV. CONTENTION ANALYSIS

A. Beyond Nuclear

Beyond Nuclear’s sole contention states:

The NRC must dismiss ISP’s license application and terminate this proceeding because the application violates the NWPA. The proceeding must be dismissed because the central premise of ISP’s application—that the U.S. Department of Energy (“DOE”) will be responsible for the spent fuel that is transported to and stored at the proposed interim facility—violates the NWPA. Under the NWPA, the DOE is precluded from taking title to spent fuel unless and until a permanent repository has opened. 42 U.S.C. §§ 10222(a)(5)(A), 10143.¹⁴⁵

Similar to the Holtec application, ISP’s license application states that either DOE or other holders of the title to spent nuclear fuel will hold title to the spent fuel destined for storage at the

¹⁴¹ 10 C.F.R. § 51.23(a).

¹⁴² Id. § 51.23(b).

¹⁴³ Id.

¹⁴⁴ See 10 C.F.R. § 2.335(a)–(b).

¹⁴⁵ Beyond Nuclear Pet. at 8–9.

proposed facility.¹⁴⁶ Unlike in Holtec, initially ISP also sought an exemption from the NRC's financial assurance regulations in the event that DOE were to hold title.¹⁴⁷

Beyond Nuclear's contention encompasses three separate claims: First, as the law now stands, DOE cannot, consistent with the NWPA, presently take title to private power companies' spent nuclear fuel.¹⁴⁸ Second, ISP therefore cannot properly seek an exemption from NRC regulations based on the possibility of DOE's taking title.¹⁴⁹ Third, references in ISP's application to the option of private ownership are allegedly "meaningless and unsupported," serving as "nothing more than fig leaves" over the essential premise of ISP's proposal—that its storage facility "will be built only if DOE owns the waste."¹⁵⁰

Beyond Nuclear's first two claims are now moot. ISP responded to the Board's written questions by stating: "Applicant agrees that, absent new legislation, the DOE could not lawfully assume ownership of the spent nuclear fuel in the proposed interim storage facility."¹⁵¹ ISP also withdrew its request for an exemption from the financial assurance requirements set forth in 10 C.F.R. § 72.30.¹⁵² There is no dispute on these points. (The NWPA's prohibition on DOE's taking title to private power companies' spent nuclear fuel before a permanent national repository becomes operational is discussed at length in Holtec, and will not be repeated here.¹⁵³)

¹⁴⁶ ISP License Application at 1-1 to -2.

¹⁴⁷ Id. at 1-7.

¹⁴⁸ Beyond Nuclear Pet. Ex. 1 at 19–22.

¹⁴⁹ Id. at 18–19.

¹⁵⁰ Id. at 19 (emphasis in original).

¹⁵¹ ISP June 28, 2019 Response to Board at 1. ISP confirmed this position at oral argument. Tr. at 44.

¹⁵² ISP June 3, 2019 Letter at 1 (citing Attach. 4 to ISP Letter E-54257 (Additional Changes Not Associated with the RAIs)).

¹⁵³ See Holtec, LBP-19-4, 89 NRC at ___ (slip op. at 26–27).

Beyond Nuclear's third claim also does not raise a genuine dispute with ISP's application,¹⁵⁴ which includes the option of contracting directly with nuclear plant owners that currently hold title to their spent fuel. As in Holtec,¹⁵⁵ whether ISP will find that alternative commercially viable is not an issue before the Board, because the business decision of whether to use a license has no bearing on a licensee's ability to safely conduct the activities the license authorizes. As the Commission instructs us, "the NRC is not in the business of regulating the market strategies of licensees or determining whether market strategies warrant commencing operations."¹⁵⁶

At oral argument, Beyond Nuclear claimed, for the first time in this proceeding, that mere mention of the possibility of contracting with DOE renders ISP's license application unlawful.¹⁵⁷ The Board disagrees. ISP may hope that Congress changes the law to allow it the option of contracting directly with DOE. Meanwhile, we are confident that ISP—having acknowledged on the record that it would be unlawful to contract with DOE under the NWPA as currently in effect—will not try to do just that. Nor may we assume that DOE would be complicit in a violation of the NWPA.¹⁵⁸ On the contrary, DOE has also taken the position publicly that it may not take title to the vast majority of private plant companies' spent nuclear fuel without violating the NWPA as currently in effect.¹⁵⁹

¹⁵⁴ See 10 C.F.R. § 2.309(f)(1)(vi).

¹⁵⁵ Holtec, LBP-19-4, 89 NRC at ___ (slip op. at 33).

¹⁵⁶ La. Energy Servs. (Nat'l Enrichment Facility), CLI-05-28, 62 NRC 721, 726 (2005) (quoting Hydro Res., Inc. (P.O. Box 15910, Rio Rancho, N.M. 87174), CLI-01-4, 53 NRC 31, 48–49 (2001) (internal quotation marks omitted)).

¹⁵⁷ Tr. at 17.

¹⁵⁸ A presumption of regularity applies to federal agencies, which should be assumed to act properly in the absence of evidence to the contrary. See, e.g., United States v. Armstrong, 517 U.S. 456, 464 (1996); United States v. Chem. Found., Inc., 272 U.S. 1, 14–15 (1926).

¹⁵⁹ See, e.g., [DOE] Final Interpretation of Nuclear Waste Acceptance Issues, 60 Fed. Reg. 21,793, 21,793–94, 21,797 (May 3, 1995); N. States Power Co. v. U.S. Dep't of Energy, 128 F.3d 754, 756 (D.C. Cir. 1997) ("The Department also took the position that 'it lacks statutory

Moreover, regardless of who holds title, ISP's proposed license is limited to storage of spent nuclear fuel elements, associated components and radioactive materials "from commercial nuclear utilities."¹⁶⁰ That is the only material that may be stored at the proposed facility.

For its part, the NRC Staff's position on Beyond Nuclear's contention has also changed. Initially, the Staff would have had us admit it "to the extent this contention raises an issue of law regarding ISP's reliance on DOE for seeking an exemption from NRC's decommissioning financial assurance requirements."¹⁶¹ However, the Staff initially deemed no other portion of Beyond Nuclear's contention admissible, concluding that "to the extent the Petitioner asserts that the application relies exclusively on potential DOE involvement, it fails to demonstrate a genuine dispute with the application."¹⁶²

At oral argument, however, after ISP had withdrawn its exemption request and mooted the only part of Beyond Nuclear's contention that the NRC Staff initially deemed admissible, the Staff nonetheless continued to urge that Beyond Nuclear's contention should be admitted. According to its counsel, the NRC Staff now views Beyond Nuclear's contention admissible as to "whether it is legally permissible to include DOE as a potential customer."¹⁶³

The Board disagrees. Beyond Nuclear, ISP, and the Board are all in agreement that, under current law, ISP may not contract for DOE to take title to private power companies' spent

authority under the [Nuclear Waste Policy] Act to provide interim storage."") (quoting 60 Fed. Reg. at 21,794); Ind. Mich. Power Co. v. U.S. Dep't of Energy, 88 F.3d 1272, 1274 (D.C. Cir. 1996) ("The [DOE] also determined that it had no authority under the NWPA to provide interim storage in the absence of a facility that has been authorized, constructed and licensed in accordance with the NWPA.").

¹⁶⁰ ISP License Application, Attach. A, Proposed License Conditions at unnumbered A-2 to -4 (ISP Proposed License No. SNM-1050) at §§ 6.A, 21.

¹⁶¹ NRC Staff Answer to Beyond Nuclear at 13.

¹⁶² Id. at 12.

¹⁶³ Tr. at 53.

nuclear fuel. There is no credible possibility that such contracts will be made in violation of the law. There is no dispute that warrants devoting agency resources to further legal briefing or to an evidentiary hearing.

Additionally, unlike in Holtec,¹⁶⁴ here Beyond Nuclear has not sought to amend its original contention in response to the applicant's concession that, at present, it may not lawfully contract for DOE to take title. Contrary to the NRC's procedures,¹⁶⁵ the Staff apparently would have the Board admit a new version of Beyond Nuclear's contention that Beyond Nuclear advanced during oral argument, but never sought permission to submit in a written pleading. The Board declines to do so.

Beyond Nuclear's contention is not admitted.

B. Sierra Club

1. Sierra Club Contention 1

Sierra Club's Contention 1 states:

The NRC has no authority to license the ISP [CISF] under the NWPA nor the AEA. ISP has said DOE must take title to the waste, but the NWPA does not authorize DOE to take title to spent fuel in an interim storage facility. The AEA has no provision for licensing a CIS facility.¹⁶⁶

Sierra Club Contention 1 is similar in part to Beyond Nuclear's contention. It likewise encompasses three claims: First, as the law now stands, DOE cannot, consistent with the NWPA, presently take title to private power companies' spent nuclear fuel.¹⁶⁷ Second, Sierra Club alleges, ISP's application "assumes" that DOE will take title to the spent fuel destined for the proposed facility.¹⁶⁸ According to Sierra Club, it "strains credulity to believe that a nuclear

¹⁶⁴ See Holtec, LBP-19-4, 89 NRC at ___ (slip op. at 27).

¹⁶⁵ 10 C.F.R. § 2.309(c).

¹⁶⁶ Sierra Club Pet. at 14.

¹⁶⁷ Id. at 16.

¹⁶⁸ Id. at 14.

plant owner would want to retain title to the waste.”¹⁶⁹ Third, Sierra Club claims, the AEA does not authorize the NRC to license interim storage away from the site of a reactor.¹⁷⁰

We agree with both the NRC Staff¹⁷¹ and ISP¹⁷² that Sierra Club Contention 1 is not admissible. As explained in the Board’s ruling on Beyond Nuclear’s contention, supra, Sierra Club’s first claim is now moot, as ISP has acknowledged on the record that, as the law now stands, it cannot lawfully contract with DOE to take title to spent fuel destined for its proposed facility.¹⁷³

As also explained supra, in the Board’s ruling on Beyond Nuclear’s contention, Sierra Club’s second claim does not raise a genuine dispute with ISP’s application.¹⁷⁴ The application includes the option of ISP’s contracting directly with nuclear plant owners that currently hold title to their spent fuel. As in Holtec,¹⁷⁵ whether ISP will find that alternative commercially viable is not an issue before the Board, because the business decision of whether to use a license has no bearing on a licensee’s ability to safely conduct the activities the license authorizes.

Finally, insofar as Sierra Club Contention 1 asserts that any away-from-reactor interim storage facility is necessarily unlawful under the AEA and/or the NWPA, we conclude (as the board did in Holtec¹⁷⁶) that the contention constitutes an impermissible challenge to NRC regulations that is precluded by 10 C.F.R. § 2.335. NRC regulations expressly allow licensing of

¹⁶⁹ Id. at 15.

¹⁷⁰ Id. at 20.

¹⁷¹ NRC Staff Consol. Answer at 79.

¹⁷² ISP Answer to Sierra Club at 24.

¹⁷³ ISP June 28, 2019 Response to Board at 1; Tr. at 44.

¹⁷⁴ See 10 C.F.R. § 2.309(f)(1)(vi).

¹⁷⁵ Holtec, LBP-19-4, 89 NRC at ___ (slip op. at 33).

¹⁷⁶ Id. at ___ (slip op. at 35–36.)

such facilities.¹⁷⁷ Moreover, the United States Court of Appeals for the District of Columbia Circuit has confirmed that the NRC has such authority under the AEA, and that the NWPA did not repeal or supersede that authority.¹⁷⁸

Sierra Club Contention 1 is not admitted.¹⁷⁹

2. Sierra Club Contention 2

Sierra Club Contention 2 states:

The ISP Environmental Report, in attempting to describe the purpose and need for this project, claims that [consolidated interim storage] is safer and more secure than storing the waste at the reactor site. However, the Environmental Report cites no evidence or data to support this assertion. An agency cannot rely on self-serving statements, especially ones with no supporting data, from the prime beneficiary of the project.¹⁸⁰

Sierra Club Contention 2 claims that the Environmental Report contains unsupported self-serving statements about the safety and security of consolidated interim storage.¹⁸¹ Sierra Club also claims that, to properly evaluate safety, ISP's Environmental Report and the NRC Staff's subsequent EIS must examine the safety of hardened onsite storage (HOSS) at reactor sites.¹⁸²

As support, Sierra Club relies on a 2003 report by Dr. Gordon Thompson, a declared expert on technical and policy analyses in the fields of energy and environment.¹⁸³ According to

¹⁷⁷ See generally 10 C.F.R. Part 72; see also *id.* §§ 72.32(a), 72.46(d) (concerning requirements pertaining to independent spent fuel storage facilities not co-located with an operating power reactor).

¹⁷⁸ *Bullcreek v. NRC*, 359 F.3d 536, 543 (D.C. Cir. 2004).

¹⁷⁹ Because we would reach the same decision even if we considered Sierra Club's reply, we deny as moot ISP's motion to strike insofar as it pertains to portions of the reply that concern Sierra Club Contention 1.

¹⁸⁰ Sierra Club Pet. at 23.

¹⁸¹ *Id.* at 23–24.

¹⁸² *Id.* at 27.

¹⁸³ See *id.* at 26–28 (citing Gordon Thompson, *Robust Storage of Spent Nuclear Fuel: A Neglected Issue of Homeland Security* (Jan. 2003) [hereinafter 2003 Thompson Report]); see

Sierra Club, Dr. Thompson's report outlines the benefits of HOSS and claims that ISP's Environmental Report must evaluate the relative safety of HOSS.¹⁸⁴

Although Sierra Club disputes one need for the facility, the purpose and need statement in ISP's Environmental Report lists multiple reasons to support licensing the proposed facility.¹⁸⁵ Examples include converting lands for more beneficial uses, returning areas to greenfield status, and lessening substantial costs for surveillance, maintenance, emergency preparedness, and physical security at spent fuel storage facilities.¹⁸⁶ Sierra Club only disputes ISP's safety and security reason, and does not explain how ISP's assertion of safety and security materially compromises the application. Sierra Club implies that ISP must show that the need for its project is "compelling" or grounded in "urgency."¹⁸⁷ However, Sierra Club does not identify any basis for this standard.

Sierra Club Contention 2 is not admitted.

3. Sierra Club Contention 3

Sierra Club Contention 3 states:

The statement in the [Environmental Report] that [consolidated interim storage] is safer and more secure than storage at a reactor site contradicts the NRC's Continued Storage Rule, which concludes that spent radioactive fuel can be safely stored at a reactor site indefinitely. Therefore, there is no basis for accepting the statement in the [Environmental Report], and there is no purpose and need for the ISP project.¹⁸⁸

also id. Decl. of Dr. Gordon Thompson (Nov. 12, 2018) [hereinafter Sierra Club Thompson Decl.].

¹⁸⁴ Sierra Club Pet. at 26–28 (citing Sierra Club Thompson Decl. at 15–16, 64).

¹⁸⁵ ER at 1-5.

¹⁸⁶ Id. at 1-5 to -6.

¹⁸⁷ See Sierra Club Pet. at 27.

¹⁸⁸ Sierra Club Pet. at 29.

Like Sierra Club Contention 2, Contention 3 challenges ISP's "safer and more secure" language in the purpose and need section of its Environmental Report. Sierra Club disputes that there is a purpose and need for the proposed storage project because, it claims, the Continued Storage Rule and Continued Storage GEIS have already determined that at-reactor storage "for an indefinite period would generally result in only small environmental impacts."¹⁸⁹ Sierra Club also claims that the proposed CISF would cause increased risks "due to the risks of transporting the waste to the [consolidated interim storage] site and the increased risk of so much waste being stored in one place."¹⁹⁰ Sierra Club relies on Continued Storage GEIS section 4.20 and incorporates the statement and facts from its Contention 2 to support its assertion.¹⁹¹

Sierra Club Contention 3 fails to raise a genuine dispute with ISP's application because it does not show any contradiction between ISP's Environmental Report and the Continued Storage Rule or GEIS.¹⁹² ISP's Environmental Report does not say that the Continued Storage GEIS analyses are incorrect or inadequate, or that indefinite storage at at-reactor locations is unsafe. Rather, ISP's Environmental Report agrees with those analyses because the Environmental Report incorporates and relies upon the GEIS.¹⁹³ ISP's position is that its proposed interim storage facility would be even more secure in "consolidating and enhancing monitoring and security functions"¹⁹⁴ rather than storage at reactor sites across the nation.

¹⁸⁹ Id. at 30; see Continued Storage Rule; see also Continued Storage GEIS.

¹⁹⁰ Sierra Club Pet. at 30.

¹⁹¹ Id. at 30–31.

¹⁹² See 10 C.F.R. § 2.309(f)(1)(vi).

¹⁹³ See, e.g., ER at 8-3 to -6.

¹⁹⁴ ISP Answer to Sierra Club at 42.

As to Sierra Club's assertion that there is no purpose and need for the WCS facility "if spent fuel can be safely stored at the reactor site indefinitely,"¹⁹⁵ Sierra Club does not dispute (much less acknowledge) ISP's "purpose and need" section in the WCS Environmental Report. In that section, as discussed supra, ISP states various purposes and needs for the project, including that the facility could potentially allow for an unrestricted free release of those decommissioned sites (i.e., the sites could achieve greenfield status) and that spent fuel owners could reap economic savings by not having to pay the up-front costs for spent fuel storage system physical security, maintenance, and emergency preparedness.¹⁹⁶ Sierra Club only disputes the safety and security purpose, but does not explain how ISP's assertion that its proposed WCS CISF would be "more safe and secure" than the status quo is material to the findings the NRC must make.¹⁹⁷

Sierra Club Contention 3 is not admitted.

4. Sierra Club Contention 4

Sierra Club Contention 4 states:

Operation of the [consolidated interim storage] site as proposed by ISP would necessitate the transportation of the radioactive waste from reactor sites to the [CISF]. Transportation from the reactors to the [consolidated interim storage] site carries substantial risks. These risks must be evaluated in the [Environmental Report].¹⁹⁸

On its face, Sierra Club Contention 4 appears to be a contention of omission claiming that ISP's Environmental Report does not evaluate transportation risks. In its stated basis for the contention, however, Sierra Club clarifies that its actual claim is that the Environmental Report "does not adequately address the risks and consequences of a transportation accident

¹⁹⁵ Sierra Club Pet. at 30.

¹⁹⁶ ER at 1-5 to -6.

¹⁹⁷ See 10 C.F.R. § 2.309(f)(1)(iv).

¹⁹⁸ Sierra Club Pet. at 31.

and sabotage event.”¹⁹⁹ Specifically, Contention 4 asserts that the Environmental Report underestimates both (1) the consequences of severe rail accidents involving shipments of radioactive waste;²⁰⁰ and (2) the likelihood of such accidents.²⁰¹ It also asserts that “the environmental report does not discuss the potential consequences of a sabotage event.”²⁰²

Sierra Club Contention 4 relies on an August 2001 report prepared by Matthew Lamb and Marvin Resnikoff of Radioactive Waste Management Associates (the RWMA Report).²⁰³ The RWMA Report—entitled “Worst Case Credible Nuclear Transportation Accidents: Analysis for Urban and Rural Nevada”—was prepared for litigants opposing the Yucca Mountain repository.²⁰⁴ Indeed, in this adjudication Contention 4 is supported by the accompanying declaration of the same Dr. Resnikoff, which adds no additional facts or opinions, but represents that Dr. Resnikoff assisted in preparation of Sierra Club Contention 4 and agrees with it.²⁰⁵

Rather than controverting pertinent portions of ISP’s Environmental Report, Contention 4 merely presents an 18-year-old alternative analysis—the RWMA Report—that admittedly addresses a category of “worst case” assumptions. Sierra Club’s challenge to ISP’s estimates of potential radiation doses from an accident consists of pointing out that ISP’s estimated doses are smaller than those in the RWMA Report.²⁰⁶ Sierra Club does not discuss the analysis of estimated doses contained in section 4.2.8 of ISP’s Environmental Report, and it does not

¹⁹⁹ Id. at 32.

²⁰⁰ Id. at 33–38.

²⁰¹ Id. at 38–41.

²⁰² Id. at 41.

²⁰³ Id. at 33 (citing Matthew Lamb, Marvin Resnikoff, & Richard Moore, Worst Case Credible Nuclear Transportation Accidents: Analysis for Urban and Rural Nevada (Aug. 2001) [hereinafter RWMA Report]).

²⁰⁴ RWMA Report at i.

²⁰⁵ Decl. of Dr. Marvin Resnikoff [hereinafter Resnikoff Decl.].

²⁰⁶ Sierra Club Pet. at 38–39.

attempt to explain why they are inadequate or unreasonable. Instead, Sierra Club assumes that ISP's analysis is inadequate solely because it produced estimated doses that are smaller than the "worst case" results in the RMWA Report prepared for litigants opposing the Yucca Mountain repository.

As the Commission instructs us, this is not enough to launch an evidentiary hearing: "[T]he proper question is not whether there are plausible alternative choices for use in the analysis, but whether the analysis that was done is reasonable under NEPA."²⁰⁷ As the Commission has cautioned, "it may always be possible to conceive of alternative and more conservative inputs, whose use in the analysis could result in greater estimated accident consequences."²⁰⁸

To be admissible, therefore, a "contention proposing alternative inputs or methodologies must present some factual or expert basis for why the proposed changes in the analysis are warranted (e.g., why the inputs or methodology used is unreasonable, and the proposed changes or methodology would be more appropriate)."²⁰⁹ Because Sierra Club has not done this, its challenge in Contention 4 to ISP's analysis of the consequences of severe rail accidents fails to meet its burden under 10 C.F.R. § 2.309(f)(1)(vi) to identify both specific portions of ISP's Environmental Report that Sierra Club disputes and "the supporting reasons for each dispute."

In all other respects—that is, with respect to the monetary consequences of a severe transportation accident, the likelihood of rail accidents, and the claim that ISP should have addressed the potential consequences of sabotage—Sierra Club Contention 4 is not admissible.

²⁰⁷ NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 323 (2012).

²⁰⁸ Id.

²⁰⁹ Id. at 323–24.

With respect to the monetary consequences of a severe transportation accident, Contention 4 wants ISP to analyze the costs of cleaning up a hypothetical accident associated with offsite transportation. Sierra Club fails to explain how such an analysis could plausibly affect the ultimate decision whether to license the proposed storage facility, and therefore fails to justify why this additional analysis must be performed, consistent with NEPA's rule of reason.

With respect to the likelihood of transportation accidents, Sierra Club does not acknowledge that section 4.2.8 of ISP's Environmental Report contains such an analysis. Because Sierra Club fails to dispute the accident probability used by ISP, it fails to directly contradict the application and raise a genuine dispute as required by 10 C.F.R. § 2.309(f)(1)(vi).

With respect to Sierra Club's claim that ISP's Environmental Report fails to discuss potential sabotage events, the Commission has taken the position that the NRC is not required to consider terrorism in its NEPA analysis of licensing actions outside of those states encompassed by the United States Court of Appeals for the Ninth Circuit.²¹⁰ Therefore, this issue is outside the scope of this proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

Finally, we are not persuaded by Sierra Club's argument²¹¹ that we should admit Contention 4 because one of the Yucca Mountain licensing boards admitted a contention entitled "Transportation Risk Assumptions" (NEV-NEPA-012).²¹² NEV-NEPA-012 is not comparable to Sierra Club Contention 4.

On the contrary, NEV-NEPA-012 targeted an internal inconsistency in DOE's EIS. According to Nevada, "[t]o evaluate transportation accidents and sabotage events,²¹³ DOE used

²¹⁰ AmerGen Energy Co. (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 128–29 (2007).

²¹¹ Sierra Club Reply at 19.

²¹² U.S. Dep't of Energy (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 492 (2009).

²¹³ Because Nevada falls within the Ninth Circuit (unlike Texas), DOE did evaluate the potential consequences of sabotage.

Pasquill Stability Class D and release fractions from 26 fuel assemblies in a rail cask.”²¹⁴ On the other hand, Nevada pointed out, “to evaluate the maximum reasonably foreseeable transportation accident, DOE used Pasquill Stability Class F and release fractions from a rail cask containing 21 fuel assemblies.”²¹⁵

In NEV-NEPA-12, Nevada therefore argued that “[t]he use of different weather and release fractions between these evaluations is an inconsistent application of assumptions.”²¹⁶ NEV-NEPA-12 said nothing about the RWMA Report. The decision to admit NEV-NEPA-12 has no bearing on whether we should admit Sierra Club Contention 4.²¹⁷

Sierra Club Contention 4 is not admitted.²¹⁸

5. Sierra Club Contention 5

Sierra Club Contention 5 states:

The [Environmental Report] states that waste would be stored at the [CISF] for 60-100 years until a permanent repository is found. The [Environmental Report] and the subsequent EIS must address the purpose and need and the environmental impacts if a permanent repository is not found, and the ISP facility becomes a de facto permanent repository.²¹⁹

²¹⁴ State of Nevada’s Petition to Intervene as a Full Party, U.S. Dep’t of Energy (High Level Waste Repository), Docket No. 63-001 at 1093 (Dec. 19, 2008) (ADAMS Accession No. ML083540096).

²¹⁵ Id.

²¹⁶ Id.

²¹⁷ Initially the NRC Staff would have had us admit Sierra Club Contention 4 in part: that is, solely insofar as it addresses the potential radiological consequences of severe transportation accidents. NRC Staff Consol. Answer at 85. At oral argument, however, the Staff announced that it no longer considers any portion of Sierra Club Contention 4 admissible in light of ISP’s June 28, 2019 response to the NRC Staff’s request for additional information, ISP June 28, 2019 Letter at 1–2 (citing ISP Letter E-54423 (June 28, 2019), which responded to the April 23, 2019 NRC Staff’s First RAI, Part 3). Tr. at 111–12.

²¹⁸ Because we would reach the same decision even if we consider Sierra Club’s reply, we deny as moot ISP’s motion to strike insofar as it pertains to portions of the reply that concern Sierra Club Contention 4.

²¹⁹ Sierra Club Pet. at 44.

In support, Sierra Club cites New York v. NRC,²²⁰ in which the United States Court of Appeals for the District of Columbia Circuit ruled that the NRC “must look at both the probabilities of potentially harmful events and the consequences if those events come to pass.”²²¹ Sierra Club therefore asserts that ISP’s Environmental Report must “discuss and analyze the impacts of indefinite storage at the ISP CIS facility.”²²² Sierra Club relies on the declaration of Dr. Gordon Thompson, who likewise asserts that ISP should evaluate the possibility of indefinite storage.²²³

As discussed supra, the Continued Storage GEIS, which the NRC prepared in response to New York, generically analyzes the environmental impacts of storing spent nuclear fuel for certain lengths of time, including the indefinite time scenario where no repository is ever constructed.²²⁴ In its Environmental Report, ISP incorporates the Continued Storage GEIS and its analyses in Chapter 8.²²⁵ Although Sierra Club attempts to characterize its arguments as site-specific challenges to the application, as opposed to challenges to the Continued Storage Rule,²²⁶ Sierra Club’s argument is without merit. Sierra Club’s claims impermissibly challenge the Continued Storage Rule and are therefore outside the scope of this proceeding.²²⁷

The Rule, in section 51.23(b), expressly provides that license applicants’ environmental reports “are not required to discuss the environmental impacts of spent nuclear fuel storage

²²⁰ 681 F.3d at 478.

²²¹ Id.

²²² Sierra Club Pet. at 45–46.

²²³ Id. at 48.

²²⁴ New York, 681 F.3d at 483; Final Rule, Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. 56,238, 56,241 (Sept. 19, 2014).

²²⁵ ER at 8-3 to -6.

²²⁶ Sierra Club Pet. at 46 (“The Continued Storage Rule does not preclude the site-specific review specified by this contention. . . . [t]hat is exactly the focus of this contention.”).

²²⁷ See 10 C.F.R. § 2.309(f)(1)(iii).

in . . . an ISFSI for the period following the term of the . . . ISFSI license.”²²⁸ Because ISP is applying for a 40-year license to store spent nuclear fuel and GTCC waste, ISP need only discuss the environmental impacts of storage for 40 years. And again, the Continued Storage GEIS does consider what Sierra Club wants ISP to do—that is, analyze the environmental impacts of spent fuel storage for an indefinite amount of time.²²⁹

Sierra Club Contention 5 is not admitted.

6. Sierra Club Contention 6

Sierra Club Contention 6 states:

The [Environmental Report] and the subsequent EIS must evaluate the potential for earthquakes at the ISP site and the environmental impact of earthquakes. Likewise, the Safety Analysis Report (SAR) must adequately evaluate the earthquake potential of the proposed site. Both the [Environmental Report] and SAR are inadequate in this respect.²³⁰

Sierra Club Contention 6 contains two challenges related to the seismicity of the area: a contention of omission regarding ISP’s Environmental Report, and a challenge to the adequacy of ISP’s SAR.²³¹

Sierra Club claims that “[t]he [Environmental Report] essentially dismisses the likelihood of earthquakes in the area and does not mention any environmental impacts from earthquakes,”²³² in violation of 10 C.F.R. § 51.45.²³³ Specifically, Sierra Club asserts that increased drilling in the area “makes the underground area unstable and induces

²²⁸ 10 C.F.R. § 51.23(b).

²²⁹ Continued Storage GEIS at 5-8.

²³⁰ Sierra Club Pet. at 49.

²³¹ WCS [CISF] System Safety Analysis Report, Docket No. 72-1050, Rev. 2 (ML18221A408 (package)) [hereinafter SAR].

²³² Sierra Club Pet. at 49.

²³³ Id.

earthquakes.”²³⁴ In support of these assertions, Sierra Club proffers an internet hyperlink to a study by Stanford University researchers that purportedly shows “the existence of numerous faults in the area in and around the proposed ISP site,”²³⁵ and also provides an internet hyperlink to a study by researchers at the University of Texas and Southern Methodist University that purportedly shows an increased incidence of earthquakes induced by fossil fuel extraction in the area of the ISP facility.²³⁶

The environmental portion of Sierra Club Contention 6 is inadmissible regardless. As a contention of omission, it fails to raise a genuine dispute with the application, as required by 10 C.F.R. § 2.309(f)(1)(vi), because ISP’s Environmental Report does evaluate and analyze seismic activity in the CISF region.²³⁷ Section 3.3.2 of the Environmental Report discusses “Basic Geologic and Seismic Information,” including faulting in the region at subsection 3.3.4. Sierra Club’s claim that ISP “does not even discuss the impact of earthquakes” is therefore incorrect.²³⁸ As to Sierra Club’s claim that ISP’s Environmental Report ignores seismic impacts from the oil and gas industry, section 3.3.3 does discuss the seismic effects of drilling in the area and concludes that the “low to moderate rate of background seismicity, even that

²³⁴ Id. at 51; see Sierra Club Reply at 22.

²³⁵ Sierra Club Pet. at 52.

²³⁶ Id. at 51. Although we consider them in this instance, documents on which petitioners rely should be filed in their entirety on the Electronic Information Exchange—not by means of hyperlinks in pleadings. See Guidance for Electronic Submissions to the NRC (rev. 8 May 18, 2017) at 7 (“For adjudicatory documents (pleadings and exhibits), parties are discouraged from using hyperlinks because of concerns about the integrity of the hearing record.”) (emphasis in original). Hyperlinks and internet sources can change over time, and can be edited (or even deleted); accordingly, licensing boards strongly discourage this practice. See, e.g., Licensing Board Order, Powertech USA, Inc. (Dewey-Burdock In Situ Uranium Recovery Facility), (Providing Case Management Information) at 1 n.3 (May 2, 2019) (unpublished); Licensing Board Memorandum and Order, Crow Butte Res., Inc. (Marsland Expansion Area), (Providing Administrative Directives Associated with Evidentiary Hearing and Limited Appearance Session) at 3 n.4 (July 27, 2018) (unpublished).

²³⁷ See ER at 3-3 to -16, id. at 4-28 to -29, -64, -70.

²³⁸ Sierra Club Pet. at 50.

associated with petroleum recovery activities, results in relatively low seismic hazard at the CISF site.”²³⁹

Second, insofar as Sierra Club tries in its reply to transform Contention 6 into a contention of inadequacy,²⁴⁰ it fails to point to specific portions of the application where alleged deficiencies exist and to provide reasons why they are deficient. Moreover, the studies Sierra Club purports to use as support do no more than review the historic seismic activity in the Permian Basin and recognize that there is petroleum drilling in the area—facts already addressed by ISP in its Environmental Report Chapter 3.

Sierra Club also claims that ISP’s SAR does not comply with the requirements of 10 C.F.R. § 72.103(f)(1), which requires “an adequate analysis of the earthquake potential of the area in and around the proposed ISP site.”²⁴¹ However, SAR section 2.6.2 refers the reader to ISP’s seismic hazard evaluation, at SAR Attachment D.²⁴² Because Attachment D contains proprietary information and is not publicly available, Sierra Club asserts that ISP’s SAR is inadequate.²⁴³

Sierra Club, along with other members of the public, were afforded the opportunity to access proprietary information in ISP’s application by following the procedure in the Federal Register notice for this proceeding.²⁴⁴ They chose not to. Sierra Club’s complaints²⁴⁵ about the procedure for accessing sensitive unclassified nonsafeguards information are not within the scope of this proceeding, contrary to 10 C.F.R. 2.309(f)(1)(iii).

²³⁹ ER at 3-12.

²⁴⁰ Sierra Club Reply at 22.

²⁴¹ Sierra Club Pet. at 49.

²⁴² SAR at 2-28.

²⁴³ Sierra Club Pet. at 52.

²⁴⁴ 83 Fed. Reg. at 44,073–75.

²⁴⁵ Tr. at 58–59.

Sierra Club Contention 6 is not admitted.

7. Sierra Club Contention 7

Sierra Club Contention 7 states:

An [Environmental Report] is required to discuss alternatives to the proposed action. Pursuant to NEPA, this includes an examination of the no-action alternative. The discussion of the no-action alternative in the ISP [Environmental Report] is deficient because it does not discuss safer storage methods at the reactor sites, such as HOSS, nor does it acknowledge the NRC's Continued Storage Rule that concludes that waste can be safely stored at the reactor site indefinitely.²⁴⁶

Sierra Club asserts that ISP's discussion of the "no-action alternative" in its Environmental Report is lacking because ISP does not discuss HOSS or the Continued Storage Rule.²⁴⁷ Framed as a contention of omission, Sierra Club challenges the no-action alternative analysis in section 2.1 of ISP's Environmental Report as deficient because allegedly it provides "absolutely no discussion about the safety aspects of keeping the waste at the reactor sites"²⁴⁸ and does not perform the necessary cost benefit analysis with respect to project alternatives.²⁴⁹

Sierra Club fails to show how a discussion of HOSS would be material to ISP's no-action alternative analysis. ISP's Environmental Report need only analyze the no-action alternative of maintaining the status quo. As ISP's Environmental Report explains, "[t]he no action alternative...would be to not construct and operate the CISF. Under the no action alternative, the NRC would not approve the license application that would allow ISP to construct and operate the proposed facility."²⁵⁰ Therefore, Sierra Club's claim that ISP fails to discuss HOSS does not raise a genuine dispute with the application.

²⁴⁶ Sierra Club Pet. at 53.

²⁴⁷ Id.

²⁴⁸ Id. at 54.

²⁴⁹ Id. at 55.

²⁵⁰ ER at 2-1.

Sierra Club claims that discussion of the no-action alternative in ISP's Environmental Report does not acknowledge the NRC's Continued Storage Rule. This claim ignores section 8.4 of the Report, which summarizes the short-term and long-term impacts of at-reactor storage, as adopted from the Continued Storage GEIS.²⁵¹ Sierra Club not only overlooks this discussion, but appears to assert that ISP's Environmental Report must discuss "the safety aspects of keeping the waste at the reactor sites."²⁵² Safety considerations are analyzed within ISP's SAR, as they should be.

Sierra Club's claim that ISP does not perform a cost benefit analysis with respect to project alternatives likewise reflects a failure to acknowledge, much less challenge, the contents of ISP's application. In sections 7.2 and 7.3, ISP's Environmental Report does discuss the relative benefits and costs of maintaining the status quo (leaving the spent fuel at the reactor site) compared to implementing the proposed action.²⁵³ Moreover, Table 7.2-2 in ISP's Environmental Report examines the costs to a subset of plants that are no longer operating from the perspective of both the proposed action and the no-action alternative.²⁵⁴ Sierra Club Contention 7 does not establish a genuine dispute with ISP's analysis.²⁵⁵

Sierra Club Contention 7 is not admitted.

8. Sierra Club Contention 8

Sierra Club Contention 8 states:

ISP relies heavily on the assertion that the Blue Ribbon Commission on America's Nuclear Future (BRC) has recommended [consolidated interim storage] as the answer to the country's nuclear waste problem. On the contrary, the BRC report should not be viewed uncritically and does not necessarily deserve blind support in assessing the ISP application. ISP's [Environmental Report] therefore

²⁵¹ Id. at 8-3 to -6.

²⁵² Sierra Club Pet. at 54.

²⁵³ ER at 7-4 to -28; see Tr. at 103-04.

²⁵⁴ Id. at 7-7 to -8.

²⁵⁵ See 10 C.F.R. § 2.309(f)(1)(vi).

mischaracterizes both the BRC report's conclusions and the relative risks of [consolidated interim storage] versus onsite storage. The EIS must therefore independently and fully address the relative risks and benefits of both storage options.²⁵⁶

Sierra Club Contention 8 claims that ISP's proposed storage project "is dictated to a great extent by the BRC report."²⁵⁷ Sierra Club also claims that ISP's Environmental Report "mischaracterizes both the BRC report's conclusions and the relative risks of [consolidated interim storage] versus onsite storage."²⁵⁸ Sierra Club further claims that ISP's Environmental Report and the NRC's subsequent EIS must independently compare the risks and benefits of ISP's interim storage facility with the risks and benefits of storing spent fuel where it was generated, i.e., at-reactor storage.²⁵⁹

Sierra Club Contention 8 fails to raise a genuine dispute with ISP's application, as required by 10 C.F.R. § 2.309(f)(1)(vi). ISP's Environmental Report does contain the risk-benefit analysis that Sierra Club claims to be omitted,²⁶⁰ and Sierra Club fails to challenge it.

Section 1 of ISP's Environmental Report discusses the history and background of the country's spent fuel quandary, including the NWPAA, the status of the Yucca Mountain project, and the 2012 Blue Ribbon Commission (BRC) report.²⁶¹ And both sections 1 and 2 suggest that ISP's proposed facility would better advance the BRC report's preference for a consent-based approach to siting the proposed project. Whether or not that is correct, Sierra Club fails to show how ISP's discussion affects the adequacy of its analysis of options in the Environmental Report.

²⁵⁶ Sierra Club Pet. at 56.

²⁵⁷ Id. at 56.

²⁵⁸ Id. at 59.

²⁵⁹ Id.

²⁶⁰ ER Chapter 7; id. at 2-64 (tbl. 2.5-1).

²⁶¹ Id. at 1-1 to -5.

Sierra Club Contention 8 is not admitted.

9. Sierra Club Contention 9

Sierra Club Contention 9 states:

10 C.F.R. § 72.30 establishes requirements for decommissioning interim storage facilities. An application for licensing a CISF must contain a decommissioning plan explaining how the plan will satisfy the requirements in the regulation. The application for the ISP [CISF] does not comply with these requirements.²⁶²

Sierra Club Contention 9 is similar in part to Beyond Nuclear's Contention. It focuses primarily upon ISP's request for an exemption from the requirements in 10 C.F.R. § 72.30(e) regarding reasonable assurance that funds will be available to decommission the proposed storage facility.²⁶³ As explained supra, in the Board's ruling on Beyond Nuclear's contention, ISP has withdrawn its exemption request.²⁶⁴ This part of Sierra Club Contention 9 is therefore moot.

Insofar as Sierra Contention 9 also challenges ISP's estimate of decommissioning costs,²⁶⁵ it does not explain why ISP's estimate is incorrect. Therefore, the contention fails to raise a genuine dispute with ISP's application, as required by 10 C.F.R. § 2.309(f)(1)(vi).

Initially the NRC Staff would have had us admit Sierra Club Contention 9 "[t]o the extent the contention challenges the requested exemption."²⁶⁶ At oral argument, however, the Staff clarified that, in light of ISP's withdrawal of its exemption request, the Staff no longer considers any part of Sierra Club Contention 9 to be admissible.²⁶⁷

²⁶² Sierra Club Pet. at 60.

²⁶³ Id. at 61–62.

²⁶⁴ ISP June 3, 2019 Letter at 1.

²⁶⁵ Sierra Club Pet. at 60.

²⁶⁶ NRC Staff Consol. Answer at 102.

²⁶⁷ Tr. at 109.

Sierra Club Contention 9 is not admitted.²⁶⁸

10. Sierra Club Contention 10

Sierra Club Contention 10 states:

The ISP [consolidated interim storage] site sits atop the Ogallala Aquifer. The [Environmental Report] and SAR submitted by ISP appear to claim that the site does not sit atop the aquifer. Therefore, the [Environmental Report] and SAR do not accurately and adequately evaluate and consider the impacts to the aquifer from the [CISF].²⁶⁹

Sierra Club claims that, because the ISP CISF site sits atop the Ogallala Aquifer, ISP's Environmental Report and SAR "must address the impact on groundwater from release of radioactive material."²⁷⁰ Sierra Club asserts that a dispute exists with ISP on whether or not the Aquifer underlies the CISF, and relies upon a declaration by Dr. Patricia Bobeck, a geologist, and a 2012 report from George Rice, a professional hydrologist.²⁷¹ Sierra Club further disputes ISP's application concerning the water saturation point beneath the CIS site, alleging "[i]t is important to know how susceptible the groundwater is to contamination from a leak of radioactive material."²⁷² A leak of radioactive material, Sierra Club claims, would come from a ruptured cask from the storage of high burnup fuel,²⁷³ a seismic event produced by hydraulic fracturing (i.e., fracking) in the area,²⁷⁴ or a terrorist attack.²⁷⁵ In sum, Sierra Club Contention 10

²⁶⁸ Because we would reach the same decision even if we considered Sierra Club's reply, we deny as moot ISP's motion to strike insofar as it pertains to portions of the reply concerning Sierra Club Contention 9.

²⁶⁹ Sierra Club Pet. at 63.

²⁷⁰ Id.

²⁷¹ Id. at 63–64.

²⁷² Id. at 64.

²⁷³ Id. at 66.

²⁷⁴ Id. at 67 (citing id., Attach., Patricia Bobeck, Ph.D., P.G., Geologic Review of Interim Storage Partners LLC WCS Consolidated Interim Storage Facility Environmental Report (Oct. 25, 2018) at 2 [hereinafter Bobeck Report]).

²⁷⁵ Bobeck Report at 2–3.

claims that ISP's Environmental Report "does not provide the basic information necessary to adequately and thoroughly address the impact of cask rupture and discharge of radioactive material to ground and groundwater at the ISP site."²⁷⁶

Any disagreement concerning the location of the Ogallala Aquifer or the water saturation point at the CISF site is only material to the findings the NRC must make if it is possible for groundwater to be contaminated from a cracked or ruptured cask. Regardless of the aquifer's location or the water saturation point, to demonstrate an admissible contention Sierra Club must proffer fact or expert opinion concerning: (1) how a cask would become ruptured in the first place, and (2) how radioactive material from that cask would get into the groundwater. Contention 10 is inadmissible because Sierra Club offers no expert opinion or plausible facts on either of these points.²⁷⁷

In any event, Sierra Club's claim that storage of high burnup fuel²⁷⁸ and seismic events from hydraulic fracturing in the area²⁷⁹ would crack a canister is in essence a challenge to the NRC's cask certificate of compliance (CoC) program and is thus outside the scope of this proceeding. ISP's application states that it will only accept six types of cask systems that have already been individually certified and issued CoCs by the NRC to safely store spent fuel, including high burnup fuel. These canisters have also been analyzed to withstand credible seismic events. As these CoCs are designated by NRC rulemaking as approved storage systems, any challenge to them is an impermissible challenge to NRC regulations under 10 C.F.R. § 2.335.

²⁷⁶ Sierra Club Pet. at 65.

²⁷⁷ See 10 C.F.R. § 2.309(f)(1)(v).

²⁷⁸ Sierra Club Pet. at 65–67.

²⁷⁹ Id. at 67.

Sierra Club's geologist also claims that a terrorist attack might rupture a cask, which ought to require further analysis by ISP under NEPA.²⁸⁰ Whether or not this scenario is plausible, as explained supra the Commission takes the position that only facilities within the jurisdiction of the United States Court of Appeals for the Ninth Circuit must conduct a NEPA analysis for terrorist attacks.²⁸¹ As ISP's facility would be under the United States Court of Appeals for the Fifth Circuit's jurisdiction, ISP is not required to review the threat of a terrorist attack.

Sierra Club also does not demonstrate a genuine dispute with ISP's application concerning how radiation from a cracked spent fuel canister, containing fuel in solid, ceramic pellet form,²⁸² could reach groundwater. Likewise, the GTCC waste that would be stored at ISP's facility would be reactor-related and in solid form.²⁸³ No liquid waste would be stored at the facility.²⁸⁴ As the Commission explained in Private Fuel Storage, "[t]o show a genuine material dispute, [a petitioner's] contention would have to give the Board reason to believe that contamination from a defective canister could find its way outside of the cask."²⁸⁵ Sierra Club has not done this.

Sierra Club Contention 10 is not admitted.

²⁸⁰ Bobeck Report at 3.

²⁸¹ See Oyster Creek, CLI-07-8, 65 NRC at 129. Compare San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016, 1032 (9th Cir. 2006), with N.J. Dep't of Env'tl. Prot. v. NRC, 561 F.3d 132, 142-43 (3d Cir. 2009); Continued Storage GEIS at 4-91.

²⁸² Tr. at 96-97.

²⁸³ SAR App. H at H.1-1.

²⁸⁴ Id.

²⁸⁵ Private Fuel Storage, L.L.C. (Indep. Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 138-39 (2004).

11. Sierra Club Contention 11

Sierra Club Contention 11 states:

Section 2.3.3 of the [Environmental Report] discusses 15 criteria ISP used to evaluate the suitability of the Andrews County site. These criteria were created by ISP and bear little or no relationship to any criteria in the statutes or regulations. Even the criteria that are relevant have not been adequately addressed.²⁸⁶

Sierra Club takes issue with fifteen criteria ISP used to evaluate and select the proposed CISF site, allegedly in violation of the requirement in 10 C.F.R. § 51.45(c) to consider “the economic, technical, and other benefits and costs of the proposed action and its alternatives.”²⁸⁷ Sierra Club claims that only four of those fifteen criteria actually involve environmental impacts, and that those are not adequately addressed by ISP.²⁸⁸ Within ISP’s analysis of Criterion 11, which concerns Environmental Protection, Sierra Club disputes: (1) the discussion of contamination from the adjacent WCS low-level radioactive waste (LLRW) site; (2) whether the CISF would reside in a 100-year floodplain; (3) the discussion of the relevance of climate to environmental impacts; (4) the discussion of protected species in the area of the CISF; (5) discussion of socioeconomic data in the area of the proposed CISF; and (6) discussion of archaeological resources at the CISF site.²⁸⁹

ISP’s Environmental Report states that, in identifying potential locations for its CISF site, “ISP began by identifying a Region-of-Interest (ROI) consisting of a set of states that have the basic characteristics appropriate for a CISF site.”²⁹⁰ After ISP narrowed down its options to four counties in two states, ISP subjected those locations to “a rigorous two-tier screening process

²⁸⁶ Sierra Club Pet. at 68.

²⁸⁷ Id. at 68, 75.

²⁸⁸ Id. at 71.

²⁸⁹ Id. at 71–75.

²⁹⁰ ER at 2-9 to -10.

evaluating 15 criteria from local political support and land availability to operational considerations and environmental impacts.”²⁹¹

As the NRC Staff correctly points out, “[t]here are no specific regulatory findings under 10 C.F.R. Part 51 for an applicant’s site selection criteria; the criteria are examined for reasonableness.”²⁹² Moreover, the site selection process is driven by the purpose and need specified in the application, and the NRC may accord “substantial weight to the preferences of the applicant and/or sponsor in the siting and design of the project”²⁹³ so long as the application is not artificially narrow as to circumvent the requirement that reasonable alternatives must be considered.²⁹⁴

Sierra Club does not show how ISP’s analysis of alternative CFSF locations contravenes 10 C.F.R. § 51.45 or other “statutes or regulations,” as Sierra Club claims. As the Staff states, ISP’s criteria are driven by ISP’s own purpose and need statement, which is to develop a CFSF “to serve a national strategic need by providing for an orderly transfer of [spent nuclear fuel] from twelve shut down reactors.”²⁹⁵

Concerning Sierra Club’s general assertions that ISP’s Criterion 11 analyses are inadequate and “do not comply with NRC regulations,”²⁹⁶ we agree with the NRC Staff that Sierra Club’s complaints amount to impermissible flyspecking of the Environmental Report,²⁹⁷

²⁹¹ Id. at 2-10.

²⁹² NRC Staff Consol. Answer at 110 (citing Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 & 2), CLI-16-19, 84 NRC 180, 210 (2016)).

²⁹³ Hydro Res., Inc. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55 (2001).

²⁹⁴ Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-90-8, 32 NRC 201, 206 (1991).

²⁹⁵ ER at 1-6.

²⁹⁶ Sierra Club Pet. at 75.

²⁹⁷ NRC Staff Consol. Answer at 112 (citing System Energy Res., Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005)).

and thus generate no genuine material dispute with ISP's application under 10 C.F.R. 2.309(f)(1)(vi).²⁹⁸ ISP established its own site selection criteria sufficient to permit a "hard look" at alternative sites, and Sierra Club does not cite any authority that requires ISP to use any different criteria. Nor does Sierra Club specify how ISP's selection process violates NEPA. "If the [environmental report] on its face 'comes to grips with all important considerations' nothing more need be done."²⁹⁹

Sierra Club Contention 11 is not admitted.³⁰⁰

12. Sierra Club Contention 12

Sierra Club Contention 12 states:

The minimum cooling time for transportation of fuel from a boiling water reactor (BWR) in a NUHOMS MP-187 cask is greater than calculated by TN Americas, the manufacturer of the cask. This implies that the cladding of BWR fuel will exceed allowable limits and will degrade. Cladding is an issue that must be adequately addressed.³⁰¹

Sierra Club claims that "the storage and transportation of containers loaded with high heat output [will be] likely to leak radioactive material into the environment in a transportation accident."³⁰² Sierra Club Contention 12 relies on a 2013 DOE report that mentions the possibility of cladding embrittlement at burnup rates of 30 Gwd/MTU (gigawatt days per metric

²⁹⁸ Of these six claims, two are also proffered by Sierra Club as separate contentions: Sierra Club Contention 13 (protected species) and Sierra Club Contention 15 (environmental justice).

²⁹⁹ Grand Gulf ESP, CLI-05-4, 61 NRC at 13 (quoting Hydro Res., Inc., CLI-01-4, 53 NRC at 71 (2001)).

³⁰⁰ Because we would reach the same decision even if we considered Sierra Club's reply, we deny as moot ISP's motion to strike insofar as it pertains to portions of the reply concerning Sierra Club Contention 11.

³⁰¹ Sierra Club Pet. at 75.

³⁰² Id. at 75–76.

ton of uranium).³⁰³ Sierra Club also presents a table of calculations by Dr. Marvin Resnikoff, an asserted expert in radioactive waste,³⁰⁴ to dispute the calculations from two exhibits “in the [NUHOMS] MP-187 SAR.”³⁰⁵ Dr. Resnikoff’s calculations purport to prove that the adequate cooling time for a 7x7 boiling water reactor fuel assembly in a NUHOMS MP-187 cask is actually thirty-two years, not fifteen years.³⁰⁶ Thus, Sierra Club challenges the design specifications of the cask.

Sierra Club Contention 12 is inadmissible because it fails to raise a genuine dispute with the application on a material issue of law or fact.³⁰⁷ Sierra Club’s exhibits do not correspond to the design of the NUHOMS MP-187 cask, but rather to the design of the NUHOMS MP-197 Transportation Cask, which is inapposite to ISP’s application.³⁰⁸ It is unclear what Sierra Club is trying to challenge, but regardless both designs have already been approved by the NRC and issued Certificates of Compliance.³⁰⁹ 10 C.F.R. § 2.335 bars any contention challenging an NRC-approved storage cask design that has been incorporated by reference in a spent fuel storage facility application.³¹⁰

³⁰³ Id. at 76 (citing U.S. Dep’t of Energy, Fuel Cycle Research & Dev., A Project Concept for Nuclear Fuels Storage and Transportation (rev. 1 June 2013) [hereinafter DOE Fuel Concept Report]).

³⁰⁴ Id., Resnikoff Decl. at ¶ 1.

³⁰⁵ Id. at 76–77.

³⁰⁶ Id. at 77.

³⁰⁷ See 10 C.F.R. § 2.309(f)(1)(vi).

³⁰⁸ Compare 1 TN Americas LLC, NUHOMS®-MP197 Transportation Packaging Safety Analysis Report at 1-10 (rev. 19 Apr. 2019) (ADAMS Accession No. ML19112A252) (proprietary), with Sierra Club Pet., Ex. 6.

³⁰⁹ [CoC] for Radioactive Materials Packages, Certificate No. 9255, Rev. 14, Docket No. 71-9255, NUHOMS® MP187 Multi-Purpose Cask (Nov. 28, 2018) (ADAMS Accession No. ML18330A248) [hereinafter CoC No. 9255]; [CoC] for Radioactive Materials Packages, Certificate No. 9302, Rev. 9, Docket No. 71-9302, NUHOMS®- MP197 Transportation Package (Apr. 18, 2019) (ADAMS Accession No. ML19112A169).

³¹⁰ 10 C.F.R. § 72.46(e).

The premise of Sierra Club Contention 12 is also fundamentally incorrect because the Certificate of Compliance for NUHOMS MP-187 only authorizes pressurized water reactor fuel to be loaded into the cask, not boiling water reactor fuel.³¹¹ Nor is ISP seeking approval to transport any fuel to the proposed facility.³¹²

Sierra Club Contention 12 is not admitted.

13. Sierra Club Contention 13

Sierra Club Contention 13 states:

The [Environmental Report] states that two species of concern, the Texas horned lizard and the dunes sagebrush lizard, have been seen at the ISP site or may be present. But there is no discussion of any studies or surveys to determine if the species are present and the impact of the project on those species. Therefore, the [Environmental Report] is inadequate in describing the affected environment.³¹³

Sierra Club Contention 13 challenges the adequacy of the discussion in ISP's Environmental Report regarding two species of concern: the Texas horned lizard and the dunes sagebrush lizard. The contention also claims that ISP's supporting references "are not described well enough to allow members of the public to access the sources."³¹⁴

Although ISP correctly points out that Sierra Club's analysis of the Environmental Report is rather thin,³¹⁵ ISP does not dispute that all five sources cited in section 3.5.16 of its Environmental Report—the sources on which it relies in discussing the Texas horned lizard and the dunes sagebrush lizard—are not publicly available. As discussed at oral argument, no interested member of the public could access any of these studies, or learn how many people

³¹¹ CoC No. 9255 at 4 (Condition 5(b)(1)(c)(i)–(ii)) (stating that the only fuel authorized for shipment is pressurized water fuel assemblies).

³¹² ISP License Application at 1-3 ("Transportation of the spent nuclear fuel shipping casks from the originating nuclear reactor to the CISF will be performed in accordance with 10 CFR 71 and the originating reactor licenses and is not part of this License Application.").

³¹³ Sierra Club Pet. at 78.

³¹⁴ Id. at 79.

³¹⁵ ISP Answer to Sierra Club at 104–09.

performed them, what their qualifications were, or how much time they spent.³¹⁶ The NRC Staff admitted that it could not find any of these five studies either.³¹⁷ Although the Staff criticized Sierra Club for challenging ISP's conclusions "[w]ithout referencing to surveys cited in section 3.5 of the [Environmental Report],"³¹⁸ these are the same studies that the Staff itself could not locate.

ISP's response is to claim that "Petitioner's assertion that the environmental studies relied upon in an [environmental report] must be publicly available is not supported by NRC precedent or guidance."³¹⁹ But that is not so. Although as an independent agency the NRC is not necessarily bound by the regulations of the Council on Environmental Quality (CEQ), the Commission instructs us to "look to CEQ regulations for guidance."³²⁰

As Sierra Club points out in its reply,³²¹ the CEQ regulations recognize that "[a]ccurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA."³²² In furtherance of this directive, federal agencies must, in their environmental analyses, "identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions."³²³ We need not decide whether all cited references in an applicant's Environmental Report must be publicly available, but—to

³¹⁶ Tr. at 278–79.

³¹⁷ Tr. at 277.

³¹⁸ NRC Staff Consol. Answer at 120.

³¹⁹ ISP Answer to Sierra Club at 109.

³²⁰ Pac. Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), CLI-11-11, 74 NRC 427, 443–44 & n.95 (2011); see also 10 C.F.R. § 51.10 (describing the Commission's policy "to take account of" CEQ regulations "voluntarily, subject to certain conditions").

³²¹ Sierra Club Reply at 38–39.

³²² 40 C.F.R. § 1500.1(b) (emphasis added).

³²³ Id. at § 1502.24.

facilitate the public scrutiny deemed “essential” to implementing NEPA—surely some of them must be, or must be appended to the Report. Otherwise, public scrutiny is not possible.

ISP moves to strike Sierra Club’s references to the CEQ regulations as outside the permissible scope of a reply.³²⁴ We deny the motion insofar as ISP wants to strike reference to the CEQ regulations. Sierra Club Contention 13 claims that ISP’s sources are not described well enough for the public to access them. In opposition, ISP argues that “Petitioner cites no requirement that the ecological surveys referenced and summarized in the [environmental report] all must be publicly available.”³²⁵ In its reply, Sierra Club cites to just such a requirement.³²⁶ This constitutes a legitimate amplification of the argument in its original petition.³²⁷

Sierra Club Contention 13 is admitted solely as a contention of omission, insofar as none of the five references in section 3.5.16 of ISP’s Environmental Report is either sufficiently described to judge its technical adequacy or made publicly available.

Sierra Club Contention 13 is admitted in part.

14. Sierra Club Contention 14

Sierra Club Contention 14 states:

The containers in which the waste will be transported to and stored at the ISP site are licensed for a period of 20 years. ISP hopes to renew the license for an additional 40 years, and then apparently hoping for additional relicensing to the projected 100-year life of the [CISF]. However, many of the containers will already have been in service for years prior to being shipped to the ISP [CISF]. Furthermore, the Continued Storage Rule assumes that the spent fuel will be transferred to new containers after 100 years. ISP’s proposal may present an

³²⁴ [ISP’s] Motion to Strike Portions of the Reply Filed by Sierra Club (Dec. 27, 2018).

³²⁵ ISP Answer to Sierra Club at 109.

³²⁶ Sierra Club Reply at 38.

³²⁷ See Nuclear Mgmt. Co. (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006). We deny as moot ISP’s motion to strike insofar as it pertains to all other portions of the reply concerning Sierra Club Contention 13, because we would reach the same decision even if we considered Sierra Club’s reply.

unacceptable danger of radioactive release. Therefore, the [Environmental Report] must examine the environmental impact of the containers beyond their 20-year licensing period.³²⁸

In support of Contention 14, Sierra Club claims that “the most significant factor in the safety of the [CISF] is the safety of the containers that will be transported to and stored at the [CISF] site.”³²⁹ Sierra Club contends that ISP’s SAR omits analyses of the safety of the canisters under 10 C.F.R. § 72.45(d),³³⁰ and further claims that the Continued Storage GEIS does not “provide a basis for saying the containers are safe.”³³¹ Sierra Club also claims that ISP’s SAR lacks a plan for dealing with leaking and cracking containers,³³² and that the proposed interim storage facility lacks a dry transfer system for repackaging any leaking or cracked canister received at the site.³³³ Finally, Sierra Club asserts that, because the canisters are only licensed for 20 years and because ISP’s WCS facility has a projected life of 60 to 100 years, “the cask systems to be used at the ISP facility must be analyzed for the possibility of indefinite storage.”³³⁴

Sierra Club Contention 14 is not admissible. First, the Commission’s decision in Private Fuel Storage established that cracked and leaking canisters in storage, transport, or otherwise is not a credible scenario.³³⁵ Second, the canisters that are proposed to be stored at the WCS facility have already been issued certificates of compliance and approved for storage by the

³²⁸ Sierra Club Pet. at 79.

³²⁹ Id. at 80.

³³⁰ Id. at 81.

³³¹ Id.

³³² Id. at 82.

³³³ Id. at 81.

³³⁴ Id. at 80.

³³⁵ Private Fuel Storage, CLI-04-22, 60 NRC at 136–37.

NRC under Part 72.³³⁶ These certificates of compliance have been codified in a rulemaking.³³⁷ Because the NRC has already approved the canisters ISP plans to store at its proposed interim facility, Sierra Club's challenges to the safety of the canisters themselves (including the environmental impact of the containers beyond their own certificates of compliance terms) are outside the scope of this proceeding and do not raise a genuine dispute with the application.

Third, Sierra Club's challenge to the safety of transportation of spent fuel storage canisters is an impermissible challenge to Part 71 and is outside the scope of this proceeding. When a spent fuel cask owner (such as a utility) is issued a license to store fuel under Part 72, the owner is also issued a license for transportation under Part 71.³³⁸ ISP's license application does not seek permission to transport canisters to its proposed CISF.³³⁹

Finally, Sierra Club's claim that further environmental analysis is needed beyond the proposed facility's 40-year licensing period and its challenge to the lack of a dry transfer system at the facility improperly challenge the Continued Storage Rule and Continued Storage GEIS. These claims are outside the scope of this proceeding and are an impermissible attack on the Commission's regulations under 10 C.F.R. § 2.335.

³³⁶ See SAR at 1-22 (tbl. 1-1) (listing six various cask systems by three different vendors ISP proposes to store at the WCS facility, including NUHOMS[®] MP187 Cask System, Docket No. 72-11 (license SNM-2510); CoC 1004, Standardized NUHOMS[®] System, Docket No. 72-1004; CoC 1015, NAC-UMS, Docket No. 72-1015; CoC 1025, NAC-MPC, Docket No. 72-1025; CoC 1029, Advanced Standardized NUHOMS[®] System, Docket No. 72-1029; CoC 1031, MAGNASTOR, Docket No. 72-1031).

³³⁷ 10 C.F.R. § 72.214 (listing among the certified casks NUHOMS[®] MP187 Cask System, Docket No. 72-11 (license SNM-2510); CoC 1004, Standardized NUHOMS[®] System, Docket No. 72-1004; CoC 1015, NAC-UMS, Docket No. 72-1015; CoC 1025, NAC-MPC, Docket No. 72-1025; CoC 1029, Advanced Standardized NUHOMS[®] System, Docket No. 72-1029; CoC 1031, MAGNASTOR, Docket No. 72-1031).

³³⁸ "A general license is issued to any licensee of the Commission to transport, or to deliver to a carrier for transport, licensed material in a package for which a license, certificate of compliance (CoC), or other approval has been issued by the NRC." Id. § 71.17(a).

³³⁹ ISP License Application at 1-1 to -3.

Sierra Club Contention 14 is not admitted.³⁴⁰

15. Sierra Club Contention 15

Sierra Club Contention 15 states:

The [Environmental Report] for the ISP [CISF] does not adequately investigate or analyze the impact of the [CISF] on minority and low income communities. Executive Order 12898 requires that the NEPA process include a discussion and analysis of the environmental justice impacts of the proposed action.³⁴¹

Sierra Club Contention 15 objects to ISP's site selection process. Sierra Club cites Executive Order 12898³⁴² and a licensing board decision, Louisiana Energy Services, L.P. (Claiborne Enrichment Center),³⁴³ alleging that Claiborne is binding precedent because it "addressed in detail what a licensing applicant must do to ensure that the site selection process for storage of nuclear material does not have a disparate impact on a minority population."³⁴⁴

Environmental justice became a federally mandated NEPA consideration in 1994.³⁴⁵ Executive Order 12898 directed federal agencies to identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."³⁴⁶ The Commission's Claiborne decision

³⁴⁰ Because we would reach the same decision even if we considered Sierra Club's reply, we deny as moot ISP's motion to strike insofar as it pertains to portions of the reply concerning Sierra Club Contention 14.

³⁴¹ Sierra Club Pet. at 83.

³⁴² See Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7629 (Feb. 11, 1994) [hereinafter Exec. Order 12898].

³⁴³ La. Energy Servs., L.P. (Claiborne Enrichment Center), LBP-97-8, 45 NRC 367 (1997), aff'd in part, rev'd in part, CLI-98-3, 47 NRC 77 (1998).

³⁴⁴ Sierra Club Pet. at 84.

³⁴⁵ See Exec. Order 12898.

³⁴⁶ Id.

clarified that NEPA requires the NRC to consider “social and economic impacts ancillary” to environmental impacts; that is, environmental justice concerns.³⁴⁷

In response to Claiborne and Executive Order 12898, the NRC promulgated its Environmental Justice Policy Statement³⁴⁸ and revised guidance documents³⁴⁹ to incorporate the guiding principles from those decisions. The policy statement directs the Staff to conduct a more thorough site selection analysis “if the percentage in the impacted area significantly exceeds that of the State or County percentage for either the minority or low-income population.”³⁵⁰ NRC guidance specifies that an applicant’s environmental report should include “a discussion of the methods used to identify and quantify impacts on low-income and minority populations, the location and significance of any environmental impacts during construction on populations that are particularly sensitive, and any additional information pertaining to mitigation.”³⁵¹

Sierra Club Contention 15 makes three principal claims.

First, Sierra Club questions the adequacy of the Environmental Report’s discussion of eleven site selection criteria, two of which pertain to environmental justice.³⁵² Specifically, Sierra Club asserts that Criterion 1 (evaluating community support) improperly considers only

³⁴⁷ Claiborne, CLI-98-3, 47 NRC at 101.

³⁴⁸ See Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions, 69 Fed. Reg. 52,040, 52,040–41, 52,048 (Aug. 24, 2004) [hereinafter NRC Environmental Justice Policy Statement]. Because the NRC is an independent agency, Executive Order 12898 did not automatically apply to the NRC.

³⁴⁹ See, e.g., NUREG-1748, Office of Nuclear Material Safety and Safeguards, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, Final Report (Aug. 2003) [hereinafter NUREG-1748].

³⁵⁰ NRC Environmental Justice Policy Statement, 69 Fed. Reg. at 52,048.

³⁵¹ NUREG 1748 at 6-25; see also id. at 5-22.

³⁵² Sierra Club Pet. at 86–91.

governmental support rather than the support of the entire community.³⁵³ And, according to Sierra Club, Criterion 11 (evaluating environmental protection) “gives short shrift to environmental justice,” only providing “summary consideration” to Lea County and Eddy County, New Mexico; no consideration to Loving County, Texas; and “arguably adequate” consideration to Andrews County, Texas.³⁵⁴

Second, Sierra Club raises concerns about the use of a four-mile radius in Environmental Report Appendix A to determine “the level of minority population.”³⁵⁵ Instead, Sierra Club advocates for a fifty-mile radius to include the cities of Hobbs, Eunice and Jal in New Mexico.³⁵⁶

Third, Sierra Club claims that the Environmental Report allegedly contains “absolutely no discussion” about environmental justice impacts “from the transportation of the waste to the CIS facility.”³⁵⁷ Quoting from the International Journal of Environmental Research and Public Health, Sierra Club asserts that “legitimate concerns exist as to the environmental and human health consequences [of] a highway or rail accident [releasing] highly toxic radioactive material in a population center.”³⁵⁸

As to its first claim, Sierra Club fails to provide facts or expert opinion to support its position, as required by 10 C.F.R. § 2.309(f)(1)(v). When citing Claiborne, Sierra Club comes close to advocating for a free-range inquiry into the site selection process under NEPA, the very

³⁵³ Id. at 87.

³⁵⁴ Id. at 87–90.

³⁵⁵ Id. at 89–90.

³⁵⁶ Id. at 90.

³⁵⁷ Id.

³⁵⁸ Id. at 91 (quoting Dean Kyne & Bob Bolin, Emerging Environmental Justice Issues in Nuclear Power and Radioactive Contamination, INT’L J. OF ENV’L & HUMAN HEALTH CONSEQUENCES (July 12, 2016)).

position for which Claiborne was reversed by the Commission.³⁵⁹ The board decision in Claiborne did not spell out a list of requirements to consider during a site selection process, nor is it binding precedent on this Board. Not only does Sierra Club fail to show what it contends ISP must consider beyond Criteria 1 and 11, but Sierra Club also fails to show legal support for why ISP is allegedly required to consider more than it already has.

As to its second claim in Contention 15, Sierra Club again fails to provide facts or expert opinion to support its position. The NRC's environmental justice guidance provides that an applicant's environmental report should include "a discussion of the methods used to identify and quantify impacts on low-income and minority populations, the location and significance of any environmental impacts during construction on populations that are particularly sensitive, and any additional information pertaining to mitigation."³⁶⁰ If a facility is located outside the city limits or in a rural area, the environmental report should use a radius of approximately four miles.³⁶¹ This radius is used in ISP's Environmental Report.³⁶² Although Sierra Club contends that four miles is not the appropriate radius, it fails to show how ISP's compliance with NRC guidance violates NEPA or NRC regulations. Sierra Club prefers a larger radius like the one used for the Yucca Mountain EIS, but it does not provide support to explain why such a radius is required for environmental justice here.

As to its third claim, Sierra Club fails to show a genuine dispute with the application on a material issue of law or fact.³⁶³ Although Sierra Club contends that "risks from transportation of

³⁵⁹ Compare Sierra Club Pet. at 84 (asserting that ISP's Environmental Report's analysis of site selection criteria related to environmental justice is not adequate), with Claiborne, CLI-98-3, 47 NRC at 103 (reversing the board's ruling that NEPA requires a "free-ranging inquiry into the site selection process" to resolve allegations of racial discrimination).

³⁶⁰ NUREG-1748 at 6-25.

³⁶¹ Id. at C-4.

³⁶² ER App. A at 1-39 to -44.

³⁶³ 10 C.F.R. § 2.309(f)(1)(vi).

the waste to the . . . facility” should be “another factor to be considered in the consideration of environmental justice impacts,”³⁶⁴ Sierra Club does not provide any legal requirements or facts in support. On the contrary, the area for assessment of environmental justice impacts is based on the location of the facility itself and its proximity to certain populations, not on the facility’s proximity to possible transportation routes. Sierra Club’s quotation from the International Journal of Environmental Research and Public Health does not itself dispute ISP’s application or the transportation analysis in Environmental Report section 4.2, and Sierra Club fails to explain how it does.

Sierra Club Contention 15 is not admitted.

16. Sierra Club Contention 16

Sierra Club Contention 16 states:

Since the 1990’s almost all spent nuclear fuel being generated is high burnup fuel (HBF). HBF causes the cladding to become thinner, creating a higher risk of release of radioactive material. The cladding also becomes more brittle, with additional cracks. This situation causes risks for short-term and long-term dry storage. The SAR, 1.2.4, claims that the cask system to be used for the transportation and storage for the ISP [CISF] will not contain HBF. But the prevalence of HBF requires that the cask systems will need to contain HBF at some point. The SAR and [Environmental Report] must evaluate the risks of HBF.³⁶⁵

Sierra Club Contention 16 asserts that, because “[h]igh burnup fuel causes the cladding around the fuel to become thinner and more brittle, inducing cracking,” high burnup fuel containers are “more likely to leak radioactive material.”³⁶⁶ Sierra Club insists that the “prevalence of [high burnup fuel] means that the ISP facility will have to immediately or in the near future transport and store [high burnup fuel].”³⁶⁷ Sierra Club cites a DOE report to suggest

³⁶⁴ Sierra Club Pet. at 90.

³⁶⁵ Id. at 91.

³⁶⁶ Id. at 91–92.

³⁶⁷ Id. at 92.

that outstanding issues regarding cladding and high burnup fuel should be resolved before it can be safely loaded, transported, and stored.³⁶⁸ Citing a study by the U.S. Nuclear Waste Technical Review Board,³⁶⁹ Sierra Club claims that zirconium cladding experiences a twelve percent thinning due to the effects of high burnup, and “the likelihood of cladding defects increase” when storing high burnup fuel.³⁷⁰ Finally, Sierra Club cites New York v. NRC³⁷¹ for the proposition that “an agency must look at both the probabilities of potentially harmful events and the consequences if those events come to pass.”³⁷² In sum, Sierra Club argues the Environmental Report and SAR must “discuss and evaluate the risks of transporting and storing [high burnup fuel].”³⁷³

Insofar as Sierra Club seeks to challenge general safety concerns about transporting high burnup fuel, Contention 16 is outside the scope of this proceeding. U.S. Department of Transportation regulations and 10 C.F.R. Part 71 establish the standards for transporting spent nuclear fuel, not 10 C.F.R. Part 72.

Insofar as Sierra Club seeks to challenge the safety of storing high burnup fuel at the proposed ISP facility, Contention 16 is also outside the scope of this proceeding. First, Sierra Club misunderstands ISP’s application. Contrary to Sierra Club’s statement that “the SAR claims that [high burnup fuel] will not be transported or stored in the cask systems used,” the SAR actually allows for storage of high burnup fuel with additional limitations—that is, the high

³⁶⁸ Id. at 93 (citing DOE Fuel Concept Report).

³⁶⁹ Id. at 94 (citing U.S. Nuclear Waste Transp. Review Bd., Evaluation of the Technical Basis for Extended Dry Storage and Transportation of Used Nuclear Fuel (Dec. 2010)); id. at 95.

³⁷⁰ Sierra Club Pet. at 94–95.

³⁷¹ 681 F.3d at 478.

³⁷² Sierra Club Pet. at 95.

³⁷³ Id.

burnup fuel must be canned within the canister.³⁷⁴ Second, the application provides that only storage systems approved by the NRC will be received at the ISP facility, and incorporates those technical specifications by reference into the SAR.³⁷⁵ NRC regulations bar any admitted contention that challenges an NRC-approved cask design incorporated by reference in an ISFSI application.³⁷⁶

To the extent Contention 16 raises environmental concerns about high burnup fuel, Sierra Club fails to raise a genuine dispute with the application.³⁷⁷ Sierra Club proffers a contention of omission, stating that “the ER [does not] discuss at all the likelihood or the impacts of [high burnup fuel] being transported to and stored at the [proposed] facility.”³⁷⁸ However, ISP’s Environmental Report does address the possibility of high burnup fuel being sent to the facility and analyzes the impacts of both transportation³⁷⁹ and storage.³⁸⁰ In its reply, Sierra Club disputes the Environmental Report’s transportation impact analysis, arguing that the study is a “general modeling exercise that does not indicate . . . whether the model considered whether high-burnup fuel was modeled, and if so, if the model assumed that the fuel was canned.”³⁸¹ However, the RADTRAN analysis performed by the applicant encompasses spent

³⁷⁴ ISP License Application, Attach. A, Proposed License Conditions at unnumbered A-3 (Proposed License No. SNM-1050) at § 9.

³⁷⁵ SAR at 1-6 to -10.

³⁷⁶ 10 C.F.R. § 72.46(e).

³⁷⁷ See 10 C.F.R. § 2.309(f)(1)(vi).

³⁷⁸ Sierra Club Pet. at 95.

³⁷⁹ ER at 4-12 to -16. This section provides the results of a RADTRAN analysis that evaluated the incident-free radiological transportation impacts assuming the maximum dose rate allowed for exclusive use shipments under 10 C.F.R. § 71.47(b)(3).

³⁸⁰ ER at 4-55 to -59. Storage of high burnup fuel is subject to the same standards as other forms of spent fuel, and therefore is encompassed by the discussion of impacts to public and occupational health from facility operation. If Sierra Club objected to this analysis, it was not articulated.

³⁸¹ Sierra Club Reply at 44.

fuel of any burnup level, including high burnup fuel.³⁸² The information that Sierra Club claims to be lacking is contained within the Environmental Report, and therefore Sierra Club does not raise a genuine dispute with the application.

Sierra Club Contention 16 is not admitted.

17. Sierra Club Contention 17

Sierra Club Contention 17 states:

Sierra Club adopts all contentions presented by [Joint Petitioners], in their Petition to Intervene in this proceeding.³⁸³

To adopt a contention, a participant must (1) demonstrate standing; and (2) have proffered its own admissible contention.³⁸⁴ Although Sierra Club has done this, the contention a petitioner seeks to adopt must also be admissible under 10 C.F.R. § 2.309(f)(1). Because Joint Petitioners have not proffered an admissible contention, as explained infra, Sierra Club cannot adopt any of Joint Petitioners' contentions.

Sierra Club Contention 17 is not admitted.

³⁸² ER at 4-13 ("Incident-free doses were calculated using the maximum dose rate allowed for exclusive use shipments under NRC regulations.").

³⁸³ Sierra Club Pet. at 96.

³⁸⁴ See Consol. Edison Co. of N.Y. (Indian Point, Units 1 & 2), CLI-01-19, 54 NRC 109, 132-33 (2001).

C. Joint Petitioners³⁸⁵

1. Joint Petitioners Contention 1: NEPA Analysis of Transportation of [Spent Nuclear Fuel] and GTCC Wastes Was Excluded from the Application and Comprises Unlawful Segmentation of the Project

Joint Petitioners Contention 1 states:

ISP states in the Application that “Transportation of the spent nuclear fuel shipping casks from the originating commercial nuclear reactor to the CISF . . . is not part of this License Application. The exclusion from the [Environmental Report]—and by implication, from the EIS—of details and environmental impacts of a planned 20-year shipping campaign involving at least 3,000 deliveries of [spent nuclear fuel] and GTCC waste to ISP violates NEPA requirements that the transportation and storage aspects of the ISP plan be evaluated as a single, integrated project.”³⁸⁶

Joint Petitioners Contention 1 stems from statements in ISP’s application that:

(1) “[o]perations at the originating commercial nuclear reactors in preparation or support of spent nuclear fuel shipments to the CISF are performed under the individual reactor licenses . . . and are not part of this License Application;” and (2) “[t]ransportation of the spent nuclear fuel shipping casks from the originating commercial nuclear reactor to the CISF will be performed in accordance with 10 CFR 71 from the originating commercial nuclear reactor licensees and is not part of this License Application.”³⁸⁷

³⁸⁵ In addition to proffering their individual contentions, Joint Petitioners “object and move for the dismissal and termination of this licensing proceeding.” Joint Pet’rs Pet. at 40. They allege that there is no federal authorization for the ISP CISF to be licensed because “neither Part 72 nor the NWPA authorize an ISP CISF financed by means of having the DOE take title to the [fuel] and GTCC wastes and compensating the company for overseeing their management.” Id. at 38. They also challenge the legality of the general licensing of a CISF under federal law and the NRC’s subject matter jurisdiction over ISP’s license application to the extent the DOE retains ownership of the spent fuel. Id. at 39–40.

The Board overrules Joint Petitioners’ objection on procedural grounds. As explained in SECY’s Order denying Beyond Nuclear and Fasken’s threshold motions to dismiss, NRC regulations do not provide any avenue for Boards to rule on contested motions (or objections) to dismiss a proceeding at the proceeding’s commencement. See Order Denying Motions to Dismiss.

³⁸⁶ Joint Pet’rs Pet. at 41.

³⁸⁷ ISP License Application at 1-2 to -3; see id. at 3-1.

Joint Petitioners contend that, in spite of what ISP says, transportation should be part of its Part 72 CISF application because “[t]he delivery of [spent nuclear fuel] and GTCC waste from nuclear reactors to ISP will be a major, complicated campaign, expected to last 20 years and to include at least 3,000 separate shipments transported, in the aggregate, hundreds of thousands of miles.”³⁸⁸ In sum, Joint Petitioners assert that transportation to the CISF is the sine qua non of the project itself,³⁸⁹ and accordingly must be analyzed under 10 C.F.R. § 51.45(b).³⁹⁰

Joint Petitioners also argue that, if they are to “meaningfully participate in the NEPA process, and for state and local government officials and emergency response personnel to comprehend the scope of this vast [spent nuclear fuel] shipping campaign, there must be complete disclosure of all probable transportation routes, along with quantities of [spent nuclear fuel] and the likely radioisotopic contents.”³⁹¹ Joint Petitioners assert a contention of omission concerning the lack of transportation plans in the Environmental Report,³⁹² and claim that the separation of the environmental impacts from spent fuel transportation and the storage itself “comprises unlawful segmentation of the project.”³⁹³

Joint Petitioners do not address or dispute the transportation analyses that are contained in the application, and Joint Petitioners Contention 1 therefore does not show that a genuine dispute exists on a material issue of law or fact with ISP’s application. The issue presented by Joint Petitioners is also outside the scope of this proceeding. Joint Petitioners do not explain why, under NEPA, ISP is required to divulge all transportation routes of casks coming from

³⁸⁸ Joint Pet’rs Pet. at 42.

³⁸⁹ Tr. at 294.

³⁹⁰ Joint Pet’rs Pet. at 48.

³⁹¹ Id. at 43.

³⁹² Id.

³⁹³ Id. at 44 (citing Stewart Part & Reserve Coal, Inc. (SPARC) v. Slater, 352 F.3d 545, 559 (2d Cir. 2003)).

customers, unknown at this time, for the 20-year transportation and loading campaign. As ISP points out,³⁹⁴ ISP cannot know these details at this time, and relevant caselaw does not require ISP to hypothesize about who will be sending what fuel at this time.³⁹⁵ Responsibility for transportation of spent nuclear fuel from commercial reactors to the proposed CISF lies with the title holders of the spent fuel, not with ISP.

Instead of disputing the sections of ISP's Environmental Report that discuss transportation issues,³⁹⁶ Joint Petitioners challenge the adequacy of NRC regulations establishing the requirements for applicants' Environmental Reports under Part 72.³⁹⁷ Joint Petitioners' "unlawful segmenting" argument is outside the scope of this proceeding because it challenges the NRC's Part 72 and NEPA-implementing regulations under Part 51 in violation of 10 C.F.R. § 2.335.

Joint Petitioners Contention 1 is not admitted.

2. Joint Petitioners Contention 2: ISP's 'Start Clean/Stay Clean' Policy Cherry-Picks Waste For Storage and Contradicts the Project's Purpose and Need Statement

Joint Petitioners Contention 2 states:

Interim Storage Partners states in its "Purpose and Need" statement that: "A CISF is needed to ensure that the [spent nuclear fuel] at these commercial reactor sites can be safely removed so that the remaining lands can be returned to greenfield status." ER § 1.1, p. 1–5. But the implementation of ISP's plan contradicts its purpose and need statement.³⁹⁸

Joint Petitioners claim that ISP's policy of not accepting leaking or contaminated casks conflicts with ISP's own statement of the purpose and need for its proposed facility: that is, to

³⁹⁴ ISP Answer to Joint Pet'rs at 31–32.

³⁹⁵ See Morton, 458 F.2d at 837.

³⁹⁶ ER at 3-5 to -7, 4-3 to -28.

³⁹⁷ See 10 C.F.R. §§ 51.61, 72.34, 72.108.

³⁹⁸ Joint Pet'rs Pet. at 49–50.

help ensure decommissioned reactor sites can be returned to greenfield status.³⁹⁹ Joint Petitioners hypothesize that, if ISP rejects damaged or leaky canisters, then after they are returned to their place of origin, they “may be subjected to less oversight, maintenance, and security” and “[t]heir deteriorated or damaged conditions may not be noted nor remedied,” which will create “greater dangers than would have earlier been present.”⁴⁰⁰

Joint Petitioners Contention 2 is inadmissible for lack of a sufficient factual basis.⁴⁰¹ Their claim that a rejected cask will lead to a cascade of stranded and neglected spent fuel across the country is speculative. It is not supported by any factual basis, especially in light of the NRC’s transportation regulations under Part 71, the NRC’s security regulations under Part 73, and its spent fuel storage rules in Part 72. Joint Petitioners Contention 2 also ignores the Commission’s decision in Private Fuel Storage, in which the Commission determined that a leaky or damaged canister in transit to a CISF is not credible.⁴⁰² A contention cannot be admitted on bare assertions and speculation alone.⁴⁰³

Joint Petitioners Contention 2 is not admitted.

3. Joint Petitioners Contention 3: The Project Has Inadequate Assurances of Financing

Joint Petitioners Contention 3 states:

ISP as a matter of fact and law has not provided reasonable assurance that it can or will obtain the necessary funds to cover the costs of construction, operation, maintenance and decommissioning of the CISF.⁴⁰⁴

³⁹⁹ Id. at 53.

⁴⁰⁰ Id. at 53–54.

⁴⁰¹ See 10 C.F.R. § 2.309(f)(1)(v).

⁴⁰² Private Fuel Storage, CLI-04-22, 60 NRC at 136–37, 138.

⁴⁰³ Fansteel, CLI-03-13, 58 NRC at 203.

⁴⁰⁴ Joint Pet’rs Pet. at 55.

As explained in its stated basis, Joint Petitioners Contention 3 encompasses four interrelated claims: First, Joint Petitioners claim that ISP's application is "dependent" on DOE's taking title to the spent fuel to be stored at the proposed facility.⁴⁰⁵ Second, such an arrangement is not currently legal.⁴⁰⁶ Third, if DOE were to hold title, that would jeopardize the liability protection afforded by the Price-Anderson Act.⁴⁰⁷ Fourth, because DOE may not lawfully hold title to the spent fuel, the NRC must deny ISP's request for an exemption from providing financial assurance for decommissioning, as required by 10 C.F.R. § 72.30, insofar as ISP's request is based on a contract with DOE guaranteeing decommissioning funds.⁴⁰⁸

As explained in the Board's ruling on Beyond Nuclear's contention, supra, Joint Petitioners' first claim does not raise a genuine dispute with ISP's application, which includes the option of contracting directly with nuclear plant owners that currently hold title to their spent fuel. As in Holtec,⁴⁰⁹ whether ISP will find that alternative commercially viable is not an issue before the Board, because the business decision of whether to use a license has no bearing on a licensee's ability to safely conduct the activities the license authorizes.

As also explained supra, in the Board's ruling on Beyond Nuclear's contention, intervening developments have mooted the other claims that Joint Petitioners assert in Contention 3. ISP has withdrawn its request for a regulatory exemption,⁴¹⁰ and has acknowledged on the record that, as the law now stands, it cannot lawfully contract for DOE to

⁴⁰⁵ Id. at 56.

⁴⁰⁶ Id.

⁴⁰⁷ Id. at 58.

⁴⁰⁸ Id. at 61.

⁴⁰⁹ Holtec, LBP-19-4, 89 NRC at ___ (slip op. at 33).

⁴¹⁰ ISP June 3, 2019 Letter at 1.

take title to spent fuel destined for its proposed facility.⁴¹¹ So that option is off the table. Additionally, Joint Petitioners' concerns about Price-Anderson coverage are in any event misplaced. 10 C.F.R. § 72.22(e) requires reasonable assurance of obtaining necessary funds to cover construction, operating, and estimated decommissioning costs, but says nothing about liability coverage.

Although initially the NRC Staff would have had us admit Joint Petitioners Contention 3 solely as to the lawfulness of ISP's exemption request,⁴¹² at oral argument the Staff announced that its position has changed. Recognizing that ISP has withdrawn its exemption request, the NRC Staff now takes the position that no portion of Joint Petitioners Contention 3 is admissible.⁴¹³ We agree.

Joint Petitioners Contention 3 is not admitted.

4. Joint Petitioners Contention 4: Low-Level Radioactive Waste Volumes and Repackaging Requirements Are Considerably Underestimated

Joint Petitioners Contention 4 states:

The ISP Environmental Report significantly underestimates the volume of low-level radioactive waste ("LLRW") that will be generated by the interim storage project. ISP fails to count irradiated concrete and other materials toward the gross total volumes of LLRW. ISP further fails to acknowledge and properly quantify LLRW volumes resulting from mandatory repackaging of [spent nuclear fuel] and GTCC waste, at least some of which will occur at the WCS site to meet likely DOE requirements for transportation, aging and disposal ("TAD") canisters to be delivered to the final geological repository. ISP provides an incomplete perspective of the waste management obligations at the CISF as well as the financial burdens arising from creation, oversight and disposition of thousands of additional tons of LLRW. This truncated perspective in turn has caused a seriously inaccurate picture of the true costs of constructing, operating and decommissioning the WCS CISF.⁴¹⁴

⁴¹¹ ISP June 28, 2019 Response to Board at 1; Tr. at 44 ("DOE may not, absent statutory change, make use of our facility.").

⁴¹² NRC Staff Consol. Answer at 27.

⁴¹³ Tr. at 159.

⁴¹⁴ Joint Pet'rs Pet. at 64.

Joint Petitioners Contention 4 asserts three claims concerning LLRW at the proposed storage facility: (1) the repackaging of spent nuclear fuel poses “unconsidered management difficulties, increased waste generation, and unforeseen and undisclosed costs;”⁴¹⁵ (2) allegedly, ISP grossly underestimates the concrete LLRW at the CISF site;⁴¹⁶ and (3) ISP allegedly fails to conduct an acceptable life cycle estimate of LLRW volumes and associated expenses.⁴¹⁷ For its second and third claims, Joint Petitioners rely on a report by Robert Alvarez, an asserted expert on spent fuel storage.⁴¹⁸

As to Joint Petitioners’ claim that the repackaging of spent fuel poses management difficulties, increased waste generation, and unforeseen and undisclosed costs, ISP’s application is for a 40-year license. Its Environmental Report relies on the Continued Storage Rule and Continued Storage GEIS. ISP’s application does not set forth any intent to repackage spent fuel or any analysis of the costs of repackaging the fuel, and the Continued Storage Rule does not require a spent fuel storage facility applicant under Part 72 to include such an analysis beyond the license term.⁴¹⁹ Thus, this claim is outside the scope of this proceeding. And, to the extent Joint Petitioners assert that ISP must discuss waste generated by repackaging fuel canisters into DOE transportation, aging and disposal casks, this claim is necessarily outside the scope of this proceeding as well.

Joint Petitioners’ claim that ISP grossly underestimates the concrete LLRW in its Environmental Report also challenges the Continued Storage Rule and Continued Storage

⁴¹⁵ Id. at 66–71.

⁴¹⁶ Id. at 72–74.

⁴¹⁷ Id. at 74–76

⁴¹⁸ Id. at 69; see id., Decl. of Robert Alvarez (Oct. 23, 2018).

⁴¹⁹ 10 C.F.R. § 51.23(b).

GEIS and is inadmissible for challenging an NRC rule in violation of section 2.335. The Continued Storage GEIS, deemed incorporated by the Continued Storage Rule, concludes that

[a]lthough the exact amount of [low level waste (LLW)] and nonradioactive waste depends on the level of contamination, the quantity of waste generated from the replacement of the canisters, storage casks, concrete storage pads, [dry transfer system], and canister transfer building is still expected to be a comparable to the LLW generated during reactor decommissioning, which was previously determined to have a SMALL impact in the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (NRC 2013a).⁴²⁰

Finally, Joint Petitioners' claim that "ISP's tabulation in the [Environmental Report] of the quantities of canister LLRW and concrete LLRW do not adequately answer cost or quantitative questions"⁴²¹ is based solely on the Environmental Report's omission of repackaging spent fuel canisters⁴²²—an analysis ISP is not required to include in its initial 40-year application under the Continued Storage Rule. Therefore, this claim is also outside the scope of this proceeding and impermissibly challenges the Continued Storage Rule in violation of 10 C.F.R. § 2.335.

Joint Petitioners Contention 4 is not admitted.⁴²³

5. Joint Petitioners Contention 5: ISP Has Not Performed an Environmental Justice Investigation of Transportation Communities; the ISP CISF Will Cause Disparate Impacts From Routine and Non-Routine Transportation-Related Radiation Exposures Upon Minority and Low-Income Populations Along Hundreds of Miles of Transportation Corridors

Joint Petitioners Contention 5 states:

ISP states in its License Application (ML 18206A483) that "Transportation of the spent nuclear fuel shipping casks from the originating commercial nuclear reactor to the CISF will be performed in accordance with 10 CFR 71, and the originating reactor licenses and is not part of this License Application." Id. § 1.1, p. 1–3 (Emphasis added). With that, WCS severed—and "segmented"—the transportation part of the CISF proposal from the storage component. Segmentation is impermissible for legal as well as practical reasons. One consequence of the segmentation is that Environmental Justice ("EJ") compliance

⁴²⁰ Continued Storage GEIS at 5-48.

⁴²¹ Joint Pet'rs Pet. at 75.

⁴²² Id. at 75–76.

⁴²³ Because we would reach the same decision even if we considered Joint Petitioners' reply, we deny as moot ISP's motion to strike insofar as it pertains to portions of the reply concerning Joint Petitioners Contention 4.

in the form of identification and analysis of potentially affected populations along the anticipated rail, truck and barge routes will be improperly excluded from disclosure in the NEPA document.⁴²⁴

Framed as a contention of omission, Joint Petitioners claim that ISP's Environmental Report improperly excludes an environmental justice analysis of potentially affected people who live near probable spent fuel and GTCC waste transportation routes to the ISP CISF. For support, Joint Petitioners purport to rely on Claiborne,⁴²⁵ Executive Order 12898, CEQ guidance, and U.S. Environmental Protection Agency guidance.

Joint Petitioners Contention 5 fails to raise a material dispute. ISP is applying to construct a CISF under 10 C.F.R. Part 72. In its license application, ISP emphasizes "[t]ransportation of the spent nuclear fuel shipping casks from the originating commercial nuclear reactor to the CISF will be performed in accordance with 10 CFR 71 and the originating reactor licenses and is not part of this License Application."⁴²⁶

Joint Petitioners are correct that transportation routes will eventually need to be established, and impacts from those routes will need to be analyzed, should ISP's proposed facility be licensed and become operational. Joint Petitioners are also correct that the U.S. Department of Transportation will need to be involved in that analysis.

However, Joint Petitioners' claim that an environmental justice investigation must extend to the "populations in the shipping corridors covering thousands of miles of rail, truck and barge routes" has no bearing on this proceeding.⁴²⁷ The authorities cited by Joint Petitioners (including Executive Order 12898 and the NRC's Environmental Justice Policy Statement) were

⁴²⁴ Joint Pet'rs Pet. at 76–77. Although characterized as the basis for Joint Petitioners Contention 5, this statement appears to be what Joint Petitioners intend to litigate as their contention.

⁴²⁵ Claiborne, LBP-97-8, 45 NRC at 367, aff'd in part, rev'd in part, CLI-98-3, 47 NRC at 77.

⁴²⁶ ISP License Application at 1-3.

⁴²⁷ Joint Pet'rs Pet. at 81.

promulgated to implement NEPA. And, under NEPA, an environmental justice assessment need only assess the “disproportionately high and adverse human health or environmental” impacts of the proposed action and its reasonable alternatives.⁴²⁸ The area for assessment of environmental justice impacts is based on the location of the proposed facility itself, not proximity to possible transportation routes. Accordingly, Joint Petitioners have not raised an issue that is material to the findings the NRC must make in this proceeding.⁴²⁹

Joint Petitioners Contention 5 is not admitted.

6. Joint Petitioners Contention 6: Inadequate Disclosure of Oil and Gas Drilling Activity Beneath the WCS CISF Site

Joint Petitioners Contention 6 states:

Horizontal hydraulic fracturing (“fracking”) activity is taking place in close proximity to the ISP/WCS site. It is technologically and legally possible that fracking will be undertaken directly beneath the waste storage areas of the site. Fracking has seismic, groundwater flow and water consumption implications, which become cumulative if extraction wells and/or waste injection disposal wells are developed near and/or underneath WCS. There is no indication in the Environmental Report or Safety Analysis Report of legal controls over present or potential oil and gas drilling directly beneath the site. The presence, overall, of mineral interests beneath or proximate to the waste storage portion of the ISP site is inadequately disclosed. Consequently, the realistic prospects for mineral development immediately surrounding and underneath the WCS site, and the implications for inducing or expediting geological problems including seismicity and groundwater movement, are unknown.⁴³⁰

Joint Petitioners Contention 6 claims that analyses have been omitted from ISP’s application with regard to ISP’s property and mineral rights and the CISF area’s seismology and hydrology. Joint Petitioners claim that ISP’s Environmental Report and SAR are deficient because, they allege, both are devoid of the “land ownership and legal control of the mineral

⁴²⁸ Exec. Order 12898 § 1-101; see NRC Environmental Justice Policy Statement, 69 Fed. Reg. at 52,047; Claiborne, CLI-98-3, 47 NRC at 103–04.

⁴²⁹ See 10 C.F.R. § 2.309(f)(1)(iv).

⁴³⁰ Joint Pet’rs Pet. at 97–98.

rights interests of the site where the waste storage will occur”⁴³¹ and they “fail to connect the considerable history of oil and gas development” in the CISF area.⁴³² Joint Petitioners allege that the Environmental Report omits “investigation . . . into the chemical status of water from the Ogallala Aquifer,” its connected smaller aquifers, the area soils and the soils’ possible corrosive effects on the casks, the concrete bunkers and pads, and the artificial substrate materials.⁴³³ Joint Petitioners further contend that ISP’s Environmental Report violates 10 C.F.R. § 72.120(d), because allegedly ISP “has ignored and failed to integrate evidence of groundwater at the site” as related to induced faults from fracking, associated seismic activity, and waste water injection wells from area petroleum exploration.⁴³⁴ Finally, Joint Petitioners claim that ISP’s Environmental Report violates multiple Part 72 regulations because it allegedly omits analysis of seismic activity in the area (including fracking-induced seismic activity analyses) and groundwater analysis that would affect the design and operation of the proposed CISF.⁴³⁵

Joint Petitioners fail to acknowledge (much less dispute) relevant portions of ISP’s application that address their concerns, and thus do not raise a genuine dispute with the application, as required by 10 C.F.R. § 2.309(f)(1)(vi).

For example, most of the seismic analyses Joint Petitioners seek are in SAR Chapter 2, Attachment D. Although this portion of the application contains proprietary information, as explained supra Joint Petitioners had the opportunity to gain access to this information but chose not to.⁴³⁶ Moreover, the analyses that ISP employs to demonstrate compliance with Part

⁴³¹ Id. at 99.

⁴³² Id. at 99–100.

⁴³³ Id. at 100.

⁴³⁴ Id.

⁴³⁵ Id. at 100–02 (alleging that ISP’s ER violates 10 C.F.R. §§ 72.103(f), 72.103(e), 72.103(f)(2)(iv), 72.90, and 72.94).

⁴³⁶ 83 Fed. Reg. at 44,073–75.

72 are appropriately located in the SAR (as they relate to safety),⁴³⁷ not in ISP's Environmental Report.

In their reply, Joint Petitioners attempt to transform their contention of omission into one of inadequacy. They concede that "induced seismicity is discussed in the [Environmental Report]," but claim the discussion is inadequate because "there must be an accounting of prospective drilling trends and density in the immediate region of the CISF."⁴³⁸ But Joint Petitioners do not explain what authority requires this analysis.

Petitioners have a duty to "read the pertinent portions of the license application, . . . state the applicant's position," and explain their disagreement with the applicant—i.e., identify what section is allegedly devoid of a required analysis.⁴³⁹ Joint Petitioners clearly failed to do this. Joint Petitioners Contention 6 does not raise a genuine dispute with the application as required under 10 C.F.R. § 2.309(f)(1)(vi).

Joint Petitioners Contention 6 is not admitted.

7. Joint Petitioners Contention 7: Disqualifying Foreign Ownership of Interim Storage Partners

Joint Petitioners Contention 7 states:

Interim Storage Partners is majority controlled by a foreign corporation and is barred by statute and regulation from seeking or receiving a license from the Nuclear Regulatory Commission.⁴⁴⁰

Joint Petitioners correctly point out that ISP's application states that ISP "is majority owned and controlled by Orano CIS,"⁴⁴¹ which in turn is wholly owned by Orano USA LLC.⁴⁴² Orano USA LLC is "ultimately majority owned and controlled by FAE AEC, an entity of the

⁴³⁷ See, e.g., SAR sections 11.5, 15.1.4 (information required under 10 C.F.R. § 72.120).

⁴³⁸ Joint Pet'rs Reply at 38.

⁴³⁹ Millstone, CLI-01-24, 54 NRC at 358.

⁴⁴⁰ Joint Pet'rs Pet. at 102.

⁴⁴¹ ISP License Application at 1-4.

⁴⁴² Id.

French Government.”⁴⁴³ Joint Petitioners claim that, because ISP is ultimately controlled by the French government, AEA sections 103 and 104 (and the NRC regulations implementing these provisions) forbid the NRC from issuing ISP a license to store spent nuclear fuel.⁴⁴⁴

Although this contention would be admissible if ISP sought to obtain a license for a production or utilization facility,⁴⁴⁵ AEA sections 103 and 104 apply, by their terms, only to production and utilization facilities. An independent spent fuel storage facility under Part 72 is neither a production nor a utilization facility.⁴⁴⁶ Thus, ISP’s CISF is not subject to AEA sections 103 or 104.

Joint Petitioners Contention 7 is not admitted.

8. Joint Petitioners Contention 8: The Discussion of Alternatives to the Proposed Project Is Inadequate Under NEPA

Joint Petitioners Contention 8 states:

The no-action alternative in the [ISP Environmental Report] is incomplete because it does not acknowledge safer storage methods at reactor sites, such as hardened on-site storage (“HOSS”), nor does it acknowledge the NRC’s Continued Storage Rule that concludes that waste can be safely stored at reactor sites indefinitely.

⁴⁴³ Id.

⁴⁴⁴ Joint Pet’rs Pet. at 102–03.

⁴⁴⁵ See Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-12-19, 76 NRC 184 (2012) (finding a violation of AEA sections 103 and 104 where a power reactor license applicant’s parent company was foreign owned).

⁴⁴⁶ AEA section 11 defines a “production facility” as “(1) any equipment or device determined by rule of the Commission to be capable of the production of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or (2) any important component part especially designed for such equipment or device as determined by the Commission.” AEA section 11 defines a “utilization facility” as “(1) any equipment or device, except an atomic weapon, determined by rule of the Commission to be capable of making use of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public, or peculiarly adapted for making use of atomic energy in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or (2) any important component part especially designed for such equipment or device as determined by the Commission.” 42 U.S.C. § 2014.

There are at least four alternatives to the proposed CISF project which are neither recognized nor addressed in the Environmental Report, contrary to NEPA requirements.⁴⁴⁷

Joint Petitioners claim that ISP's discussion of the "no-action alternative" in its Environmental Report is deficient because it does not discuss potential alternatives to the proposed project, such as HOSS, and conflicts with the NRC's Continued Storage Rule.⁴⁴⁸ Additionally, Joint Petitioners claim that ISP did not conduct an appropriate analysis of the costs and benefits associated with the proposed project.

Joint Petitioners' claim that ISP's Environmental Report fails to consider other alternatives does not demonstrate a genuine dispute on a material issue.⁴⁴⁹ Joint Petitioners identify five separate alternatives that ISP's Environmental Report allegedly fails to consider: (1) establishment of a dry transfer system; (2) modification of ISP's emergency response plan to include preparations for emissions mitigation; (3) modification of the CISF design to prevent "malevolent" acts; (4) Federal Government control of the ISP facility; and (5) implementation of HOSS at reactor sites.⁴⁵⁰ However, Joint Petitioners do not explain why these five alternatives must be evaluated by ISP in its Environmental Report.

Indeed, Joint Petitioners' first four "alternatives" do not appear to be alternatives to constructing ISP's proposed facility at all, but rather suggestions for how to improve it. As to Joint Petitioners' claim that ISP's Environmental Report must discuss using "safer storage methods . . . such as HOSS" at reactor sites as an alternative to constructing a central storage facility, Joint Petitioners fail to demonstrate how such a discussion would be material to the no-action alternative either. HOSS is a method of storage that has not been licensed, much less

⁴⁴⁷ Joint Pet'rs Pet. at 107.

⁴⁴⁸ Id.

⁴⁴⁹ See 10 C.F.R. § 2.309(f)(1)(vi).

⁴⁵⁰ Joint Pet'rs Pet. at 107–08.

implemented, at any reactor site. ISP's Environmental Report is only required to analyze a no-action alternative of maintaining the status quo. Joint Petitioners do not explain why analyzing the unused HOSS method is necessary to analyzing the status quo.

Joint Petitioners' claims concerning the Continued Storage Rule are based on a fundamental misunderstanding of the Rule, which petitioners incorrectly assert "concludes that waste can be stored at the reactor site indefinitely."⁴⁵¹ It does no such thing. Rather, the Continued Storage Rule incorporates the impact determinations made in the continued storage GEIS, which merely analyzes the environmental impacts of storing waste at reactor sites after the end of their licenses. It did not include an analysis of safety benefits or advocate for a particular method of storage.

Joint Petitioners claim that ISP's Environmental Report does not provide a cost benefit analysis ignores Chapter 7 of the Report, which contains the analysis that Joint Petitioners claim is omitted.⁴⁵² A petitioner has a duty to "read the pertinent portions of the license application."⁴⁵³ This portion of Joint Petitioners contention does not demonstrate a genuine dispute because the alleged missing information is contained within the license application.

Joint Petitioners Contention 8 is not admitted.

9. Joint Petitioners Contention 9: ISP Misrepresents the Financial Benefits to the Federal Government From Opening and Operating a CISF

Joint Petitioners Contention 9 states:

ISP maintains that establishment of the proposed ISP facility would financially benefit the US federal government. There is considerable dispute over whether the proposed action of opening a CISF at Interim Storage Partners' site in west

⁴⁵¹ Id. at 107.

⁴⁵² See ER Chapter 7.

⁴⁵³ Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170; see also Millstone, CLI-01-24, 54 NRC at 358.

Texas will provide over \$5 billion of net economic benefit to the U.S. government.⁴⁵⁴

In Contention 9, Joint Petitioners claim that ISP's Environmental Report provides no benefit-cost analysis.⁴⁵⁵ They assert that Table 7.4-1 depicts only purported benefits of the proposed storage facility, but fails to set forth its costs.⁴⁵⁶ Joint Petitioners conclude: "NEPA does not require a cost-benefit analysis; but an agency choosing to 'trumpet' an action's benefits has a duty to disclose its costs."⁴⁵⁷

Despite Joint Petitioners' claim, ISP's Environmental Report does contain an entire chapter entitled "Benefit-Cost Analysis."⁴⁵⁸ Joint Petitioners correctly point out that Table 7.4-1 only summarizes purported benefits, but they ignore the fact that on the next page Table 7.4-2 summarizes estimated costs.

The Commission expects petitioners to "read the pertinent portions of the license application."⁴⁵⁹ Because the information Joint Petitioners claim is missing from ISP's Environmental Report in fact appears there, Contention 9 fails to demonstrate a genuine dispute with the application, as required by 10 C.F.R. § 2.309(f)(1)(vi).

In their reply, Joint Petitioners try for the first time to challenge the sufficiency of ISP's benefit-cost analysis and its alleged reliance on "flawed assumptions."⁴⁶⁰ The Board grants ISP's motion to strike these new arguments, which could have been timely raised in Joint Petitioners original petition, but were not.

⁴⁵⁴ Joint Pet'rs Pet. at 112.

⁴⁵⁵ Id.

⁴⁵⁶ Id. at 113.

⁴⁵⁷ Id. at 114 (citing Sierra Club v. Sigler, 695 F.2d 957, 979 (5th Cir. 1983)).

⁴⁵⁸ ER Chapter 7.

⁴⁵⁹ Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170.

⁴⁶⁰ Joint Pet'rs Reply at 47.

There is a world of difference between claiming a benefit-cost analysis is missing and claiming it is insufficient. “The Commission will not permit, in a reply, the filing of new arguments or new legal theories that opposing parties have not had an opportunity to address.”⁴⁶¹ Rather, NRC regulations “demand a level of discipline and preparedness on the part of petitioners,” who are required by our contention admissibility requirements to set forth their claims in detail at the outset of a proceeding.⁴⁶²

Joint Petitioners Contention 9 is not admitted.

10. Joint Petitioners Contention 10: The Predicted Length of the Period of Operation of the CISF Warrants Scrutiny Under NEPA of Storage Exceeding 100 Years

Joint Petitioners Contention 10 states:

WCS plans to provide long-term [spent nuclear fuel] storage for up to either 40, 60 or 100 years, depending on which statement one wishes to rely on or until a geological repository is developed. The indefinite length of the interim storage scheme requires NEPA evaluation beyond 60 years of operations.⁴⁶³

Joint Petitioners claim that, notwithstanding ISP is applying for only a 40-year license,⁴⁶⁴ it is not clear how long the ISP CISF will actually store spent nuclear fuel. Joint Petitioners cite different parts of ISP’s license application where ISP hypothesizes how long the interim storage facility might store fuel: in one place, ISP estimates 60 years “or until a final geologic repository is licensed and operating;” in two other portions of the Environmental Report, ISP estimates 60 to 100 years (or until a permanent repository is operational).⁴⁶⁵ Because of these statements, Joint Petitioners contend that ISP must conduct a NEPA review beyond 60 years of the facility’s

⁴⁶¹ USEC, Inc. (Am. Centrifuge Plant), CLI-06-9, 63 NRC 433, 439 (2006).

⁴⁶² La. Energy Servs., LP (Nat’l Enrichment Facility), CLI-04-25, 60 NRC 223, 225, reconsideration denied, CLI-04-35, 60 NRC 619 (2004).

⁴⁶³ Joint Pet’rs Pet. at 114.

⁴⁶⁴ ISP License Application at 1-5.

⁴⁶⁵ Joint Pet’rs Pet. at 114–15.

licensing (at a minimum); beyond 100 years as a NEPA “cumulative impact;”⁴⁶⁶ and for a period of “hundreds, or even thousands of years, or forever,” because the facility might become a de facto repository.⁴⁶⁷

This proceeding concerns an application for a license to store spent fuel for up to 40 years. As NEPA requires a federal agency to “take a hard look at the environmental consequences of its proposed action,”⁴⁶⁸ ISP’s Environmental Report (and the NRC’s subsequent EIS) must only take its hard look at the environmental impacts for a 40-year term. As to the de facto repository argument, it impermissibly challenges the Continued Storage Rule. The Continued Storage GEIS has evaluated environmental impacts of long-term spent fuel storage, analyzing three scenarios: (1) 60 years beyond the cessation of reactor operations, (2) 100 years after that period, and (3) indefinite storage where no repository is opened (i.e., the de facto repository scenario).⁴⁶⁹ Therefore, Joint Petitioners Contention 10 asserts an impermissible challenge to the Continued Storage Rule, in violation of 10 C.F.R. § 2.335, and fails to raise a genuine, material dispute with ISP’s application.

Joint Petitioners Contention 10 is not admitted.

11. Joint Petitioners Contention 11: Having No Dry Transfer System And No Radioactive Emissions Mitigation Plan For ISP’s CISF Are Impermissible Omissions Under the AEA And Must Be Addressed Under NEPA

Joint Petitioners Contention 11 states:

ISP’s plan to not have a dry transfer system (“DTS”) or other technological means of handling problems with damaged, leaking or externally contaminated [spent nuclear fuel] canisters or damaged fuel in the canisters at the WCS site, from the date of commencement of operations, contradicts the expectations of the Continued Storage GEIS, and the unanalyzed risks, and increased possibilities of

⁴⁶⁶ Id. at 117.

⁴⁶⁷ Id. at 115.

⁴⁶⁸ Friends of Capital Crescent Trail v. Fed. Transit. Admin., 877 F.3d 1051, 1055 (D.C. Cir. 2017) (citing Robertson, 490 U.S. at 530).

⁴⁶⁹ See Continued Storage GEIS at 1-13 to -15; 10 C.F.R. § 51.23(b).

minor to severe radiological accidents must be addressed in the Environmental Impact Statement. There is no plan for radiation emissions mitigation or radioactive releases at the CISF site. These refusals to contingently prepare for radiological problems at the site are a byproduct of ISP's "start clean/stay clean" policy, are unrealistic and must be addressed in the EIS as well as in licensing conditions.⁴⁷⁰

In Contention 11, Joint Petitioners claim that the lack of a dry transfer facility at ISP's proposed storage facility presents an impermissible risk under the AEA and is inadequately addressed in ISP's Environmental Report. Contention 11 asserts that a dry transfer facility is needed because canisters could become damaged through transportation,⁴⁷¹ damage to cladding during long-term storage of high burnup fuel,⁴⁷² gradual degradation of fuel assemblies and canisters, canister accidents, or attack.⁴⁷³ Contention 11 also asserts that "[t]here is no plan for radiation emissions mitigation or radioactive releases at the CISF site."⁴⁷⁴

Contention 11 is not admissible for three reasons.

First, Joint Petitioners fail to address the relevant contents of ISP's application. Although Contention 11 suggests various ways in which canisters might be damaged, neither the contention nor the referenced portions of the Alvarez report and the Thompson declaration cite, much less dispute, any portions of ISP's application that concern the proposed facility's safety analyses, aging management plans, or quality assurance programs. Nor do Contention 11 or its supporting references directly dispute how ISP proposes to address the special challenges

⁴⁷⁰ Joint Pet'rs Pet. at 118.

⁴⁷¹ Id. at 124.

⁴⁷² Id. at 120–21.

⁴⁷³ Id. at 125.

⁴⁷⁴ Id. at 118; see also id., Decl. of Dr. Gordon Thompson (Nov. 12, 2018); id., Decl. of Robert Alvarez (Oct. 23, 2018).

posed by high burnup fuel.⁴⁷⁵ Therefore, Contention 11 fails to raise a genuine dispute with ISP's application, as required by 10 C.F.R. § 2.309(f)(1)(vi).

Second, Contention 11 fails to raise a plausible scenario. NRC regulations require spent nuclear fuel to be "packaged in a manner that allows handling and retrievability without the release of radioactive materials to the environment."⁴⁷⁶ In Contention 11, Joint Petitioners speculate that, nonetheless, damaged containers might arrive at the site of the proposed storage facility in violation of NRC regulations and, in the absence of repackaging capability, create various dangers.⁴⁷⁷

The Commission affirmed a licensing board's decision not to admit a similar contention in Private Fuel Storage.⁴⁷⁸ The State of Utah had proffered a contention claiming that a canister "improperly constructed or improperly sealed" could be shipped to the proposed storage facility and cause harm.⁴⁷⁹ Because the NRC had generically determined that an accidental canister breach is not credible,⁴⁸⁰ the Commission upheld the board's rejection of the contention.⁴⁸¹ Moreover, the Commission ruled that Utah (like Joint Petitioners here) had improperly failed to focus on and challenge implementation of NRC-approved quality assurance programs—those very programs that ensure a transportation accident or canister breach is not credible.⁴⁸²

⁴⁷⁵ See, e.g., ISP License Application, Chapter 13 at Attach. A, Proposed License Conditions.

⁴⁷⁶ 10 C.F.R. § 72.122(h)(5).

⁴⁷⁷ Joint Pet'rs Pet. at 124–25.

⁴⁷⁸ Private Fuel Storage, CLI-04-22, 60 NRC at 136–37.

⁴⁷⁹ Id.

⁴⁸⁰ See Final Rule, Emergency Planning Licensing Requirements for Independent Spent Fuel Storage Facilities (ISFSI) and Monitored Retrievable Storage Facilities (MRS), 60 Fed. Reg. 32,430, 32,438 (June 22, 1995).

⁴⁸¹ Private Fuel Storage, CLI-04-22, 60 NRC at 137.

⁴⁸² Id. at 138.

Because Private Fuel Storage is so closely analogous to this proceeding, we must reject Joint Petitioners Contention 11 for the same reasons.⁴⁸³

Third, insofar as Contention 11 criticizes the lack of a dry transfer system because, allegedly, its absence may complicate eventual shipment of spent fuel to a permanent repository, it is an impermissible challenge to the NRC's Continued Storage Rule⁴⁸⁴ in violation of 10 C.F.R. § 2.335. Contention 11 raises concerns about canister compatibility with future transport and repository requirements for disposal.⁴⁸⁵ However, although the Continued Storage GEIS does assume that a dry storage system would be built during long-term storage (that is, within 160 years after the licensed operating life of a reactor),⁴⁸⁶ neither the GEIS nor NRC regulations require ISP to construct a dry storage system during the initial 40-year license for its proposed facility. Moreover, the Continued Storage Rule makes clear that ISP's Environmental Report is not required to evaluate the impacts of storage beyond the term of the license it is requesting.⁴⁸⁷

Joint Petitioners Contention 11 is not admitted.

12. Joint Petitioners Contention 12: ISIP|WCS Is Disqualified From And/Or Has Waived Applicability Of The Continued Storage Generic Environmental Impact Statement To the Licensing Review

Joint Petitioners Contention 12 states:

The proposed WCS CISF does not qualify for the exclusions from NEPA scrutiny conferred by the Waste Storage GEIS. Consideration of severe accidents, Environmental Justice, terrorism and sabotage and related mitigation in the

⁴⁸³ Insofar as Joint Petitioners Contention 11 addresses the impacts of a terrorist attack outside the United States Court of Appeals for the Ninth Circuit's jurisdiction, the Commission has also made clear that NEPA consideration of impacts from terrorism is necessarily outside the scope of this proceeding. See Oyster Creek, CLI-07-8, 65 NRC at 124, 128–29.

⁴⁸⁴ 10 C.F.R. § 51.23.

⁴⁸⁵ Joint Pet'rs Pet. at 121.

⁴⁸⁶ Continued Storage GEIS at 5-4 & n.2.

⁴⁸⁷ 10 C.F.R. § 51.23(b).

transportation and operations elements of the ISP/WCS CISF plan may not be treated as generic issues and excused from consideration under NEPA.⁴⁸⁸

Joint Petitioners assert five separate arguments allegedly in support of Contention 12:

(1) the proposed facility is not legally authorized;⁴⁸⁹ (2) because the proposed facility differs significantly from the assumptions in the Continued Storage GEIS, ISP is disqualified from relying on the Continued Storage Rule;⁴⁹⁰ (3) the Texas Commission on Environmental Quality (TCEQ) concedes that the proposed project is site-specific;⁴⁹¹ (4) the NRC's Continued Storage Rule does not apply to ISFSIs;⁴⁹² and (5) ISP's financing mechanism for its proposed interim storage facility "diverges sharply from the [Private Fuel Storage Facility] Prototype of the GEIS."⁴⁹³ None supports an admissible contention.

First, as explained supra, both the Commission and the United States Court of Appeals for the District of Columbia Circuit have already determined that the NRC has statutory authority under the AEA to issue away-from-reactor spent fuel storage installation licenses.⁴⁹⁴

Joint Petitioners' second, third, and fourth assertions all wrongly claim that ISP's application may not rely on the Continued Storage Rule and Continued Storage GEIS because of design differences between ISP's proposed facility and the Continued Storage GEIS's model. The Continued Storage GEIS acknowledges that not all facilities will be a replica of the "assumed generic facility" on which its analyses are based. Where there are differences, the GEIS mandates an independent evaluation of the environmental impacts of the proposed

⁴⁸⁸ Joint Pet'rs Pet. at 127.

⁴⁸⁹ Id. at 127–28.

⁴⁹⁰ Id. at 128–31.

⁴⁹¹ Id. at 131–33.

⁴⁹² Id. at 133.

⁴⁹³ Id. at 133–34.

⁴⁹⁴ See Private Fuel Storage, CLI-02-25, 56 NRC at 392; Bullcreek, 359 F.3d at 543.

facility—especially as to “size, operational characteristics, and location of the facility.”⁴⁹⁵ Where there are differences between the GEIS analyses and the proposed WCS storage facility, those analyses are addressed in ISP’s Environmental Report’s Chapter 4 and in its emergency response mitigation measures in Chapter 5. Joint Petitioners do not dispute any of these chapters, and therefore raise no genuine dispute with the application, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Finally, insofar as Joint Petitioners claims concerning financing are all rooted in a belief that “ISP’s proposal involves a funding stream from DOE for which there is no federal statutory authorization,”⁴⁹⁶ those concerns have been mooted. As explained supra, ISP has expressly acknowledged that, as the law now stands, it cannot contract with DOE to store private utilities’ spent fuel,⁴⁹⁷ and likewise ISP has withdrawn its request for an exemption from the NRC’s regulations regarding financing.

Joint Petitioners Contention 12 is not admitted.⁴⁹⁸

13. Joint Petitioners Contention 13: Any Anticipated Nuclear Reprocessing Activity Must Be Disclosed In The EIS And Included in Cumulative Effects Analysis

Joint Petitioners Contention 13 states:

The WCS CISF, by aggregating [spent nuclear fuel] in west Texas, would provide a stockpile of spent fuel for purposes of reprocessing. The return of spent fuel reprocessing is supported by the Texas Commission on Environmental Quality. The radioactively dangerous industrial activity of reprocessing must be addressed, analyzed and disclosed in a discussion of cumulative environmental impacts of the [spent nuclear fuel] waste storage project.⁴⁹⁹

⁴⁹⁵ Continued Storage GEIS at 5-2.

⁴⁹⁶ Joint Pet’rs Pet. at 134

⁴⁹⁷ ISP June 28, 2019 Response to Board; Tr. at 44.

⁴⁹⁸ Because we would reach the same decision even if we consider Joint Petitioners’ reply, we deny as moot ISP’s motion to strike insofar as it pertains to portions of the reply that concern Joint Petitioners Contention 12.

⁴⁹⁹ Joint Pet’rs Pet. at 134–35.

Joint Petitioners assert that nuclear reprocessing is a “strong possibility” that must be discussed under NEPA as a cumulative impact of ISP’s proposed project.⁵⁰⁰ As evidence, Joint Petitioners rely on “a 2015 slide show given by a Holtec representative to the New Mexico State Legislature;”⁵⁰¹ a 2017 Los Angeles Times article;⁵⁰² a 2008 “Draft Global Nuclear Energy Partnership Programmatic Environmental Impact Statement [GNEP]” published by DOE;⁵⁰³ a 2014 report by the TCEQ;⁵⁰⁴ and a 2018 DOE request for public comment on DOE’s interpretation of the definition of high-level waste as set forth in the AEA and NWPA.⁵⁰⁵

Joint Petitioners claim that NEPA requires a cumulative impacts analysis of reprocessing spent nuclear fuel at the proposed facility because such action “falls within the realm of ‘cumulative actions’ delineated in the CEQ regulations.”⁵⁰⁶ Joint Petitioners contend that reprocessing activities have “business community support” and backing from the TCEQ,⁵⁰⁷ which characterized these activities as “a fine idea.”⁵⁰⁸ Joint Petitioners allege that, once the

⁵⁰⁰ Tr. at 129.

⁵⁰¹ Joint Petr’s Pet. at 135.

⁵⁰² Id. (quoting an Eddy-Lea Energy Alliance member saying “[w]e believe if we have an interim storage site, we will be the center for future nuclear fuel reprocessing”).

⁵⁰³ Id. at 136.

⁵⁰⁴ Id. at 137 (citing ER Attach. 1-2, [TCEQ], “Assessment of Texas’s High Level Radioactive Waste Storage Options” (Mar. 2014)).

⁵⁰⁵ Id. at 137–38 (citing Request for Public Comment on the U.S. Department of Energy Interpretation of High-Level Radioactive Waste, 83 Fed. Reg. 50,909, 50,909–50,910 (Oct. 10, 2018) (soliciting public input on a reinterpretation of the AEA so that wastes generated from nuclear reprocessing activities would no longer be considered high-level waste if the waste does not exceed concentration limits for Class C LLRW as set out in 10 C.F.R. § 61.55; or does not require disposal in a deep geologic repository and meets the performance objectives of a disposal facility as demonstrated through a performance assessment conducted in accordance with applicable regulatory requirements)).

⁵⁰⁶ Id. at 140 (citing 40 C.F.R. § 1508.7).

⁵⁰⁷ Joint Petr’s Pet. at 135, 137–38.

⁵⁰⁸ Tr. at 127.

proposed project begins operation, reprocessing activities will create cumulative environmental impacts that should be discussed under NEPA.⁵⁰⁹

Although Joint Petitioners correctly state that “[u]nder NEPA, an EIS ‘must analyze not only the direct impacts of a proposed action, but also the indirect and cumulative impacts of ‘past, present, and reasonably foreseeable future actions,’”⁵¹⁰ this requirement has limits. An EIS must include other related actions only when those actions have been formally proposed and are pending before an agency.⁵¹¹ Consistent with NEPA’s “rule of reason,” the Commission has held that projects that are merely contemplated and not concrete or reasonably certain do not warrant consideration in a cumulative impact analysis.⁵¹²

Joint Petitioners Contention 13 does not create a genuine dispute with the application because ISP is not asking to conduct reprocessing activities in this licensing action. We agree with the NRC Staff that, at most, the evidence proffered by Joint Petitioners “reflects speculation about the potential for (or benefits of) future reprocessing activities.”⁵¹³ Joint Petitioners’ contention relies on mere conjecture and does not identify a pending proposal for a reprocessing facility that would meet the Commission’s standard for materiality. For these reasons, Joint Petitioners have failed to demonstrate a genuine dispute with ISP’s application.⁵¹⁴

⁵⁰⁹ Joint Petr’s Pet. at 138.

⁵¹⁰ Id. (quoting Colo. Env’tl. Coal. v. Dombeck, 185 F.3d 1162, 1176 (10th Cir. 1999)).

⁵¹¹ Kleppe, 427 U.S. at 410 & n.20 (indicating that while NEPA addresses proposed actions, it does not mandate that an agency contemplate the possible environmental impacts of less imminent activities).

⁵¹² Duke Energy Corp. (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-14, 55 NRC 278, 295 (2002). The Commission reiterated that a possible future action must “be in a sufficiently advanced stage to be considered a ‘proposal’ for action that ‘bring[s] NEPA into play.’” Strata Energy, Inc. (Ross In Situ Uranium Recovery Project), CLI-16-13, 83 NRC 566, 577 (2016) (quoting McGuire/Catawba, CLI-02-14, 55 NRC at 295).

⁵¹³ NRC Consol. Answer at 69.

⁵¹⁴ 10 C.F.R. § 2.309(f)(1)(vi).

Joint Petitioners Contention 13 is not admitted.⁵¹⁵

14. Joint Petitioners Contention 14: NEPA Requires Significant Security Risk Analyses for the Spent Nuclear Fuel and Greater-Than-Class-C Wastes Proposed for Interim Storage, And Associated Transportation Component, at ISP/WCS's Texas Facility

Joint Petitioners Contention 14 states:

The NRC should, under NEPA, consider the risks, impacts and safety/security arrangements for the ISP/WCS CISF [spent nuclear fuel] transportation effort, given the long historical record and experience derived from research and litigation over the proposed Yucca Mountain geologic facility. There is a constantly-changing threat environment that radiological shipments to waste storage facilities such as ISP/WCS and a consequent need to plan for an evolving variety of design-basis threats (DBTs) and beyond-design-basis-events (BDBE). In-transit risks are a central part of the equation and need to be addressed. To “stock” the ISP CISF with [spent nuclear fuel] and GTCC wastes, the materials must be transported there, and the lack of details on waste conveyance in the WCS Environmental Report belies the centrality of transportation to the implementation of the project.⁵¹⁶

Joint Petitioners claim that ISP's Environmental Report should contain an analysis for terrorist attacks as a “not so remote and highly speculative” environmental impact, consistent with the United States Court of Appeals for the Ninth Circuit's decision in San Luis Obispo Mothers for Peace v. NRC.⁵¹⁷

In San Luis Obispo Mothers for Peace, the Ninth Circuit held “that it was unreasonable for the NRC to categorically dismiss the possibility of terrorist attack on the Storage Installation . . . as too remote and highly speculative to warrant consideration under NEPA.”⁵¹⁸ And, although Joint Petitioners acknowledge that Texas is not within the Ninth Circuit,⁵¹⁹ they

⁵¹⁵ Because we would reach the same decision even if we considered Joint Petitioners' reply, we deny as moot ISP's motion to strike insofar as it pertains to portions of the reply concerning Joint Petitioners Contention 13.

⁵¹⁶ Joint Pet'rs Pet. at 142. Although characterized as the basis for Contention 14, this statement appears to be what Joint Petitioners intend to litigate as their contention.

⁵¹⁷ Id. at 150 (quoting San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016, 1032 (9th Cir. 2006)).

⁵¹⁸ San Luis Obispo Mothers for Peace, 449 F.3d at 1030 (internal quotations omitted).

⁵¹⁹ Joint Pet'rs Reply at 56.

claim that because “hundreds of [spent nuclear fuel] transport trips” will come through “the Ninth Circuit’s geographical area” en route to Texas, Ninth Circuit law must be applied and thus ISP must conduct a terrorism analysis in its Environmental Report.⁵²⁰

As explained supra, the Commission takes the position (as upheld by the United States Court of Appeals for the Third Circuit⁵²¹) that for all licensing actions outside the Ninth Circuit, “NEPA does not require the NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities.”⁵²² Unless the proposed facility would be located in one of the nine states in the Ninth Circuit, no terrorism analysis under NEPA is required. ISP’s facility would be constructed in Texas, which is in the Fifth Circuit. ISP’s Environmental Report accordingly need not conduct an analysis concerning terrorism under NEPA. Contention 14 is therefore outside the scope of this proceeding.⁵²³

Joint Petitioners Contention 14 is not admitted.

15. Joint Petitioners Contention 15: Adoption of Sierra Club Contentions By Joint Petitioners

Joint Petitioners Contention 15 states:

Pursuant to 10 C.F.R. § 2.309(f)(3), Joint Petitioners move to adopt all contentions filed by Sierra Club in this proceeding and to re-allege them as their own as if written herein.⁵²⁴

To adopt a contention, a participant must (1) demonstrate standing and (2) have proffered its own admissible contention.⁵²⁵ Because Joint Petitioners have not proffered an admissible contention, they cannot adopt Sierra Club’s admissible contention.

Joint Petitioners Contention 15 is not admitted.

⁵²⁰ Id.

⁵²¹ N.J. Dep’t of Env’tl. Prot., 561 F.3d at 142–43.

⁵²² Oyster Creek, CLI-07-8, 65 NRC at 129.

⁵²³ 10 C.F.R. § 2.309(f)(1)(iii).

⁵²⁴ Joint Pet’rs Pet. at 159.

⁵²⁵ See Indian Point, CLI-01-19, 54 NRC at 132–33.

D. Fasken

1. Fasken's Referred Contention

Before it submitted contentions in response to this proceeding's Federal Register notice, Fasken also filed a motion with the Commission to dismiss both this proceeding and the Holtec proceeding.⁵²⁶ SECY denied Fasken's motion to dismiss, and referred it for review under the NRC's contention admissibility standards.⁵²⁷

Fasken's Referred Contention states:

The NRC lacks jurisdiction over the [application] because [it is] premised on the proposition that the U.S. Department of Energy ("DOE") will be responsible for the spent fuel that would be transported to and stored at the proposed [facility]. This premise is prohibited under the NWPA because the DOE is precluded from taking title to spent fuel until a permanent repository is available. 42 U.S.C. §§ 10222(a)(5)(A), 10143.

The NRC's acceptance and processing of the [application] conflicts with the essential predicate that a permanent repository be available before licensure of a CISF. Further, processing the subject applications implies that the NRC disregards the NWPA's unambiguous requirement that spent fuel remain owned by and is the responsibility of reactor licensees until a permanent repository is available. The logic that underpins the plain language of the NWPA's requirement for a functioning permanent repository is effectively vitiated by processing [this application]. Movants contend the CISF [applicant] should be required to show cause why [its application does] not constitute a violation of the NWPA since no permanent repository for spent nuclear fuel exists in the United States. Processing [the application] to licensure under the present circumstances invites the situation Congress was attempting to avoid because licensure of a CISF without an available permanent repository contradicts the NWPA's objective to establish a permanent repository. The prospect that any CISF will become a de facto permanent repository is precisely what the NWPA intends to avoid.⁵²⁸

⁵²⁶ Fasken Motion to Dismiss at 1–8.

⁵²⁷ Order Denying Motions to Dismiss at 2–3.

⁵²⁸ Fasken Motion to Dismiss at 1–2.

Fasken's contention is similar to Beyond Nuclear's contention. However, it relies solely upon Beyond Nuclear's filings and incorporates by reference "the arguments and authorities in the Beyond Nuclear Inc. motion to dismiss at sections IV, V and VI."⁵²⁹

The Commission has approved the incorporation of contentions of other petitioners by reference, but only for those who have demonstrated standing and have submitted an admissible contention themselves.⁵³⁰ The Commission also cautioned: "Nor will we permit wholesale incorporation by reference by a petitioner who, in a written submission, merely establishes standing and attempts, without more, to incorporate the issues of other petitioners."⁵³¹

Although Fasken demonstrates standing, Fasken merely relies upon the arguments made in Beyond Nuclear's lone contention, which does not comport with the Commission's caveat in Indian Point. For this reason (and for the reasons we do not admit Beyond Nuclear's contention supra), Fasken's referred contention is rejected.

Fasken's referred contention is not admitted.

2. Fasken Contention 1

Fasken Contention 1 states:

The applicant's proposed CISF is not needed to ensure safe storage of [spent nuclear fuel], even for indefinite durations.⁵³²

Fasken challenges the purpose and need statement in section 1.1 of ISP's Environmental Report.⁵³³ Fasken claims that ISP's statement that its proposed facility will be a "safer and more secure centralized storage location" conflicts with the Continued Storage

⁵²⁹ Id. at 7.

⁵³⁰ Indian Point, CLI-01-19, 54 NRC at 132.

⁵³¹ Id. at 133.

⁵³² Fasken Pet. at 9.

⁵³³ Id.

GEIS.⁵³⁴ Fasken also claims that ISP's application does not comply with three alleged requirements: (1) ISP has not shown that its CISF will further the cause of establishing a permanent repository;⁵³⁵ (2) ISP "has not addressed the statutory requirement that construction of a CISF may not commence before a license for a permanent repository has been issued;"⁵³⁶ and (3) ISP fails to demonstrate that its WCS CISF will not become a de facto repository.⁵³⁷

None of Fasken's claims supports an admissible contention.

First, as explained supra, ISP's assertion of enhanced safety is not in conflict with the Continued Storage GEIS, which concludes that spent fuel may be stored safely, but does not favor one method of storage over another. Moreover, the purpose and need section of ISP's Environmental Report sets forth potential benefits that are unrelated to enhanced safety, such as freeing up decommissioned sites for other uses and avoiding the costs of maintaining spent fuel at multiple sites throughout the country.⁵³⁸

Second, Fasken does not identify any requirement for ISP to demonstrate that its proposed facility will further the cause of eventually establishing a permanent repository.

Third, Fasken is mistaken in claiming that construction of a CISF may not commence before the NRC licenses a permanent repository. The NWPA bars DOE from constructing a monitored retrieval storage facility before the NRC licenses construction of a repository,⁵³⁹ but does not prohibit a private company from seeking a license to construct a CISF at any time.

⁵³⁴ Id.

⁵³⁵ Id. at 13.

⁵³⁶ Id. at 14.

⁵³⁷ Id. at 13.

⁵³⁸ ER at 1-5 to -6.

⁵³⁹ 42 U.S.C. § 10168(d)(1).

Finally, we reject Fasken's claim that ISP must demonstrate that the WCS site will not become a de facto repository for the same reasons we have rejected similar claims in Sierra Club Contention 5 and Joint Petitioners Contention 10, discussed supra.

Fasken's Contention 1 is not admitted.⁵⁴⁰

3. Fasken Contention 2

Fasken Contention 2 states:

ISP's SAR fails to provide adequate data regarding active and abandoned oil and gas wells and borings on and near the WCS site, contrary to the requirements of 10 C.F.R. § 72.103.⁵⁴¹

Supported by the declaration of Aaron Pachlhofer, a geologist employed by Fasken, Fasken Contention 2 claims that ISP's SAR fails to address a total of 4,579 well bores in Texas and New Mexico within a 10-mile radius of the WCS site,⁵⁴² as allegedly required by 10 C.F.R. § 72.103.⁵⁴³ However, Fasken Contention 2 ignores portions of ISP's application that concern compliance with section 72.103, and does not identify a requirement for additional discussion of the well bores within a 10-mile radius of the proposed site.

Fasken Contention 2 is premised on an alleged violation of 10 C.F.R. § 72.103(a)(1), which states:

East of the Rocky Mountain Front (east of approximately 104° west longitude), except in areas of known seismic activity including but not limited to the regions around New Madrid, MO; Charleston, SC; and Attica, NY; sites will be acceptable if the results from onsite foundation and geological investigation, literature review, and regional geological reconnaissance show no unstable geological characteristics, soil stability problems, or potential for vibratory ground motion at the site in excess of an appropriate response spectrum anchored at 0.2 g.

⁵⁴⁰ Because we would reach the same decision even if we consider Fasken's replies, we deny as moot ISP's motion to strike insofar as it pertains to portions of the replies that concern Fasken Contention 1.

⁵⁴¹ Fasken Pet. at 15.

⁵⁴² At oral argument, Fasken's counsel corrected the claimed number to be 4,579. Tr. at 324.

⁵⁴³ Fasken Pet. at 16.

The investigation ISP performed to satisfy this provision is described in numerous sections of its SAR and related attachments.⁵⁴⁴ Fasken fails to challenge these portions of ISP's application, which evaluate and reach the conclusions required by section 72.103(a)(1).

For example, although Fasken claims that "ISP's SAR fails to admit the presence of nearly 5,000 wells located within 10 miles of the site,"⁵⁴⁵ SAR section 2.1 reflects ISP's consideration of local land uses, including "drilling for and production from oil and gas wells." It cannot be said that ISP ignored oil and gas wells. Absent some demonstration that such wells would affect the consideration of "unstable geological characteristics, soil stability problems, or potential for vibratory ground motion at the site" that is required by section 72.103(a)(1)—and Fasken has provided none—we are not aware of any requirement to further enumerate or list wells within any specific radius of the site.

Fasken ignores other relevant discussion in ISP's application. For example, ISP's application states:

Subsurface petroleum product exploration and production have been conducted in the area of the Central Basin Platform for over 75 years. The local area has been heavily explored for oil and gas reserves over the last 35 years. Most of the oil wells in the vicinity of the CISF site have been abandoned or are in the process of secondary or tertiary recovery. The absence of oil wells on the site supports the absence of favorable conditions for oil production. Oil and gas wells are also located to the west in New Mexico.⁵⁴⁶

Most importantly, insofar as Fasken claims that oil and gas wells are inducing seismic activity, Fasken ignores ISP's conclusion that any such effects pose little risk. SAR Section 2.6.2 states: "The absence of late-Quaternary faulting and the low to moderate rate of

⁵⁴⁴ See, e.g., SAR section 2.1 (describing the geography and demography of the site); section 2.6, which is entitled "Geology and Seismology," and includes subsections 2.6.1 (Basic Geologic and Seismic Information), 2.6.2 (Vibratory Ground Motion), 2.6.3 (Surface Faulting), 2.6.4 (Stability of Subsurface Materials), 2.6.5 (Slope Stability), and 2.6.6 (Volcanism); and SAR Attachments D (Seismic Hazard Evaluation for WCS CISF) and E (Geotechnical Investigation for WCS CISF).

⁵⁴⁵ Fasken Pet. at 17.

⁵⁴⁶ ISP License Application at 12-2 (emphasis added).

background seismicity, even that associated with petroleum recovery activities, results in relatively low seismic hazard at the WCS CISF.” Fasken likewise fails to acknowledge or challenge the extensive evaluation of induced seismicity from oil and gas activities in section 4.3 of Attachment D to the SAR. Although Attachment D is proprietary, as explained supra all petitioners had the opportunity to seek access, but Fasken failed to do so.

Nor has Fasken identified any plausible impact from oil and gas wells that might affect ISP’s proposed facility. As ISP points out, the proposed site boundary includes but a single dry hole, and all but a handful of the 4,579 well bores Fasken claims are within a 10-mile radius are miles away.⁵⁴⁷

Additionally, insofar as Fasken claims that “these abandoned wells should be analyzed as potential pathways to groundwater,”⁵⁴⁸ it likewise ignores—and therefore fails to address—the multiple explanations in ISP’s application as to why groundwater contamination is not an issue. For example, SAR section 2.7 states: “The method of storage (dry cask), the nature of the storage casks, the extremely low permeability of the red bed clay and the depth to groundwater beneath the WCS CISF preclude the possibility of groundwater contamination from the operation of the WCS CISF.”

Because Fasken fails to acknowledge or address the relevant portions of ISP’s application, and because it also fails to provide factual or legal support for its claims, Fasken Contention 2 does not satisfy 10 C.F.R. § 2.309(f)(1)(v) and (vi).⁵⁴⁹

⁵⁴⁷ ISP Answer to Fasken at 38.

⁵⁴⁸ Fasken Pet. at 17.

⁵⁴⁹ For its part, initially the NRC Staff would have had us admit Fasken Contention 2 insofar as it challenges the impact of wells on site stability, but not as to potential groundwater contamination. NRC Staff Answer to Fasken at 16–17. At oral argument, however, the Staff announced that its position has changed. Tr. at 198. In light of ISP’s response to RAI-2.2-2, which expanded ISP’s discussion of gas and oilfield operations in the vicinity of the propose facility, the Staff now considers Fasken Contention 2 to be moot and inadmissible in its entirety. Tr. at 198.

Fasken Contention 2 is not admitted.⁵⁵⁰

4. Fasken Contention 3

Fasken Contention 3 states:

The Applicant's Emergency Response Plan (ERP) fails to address how licensee will protect the facility from credible fire and explosion effects including those that are caused by aircraft crashes.⁵⁵¹

Contention 3 claims that ISP's emergency response plan fails to establish that its proposed storage facility will effectively perform its safety functions under all credible fire and explosion conditions, as required by 10 C.F.R. § 72.122(c).⁵⁵² The contention is not admissible, primarily because Fasken misunderstands the regulatory requirements for emergency response plans, and therefore fails to address, much less dispute, the sections of ISP's application that actually concern the matters Fasken raises.

Specifically, Fasken claims that ISP does not satisfy 10 C.F.R. § 72.122(c), which states that "[s]tructures, systems and components important to safety must be designed and located so that they can continue to perform their safety functions effectively under credible fire and explosion exposure conditions."⁵⁵³ Section § 72.122(c) is a facility design requirement. In contrast, an applicant's emergency response plan must address the requirements of 10 C.F.R. § 72.32, which concerns the applicant's response to onsite emergencies.

Apparently rooted in this fundamental confusion, Fasken repeatedly fails to acknowledge where ISP's application does address the matters Fasken is concerned about, and therefore

⁵⁵⁰ Because we would reach the same decision even if we consider Fasken's replies, we deny as moot ISP's motion to strike insofar as it pertains to portions of the replies that concern Fasken Contention 2.

⁵⁵¹ Fasken Pet. at 18.

⁵⁵² Id.

⁵⁵³ Emphasis added.

Fasken Contention 3 fails to raise a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(vi).

First, ISP's grounds for complying with 10 C.F.R. § 72.122(c) are set forth in Chapter 12, "Accident Analysis,"⁵⁵⁴ which Fasken does not cite or address.

Second, citing 10 C.F.R. § 72.44(c)(1)(i), which requires that a license include technical specifications to guard against the uncontrolled release of radioactive materials, Fasken appears to wrongly assume that such specifications should appear in ISP's emergency response plan.⁵⁵⁵ In fact, they appear—as they should—in ISP's Proposed License, Appendix A,⁵⁵⁶ which Fasken does not cite or address.

Third, Fasken does not cite or address ISP's description of its fire protection system for the proposed facility, which appears in Section 4.3.8 of the SAR.

Fourth, although Fasken claims that ISP's emergency response plan fails to demonstrate compliance with "as low as reasonably achievable" (ALARA) dose rate principles, Fasken does not cite or address ISP's actual discussion of ALARA, which is found in Chapter 11 of the SAR.

In addition to Fasken's failure to address or dispute the relevant portions of ISP's application, Fasken Contention 3 also appears to be premised on a misreading of whether ISP has determined that an aircraft crash is a credible event for purposes of the design requirements of 10 C.F.R. § 72.122(c). Fasken appears to assume that all events that could trigger an emergency alert are necessarily credible events for which the facility must be designed to survive with its safety functions intact.⁵⁵⁷ They are not. For purposes of 10 C.F.R.

⁵⁵⁴ SAR at 12-1 to -9.

⁵⁵⁵ Fasken Pet. at 19.

⁵⁵⁶ See ISP License Application at App. A, Proposed Technical Specifications.

⁵⁵⁷ Fasken Pet. at 19.

§ 72.122(c), ISP sets forth in Section 12.2.2 of the SAR the credible events that could lead to such an accident from an offsite event, and they do not include aircraft crashes. Fasken does not reference or dispute this section.

Finally, separate and apart from failing to acknowledge or challenge the relevant portions of ISP's application, Fasken makes various generalized claims about the inadequacy of ISP's equipment and its inability to cope with a fire or explosion in a timely fashion. As Fasken does not support these claims with specific fact or with expert opinion, Fasken Contention 3 also fails to satisfy 10 C.F.R. § 2.309(f)(1)(v).

Fasken Contention 3 is not admitted.⁵⁵⁸

5. Fasken Contention 4

Fasken Contention 4 states:

ISP has failed to adequately discuss and evaluate the impact the proposed site will have on the environment and has also failed to include adverse information specifically relating to potential of waste-contaminated groundwater traveling to aquifers and other groundwater formations located below and around the proposed site.⁵⁵⁹

Fasken Contention 4 appears to assume that operation of the proposed facility could contaminate aquifers and other groundwater formations that underlie or surround it. In its SAR, ISP describes four independent reasons why that should not happen: "[t]he method of storage (dry casks), the nature of the canisters, the extremely low permeability of the red clay and the depth to groundwater."⁵⁶⁰

Fasken cites, but does not challenge, ISP's assessment that both the dry cask storage method and the nature of the canisters preclude any credible pathway for groundwater

⁵⁵⁸ Because we would reach the same decision even if we consider Fasken's replies, we deny as moot ISP's motion to strike insofar as it pertains to portions of the replies that concern Fasken Contention 3.

⁵⁵⁹ Fasken Pet. at 26.

⁵⁶⁰ SAR at 2-21.

contamination.⁵⁶¹ Indeed, Fasken does not even cite, much less challenge, other portions of ISP's SAR and Environmental Report in which ISP asserts that a leak of contaminants is not credible.⁵⁶²

Fasken appears to rely on the premise that a pathway to groundwater contamination could be established in the event of an impact from "large, fully-fueled aircrafts," which Fasken claims is a credible event.⁵⁶³ However, as explained in our ruling on Fasken Contention 3 supra, Fasken fails to support its assertion that an aircraft crash is a credible event. Therefore, contrary to 10 C.F.R. § 2.309(f)(1)(v), Fasken likewise fails to provide a factual basis for this same premise to Fasken Contention 4.

Because Fasken has not challenged ISP's determination that the facility's design precludes a pathway to groundwater contamination, Fasken's claims about ISP's characterization and evaluation of groundwater formation do not raise a genuine dispute on a material issue, as required by 10 C.F.R. § 2.309(f)(1)(vi). Absent a pathway to groundwater contamination, Fasken's claims are not material because their resolution would make no difference in the outcome of the licensing proceeding.

Finally, although Fasken purports to challenge ISP's compliance with the NRC's NEPA-implementing regulations in 10 C.F.R. Part 51, it addresses only ISP's SAR. Fasken does not cite to or mention, much less controvert, any portion of ISP's Environmental Report, including sections that specifically evaluate potential groundwater impacts.⁵⁶⁴

Fasken Contention 4 is not admitted.⁵⁶⁵

⁵⁶¹ Fasken Pet. at 27–28 (citing SAR at 2-21).

⁵⁶² See, e.g., SAR at 11-1 to -2, App. A.11; ER at 4-29 to -32, 6-1 to -2.

⁵⁶³ Fasken Pet. at 27–28.

⁵⁶⁴ See, e.g., ER at 3-24 to -29, 4-29 to -32.

⁵⁶⁵ Because we would reach the same decision even if we consider Fasken's replies, we deny as moot ISP's motion to strike insofar as it pertains to portions of the replies that concern Fasken Contention 4.

6. Fasken Contention 5

Fasken Contention 5 states:

The Applicant's Environmental Report (ER) discusses its assessment of the presence of threatened and endangered species. ER, sections 3.5.4–3.5.8[.] However, the ER does not adequately characterize the threatened and endangered species in the area of the proposed CISF.⁵⁶⁶

Fasken asserts that ISP's Environmental Report violates 10 C.F.R. § 51.45 because it "fail[s] to adequately evaluate the potential for the presence of threatened and endangered species and relevant conservation efforts that may be undermined by the proposed CISF," specifically concerning the dunes sagebrush lizard and lesser prairie chicken.⁵⁶⁷ Fasken claims that the Environmental Report should include the dunes sagebrush lizard's threatened status, and "discuss the efforts of the regional oil and gas community to protect the lesser prairie chicken."⁵⁶⁸ In support, Contention 5 relies on declarations from Mr. Pachlhofer, Fasken's geologist, and Mr. Taylor, president of Fasken Land and Minerals.⁵⁶⁹

At oral argument, Fasken's counsel clarified that the crux of its Contention 5 is that "there's an omission of material information rather than contradicting that which has actually been presented" in ISP's Environmental Report as to the collective efforts of the oil and gas industry protecting the dunes sagebrush lizard's and lesser prairie chicken's habitats.⁵⁷⁰

As to Fasken's claim that the Environmental Report must reflect the dunes sagebrush lizard's threatened status, there is no genuine dispute with the application. As ISP points out, neither the U.S. Fish and Wildlife Service nor the State of Texas lists the dunes sagebrush

⁵⁶⁶ Fasken Pet. at 31.

⁵⁶⁷ Id. at 31–32.

⁵⁶⁸ Id. at 32.

⁵⁶⁹ Fasken Pet. Ex. 3, Decl. of Aaron Pachlhofer; id. Ex. 1, Decl. of Tommy Taylor.

⁵⁷⁰ Tr. at 321–22, 336.

lizard as an animal requiring increased protections,⁵⁷¹ and Fasken does not proffer any legal requirement for ISP to do so.

Regarding Fasken's claim that the Environmental Report must discuss the efforts of the oil and gas companies to save and conserve the dunes sagebrush lizard, the lesser prairie chicken, and their respective habitats, Fasken Contention 5 is inadmissible for lack of the factual support required by 10 C.F.R. § 2.309(f)(1)(v). Although 10 C.F.R. § 51.45(b) does require a discussion of the affected environment and impacts to that environment by the project, including animal habitats in the area and those likely impacts upon them by the proposed action, NEPA and Part 51 do not require a discussion concerning ongoing animal conservation efforts by area oil, gas, and ranching companies.

Fasken Contention 5 is not admitted.⁵⁷²

V. RULING ON PETITIONS

As set forth above, Beyond Nuclear, Sierra Club, SEED (of Joint Petitioners), and Fasken have demonstrated standing in accordance with 10 C.F.R. § 2.309(d). Only Sierra Club has proffered an admissible contention meeting the requirements of 10 C.F.R. § 2.309(f)(1). Therefore, in accordance with 10 C.F.R. § 2.309(a), the Board denies Beyond Nuclear's, Joint Petitioners' and Fasken's respective petitions, and grants the request for hearing and petition for leave to intervene by Sierra Club. Sierra Club is admitted as a party to this proceeding.

⁵⁷¹ ISP Answer to Fasken at 70. See also Tr. at 338–39 (Fasken counsel agreeing with ISP counsel that the lesser prairie chicken is currently delisted).

⁵⁷² Although we would reach the same decision even if we consider Fasken's replies, we recognize new arguments in Fasken's replies, including a new allegation that ISP must consult with the U.S. Fish and Wildlife Service, that improperly "expand the scope of the arguments set forth" in ISP's initial petition. Palisades, CLI-06-17, 63 NRC at 732. Accordingly, we grant ISP's motion to strike insofar as it pertains to portions of the replies that concern Fasken Contention 5.

VI. ORDER

For the foregoing reasons:

- A. Beyond Nuclear's petition is denied. Beyond Nuclear's contention is not admitted.
- B. Sierra Club's petition is granted. Sierra Club Contention 13 is admitted in part. Sierra Club's other contentions are not admitted.
- C. Joint Petitioners' petition is denied. Joint Petitioners' contentions are not admitted.
- D. Fasken's petition is denied. Fasken's contentions are not admitted.
- E. ISP's motion to strike a portion of Sierra Club's reply on Sierra Club Contention 13 is denied in part and denied in part as moot. ISP's motion to strike portions of Sierra Club's reply on Sierra Club Contentions 1, 4, 9, 11, and 14 is denied as moot.⁵⁷³
- F. ISP's motion to strike a portion of Joint Petitioners' reply on Joint Petitioners Contention 9 is granted.⁵⁷⁴ ISP's motion to strike portions of Joint Petitioners' reply on Joint Petitioners Contentions 4, 12, and 13 is denied as moot.⁵⁷⁵
- G. ISP's motion to strike a portion of Fasken's replies on Fasken Contention 5 is granted.⁵⁷⁶ ISP's motion to strike portions of Fasken's replies on Fasken's standing and Fasken Contentions 1, 2, 3, and 4 is denied as moot.⁵⁷⁷
- H. The admitted contention will be adjudicated under the procedures set forth at 10 C.F.R. Part 2, Subpart L.

⁵⁷³ [ISP's] Motion to Strike Portions of the Reply Filed by Sierra Club (Dec. 27, 2018).

⁵⁷⁴ [ISP's] Motion to Strike Portions of the Reply Filed by [Joint Petitioners] (Dec. 27, 2018) at 5–7.

⁵⁷⁵ Id. at 4–5, 7.

⁵⁷⁶ [ISP's] Motion to Strike Portions of the Replies Filed by [Fasken] (Dec. 10, 2018) at 5, 10.

⁵⁷⁷ Id. at 5–10.

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/

Nicholas G. Trikouros
ADMINISTRATIVE JUDGE

/RA/

Dr. Gary S. Arnold
ADMINISTRATIVE JUDGE

Rockville, Maryland
August 23, 2019

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
INTERIM STORAGE PARTNERS LLC) Docket No. 72-1050-ISFSI
)
(WCS Consolidated Interim Storage Facility))
)

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **MEMORANDUM AND ORDER (Ruling on Petitions for Intervention and Requests for Hearing) (LBP-19-07)** have been served upon the following persons by the Electronic Information Exchange:

U.S. Nuclear Regulatory Commission
Atomic Safety and Licensing Board Panel
Mail Stop: T-3F23
Washington, DC 20555-0001

Paul S. Ryerson, Chair
Administrative Judge
E-mail: paul.ryerson@nrc.gov

Nicholas G. Trikouros
Administrative Judge
E-mail: nicholas.trikouros@nrc.gov

Dr. Gary S. Arnold
Administrative Judge
E-mail: gary.arnold@nrc.gov

Joseph McManus, Law Clerk
Taylor Mayhall, Law Clerk
Molly Mattison, Law Clerk
E-mail: joseph.mcmanus@nrc.gov
taylor.mayhall@nrc.gov
molly.mattison@nrc.gov

U.S. Nuclear Regulatory Commission
Office of Commission Appellate Adjudication
Mail Stop: O16-B33
Washington, DC 20555-0001
E-mail: ocaamail@nrc.gov

U.S. Nuclear Regulatory Commission
Office of the Secretary of the Commission
Mail Stop: O16-B33
Washington, DC 20555-0001
Hearing Docket
E-mail: Hearing.Docket@nrc.gov

U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop - O-14A44
Washington, DC 20555-0001
Joe Gillespie, Esq.
Sara Kirkwood, Esq.
Mauri Lemoncelli, Esq.
Patrick Moulding, Esq.
Carrie Safford, Esq.
Thomas Steinfeldt
Alana Wase, Esq.
Brian Newell, Senior Paralegal
E-mail: joe.gillespie@nrc.gov
sara.kirkwood@nrc.gov
mauri.lemoncelli@nrc.gov
patrick.moulding@nrc.gov
carrie.safford@nrc.gov
thomas.steinfeldt@nrc.gov
alana.wase@nrc.gov

**Docket No. 72-1050-ISFSI
MEMORANDUM AND ORDER (Ruling on Petitions for Intervention and Requests for
Hearing) (LBP-19-07)**

Counsel for Beyond Nuclear

Diane Curran, Esq.
Harmon, Curran, Spielberg and Eisenberg
1725 DeSales Street NW, Suite 500
Washington, DC 20036
E-mail: dcurran@harmoncurran.com

Mindy Goldstein, Esq.
Emory University School of Law
Turner Environmental Law Clinic
1301 Clifton Road
Atlanta, GA 30322
E-mail: magolds@emory.edu

Diane D'Arrigo
Nuclear Information and
Resource Service (NIRS)
6930 Carroll Avenue
Suite 340
Takoma Park, MD 20912
Email: dianed@nirs.org

Chris Hebner, Esq.
City of San Antonio, TX
P.O. Box 839966
San Antonio, TX 78283
E-mail: chris.hebner@sanantonio.gov

Counsel for Fasken Land and Oil and
Permian Basin Land and Royalty Owners
Robert V. Eye Law Office, L.L.C.
Robert Eye, Esq.
Timothy Laughlin
4840 Bob Billings Parkway, Suite 1010
Lawrence, KS 66049
E-mail: bob@kauffmaneye.com
tijay1300@gmail.com

Karen D. Hadden
Executive Director,
Sustainable Energy and
Economic Development (SEED) Coalition
605 Carismatic Lane
Austin, TX 78748
E-mail: karendhadden@gmail.com

Counsel for Interim Storage Partners LLC
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue NW
Washington, DC 20004
Timothy Matthews, Esq.
Ryan Lighty, Esq.
Paul Bessette, Esq.
E-mail: timothy.matthews@morganlewis.com
ryan.lighty@morganlewis.com
paul.bessette@morganlewis.com

Counsel for Sierra Club
Wallace Taylor
4403 1st Avenue S.E.
Suite 402
Cedar Rapids, IA 52402
E-mail: wtaylorlaw@aol.com

Counsel for Don't Waste Michigan, et al
Terry Lodge, Esq.
316 N. Michigan Street
Suite 520
Toledo, OH 43604
E-mail: tjlodge50@yahoo.com

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

Dated at Rockville, Maryland,
this 23rd day of August, 2019