

**UNITED STATES COURT OF APPEALS FOR THE
DISTRICT OF COLUMBIA CIRCUIT**

BEYOND NUCLEAR, INC.,)	
)	
Petitioner,)	Case No. _____
)	
v.)	
)	
UNITED STATES NUCLEAR REGULATORY COMMISSION and the UNITED STATES OF AMERICA,)	
)	
Respondents.)	
)	

PETITION FOR REVIEW

Pursuant to 42 U.S.C. § 2239, 28 U.S.C. § 2344, 5 U.S.C. § 702, 42 U.S.C. § 10139, Fed. R. App. P. 15(a), and D.C. Cir. Rule 15(a), Petitioner Beyond Nuclear, Inc., through its undersigned counsel, hereby petitions for review of the following orders by the United States Nuclear Regulatory Commission (the “NRC” or “Commission”):

- A Commission Order issued on October 29, 2018 (“2018 Order”) (attached as Exhibit A) and
- Memorandum and Order CLI-20-14, issued on December 17, 2020 (“CLI-20-14”) (attached as Exhibit B).

Petitioner seeks review of the 2018 Order and CLI-20-14 on the grounds

that they violate the Nuclear Waste Policy Act (“NWPA”), 42 U.S.C. §§ 10222(a)(5)(A) and 10143, and the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 706(2)(A) and (C). Petitioner contends that in the 2018 Order, the NRC violated the NWPA and the APA by refusing to dismiss an administrative proceeding that contemplated issuance of a license permitting federal ownership of used reactor fuel at a commercial fuel storage facility. Petitioner also contends that the NRC violated the NWPA and the APA in CLI-20-14 by ruling that the application under review in the proceeding was lawful and by refusing to grant Petitioner a hearing on the question of whether the NRC is prohibited by the APA from issuing a license that contains provisions that would violate the NWPA if implemented.

Accordingly, Petitioner respectfully requests this Court review, reverse, and vacate the 2018 Order and CLI-20-14, order the dismissal of the license application under review, and grant any other remedies that may be appropriate.

This filing is timely because it is made within the 60-day period established by the Hobbs Act, 28 U.S.C. § 2344, for bringing a petition for judicial review of a final agency action. CLI-20-14, the final order against Beyond Nuclear in this proceeding, was decided within the last 60 days. CLI-20-14 also renders final all other orders issued against Beyond Nuclear in the underlying proceeding,

including the 2018 Order. Venue is appropriate within the D.C. Circuit pursuant to 28 U.S.C. § 2343.

Respectfully Submitted,

____/signed electronically by/____

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February 10, 2021

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

)	
In the Matters of)	
)	
)	
HOLTEC INTERNATIONAL)	Docket No. 72-1051
)	
(HI-STORE Consolidated Interim Storage)	
Facility))	
)	
)	
INTERIM STORAGE PARTNERS LLC)	Docket No. 72-1050
)	
(WCS Consolidated Interim Storage Facility))	
)	
)	

ORDER

On July 16, 2018, the NRC provided notice in the *Federal Register* of Holtec International's application to construct and operate a consolidated interim storage facility for spent nuclear fuel.¹ Separately, on August 29, 2018, the NRC provided notice in the *Federal Register* of Interim Storage Partners' application to construct and operate a consolidated interim storage facility for spent nuclear fuel.²

On September 14, 2018, Beyond Nuclear, Fasken Land and Minerals, and Permian Basin Land and Royalty Owners filed motions to dismiss both the Holtec and Interim Storage Partners applications.³ These groups argue that the NRC cannot, as a threshold matter, issue

¹ Holtec International HI-STORE Consolidated Interim Storage Facility for Interim Storage of Spent Nuclear Fuel, 83 Fed. Reg. 32,919 (July 16, 2018).

² Interim Storage Partner's Waste Control Specialists Consolidated Interim Storage Facility, 83 Fed. Reg. 44,070 (Aug. 29, 2018), corrected, 83 Fed. Reg. 44,608 (Aug. 31, 2018) (noting that the correct deadline to file intervention petitions is October 29, 2018). Interim Storage Partners is a joint venture of Orano USA and Waste Control Specialists.

³ Beyond Nuclear filed its own motion to dismiss. *Beyond Nuclear, Inc.’s Motion to Dismiss Licensing Proceedings for Hi-Store Consolidated Interim Storage Facility and WCS Consolidated Interim Storage Facility for Violation of the Nuclear Waste Policy Act* (Sept. 14,

licenses to Holtec or Interim Storage Partners because both applications are contrary to the Nuclear Waste Policy Act (NWPAA). Specifically, the groups argue that both applications contemplate the storage of Department of Energy-titled spent fuel in violation of various NWPAA provisions.

The NRC's regulations allow interested persons to file petitions to intervene and requests for hearing in which they can raise concerns regarding a particular license application. These regulations do not, however, provide for the filing of threshold "motions to dismiss" a license application; instead, interested persons must file petitions to intervene and be granted a hearing. I therefore deny both motions to dismiss on procedural grounds, without prejudice to the underlying merits of the legal arguments embedded within the motions.

Beyond Nuclear also filed hearing petitions in the Holtec and Interim Storage Partners proceedings that incorporated by reference the NWPAA arguments that it raised in its motion to dismiss and identified those arguments as proposed contentions.⁴ I am separately referring these hearing requests—as well as other hearing requests challenging the applications—to the Atomic Safety and Licensing Board Panel (ASLBP) for the establishment of a Board to consider *all* hearing requests in accordance with the hearing procedures set forth in 10 C.F.R. §2.309. And, in accordance with 10 C.F.R. § 2.346(i), I am referring the motion from Fasken Land and

2018) (ADAMS Accession No. ML18257A318). Fasken Land and Minerals joined with Permian Basin Land and Royalty Owners to file a motion to dismiss that is substantially similar to Beyond Nuclear's motion. *Motion of Fasken Land and Minerals and Permian Basin Land and Royalty Owners to Dismiss Licensing Proceedings for Hi-Store Consolidated Interim Storage Facility and WCS Consolidated Interim Storage Facility* (Sept. 14, 2018) (ML18257A330). Both the NRC Staff and respective applicants filed oppositions to the motions, and Beyond Nuclear, Fasken Land and Minerals, and Permian Basin Land and Royalty Owners then filed replies.

⁴ *Beyond Nuclear, Inc.'s Hearing Request and Petition to Intervene* (Sept. 14, 2018) (ML18257A324) (Holtec docket); *Beyond Nuclear, Inc.'s Hearing Request and Petition to Intervene* (Oct. 3, 2018) (ML18276A242) (Interim Storage Partners docket). Fasken Land and Minerals and Permian Basin Land and Royalty Owners have not filed related hearing petitions in either docket.

Minerals and Permian Basin Land and Royalty Owners to the ASLBP for consideration under § 2.309.

This Order is issued under my authority in 10 C.F.R. § 2.346(c), (g), (i), and (j).

IT IS SO ORDERED.

For the Commission

NRC SEAL

/RA/

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 29th day of October 2018

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Kristine L. Svinicki, Chairman
Jeff Baran
Annie Caputo
David A. Wright
Christopher T. Hanson

In the Matter of

INTERIM STORAGE PARTNERS LLC

(WCS Consolidated Interim Storage Facility)

Docket No. 72-1050-ISFSI

CLI-20-14

MEMORANDUM AND ORDER

This proceeding involves the application of Interim Storage Partners LLC (ISP) for a license to construct and operate a consolidated interim storage facility (CISF) in Andrews County, Texas. Today we address the appeals of an Atomic Safety and Licensing Board decision from petitioners Beyond Nuclear, Inc. (Beyond Nuclear); Fasken Land and Minerals, Ltd. and Permian Basin Land and Royalty Owners (together, Fasken); and a coalition of petitioners known as the “Joint Petitioners.”¹ We also refer Fasken’s motion to admit a new

¹ LBP-19-7, 90 NRC 31 (2019). Joint Petitioners are a coalition of Don’t Waste Michigan, Citizens’ Environmental Coalition, Citizens for Alternatives to Chemical Contamination, Nuclear Energy Information Service, Public Citizen, Inc., San Louis Obispo Mothers for Peace, Sustainable Energy and Economic Development Coalition (SEED Coalition), and Leona Morgan, individually.

contention based on the Staff's draft environmental impact statement to the Board for consideration.²

I. BACKGROUND

ISP is a joint venture between Waste Control Specialists LLC (WCS) and Orano CIS LLC formed to design, build, and operate the WCS CISF.³ The proposed CISF would be located within the owner-controlled area of the existing WCS site in Andrews, Texas, which currently includes two separate low-level radioactive waste (LLRW) disposal facilities.⁴ ISP has applied for a forty-year license to store 5,000 metric tons of spent nuclear fuel (SNF), mixed oxide fuel, and Greater than Class C LLRW in the proposed CISF.⁵ If the license is granted, ISP anticipates that it will request license amendments for seven expansion phases over the next twenty years, and the CISF may ultimately store up to 40,000 metric tons of waste.⁶

The Board found that although Beyond Nuclear, Fasken, and at least one member of the Joint Petitioners had established standing, none proffered an admissible contention.⁷ Beyond Nuclear, Fasken, and Joint Petitioners have appealed the denial of their hearing requests, and

² See *Fasken Land and Minerals, Ltd.'s and Permian Basin Land and Royalty Owners Motion for Leave to File New and/or Amended Contention* (July 6, 2020) (Fasken Motion for Contention 5); see also *NRC Staff's Answer in Opposition to Fasken Oil and Ranch, Ltd.'s and Permian Basin Land and Royalty Owners' Motion to Reopen the Record and File New Contention 5* (July 31, 2020); *Interim Storage Partners LLC's Answer Opposing Fasken's and PBLRO's Second Motion to Reopen the Record and Motion for Leave to File New Contention "5"* (July 31, 2020).

³ WCS Consolidated Interim Storage Facility System Safety Analysis Report (Public Version), Docket No. 72-1050, rev. 2 (Aug. 9, 2018), at 1-2 (ADAMS accession no. ML18221A408 (package)) (SAR).

⁴ *Id.* at 1-2.

⁵ WCS Consolidated Interim Spent Fuel Storage Facility Environmental Report, Docket No. 72-1050, rev. 2 (Aug. 9, 2018), at 1-1 (ML18221A405 (package)) (Environmental Report).

⁶ Environmental Report at 1-1.

⁷ LBP-19-7, 90 NRC at 39.

our decision today addresses those appeals. We also address Fasken's request for access to sensitive unclassified non-safeguards information (SUNSI) relating to one of the contentions the Board rejected in its ruling.⁸

Also, the Board initially found that Sierra Club had demonstrated standing and proposed an admissible contention.⁹ Sierra Club's contention has since been dismissed as moot, and we will address Sierra Club's appeals separately.¹⁰ On December 13, 2019, the Board rejected a late-filed contention proposed by Joint Petitioners and terminated the proceeding.¹¹

II. DISCUSSION

A. Standard of Review

Our regulations allow a petitioner whose hearing request has been wholly denied to appeal.¹² We generally defer to the Board on matters of contention admissibility and standing unless an appeal demonstrates an error of law or abuse of discretion.¹³

⁸ *Appeal of Staff Denial of Petitioners' Request for SUNSI Information Related to ISP's Responses to RAIs* (Feb. 12, 2020) (Fasken SUNSI Appeal); *see also Request for Sensitive Unclassified Non-Safeguards Information (SUNSI) regarding Interim Storage Partner's Waste Control Specialist Consolidated Interim Storage Facility* (Jan. 16, 2020) (Fasken SUNSI Request).

⁹ See LBP-19-7, 90 NRC at 50, 78-80.

¹⁰ See LBP-19-9, 90 NRC 181 (2019); *Sierra Club's Brief in Support of Appeal from Atomic Safety and Licensing Board Rulings Denying Admissibility of Contentions in Licensing Proceeding* (Dec. 13, 2019). The Board's dismissal of Sierra Club's contention has mooted ISP's appeal of the decision granting Sierra Club a hearing, and we therefore dismiss ISP's appeal without addressing its merits.

¹¹ See LBP-19-11, 90 NRC 258 (2019), *affirmed*, CLI-20-13, 92 NRC __ (Dec. 4, 2020) (slip op.).

¹² 10 C.F.R. § 2.311(c)

¹³ See, e.g., *Crow Butte Resources, Inc.* (Marsland Expansion Area), CLI-14-2, 79 NRC 11, 13-14 (2014); *Strata Energy, Inc.* (Ross *In Situ* Uranium Recovery Project), CLI-12-12, 75 NRC 603, 608-13 (2012).

B. Beyond Nuclear's Appeal

Beyond Nuclear proposed one contention in which it asserted that the application must be denied because “the central premise of ISP’s application” is that the U.S. Department of Energy (DOE) will take ownership of the waste and contract with ISP to store it until a permanent repository is available and this arrangement would violate the Nuclear Waste Policy Act (NWPA).¹⁴ The contention is substantially similar to the claim raised by Beyond Nuclear and other petitioners in the Holtec International CISF application proceeding, and we affirm the Board here for the reasons explained in our recent decision in that proceeding.¹⁵

The Staff, ISP, and the Board all recognize that the NWPA does not authorize DOE to take title to SNF at this time.¹⁶ ISP’s proposed license would include a license condition requiring that, before ISP could begin operations, it must have storage contracts in place assuring that ISP’s clients would fund operations.¹⁷ And the proposed wording of the license provides that DOE could be that client.¹⁸ Specifically, the proposed license condition states that ISP must have contracts in place “with [DOE] or other SNF title holder(s) stipulating that the DOE or the other SNF title holder(s) is/are responsible for funding operations required for

¹⁴ *Beyond Nuclear, Inc.’s Hearing Request and Petition to Intervene* (Oct. 3, 2018) (Beyond Nuclear Petition).

¹⁵ See *Holtec International* (HI-STORE Consolidated Interim Storage Facility), CLI-20-4, 91 NRC 167, 173-76 (2020); *Beyond Nuclear, Inc.’s Hearing Request and Petition to Intervene* (Sept. 14, 2018), at 10-11 (ML18257A324).

¹⁶ See LBP-19-7, 90 NRC at 57; *Interim Storage Partners LLC’s Response to the Atomic Safety and Licensing Board’s Questions Regarding the U.S. Department of Energy’s Authority Under the Nuclear Waste Policy Act* (June 28, 2019) (ISP Response to Board Questions) (acknowledging that DOE may not take title under current law).

¹⁷ See *Interim Storage Partners LLC, License Application* (Aug. 9, 2018) (License Application), Attach. A, License for Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, at 3 (ML18221A397 (package)).

¹⁸ *Id.*

storing the material” prior to commencing operations.¹⁹ In other words, the proposed license would be conditioned on ISP contracting either with the nuclear power plant operators who generated the spent nuclear fuel, consistent with current law, or with DOE, which would require statutory amendment.

ISP acknowledges that it hopes Congress will change the law to allow DOE to enter storage contracts prior to the availability of a repository.²⁰ Thus, if the proposed license were to be issued, ISP could take advantage of a future change in the law by bidding for a DOE contract without having to first amend its license.

The Board found that Beyond Nuclear’s proposed contention did not raise a genuine dispute with the application.²¹ The Board reasoned that rather than being centrally premised on ISP contracting with DOE in violation of the NWPA, the application also includes the option of contracting with nuclear plant owners, which is consistent with existing law, and whether that option will prove commercially viable was not an issue before it.²²

On appeal, Beyond Nuclear argues that the Board erred by “reframing” the contention to eliminate its central premise and thereby “failed to judge the contention by its own terms.”²³ Beyond Nuclear further argues that the proposed license condition would, contrary to law, give “ISP and/or DOE . . . rights under the license” to enter storage contracts.²⁴ Along the same lines, it claims that the license would “allow DOE to be an owner of spent fuel during

¹⁹ *Id.*

²⁰ ISP Response to Board Questions at 3.

²¹ LBP-19-7, 90 NRC at 57-58.

²² *Id.*

²³ *Beyond Nuclear’s Brief on Appeal of LBP-19-07* (Sept. 17, 2019), at 11 (Beyond Nuclear Appeal).

²⁴ *Id.* at 12.

transportation and storage” at the CISF.²⁵ Beyond Nuclear misunderstands the nature of the proposed license and its conditions.

As an initial matter, the Board agreed with Beyond Nuclear’s central argument that the NWPA prevents DOE from taking title to SNF at this time. But this does not mean that the application must automatically be rejected. The proposed license would not “authorize” ISP to enter into illegal contracts. Rather, the proposed license would require that, before it can begin operations, ISP must have contracts in place to ensure it has a flow of operating funds. Because an illegal contract is unenforceable, ISP plainly could not rely on such contracts to ensure its operating funds.²⁶ Moreover, granting a license to ISP would not effect or allow a change of spent fuel ownership as between two parties unrelated to ISP (the nuclear plant owners and the DOE). Similarly, issuing a license to ISP would not grant any rights to DOE. We therefore are not persuaded by Beyond Nuclear’s arguments that the proposed license would authorize illegal activity.

Beyond Nuclear also asserts that issuance of the license would violate the Administrative Procedure Act’s prohibition against agencies acting unlawfully, because “the license application contains provisions which, if implemented, would violate the NWPA.”²⁷

Similarly, it argues that issuing the license would exceed our statutory authority because we have no statutory authority to violate the NWPA.²⁸ It argues that its challenge to the license was dismissed based on the hope for a change in the law or an expectation that DOE and ISP would not violate the law.²⁹ But as we have explained above, the proposed license would not

²⁵ *Id.* at 2, 16.

²⁶ *See, e.g., Kaiser Steel Corp. v. Mullins*, 455 U.S. 72, 77-78 (1982).

²⁷ Beyond Nuclear Appeal at 13-14 (citing 5 U.S.C. §§ 706(2)(A), (C)).

²⁸ *Id.* at 13.

²⁹ *Id.* at 13-16.

authorize ISP to enter storage contracts with DOE and the proposed license is not premised on illegal activity because there is a lawful option by which ISP could fulfil the proposed license condition.

Beyond Nuclear has not shown error in the Board's interpretation of the legal force of the disputed license condition. The Board's conclusion that Beyond Nuclear had raised no genuine dispute with the application was reasonable. We therefore affirm its decision to dismiss this contention.

C. Fasken's Appeal

Fasken appeals the Board's determinations regarding three of its six proposed contentions.³⁰

1. Fasken's Contention 2 (Abandoned Oil and Gas Wells) and SUNSI Access Request

In Contention 2, Fasken argued that the application failed to account for "unstable geological characteristics" and "soil stability problems" of the site attributable to abandoned and "orphan" oil and gas wells in the region.³¹ Fasken supported this contention with the declaration of a geologist, Aaron Pachlhofer, who described the hydrogeology of the region and oil development in the area.³² Fasken asserted that there were 4,579 well bores within a ten-mile radius of the proposed site.³³ Fasken further claimed that the abandoned wells could provide a path for contaminants to reach the groundwater.³⁴ It argued that the application did not address

³⁰ *Fasken and PBLRO's Brief on Appeal of LBP-19-07* (Sept. 17, 2019) (Fasken Appeal).

³¹ *See Petition of Permian Basin Land and Royalty Organization and Fasken Land and Minerals for Intervention and Request for Hearing*, at 15-17 (Oct. 29, 2018) (Fasken Petition).

³² Fasken Petition, Ex. 3, Declaration of Aaron Pachlhofer (Oct. 29, 2018), at 4-7 (Pachlhofer Declaration).

³³ *See* Fasken Petition at 16; Tr. at 324 (Mr. Laughlin) (providing revised figure for number of wells).

³⁴ Fasken Petition at 17; *see also* Pachlhofer Declaration at 3-5.

this information and therefore “failed to analyze regional geography” and could not meet the requirements of 10 C.F.R. § 72.103(a)(1).³⁵

ISP opposed the contention in its entirety, but the Staff initially supported its admission in part.³⁶ In its response to Fasken’s hearing request, the Staff acknowledged that Fasken had raised an issue of whether the presence of a large number of improperly abandoned wells could impact site stability.³⁷ The Staff changed its position and considered the issue moot after Fasken’s response to a Staff Request for Additional Information (RAI) confirmed that the proposed site itself contains only a single dry hole, which has been properly plugged and abandoned.³⁸

The Board dismissed the contention because it was factually unsupported and did not address portions of the application that discuss site stability matters.³⁹ In particular, the Board pointed out that ISP’s safety evaluation acknowledged that oil and gas wells are in the general vicinity of the site and addressed soil stability, induced seismicity, and vibratory ground motion.⁴⁰ The Board found that unless Fasken could show some reason why the offsite wells would cause “unstable geological characteristics, soil stability problems or potential for vibratory

³⁵ Fasken Petition at 15-17.

³⁶ *Interim Storage Partners LLC’s Answer Opposing Hearing Request and Petition to Intervene filed by Permian Basin Land and Royalty Organization and Fasken Land and Minerals* (Nov. 20, 2018), at 34-41 (ISP Answer to Fasken Petition); *NRC Staff’s Response to Petitions to Intervene and Requests for Hearing Filed by Permian Basin Land and Royalty Organization and Fasken Land and Minerals* (Nov. 23, 2018), at 15-16 (Staff Answer to Fasken Petition).

³⁷ Staff Answer to Fasken Petition at 16.

³⁸ See Letter from Jeffery D. Isakson, ISP, to NRC Document Control Desk, “Submittal of Partial Response to First RAI” (May 31, 2019) (ML19156A048 (package)) (First RAI Response Package), Encl. 3, RAI Responses (Public Version), at 3 (First RAI Responses); see Tr. at 328 (Mr. Gillespie).

³⁹ LBP-19-7, 90 NRC at 112-13 (citing SAR §§ 2.1, 2.6.2; SAR, Attach. D § 4.3 (proprietary)).

⁴⁰ *Id.* at 112 & n.544.

ground motion at the site,” ISP was not required to provide more information.⁴¹ The Board further found that the claims that the wells could provide a conduit for contaminants to the groundwater did not dispute relevant portions of the application, which explained why groundwater contamination from spent fuel dry storage is unlikely at the site.⁴² The Board concluded that Fasken had shown no plausible impact from the existence of wells up to ten miles from the site when there is only a single dry hole within the site’s boundary.⁴³ It therefore dismissed the contention because it did not present a genuine dispute with the application and for lack of factual support.

We defer to the Board’s finding that the contention is not supported in fact. Fasken’s appeal renews its critique that the application does not adequately discuss the presence of nearby wells, but the appeal does not address the Board’s ruling that its contention did not show how abandoned or orphaned wells outside the boundary of the site and up to ten miles away could affect the soil stability of the site.⁴⁴ Mr. Pachlhofer’s declaration does not contend that abandoned or active wells five, ten, or even one mile from the proposed CISF would cause soil subsidence at the site.⁴⁵

On appeal, Fasken also argues that the plain language of 10 C.F.R. § 72.103(a)(1) requires ISP to analyze the entire region in which the proposed site is located for “unstable

⁴¹ *Id.* at 112 (quoting 10 C.F.R. § 72.103(a)(1)).

⁴² *Id.* at 113 (citing SAR § 2.7 (“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 CISF preclude the possibility of groundwater contamination from the operation of the WCS CISF.”)).

⁴³ *Id.*

⁴⁴ Fasken Petition at 4-12.

⁴⁵ See Pachlhofer Declaration at 6-7.

geological characteristics.”⁴⁶ But Fasken’s suggestion that ISP must discuss soil stability throughout the entire region of the facility without regard to the potential impacts to the proposed facility is unpersuasive. The regulation Fasken cites lists several investigative methods to ensure site stability, only one of which mentions the region: sites east of the Rocky Mountains such as the proposed site “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 [excessive] vibratory ground motions *at the site*.”⁴⁷ Although the regulation directs “regional geological reconnaissance,” it is clear that the purpose of all these investigative methods is to determine the stability of the proposed site, not the region in general.⁴⁸ We therefore affirm the Board’s interpretation of 10 C.F.R. § 72.103(a)(1).

On January 16, 2020, Fasken submitted to the NRC Staff a request for access to the non-publicly available portion of an RAI response released on January 6, 2020. Fasken stated that it needed the information to support Contention 2.⁴⁹ The Staff denied the request on January 27, 2020, and Fasken submitted an appeal on February 12, 2020.⁵⁰

Fasken argues that it needs the information in order to participate meaningfully in the licensing proceeding. The information Fasken requests is detailed information about the

⁴⁶ Fasken Appeal at 5-6.

⁴⁷ 10 C.F.R. § 72.103(a)(1) (emphasis added).

⁴⁸ Fasken additionally challenges the Board’s ruling that it failed to dispute relevant portions of the application because it did cite portions of the SAR in its petition. Fasken Appeal at 5-6. But given that the contention lacked factual support, whether it provided cites to certain SAR sections is irrelevant. We additionally find no merit to Fasken’s argument that the Staff should not have changed its position concerning the contention’s admissibility.

⁴⁹ Fasken SUNSI Request at 3.

⁵⁰ Letter from Sara Kirkwood, NRC, to Timothy Laughlin, Counsel for Fasken (Jan. 27, 2020) (Denial of Fasken SUNSI Request) (ML20024D860); *see also* Fasken SUNSI Appeal.

location, type, and status of oil, gas, and water wells within a 10-kilometer radius of the proposed CISF site, which Fasken argues is relevant to its Contention 2. But as described above, the Board found Contention 2 inadmissible principally because Fasken did not show that wells located away from the site could affect soil stability on the site. Nothing in Fasken's SUNSI appeal contravenes that analysis. We therefore deny Fasken's request for access to the non-public portions of ISP's RAI response.

2. *Fasken's Contention 3 (Airplane Crash)*

In Contention 3, Fasken claimed that ISP's emergency response plan for the facility was deficient in failing to account for aircraft crashes and other hazards: "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."⁵¹ Fasken argued that the ERP does not conform to the requirements of 10 C.F.R. § 72.122(c), which requires that structures, systems, and components important to safety (SSCs) "must be designed and located so that they can continue to 'perform their safety functions effectively under credible fire and explosion exposure conditions'" or to 10 C.F.R. § 72.24(d)(2), which requires that the application evaluate SSCs designed to prevent and mitigate accidents.⁵² Fasken reasoned that ISP had identified an airplane crash as a "credible accident" because it is listed in the ERP.⁵³ Fasken

⁵¹ Fasken Petition at 18; see Consolidated Emergency Response Plan (Mar. 15, 2017) (ML17082A054) (ERP).

⁵² Fasken Petition at 18-26 (quoting Final Report, Standard Review Plan for Spent Fuel Dry Storage Facilities," NUREG-1567 (Mar. 2000), § 6.4.5 (ML003686776) (Dry Storage SRP) (emphasis removed)).

⁵³ *Id.* at 19; see ERP, app. C, Facility Emergency Action Levels.

further argued that the ERP must take into account the “size, velocity, weight and fuel loads” of various aircraft “when assessing the hazards” of such a crash.⁵⁴

The Board held that the contention did not dispute relevant portions of the application and therefore did not raise a genuine issue of material fact concerning emergency planning.⁵⁵ The Board found that the contention mistakes matters that are to be addressed in the emergency plan with matters that are addressed elsewhere in the application. The Board explained that § 72.122(c) is a design requirement, compliance with which is addressed in the SAR, chapter 12, “Accident Analysis,” rather than in the emergency plan.⁵⁶ The Board further found that air crash accidents are not among the credible events listed.⁵⁷ Indeed, the emergency response plan explicitly states that it discusses responses to various posited scenarios, including those that have not been found to be credible.⁵⁸

On appeal, Fasken argues that the Board should have admitted its contention. First, it argues that aircraft crashes are credible accidents because there are three airports within fifty miles of the proposed facility.⁵⁹ Second, Fasken asserts that the Standard Review Plan for dry

⁵⁴ Fasken Petition at 22 (citing Dry Storage SRP § 2.5.2). Fasken further claimed in Contention 3 that the ERP “relies on outside assistance to handle catastrophic fires and explosions and does not specify how their current suppression systems will effectively mitigate fires and explosions until help arrives.” *Id.* at 19, 22-23. It argued that emergency responders are located many miles from the site although “time is of the essence” in mitigating radiation exposure. *Id.* at 22-25. These arguments appear to have been abandoned on appeal.

⁵⁵ LBP-19-7, 90 NRC at 114-15.

⁵⁶ *Id.* at 114.

⁵⁷ *Id.* at 115. The Board observed that 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.” *Id.*

⁵⁸ SAR § 13.5, “Emergency Response Planning,” provides: “The [ERP] planning basis includes credible events as well as hypothetical accidents whose occurrence is not considered credible, so as not to limit the scope of Emergency Response Planning.”

⁵⁹ Fasken Appeal at 13.

storage facilities requires an assessment of aircraft crashes regardless of whether such crashes are deemed “credible.”⁶⁰ Third, Fasken argues that the Board abused its discretion because it was inconsistent in its use of staff guidance documents in evaluating contention admissibility.⁶¹

With respect to Fasken’s argument that an aircraft crash is credible because the facility is within fifty miles of three airports, we first observe that Fasken offers no factual or expert support for this argument. This argument is new on appeal.⁶² In addition, Fasken does not address the analysis ISP provided regarding the probability of such an accident, namely, that it is less than one in a million per year.⁶³ Fasken does not question ISP’s analysis specifically or support its contention factually with anything other than the claim that airports are located within a fifty mile radius.

We also disagree with Fasken’s argument that the Standard Review Plan for spent fuel facilities, § 2.5.2, requires an analysis of aircraft crash impacts without regard to whether such a crash is credible. Section 2.5.2, by its own terms, directs the Staff reviewer to ensure that the “methods used by the applicant to quantify offsite hazards are consistent with the guidance in chapter 15,” which in turn directs that the reviewer ensure that credible events have been

⁶⁰ *Id.* at 13 (citing Dry Storage SRP § 2.5.2). The quoted section directs staff reviewers to “review potential hazards associated with nearby facilities [including airports and consider] aircraft size, velocity, weight and fuel load in assessing the hazards of aircraft crashes on an installation near an airport.”

⁶¹ *Id.* at 13-14.

⁶² We do not permit a participant to raise new arguments on appeal. *See Crow Butte Resources, Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 546 (2009).

⁶³ *See* First RAI Responses at 1; First RAI Response Package, Encl. 6, SAR Changed Pages (rev. 3 interim), at 4-12 (unnumbered). According to its RAI response, ISP used guidance in the “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition,” NUREG-0800, rev. 4 (Mar. 2010) § 3.5.1.6 (ML100331298).

analyzed.⁶⁴ A facility need not be designed to withstand “every conceivable accident,” but it must be designed to withstand those found to be credible.⁶⁵

We find unavailing Fasken’s argument that the Board applied Staff guidance documents inconsistently in its analysis because the Board treated guidance documents as controlling in rejecting other contentions.⁶⁶ Regulatory Guides describe approaches to compliance that have been deemed acceptable by the Staff in the past, but they do not create new regulatory requirements.⁶⁷ Where an applicant follows an applicable guidance document, the burden is on the petitioner to show that the application nonetheless falls short of regulatory requirements. Fasken, however, has not identified an inconsistency in the Board’s ruling on Contention 3 or an abuse of discretion by the Board in its application of the guidance documents.

We therefore affirm the Board’s decision to dismiss Fasken Contention 3.

⁶⁴ See Dry Storage SRP § 15.5.

⁶⁵ *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-22, 54 NRC 255, 259 (2001). In *Private Fuel Storage*, we ruled that the threshold probability for a design basis event (that is, whether an event is credible) should be one in one million for a spent fuel storage installation. *Id.* at 265. The *Private Fuel Storage* decision specifically addressed the probability of an aircraft crash into the facility. *Id.* at 263.

⁶⁶ Fasken Appeal at 13-14. Fasken specifically cites the Board’s rejection of Sierra Club’s proposed Contention 15. But the Board did not find that the guidance document was legally binding; it found that Sierra Club did not show how ISP had violated NEPA or NRC regulations in its environmental justice analysis. See LBP-19-7, 90 NRC at 84; see also “Environmental Review Guidance for Licensing Actions Associated with NMSS Programs” (Final Report), NUREG-1748 (Aug. 2003), at 6-25 (ML032450279).

⁶⁷ See *Private Fuel Storage*, CLI-01-22, 54 NRC at 264; *International Uranium (USA) Corp.* (Request for Materials License Amendment), CLI-00-1, 51 NRC 9, 19 (2000) (“NRC Guidance Documents are routine agency policy pronouncements that do not carry the binding effect of regulations.”).

**3. Fasken's Contention 4 (Groundwater and Aquifers); Motion to Reopen;
Motion to Amend Contention 4 Based on New Information**

In its proposed Contention 4, Fasken argued that both the Environmental Report and SAR failed to consider the adverse effect the CISF will have on groundwater.⁶⁸ Specifically, Fasken argued that the Environmental Report did not comply with 10 C.F.R. § 51.45 and that the SAR did not “contain ‘adequate information for an independent review of all subsurface hydrology-related design bases and compliance with dose radiological exposure standards’” to ensure compliance with 10 C.F.R. § 72.122(b)(4).⁶⁹ Fasken's expert Mr. Pachlhofer asserted that four aquifers are in Andrews county at or near the WCS site.⁷⁰ Fasken also claimed that water within one of these, the Antler Formation, is used for drinking and the formation is present within a few feet of the surface on the WCS site.⁷¹ However, the only support Fasken supplied for the claim that the proposed CISF could contaminate the groundwater was the assertion that ISP has conceded that an airplane crash into the facility is a credible event that could cause the release of radionuclides.⁷²

On January 21, 2020, Fasken filed a motion to reopen the proceeding and to admit an amended Contention 4 based on ISP's response to an RAI from the Staff.⁷³ Fasken's motion

⁶⁸ Fasken Petition at 26-31.

⁶⁹ *Id.* at 27 (quoting Dry Storage SRP § 2.4.5).

⁷⁰ Pachlhofer Declaration at 4.

⁷¹ Fasken Petition at 30, Pachlhofer Declaration at 4.

⁷² Fasken Petition at 27-28.

⁷³ *Fasken Oil and Ranch, LTD and Permian Basin Land and Royalty Owners Motion to Reopen the Record for Purposes of Considering and Admitting an Amended Contention Based on New Information Provided by Interim Storage Partners in Response to NRC Requests for Additional Information* (Jan. 21, 2020) (Fasken Motion to Reopen); *Fasken Oil and Ranch, LTD and Permian Basin Land and Royalty Owners Motion for Leave to Amend Contention Four Regarding Interim Storage Partner's New Description of Groundwater Located below the Site and the Potential Impact the Site Will Have on the Groundwater* (Jan. 21, 2020) (Fasken Motion to Amend Contention 4); see also Letter from Jeffery D. Isakson, ISP, to NRC Document

argues that ISP's RAI response provided a materially different description of the subsurface environment at the site.

The Board dismissed the original contention because Fasken had not raised a material dispute identifying a plausible pathway to the groundwater from the CISF. For the reasons it provided in analyzing Fasken Contention 3, the Board was unpersuaded by the argument that an aircraft accident presented a credible scenario that could result in a contamination release.⁷⁴ It found that Fasken did not challenge the finding in the SAR that four factors "preclude the possibility of groundwater contamination": the canister design, the method of storage, the extremely low permeability of the red clay underlying the site, and the depth to the groundwater beneath the facility—about 225 feet to the shallowest water bearing zone.⁷⁵ In addition, the Board found that because the only portions of the application Fasken specifically challenged were in the SAR, not the Environmental Report, the contention failed as an environmental contention.⁷⁶

Fasken's appeal challenges the Board's ruling rejecting its claim concerning aircraft crashes.⁷⁷ For the reasons the Board explained and as described above, ISP never conceded that an aircraft crash was a credible event, and Fasken has not challenged ISP's analysis

Control Desk, "Submission of ISP Responses for RAIs and Associated Document Markups from First Request For Additional Information, Part 3" (Nov. 21, 2019), Encl. 3 (ML19337B502 (package)) (Part 3 RAI Response). Although the documents were received in November 2019, they were not publicly released until January 6, 2020.

⁷⁴ LBP-19-7, 90 NRC at 116.

⁷⁵ *Id.*; see SAR § 2.5, at 2-21.

⁷⁶ LBP-19-7, 90 NRC at 116.

⁷⁷ Fasken Appeal at 15-16. On appeal, Fasken also argues that its failure to cite portions of the Environmental Report should not preclude the contention's admission as an environmental contention because the hydrology sections of the Environmental Report are repeated verbatim in the hydrology sections of the SAR. *Id.* at 15. However, Fasken's challenge to the SAR was also unsupported.

concluding that such a crash is not a credible event.⁷⁸ Fasken's petition provided no other theory by which the canisters could release radionuclides to the environment. In addition, Fasken did not challenge the Environmental Report's conclusion that the proposed facility provides "no potential for a liquid pathway because the spent fuel contains no liquid component and the casks are sealed to prevent any liquids from contacting the spent fuel assemblies."⁷⁹

Fasken next argues that it presented a genuine dispute "regarding the presence, location, and permeability of aquifers and formations below the proposed site."⁸⁰ Fasken's proposed amendment to Contention 4 also pertains to a claimed mischaracterization of the site. But neither Fasken's original nor its amended Contention 4 identifies a significant disparity between the information in the SAR and the information in Mr. Pachlhofer's declaration and the report on which he primarily relies.⁸¹ The report on which Mr. Pachlhofer relies acknowledges that groundwater "is not present continuously beneath" the WCS site.⁸² Moreover, Fasken's argument does not acknowledge the difference between a geologic formation and a water-saturated aquifer. While Mr. Pachlhofer's declaration states that the Antlers Formation underlies the site and contains groundwater used for drinking water in Midland Texas, it does not claim that the Antlers Formation is saturated beneath the CISF site.⁸³ ISP's application

⁷⁸ See *supra* § II.C.2; LBP-19-7, 90 NRC at 115.

⁷⁹ See Environmental Report § 6.2, at 6-1.

⁸⁰ Fasken Appeal at 16.

⁸¹ See Fasken Petition, Ex. 4, Thomas M. Lehman & Ken Rainwater, "Geology of the WCS–Flying 'W' Ranch, Andrews County, Texas" (April 2000) (Lehman and Rainwater Report). The Lehman and Rainwater Report focused on the Flying "W" Ranch area, immediately south of the proposed CISF, where there is currently a hazardous waste disposal site.

⁸² See Lehman and Rainwater Report at 16; see also *id.* at 30 (Fig. 10).

⁸³ Pachlhofer Declaration at 4; see also Fasken Appeal at 18.

acknowledges that the Antlers Formation is under its site.⁸⁴ Moreover, even if there are minor disagreements between the SAR and Fasken's materials, Fasken does not show how these relate to the underlying premise of its contention that the CISF would cause groundwater contamination.

Fasken's proposed amendment to Contention 4 focuses on the argument that the application misrepresented the depth of groundwater at the site. In its proposed Amended Contention 4, Fasken argues that ISP has acknowledged in its RAI response that groundwater exists at the site only "a few inches to a few feet" below the surface.⁸⁵ But Fasken's argument for amending Contention 4 is based on a misreading of ISP's RAI response.

In RAI WR-11, the Staff asked ISP to identify the shallowest groundwater located beneath the "proposed CISF footprint." ISP responded:

The shallowest groundwater beneath the proposed CISF footprint is a few inches to a few feet of saturation in the undifferentiated Antlers/Ogallala sediments starting at the northern fence line of the Protected Area boundary in the northeast corner. The sands and gravels containing the water at a 90- to 100-foot depth are part of a hydrostratigraphic unit termed the Antlers/Ogallala/Gatuña (OAG) by ISP joint venture member Waste Control Specialists.⁸⁶

Therefore, the RAI response did not state that groundwater was present a few feet or a few inches below the surface. Instead, it states that the depth of the groundwater is 90 to 100 feet below the surface and the saturated thickness is a few inches to a few feet. Fasken misinterprets the response.

⁸⁴ SAR at 2-22 to 2-23.

⁸⁵ See Fasken Motion to Reopen at 8; Fasken Motion to Amend Contention 4 at 7-8.

⁸⁶ Part 3 RAI Response at 59. ISP also acknowledged in its response that the SAR's statement that shallowest water bearing zone was at a depth of 225 feet was measured at the neighboring WCS facility. *Id.*

The remainder of Fasken's proposed amended argument turns on the claim that groundwater is present on the site no more than a few feet underground.⁸⁷ For example, Fasken argues that the Board erred in finding that the red clay layer under the site would form a natural barrier to the spread of any contamination.⁸⁸ Fasken reasons that the red clay layer cannot possibly overlies the shallowest aquifer because the Environmental Report states that the red clay layer is overlain by twenty-two to fifty-four feet of sand, gravel and alluvium, and "the red bed clays will not provide a natural barrier to the groundwater located inches below the site."⁸⁹ Because there is no basis to conclude that groundwater exists "inches" below the surface, this argument is without merit.⁹⁰

We deny Fasken's request to amend Contention 4 because it lacks factual support. We therefore do not consider whether Fasken has satisfied the standards necessary to prevail on a motion to reopen. We affirm the Board's ruling on Fasken Contention 4.

⁸⁷ Fasken Motion to Amend Contention 4 at 3, 7-8, 13 n.40, 16, 19, 21. Fasken also argues that the RAI response "admits that previous descriptions of groundwater were 'not based on sufficient boring data.'" Fasken Motion to Amend at 14, 19 (citing Part 3 RAI Response at 45). But the Part 3 RAI Response makes a different point when it states that the Lehman and Rainwater Report, which Mr. Pachlhofer cites in his declaration, "was not based on sufficient boring data to distinguish the contacts between the Antlers and the Ogallala in the proposed CISF area." Part 3 RAI Response at 45.

⁸⁸ Fasken Motion to Amend Contention 4 at 16, 21; see also LBP-19-7, 90 NRC at 116.

⁸⁹ Fasken Motion to Amend Contention 4 at 21 (citing Environmental Report § 4.3, at 4-28).

⁹⁰ See also NRC Staff's Answer in Opposition to Fasken Oil and Ranch, Ltd and Permian Basin Land and Royalty Owners' Amended Contention 4 and Accompanying Motion to Reopen the Record, at 7-8 (Feb. 13, 2020); Interim Storage Partners, LLC's Answer Opposing Fasken's and PBLRO's Motion to Reopen the Record and Motion for Leave to Amend Contention Four, at 13-14 (Feb. 18, 2020). Fasken submitted a reply to ISP's answer. See Fasken Oil and Ranch, Ltd.'s and Permian Basin Land and Royalty Owners' Reply to Interim Storage Partners, LLC's Answer Opposing Motion of Leave to Reopen the Record and Associated Motion for Leave to Amend Contention Four (Feb. 25, 2020). However, NRC regulations do not provide a right to reply to answers to a motion without prior permission from the Secretary of the Commission, and therefore Fasken's reply has not been considered. See 10 C.F.R. § 2.323(c).

D. Joint Petitioners' Appeal

The Board found that only one of the Joint Petitioners had demonstrated standing based on the standing of SEED Coalition and SEED Coalition's member Beatrice Gardiner-Aguilar.⁹¹ But the Board did not admit any of Joint Petitioners' fifteen proposed contentions, and Joint Petitioners have appealed its decision with respect to seven of them.⁹² Joint Petitioners have additionally appealed the Board's finding that its other members did not demonstrate standing.⁹³ Because we find the Board properly rejected the appealed contentions, we do not reach the standing issue.

1. Joint Petitioners' Contention 1 (NEPA Analysis of Transportation Impacts)

Joint Petitioners argued in proposed Contention 1 that the environmental impacts of waste transportation and storage at the proposed CISF must be assessed together as part of a "single, integrated project" under NEPA.⁹⁴ Joint Petitioners asserted that ISP's Environmental Report is lacking because it did not include "details and environmental impacts of a planned [twenty-year] shipping campaign involving at least 3,000 deliveries of SNF and GTCC waste to ISP."⁹⁵ Specifically, they claimed that the Environmental Report did not include "complete

⁹¹ LBP-19-7, 90 NRC at 50-51.

⁹² *Notice of Appeal of LBP-19-07 by Petitioners 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, and Brief in Support of Appeal* (Sept. 17, 2019) (Joint Petitioners Appeal).

⁹³ *Id.* at 4-18.

⁹⁴ *Petition 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, to Intervene, and Request for an Adjudicatory Hearing* (Nov. 13, 2018), at 4 (Joint Petitioners Petition).

⁹⁵ *Id.* at 41.

disclosure of all probable transportation routes, along with quantities of SNF and the likely radioisotopic contents” to be shipped.⁹⁶

The Board ruled that proposed Contention 1 was inadmissible because it did not raise a genuine dispute of material fact or law with the application, was outside the scope of this proceeding, and amounted to an impermissible attack on the NRC’s licensing regulations in 10 C.F.R. Parts 51 and 72.⁹⁷ The Board found that ISP’s application included an evaluation of the environmental impacts of waste transportation to the proposed CISF along several representative routes and that Joint Petitioners had not disputed any part of that evaluation.⁹⁸ The Board also noted that the actual routes that may one day be used to transport waste to the proposed CISF are not currently known and are not the subject of any NRC approval in this proceeding. According to the Board, Joint Petitioners did not provide legal authority to suggest additional or unknown routes must be evaluated now.⁹⁹

On appeal, Joint Petitioners reiterate their claim that ISP’s application did not sufficiently address the environmental impacts of transporting waste to the proposed CISF.¹⁰⁰ But as the Board found, this proceeding does not include NRC review and approval of waste transportation routes; rather, its scope is confined to ISP’s application for a license to build and operate a proposed CISF. Further, ISP’s application includes an evaluation of the environmental impacts that would be expected along representative waste transportation routes to the proposed CISF from twelve different potential facilities; the Board found Joint Petitioners did not dispute any

⁹⁶ *Id.* at 43.

⁹⁷ LBP-19-7, 90 NRC at 88-89.

⁹⁸ *Id.* (citing Environmental Report § 4.2, at 4-3 to 4-28).

⁹⁹ *Id.*

¹⁰⁰ Joint Petitioners Appeal at 19-20.

part of that evaluation.¹⁰¹ Joint Petitioners did not claim error in the Board's findings or reasoning and we see none. Accordingly, we affirm the Board's dismissal of Contention 1.

2. Joint Petitioners' Contention 4 (Underestimation of LLRW Volume)

Joint Petitioners argued in proposed Contention 4 that ISP's application underestimated the volume of LLRW that will be generated by the proposed CISF.¹⁰² They claim that the application does not account for LLRW that would be generated during repackaging of spent fuel from the casks and canisters at the CISF into "uniformly-constructed transportation, aging, and disposal canisters" that DOE may one day deploy to move waste from the proposed CISF to a permanent repository.¹⁰³ They argued that the application also "omit[s] mention of disposal of radioactively activated and radioactively contaminated concrete" resulting from decommissioning of "the concrete and subgrade materials that will be bombarded for from 60 to 100 years with neutron radiation" at the proposed CISF.¹⁰⁴ As a result, Joint Petitioners claimed, "there is a significant underestimate of the quantities of LLRW to be generated by long-term operations and of the associated price tag."¹⁰⁵

¹⁰¹ See LBP-19-7, 90 NRC at 89; see also Environmental Report § 4.2.7 (identifying twelve decommissioned reactor sites from which waste shipment impacts were analyzed). The use of representative routes to evaluate transportation impacts where actual routes are unknown is well-established under our regulatory framework and consistent with NEPA's "rule of reason." See, e.g., "Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel," NUREG-2157, vol. 1, at 5-52 (ML14196A105) (Continued Storage GEIS); "Final Environmental Impact Statement for the Construction and Operation of an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and the Related Transportation Facility in Tooele County, Utah," NUREG-1714, vol. 1, at 5-39 (ML020150217); see also 10 C.F.R. § 51.52, Table S-4 (deriving generic effects of transportation and fuel waste for one power reactor based on a survey of then-existing power plants).

¹⁰² Joint Petitioners Petition at 64-76.

¹⁰³ *Id.* at 66-69.

¹⁰⁴ *Id.* at 72-73.

¹⁰⁵ *Id.* at 75.

The Board ruled proposed Contention 4 inadmissible because it raised issues outside the scope of this proceeding.¹⁰⁶ The Board found the environmental impacts of spent fuel repackaging beyond the scope of this proceeding because ISP has not requested authorization to repackage spent fuel from its waste canisters into other packages.¹⁰⁷ The Board also found the impacts of repackaging resulting from any separate, future DOE waste disposal campaign “necessarily outside the scope of this proceeding as well.”¹⁰⁸

Further, the Board determined that proposed Contention 4 impermissibly challenged the Continued Storage Rule, 10 C.F.R. § 51.23, insofar as it would have ISP describe the impacts of spent fuel repackaging in its Environmental Report. The Board found that spent fuel repackaging is not an activity that would be authorized during the initial license term, and the Continued Storage Rule explicitly excuses an applicant from providing a site-specific description of environmental impacts related to spent fuel storage that may occur after the initial forty-year license term.¹⁰⁹

The Board also rejected Joint Petitioners’ argument that ISP had grossly underestimated the volume of concrete LLRW that the proposed CISF would generate. The Board found that the environmental impacts resulting from disposal of concrete casks and storage pads from an ISFSI are generically described in the Continued Storage GEIS, which is incorporated into the Continued Storage Rule.¹¹⁰ The Board ruled that Joint Petitioners’ claim that ISP

¹⁰⁶ LBP-19-7, 90 NRC at 91-93.

¹⁰⁷ *See id.* at 92.

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*; 10 C.F.R. § 51.23(b).

¹¹⁰ *See* LBP-19-7, 90 NRC at 92-93; Continued Storage GEIS; 10 C.F.R. § 51.23.

underestimated the volume of LLRW at the proposed CISF was therefore an impermissible attack on that rule.¹¹¹

On appeal, Joint Petitioners argue that the Board's decision wrongly excluded from environmental-impact consideration any future planned expansions of the proposed CISF as well as decommissioning activities that would occur beyond the initial license term.¹¹² We disagree. The Continued Storage Rule provides that the environmental impacts of an ISFSI beyond the term of its initial license are described generically in the Continued Storage GEIS.¹¹³ The Continued Storage GEIS describes the environmental impacts associated with spent fuel repackaging, concrete disposal, and facility decommissioning for spent fuel storage facilities.¹¹⁴ The Board recognized that the environmental impacts associated with the continued storage of spent fuel had already been generically determined by the Commission through the rulemaking process. Accordingly, we affirm the Board's dismissal of proposed Contention 4.

4. *Joint Petitioners' Proposed Contention 5*
(Environmental Justice Effects of Transportation)

Joint Petitioners argued in Proposed Contention 5 that ISP, by stating that transportation of waste from reactors to the proposed CISF is not part of the license application, improperly "segmented" evaluation of the environmental effects of transportation from the environmental effects of waste storage.¹¹⁵ As a result, Joint Petitioners claim, "Environmental Justice . . . compliance" will not be possible because "identification and analysis of potentially affected

¹¹¹ See LBP-19-7, 90 NRC at 92 (citing 10 C.F.R. § 2.335).

¹¹² Joint Petitioners Appeal at 23.

¹¹³ 10 C.F.R. § 51.23(b).

¹¹⁴ See Continued Storage GEIS, chs. 4-6.

¹¹⁵ Joint Petitioners Petition at 76.

populations along the anticipated rail, truck and barge routes will be improperly excluded from disclosure in the NEPA document.”¹¹⁶

The Board ruled that proposed Contention 5 did not raise a material dispute with the application. The Board found the proposed action is construction and operation of the proposed CISF and that the area for assessment of environmental justice impacts is based on the location of the proposed facility, not the location of possible transportation routes.¹¹⁷ Although the Board agreed with the petitioners 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,” it held that the proposed action is for a license to build and operate a facility to store waste, not transport it.¹¹⁸ Therefore, by asserting that ISP’s Environmental Report omits environmental justice information regarding as-yet-unknown transportation routes, the Board explained, “Joint Petitioners have not raised an issue that is material to the findings the NRC must make in this proceeding.”¹¹⁹

On appeal, Joint Petitioners cite no authority to suggest the Board erred or abused its discretion in finding that proposed Contention 5 did not raise a material issue. Joint Petitioners argue that the Board’s ruling would improperly segment evaluation of the environmental impacts of waste transportation from environmental impacts of waste storage. As the Board found, actual waste transportation routes are not under review in this licensing proceeding. We see no merit to Joint Petitioners claim that reviewing the impacts that may result from the proposed action in this case—construction and operation of the proposed CISF—also requires an

¹¹⁶ *Id.* at 76-77.

¹¹⁷ LBP-19-7, 90 NRC at 94.

¹¹⁸ *Id.* at 94.

¹¹⁹ *Id.*

environmental justice evaluation of communities along as-yet-unknown transportation routes. Accordingly, we affirm the Board's dismissal of proposed Contention 5.

5. Joint Petitioners' Proposed Contention 6 (Effects of Oil and Gas Drilling)

In proposed Contention 6, Joint Petitioners asserted that fracking is occurring nearby the proposed CISF site but that "[t]here 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."¹²⁰ Joint Petitioners further asserted that "the realistic prospects for mineral development immediately surrounding and underneath the WCS site" are unknown.¹²¹ As a result, Joint Petitioners asserted, there are unknown "seismic, groundwater flow, and water consumption implications" posed by potential fracking that have not been addressed in the application.¹²²

The Board found that Joint Petitioners "fail[ed] to acknowledge (much less dispute) relevant portions of ISP's application that address their concerns."¹²³ The Board noted, for example, that the SAR includes a proprietary analysis of seismic hazards, to which Joint Petitioners did not seek access and which they did not review.¹²⁴ Having found that Joint Petitioners had not met their burden to review the application and point out specific sections that were deficient, the Board dismissed proposed Contention 6 because it did not raise a genuine dispute with the application.¹²⁵ The Board also rejected Joint Petitioners' argument, raised for

¹²⁰ Joint Petitioners Petition at 98.

¹²¹ *Id.*

¹²² *Id.*

¹²³ LBP-19-7, 90 NRC at 96.

¹²⁴ *Id.*

¹²⁵ *Id.*

the first time in a reply brief, that the application should consider future, possibly “intensified” fracking.¹²⁶ The Board found that this argument was not supported by any authority.¹²⁷

On appeal, Joint Petitioners repeat their argument that “there must be an accounting of prospective drilling trends and density in the immediate region of the CISF” or otherwise there will be a “failure to investigate, project and disclose prospective geological changes” that will occur during the expected operations of the facility.¹²⁸ They further argue that the Board “missed Joint Petitioners’ point” that the “omission of information about legal title to subsurface mineral rights . . . means that there is no certainty that fracking and possibly waste well injection activities will be prohibited underneath the WCS site.”¹²⁹

Joint Petitioners have shown no error in the Board’s decision that proposed Contention 6 did not raise a material dispute with the license application. As required by our regulations, the license application includes information about site geology and seismology, including induced seismicity related to petroleum recovery.¹³⁰ The application discusses the corrosive properties of site soils, analyzes the potential for and severity of human-induced events at the site, and investigates other site characteristics. Joint Petitioners’ assertion that additional analysis of prospective drilling trends is required is neither supported by legal authority nor explained as a specific deficiency in any of the analyses already provided. We therefore agree with the Board

¹²⁶ *Id.*; see also *Combined Reply of Don’t Waste Michigan, Citizen’s 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 to ISP/WCS and NRC Answers* (Dec. 17, 2018), at 38.

¹²⁷ LBP-19-7, 90 NRC at 96.

¹²⁸ Joint Petitioners Appeal at 26.

¹²⁹ *Id.* at 25.

¹³⁰ See 10 C.F.R. § 72.103.

that Joint Petitioners did not meet their burden to identify sections of the application that they believed to be inadequate and provide supporting law, facts, or expert opinion to explain each asserted inadequacy described in proposed Contention 6. Accordingly, we affirm the Board's dismissal of proposed Contention 6.

6. Joint Petitioners' Proposed Contention 8 (Inadequate Consideration of Alternatives)

In proposed Contention 8, Joint Petitioners asserted that ISP's Environmental Report is inadequate because there are "alternatives to the proposed CISF project which are neither recognized nor addressed in the Environmental Report, contrary to NEPA requirements."¹³¹ They argued that these alternatives include variants on the proposed facility.¹³² Joint Petitioners also asserted that ISP's evaluation of the no-action alternative was deficient because ISP made "no demonstration of the overall benefits and costs of leaving the waste at the reactor site compared to the benefits and costs of sending waste from many reactors" to the proposed CISF.¹³³

The Board ruled the contention inadmissible because it did not raise a genuine dispute on a material issue of fact or law.¹³⁴ The Board found that Joint Petitioners had identified five potential alternatives to the proposed action but had not explained what authority required ISP to evaluate any of them.¹³⁵ It noted that of the five alternatives suggested by Joint Petitioners, four "do not appear to be alternatives to constructing ISP's proposed facility at all, but rather suggestions for how to improve it" and the fifth alternative—hardened storage of spent fuel at

¹³¹ Joint Petitioners Petition at 107.

¹³² *Id.* at 107-08, 111.

¹³³ *Id.* at 111.

¹³⁴ LBP-19-7, 90 NRC at 98.

¹³⁵ *Id.*

existing reactor sites—has not been licensed or implemented.¹³⁶ The Board found that Joint Petitioners had not shown why hardened on-site storage of spent fuel at existing reactors would be necessary to an evaluation of the no-action alternative.¹³⁷ The Board also rejected Joint Petitioners' claim that a cost-benefit analysis of the no-action alternative was omitted because "the alleged missing information" was provided in Chapter 7 of the Environmental Report.¹³⁸

On appeal, Joint Petitioners argue that the Board was wrong to require further explanation of why the five project alternatives they propose are required to be addressed by ISP. Those five alternatives include "(1) establishment of a dry transfer system; (2) modification of ISP's emergency response plan to include preparations for emissions mitigation; (3) CISF design modification to prevent 'malevolent' acts; (4) Federal Government control of the ISP facility; and (5) implementation of hardened onsite storage . . . at reactor sites."¹³⁹ Joint Petitioners, citing the decision of the United States Court of Appeals for the First Circuit in *Dubois v. U.S. Department of Agriculture*, assert that they "do not have to explain" why these alternatives must be considered because "the existence of reasonable but unexamined alternatives renders an EIS inadequate."¹⁴⁰

In *DuBois*, the First Circuit found that the United States Forest Service failed to meet its NEPA obligations because it did not address *at all* a reasonable alternative identified by commenters on its draft environmental impact statement.¹⁴¹ The U.S. Environmental Protection

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ *Id.* at 99. Joint Petitioners do not pursue this claim on appeal.

¹³⁹ Joint Petitioners Appeal at 26-27.

¹⁴⁰ *Id.* at 27 (citing *DuBois v. U.S. Dep't of Agric.*, 102 F.3d 1273, 1287 (1st Cir. 1996)).

¹⁴¹ The Forest Service had granted a permit to allow a ski resort to increase its withdrawal of water from an unusually pristine mountain pond for artificial snowmaking. The permit allowed a fifteen-foot drop in the pond's water level from the resort's water use, which was far greater than

Agency had judged that the permitted option would have serious adverse environmental consequences to an “outstanding” water resource, and the alternative urged by the commenters would involve an option that had been approved in other similar situations.¹⁴² But the Forest Service did not respond to the suggested alternative.¹⁴³ The Court found that NEPA required the Forest Service, faced with evidence of serious adverse consequences associated with the proposed action, to consider the “reasonably thoughtful” alternative proposal “and to explain its reasoning if it rejected the proposal.”¹⁴⁴ But this decision does not require an agency to conduct an environmental analysis of every suggestion proposed by a commenter.

Here, unlike in *DuBois*, Joint Petitioners have not shown that their proposed alternatives are reasonable, and the Board sufficiently explained its rejection of them. Two of the proposed alternatives—Federal ownership of the proposed CISF and implementation of hardened, on-site storage of spent fuel at current reactor sites—would not meet the applicant’s purpose to construct a privately-owned, centralized storage facility.¹⁴⁵ The other three alternatives call for design and procedure changes at the proposed facility—including consideration of design features not required by our safety regulations—without explaining why those changes would be needed to avoid or mitigate an environmental impact.

the previously approved limit of eighteen inches. The alternative presented by commenters was to build artificial water storage ponds. *Dubois*, 102 F.3d at 1278-79.

¹⁴² *Id.* at 1277-78.

¹⁴³ *Id.* at 1279.

¹⁴⁴ *Id.* at 1288-89.

¹⁴⁵ As a licensing agency charged with enabling the safe and secure use of nuclear materials, we “accord substantial weight to the preferences of the applicant and/or sponsor in the siting and design of the project.” *In re Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-04, 53 NRC 31, 55 (2001) (quoting *Citizens Against Burlington v. Busey*, 938 F.2d 190, 197 (D.C. Cir. 1991)). We may also legitimately consider the “economic goals of the project’s sponsor.” *Id.* (quoting *City of Grapevine v. Dep’t of Transp.*, 17 F.3d 1502, 1506 (D.C. Cir. 1994)).

Under our contention-pleading rules, it is the petitioner's burden to explain why a contention should be admitted. As the Board found, Joint Petitioners have not met that burden in their proposal of project alternatives. We therefore affirm the Board's dismissal of proposed Contention 8.

7. Joint Petitioners' Proposed Contention 11 (Lack of a Dry Transfer System)

Joint Petitioners asserted in proposed Contention 11 that ISP's application must include plans for a dry transfer system—a facility that could be used to repackage spent fuel—or “other technological means of handling problems with damaged, leaking or externally contaminated SNF canisters or damaged fuel in the canisters.”¹⁴⁶ The omission, according to Joint Petitioners, “contradicts the expectations of the Continued Storage GEIS” and indicates that “[t]here is no plan for radiation emissions mitigation or radioactive releases at the CISF site.”¹⁴⁷ Joint Petitioners asserted the omission “violates the Atomic Energy Act obligation to protect the public” and that the “unanalyzed risks . . . must be addressed in the Environmental Impact Statement.”¹⁴⁸

The Board found the contention inadmissible for three independent reasons. First, Joint Petitioners focused on the possibility that canisters would be damaged and a dry transfer system would be required. But contrary to our requirements, Joint Petitioners did not address ISP's relevant safety analyses, aging management plans, and quality assurance programs.¹⁴⁹ Second, under our prior decision in *Private Fuel Storage*, several safety evaluations for waste packages have led the NRC to conclude that accidental canister breaches are not credible

¹⁴⁶ Joint Petitioners Petition at 118.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* at 118-19.

¹⁴⁹ LBP-19-7, 90 NRC at 102.

scenarios.¹⁵⁰ Therefore Joint Petitioners' claim that canister damage could somehow occur "fail[ed] to raise a plausible scenario."¹⁵¹ Third, contrary to Joint Petitioners' characterizations, "neither the GEIS nor NRC regulations require ISP to construct a dry storage system during the initial 40-year license for its proposed facility," and "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."¹⁵²

On appeal, Joint Petitioners do not dispute the Board's rulings directly but again assert that it would be better to have a dry transfer system in place at the start of CISF operations, rather than in the long-term and indefinite timeframes contemplated by the Continued Storage GEIS.¹⁵³ Joint Petitioners also assert that, if DOE at some future time begins a campaign to move spent fuel from existing sites to a permanent repository, repackaging will be required, given "the current posture of the DOE's canister repackaging policy."¹⁵⁴ The Board considered and rejected these arguments, and we see no basis in Joint Petitioners' appeal to disturb the Board's decision.¹⁵⁵

We agree with the Board that NRC regulations do not require a dry transfer system to be in place during the period of licensed operation. Moreover, NRC regulations do not require a

¹⁵⁰ See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 136-37 (2004)).

¹⁵¹ LBP-19-7, 90 NRC at 102-03 (citing *Private Fuel Storage*, 60 NRC at 136-37).

¹⁵² *Id.* at 103.

¹⁵³ See Joint Petitioners Appeal at 29; see also Continued Storage GEIS § 2.1.4 (reflecting the assumption that a dry transfer system would be constructed not during the period of facility operations but in the long-term and indefinite timeframes of continued waste storage following the operating license term).

¹⁵⁴ Joint Petitioners Appeal at 29.

¹⁵⁵ See LBP-19-7, 90 NRC at 103.

license applicant to describe in its Environmental Report the impacts of building and operating a dry transfer system after the period of licensed operation. Rather, the impacts of continued spent fuel storage after the period of licensed operation—including the impacts associated with construction and operation of a dry transfer system—are already described generically in the Continued Storage GEIS, which is incorporated by reference into the Continued Storage Rule.¹⁵⁶ Accordingly, we affirm the Board's dismissal of proposed Contention 11.

8. Joint Petitioners' Proposed Contention 14 (NEPA Analysis of Security Risks)

Joint Petitioners asserted in proposed Contention 14 that ISP's application should include an analysis of the environmental impacts resulting from (among other things) a terrorist attack on spent nuclear fuel shipments to the proposed CISF.¹⁵⁷ The Board found the contention inadmissible based on our precedent, which was upheld by the United States Court of Appeals for the Third Circuit.¹⁵⁸ In *AmerGen Energy*, we held that terrorist attacks are too far removed from the natural or expected consequences of agency action to require environmental analysis in an NRC licensing proceeding.¹⁵⁹

On appeal, Joint Petitioners argue that the Board's rejection of proposed Contention 14 rested "on the unlawful segmenting of the CISF from the transportation component" and that "[w]ere transportation properly included within the scope of the project, the hundreds of SNF cargoes coming from states within the geographical Ninth Circuit, as part of the project, would have to be analyzed" under the Ninth Circuit's ruling in *San Luis Obispo Mothers for Peace v.*

¹⁵⁶ See Continued Storage GEIS § 2.2.2, at 2-31 to 2-35, chs. 4-5; 10 C.F.R. § 51.23.

¹⁵⁷ Joint Petitioners Petition at 142-43.

¹⁵⁸ LBP-19-7, 90 NRC at 108; see *AmerGen Energy Company, LLC* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124 (2007), *review denied*, *N. J. Dep't of Env'tl. Prot. v. NRC*, 561 F.3d 132 (3d Cir. 2009).

¹⁵⁹ *AmerGen Energy*, CLI-07-8, 65 NRC at 129.

NRC.¹⁶⁰ The Board explicitly considered and rejected this argument and noted that in *AmerGen Energy*, we declined to apply the ruling in *San Luis Obispo Mothers for Peace* outside of the Ninth Circuit.¹⁶¹ The Board found that because the proposed CISF would be in Texas—outside the Ninth Circuit—no terrorist-attack analysis under NEPA is required.¹⁶²

Joint Petitioners have shown no error in the Board's decision. As the Board addressed in its rulings on proposed Contentions 1 and 5, which we affirmed above, actual waste transportation routes are not currently known and have not they been proposed. Thus, review and approval of actual transportation routes to the proposed CISF is an issue outside the scope of this proceeding.¹⁶³ And Joint Petitioners have offered no argument persuading us that the likelihood of a terrorist attack is a reasonably foreseeable consequence of licensing this facility. The Board correctly applied our prior ruling in *AmerGen Energy*, and we affirm its decision to deny admission of proposed Contention 14.

E. Fasken's Motion for New Contention

On July 6, 2020, Fasken filed a motion to reopen the record of this proceeding and admit a new contention challenging the discussion of transportation impacts in the Staff's draft Environmental Impact Statement.¹⁶⁴ Although we have jurisdiction to consider whether to reopen this proceeding and admit the contention, we refer Fasken's motion to the Board for

¹⁶⁰ 449 F.3d 1016, 1032 (9th Cir. 2006).

¹⁶¹ LBP-19-7, 90 NRC at 108.

¹⁶² *Id.*

¹⁶³ *See supra* §§ II.D.1, II.D.4.

¹⁶⁴ *See* Fasken Motion for Contention 5; *see also* "Environmental Impact Statement for Interim Storage Partners LLC's License Application for a Consolidated Interim Storage Facility for Spent Nuclear Fuel in Andrews County, Texas" (Draft Report for Comment), NUREG-2239 (May 2020) (ML20122A220).

consideration of these matters initially.¹⁶⁵ We remand Fasken's Proposed Contention 5 to the Board for consideration of the contention's admissibility, good cause for filing after the deadline, and ability to meet the reopening standards, consistent with our ruling here with respect to the similar issues raised in Joint Petitioners' Contention 1.¹⁶⁶

II. CONCLUSION

For the foregoing reasons, we *affirm* the Board's decision denying the hearing requests and *remand* Fasken's Contention 5 to the Board for consideration.

IT IS SO ORDERED.



For the Commission

Annette L.
Vietti-Cook

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Annette L. Vietti-
Cook
Date: 2020.12.17
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Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 17th day of December 2020

¹⁶⁵ See, e.g., *Holtec*, CLI-20-4, 91 NRC at 191, 211; *Virginia Electric & Power Co.* (North Anna Power Station, Unit 3), CLI-12-14, 75 NRC 692, 701-02 (2012).

¹⁶⁶ The motion was timely under 10 C.F.R. § 2.326(a)(1) based on an order by the Secretary extending the deadline for filing new contentions based on the draft environmental impact statement. See Order (May 22, 2020).