

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

In the Matter of:)
)
Holtec International) Docket No. 72-1051
)
(HI-STORE Consolidated Interim Storage Facility)
)

In the Matter of:)
)
Interim Storage Partners) Docket No. 72-1050
)
(WCS Consolidated Interim Storage Facility))
)

**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**

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I. INTRODUCTION

Pursuant to the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. § 10101, *et seq.* (“NWP”) and the Administrative Procedure Act, 5 U.S.C. §§ 706(2)(A) and (C), Beyond Nuclear, Inc. (“Beyond Nuclear”) hereby requests that the U.S. Nuclear Regulatory Commission (“NRC” or “Commission”) dismiss the above-captioned applications by Holtec International (“Holtec”) and Interim Storage Partners, L.L.P. (“ISP”) to build and operate centralized interim spent fuel storage facilities (“CISF”) in New Mexico and Texas, respectively.¹ The proceedings must be dismissed because the central premise of both Holtec’s and ISP’s applications – 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 facilities – violates the NWP. Under the NWP, 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.

By even considering these unlawful applications, the NRC impermissibly allows Holtec and ISP to undermine longstanding Congressional policy, established in the NWP, that ownership of and liability for spent fuel should remain with private licensees until a federal repository becomes available for permanent disposal. By conducting these licensing proceedings, the NRC also unfairly subjects Beyond Nuclear and its members to the costly and unnecessary expenses of challenging the applications that cannot be lawfully approved.

Finally, the fact that NRC is entertaining these unlawful license applications gives them undeserved legitimacy in the eyes of the public, giving rise to general public anticipation that Holtec and ISP may be allowed to store thousands of tons of highly radioactive waste at the

¹ These applications were noticed at 83 Fed. Reg. 32,919 (July 16, 2018) (“Holtec Hearing Notice”) and 83 Fed. Reg. 44,070 (Aug. 29, 2018) (“ISP Hearing Notice”). Holtec’s proposed CISF is referred to as “Holtec CISF” and ISP’s proposed CISF is referred to as “WCS CISF.”

proposed CISFs for decades. Beyond Nuclear respectfully submits that this public perception will unnecessarily depress the property values of Beyond Nuclear members who reside and own property in the vicinity.

II. THE ISSUES RAISED BY THIS MOTION LIE OUTSIDE THE SCOPE OF THE PENDING LICENSING PROCEEDINGS AND THEREFORE SHOULD BE CONSIDERED IN A SEPARATE PROCEEDING

While Beyond Nuclear has submitted this Motion in the NRC's dockets for the Holtec and ISP license applications (Nos. 72-1050 and 72-1051, respectively), Beyond Nuclear does not seek consideration of the Motion in either of the licensing proceedings that has been noticed in the Federal Register. Holtec Hearing Notice, 83 Fed. Reg. 32,919; ISP Hearing Notice, 83 Fed. Reg. 44,070. The scope of those proceedings is limited to the question of whether the applications satisfy the Atomic Energy Act ("AEA"), the National Environmental Policy Act ("NEPA"), and NRC's regulations for implementation of those statutes. 10 C.F.R. §§ 72.40, 51.101. The question posed in this Motion, *i.e.*, whether consideration of Holtec's and ISP's license applications is permitted by the NWPA, a separate statute, can be answered without consideration of the AEA and NEPA. Therefore the Commission should establish a separate proceeding for consideration of this Motion.²

III. BEYOND NUCLEAR HAS STANDING TO BRING THIS MOTION

As set forth below, Beyond Nuclear has standing to bring this Motion as a representative of its members. *Hunt v. Washington State Apple Advert. Comm'n*, 432 U.S. 333, 342 (1977).

² In an abundance of caution, Beyond Nuclear has submitted a hearing request and contentions in the Holtec licensing proceeding and anticipates submitting a hearing request and contentions in the ISP licensing proceeding. Beyond Nuclear's contentions assert the same NWPA claims as are asserted in this Motion. Beyond Nuclear's hearing requests will preserve these claims in the event that the Commission and/or a reviewing court holds that the licensing proceedings for consideration of the Holtec and ISP applications constitute the only venues in which the NRC will consider whether these applications violate the NWPA.

Beyond Nuclear 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. Beyond Nuclear advocates for an end to the production of nuclear waste and for securing the existing reactor waste in hardened on-site storage until it can be permanently disposed of in a safe, sound, and suitable underground repository. For almost ten years, Beyond Nuclear has worked toward its mission by regularly intervening in NRC licensing, relicensing, and other proceedings related to irradiated nuclear fuel matters. Based on the following, as well as the additional interests included in members' declarations, *see* Exhibits 01-08, Beyond Nuclear demonstrates that its members fulfill the standing requirements and have authorized Beyond Nuclear to represent their interests. Accordingly, Beyond Nuclear has standing to request NRC dismiss the Holtec and ISP applications.

A. Beyond Nuclear's Standing is Established through Radiological Injury

Beyond Nuclear's members are largely concerned with radiological injury. To establish standing, the injury alleged need not be large: even minor radiological exposures, within regulatory limits, resulting from a proposed license activity can be sufficient. *See Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 417 (2001), *reversed on other grounds*, CLI-02-24, 56 NRC 335 (2002). In *Yankee Atomic Elec. Co.*, for example, the Licensing Board found standing because the Board could not "rule out" the potential for "some, even if minor, public exposures" from the decommissioning process to members of the petitioner organizations who lived within ten miles of the site, recreated along waterways, and regularly used roads that potentially would be used to transport waste. (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 69-70, *aff'd*, CLI-96-7, 43 NRC 235, 246-48

(1996). *See also Armed Forces Radiobiology Research Inst. (Cobalt-60 Storage Facility)*, ALAB-682, 16 NRC 150, 154 (1982) (quoting *Duke Power Co. v. Carolina Environmental Study Group*, 438 U.S. 59, 74 (1978)) (“[T]he emission of non-natural radiation into appellees’ environment would also seem a direct and present injury, given our generalized concern about exposure to radiation and the apprehension flowing from the uncertainty about the health and genetic consequences of even small emissions like those concededly emitted by nuclear power plants.”).

The NRC recognizes two legal frameworks for analyzing standing based on radiological injury: traditional standing and the proximity presumption. *U.S. Army Installation Command (Schofield Barracks, Oahu, Hawaii, & Pohakuloa Training Area, Island of Hawaii, Hawaii)*, LBP-10-4, 71 NRC 216, 228 (2010). Beyond Nuclear has standing pursuant to both frameworks.

B. Beyond Nuclear Has Standing Pursuant to Traditional Standing Doctrine

To establish standing through traditional means, the NRC applies judicial concepts of standing, *i.e.*, injury-in-fact, causation, and redressability. *Pac. Gas & Electric Co. (Diablo Canyon Power Plant Indep. Spent Fuel Storage Installation)* LBP-07-14, 56 NRC 413, 426 (2002).

Beyond Nuclear establishes standing through traditional means by virtue of the injuries to its members who live and travel on or along routes that Holtec and ISP plan to transport spent nuclear fuel. Members will be injured primarily from radiologic exposure received during normal transportation operations. *See WASH-1238, Environmental Survey of Transportation of Radioactive Materials To and From Nuclear Power Plants (Dec. 1972)* (NRC found that a person who spends three minutes at an average distance of three feet from loaded truck or car might receive a dose of as much of 1.3 mrem); *Environmental Report on the HI-STORE CIS*

FACILITY at 4-32 (Report No. HI-2167521) (Dec. 2017) (using dose rate of 10 mrem/hour at a distance of 6.5 feet for transportation radiation impact analysis) (hereinafter “Holtec Environmental Report”); WCS Environmental Report at 4-13 (using dose rate of 0.1 mSv per hour at 2 meters for transportation radiation impact analysis). For example, the Licensing Board in *Duke Cogema Stone & Webster* found that “unwanted doses of ionizing radiation” from shipments of nuclear fuel transported “over the same public highways the Petitioners’ members travel” established standing because “incident-free shipping of plutonium provides a dose of ionizing radiation, albeit small, to anyone next to the transport vehicle and a minor exposure to radiation, even one within regulatory limits, is sufficient to state an injury in fact.” LBP-01-35, 54 NRC at 417.

There is also a risk of radiologic injury to Beyond Nuclear’s members from an accident involving shipments of spent nuclear fuel being transported to the CISFs. *See e.g.*, Holtec Environmental Report at 4-34 (the application analyzes “a spectrum of accidents that ranged from high-probability accidents of low severity and consequences to severe accidents with radiological consequences”); WCS Environmental Report at 4-15 (noting that rail casks could release radioactivity in “exceptionally severe accidents.”). There is a higher likelihood of an accident involving spent nuclear fuel near the CISFs because the transportation infrastructure in those areas is already unsafe and impacted from the oil and gas boom. *See e.g.*, *New Mexico GOP Governor Hopeful: Toll Roads for Oil Traffic*, Associated Press, KTBS (Aug. 21, 2018), https://www.ktbs.com/news/business/new-mexico-gop-governor-hopeful-toll-roads-for-oil-traffic/article_e8f4a10a-2542-5a9a-b64e-d0e6448c7bc8.html.

Further, Beyond Nuclear’s members’ interest in and right to travel will also be injured because they will either not know which route is safest to avoid radiological injury or they will

be unable to avoid unsafe routes because of the limited highways in the area. *See Duke Cogema Stone & Webster*, LBP-01-35, 54 NRC at 415.

Holtec plans to transport spent nuclear fuel to the Holtec CISF on the Burlington Northern Santa Fe Carlsbad Subdivision railroad. Holtec Environmental Report at 2-4, 3-105, 4-30. This railroad travels through Roswell, New Mexico, south to Carlsbad, New Mexico, and then travels east toward the Holtec site, along which it parallels Highway 62/180 for 20 miles at a distance of 100 to 500 feet. Holtec may also transport the spent nuclear fuel the final 3.8 miles to the Holtec CISF by truck. Holtec Environmental Report at 4-33. Beyond Nuclear members who live or travel on roads that cross or parallel the Burlington Northern Santa Fe Carlsbad Subdivision railroad will be exposed to small doses of unwanted radiation during the normal transportation of spent nuclear fuel to the Holtec Facility and a higher likelihood of an accident involving spent nuclear fuel. Their interest in travel will be affected if they wish to avoid these injuries. Thus, Beyond Nuclear has standing to request dismissal of the Holtec application through members:

- Danny Berry who regularly travels on roads and highways around the Holtec CISF, including Highway 62/180 where it parallels the Burlington Northern Santa Fe Carlsbad Subdivision railroad. *See Exhibit 01.*
- Keli Hatley and Margo Smith, who regularly travel on Highway 62/180 where it parallels the Burlington Northern Santa Fe Carlsbad Subdivision railroad, regularly travel other roads in the area on which Holtec may transport spent nuclear fuel, and regularly travel on Laguna Road/Country Road 55 which will have to be moved to avoid the Holtec CISF. *See Exhibits 03 and 05.*
- Nick King, who lives within 450 yards of one Burlington Northern Santa Fe Carlsbad Subdivision railroad, 800 yards of a second Burlington Northern Santa Fe Carlsbad Subdivision railroad, and within one mile of a railyard at which the spent nuclear fuel shipments may stop for extended periods. *See Exhibit 04.*
- Gene Harbaugh, who lives within 250 yards of a Burlington Northern Santa Fe Carlsbad Subdivision railroad and within 500 yards of a railyard at which the spent nuclear fuel shipments may stop for extended periods. *See Exhibit 08.*

- Jimi Gadzia, who lives within 900 yards of the Burlington Northern Santa Fe Carlsbad Subdivision railroad and whose frequent travel in Roswell causes her to regularly travel along and over this railroad. *See* Exhibit 02.

ISP also plans to transport spent nuclear fuel to the WCS CISF by rail. ISP plans to use the Texas and New Mexico Railway between Monahan, Texas, and Eunice, New Mexico. WCS Environmental Report at 4-8. This railroad parallels Highway 18 within a few hundred feet for approximately 40 miles. Beyond Nuclear members who live or travel on roads that cross or parallel the Texas and New Mexico Railway will be exposed to small doses of unwanted radiation during the normal transportation of spent nuclear fuel to the WCS Facility and a higher likelihood of an accident involving spent nuclear fuel. Their interest in travel will be affected if they wish to avoid these injuries. Thus, Beyond Nuclear has standing to request dismissal of the ISP application through members:

- Rose Gardner and D.K. Boyd, who regularly travel on roads and highways around the WCS CISF, including Highway 18 where it parallels the Texas and New Mexico Railway. *See* Exhibits 06 and 07.

Beyond Nuclear also establishes standing through traditional means by virtue of adverse impacts to its members' property values. *See Kelley v. Selin*, 42 F.3d 1501, 1509–10 (6th Cir. 1995) (“Petitioners are clearly asserting a threatened injury. The injury can be fairly traced to respondents’ actions since petitioners allege that it is the storage of spent nuclear fuels in the VSC–24 cask that has the potential to interrupt enjoyment of their lakefront property and to diminish its value. Finally, a decision in their favor could redress the threatened harm.”); *see also Louisiana Energy Servs., L.P.* (Claiborne Enrichment Ctr.), CLI-98-3, 47 NRC 77, 108-109 (1998). Because of public perception and anticipation, individuals are hesitant to move close to a nuclear facility or the transportation route for spent nuclear fuel, which leads to depressed property values near these sites. Close proximity to nuclear facilities and transportation routes for

spent nuclear fuel may decrease property values as soon as a nuclear facility is licensed. Thus, Beyond Nuclear has standing to request dismissal of the Holtec application through members:

- Margo Smith and Keli Hatley, whose homes and property are located within one to seven miles from the Holtec CISF and each of their livelihoods is directly connected to the value of the Smith Ranch, which shares a fence line with the Holtec CISF. *See Exhibits 05 and 03.*
- Daniel Berry, whose home and property is located within 11 miles of the Holtec CISF and who owns ranchland located within three to 15 miles of the Holtec CISF. *See Exhibit 01.*
- Gene Harbaugh, whose home and property is located within 250 yards of a Burlington Northern Santa Fe Carlsbad Subdivision railroad and 500 yards of the railyard that Holtec will use to transport spent nuclear fuel to the Holtec CISF. *See Exhibit 08.*
- Nick King, whose home and property is located within 450 yards of one Burlington Northern Santa Fe Carlsbad Subdivision railroad, within 800 yards of a second Burlington Northern Santa Fe Carlsbad Subdivision railroad, and within one mile of a railyard that Holtec will use to transport spent nuclear fuel to the Holtec CISF. *See Exhibit 04.*
- Jimi Gadzia, whose home and property is located within 900 yards of the Burlington Northern Santa Fe Carlsbad Subdivision railroad that Holtec may use to transport spent nuclear fuel to the Holtec CISF. *See Exhibit 02.*

Beyond Nuclear also has standing to request dismissal of the ISP application through members:

- Rose Gardner, whose home and property are located within seven miles of the WCS CISF. *See Exhibit 06.*
- D.K. Boyd, whose property is four miles from the WCS CISF at the nearest point. *See Exhibit 07.*

C. Beyond Nuclear Has Standing Pursuant to the Proximity Presumption

NRC has also applied an alternative to establishing standing based on the proximity presumption. *Tennessee Valley Auth.* (Sequoyah Nuclear Plant, Units 1 & 2; Watts Bar Nuclear Plant, Unit 1), LBP-02-14, 56 NRC 15, 3 (2002) (“This so-called proximity or geographical presumption ‘presumes a petitioner has standing to intervene without the need specifically to

plead injury, causation, and redressability...’ ”); *Armed Forces Radiobiology Research Inst.*, ALAB-682, 16 NRC at 154 (The “proximity to a large source of radioactive material establishes petitioner’s interest.”). Where the “nature of the proposed action and the significance of the radioactive source” create an “obvious potential for offsite consequences,” the NRC applies a presumption of standing to individuals residing, owning property, or having frequent and regular contacts within the radius of those potential offsite consequences. *Consumers Energy Co.* (Big Rock Point Indep. Spent Fuel Storage Installation), CLI-07-19, 65 NRC 423, 426 (2007) (quoting *Exelon Generation Co. LLC & PSEG Nuclear, LLC* (Peach Bottom Atomic Power Station, Units 2 & 3), CLI-05-26, 62 NRC 577, 580-581 (2005)); see also *Kelley v. Selin*, 42 F.3d 1501 (6th Cir. 1995).

The determination of the radius “beyond which . . . there is no longer an ‘obvious potential for offsite consequences’” is made on a case-by-case basis. *Exelon Generation Co. LLC & PSEG Nuclear, LLC*, CLI-05-26, 62 NRC at 580-81. Licensing Boards have found standing based on proximity to spent nuclear fuel ranging from 4,000 feet to 17 miles. *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142 (1997); *Pac. Gas & Elec. Co.*, LBP-02-23, 56 NRC at 428. The standard for assessing the potential for offsite consequences is whether the consequences are plausible, not whether consequences are probable or likely. *Cfc Logistics, Inc.*, LBP-03-20, 58 NRC 311, 320 (2003), citing *Ga. Inst. of Tech.* (Georgia Tech Research Reactor) CLI-95-12, 42 NRC 111 (1995) (Commission found standing based on a “plausible scenario, albeit a highly unlikely one, in which three independent redundant safety systems—all designed to function under normal circumstances—could simultaneously fail in a research reactor.”).

The potential for offsite consequences from both the Holtec CISF and WCS CISF is “obvious” due to the characteristics and quantity of spent nuclear fuel Holtec and ISP plan to consolidate at the CISFs. Spent fuel is and will remain highly radioactive and dangerous to humans for hundreds of thousands of years. *Nuclear Energy Institute v. EPA*, 373 F.3d 1251, 1257 (D.C. Cir. 2004). Holtec proposes to store an astronomical quantity of this extremely dangerous and long-lived radioactive waste -- up to 173,600 MTU, more than twice the total amount of commercially generated spent nuclear fuel existing in the entire United States today. *See infra*, Section V.A. For its part, ISP plans to store 40,000 MTU of spent nuclear fuel at the WCS CISF -- a quantity that is more than half of the spent nuclear fuel existing in the United States. WCS Environmental Report at 4-9. As discussed in the Blue Ribbon Commission’s Report (for more detail, *see infra* Section V.A.), the *only* acceptable means for separating this dangerous material from the environment for the long-term is disposal, not interim storage. Blue Ribbon Commission on America’s Nuclear Future, Report to the Secretary at xi (Jan. 2012) (ML120970375) (“BRC Report”) (“The conclusion that disposal is needed and that deep geologic disposal is the scientifically preferred approach has been reached by every expert panel that has looked at the issue and by every other country that is pursuing a nuclear waste management program.”). Further, Holtec and ISP each acknowledge at least one plausible scenario that would result in off-site consequences from storage of spent nuclear fuel at both CISFs. HI-STORE CIS Safety Analysis Report at 8-5 – 8-6 (Report No. HI-2167374) (Mar. 27, 2017) (safety analysis explains that a criticality accident is possible due to a flooded canister) (hereinafter “Holtec SAR”); WCS Safety Analysis Report at 12-2 (“Analyses are provided for a range of hypothetical accidents, including those with the potential to result in a total effective

dose equivalent of greater than 5 Rem outside the owner controlled area or the sum of the deep-dose equivalent specified in 10 CFR 72.106.”).

Thus, Beyond Nuclear has standing to request dismissal of the Holtec and ISP applications based on the proximity presumption, through members who own property nearby and have frequent and regular contacts within the radius of potential obvious offsite consequences from the Holtec CISF and the WCS CISF, including:

- Keli Hatley, who lives one mile from the Holtec CISF. *See* Exhibit 03. Ms. Hatley often spends time with family approximately two miles from the Holtec CISF and ranches her cattle up to the fence line of the Holtec CISF. *Id.* Ms. Hatley and her children drive most days over a section of the Laguna Road/Country Road 55 that currently travels across the Holtec site and will have to be moved if the CISF is built. *Id.*
- Margo Smith, who lives seven miles from the Holtec CISF. *See* Exhibit 05. Ms. Smith regularly spends time within approximately two miles of the Holtec CISF, ranching and visiting her two daughters’ homes. *Id.*
- Daniel Berry, who owns property within three to fifteen miles of the Holtec CISF. *See* Exhibit 01. Mr. Berry also lives and works on this land, and regularly drives on Highway 62/180 near the Holtec CISF. *Id.*
- Jimi Gadzia, who owns mineral rights within ten to 16 miles of the Holtec CISF. *See* Exhibit 02.
- Rose Gardner, whose home and work are located within seven miles of the WCS CISF. *See* Exhibit 06. Ms. Gardner also visits family who live approximately five miles from the WCS CISF. *Id.*
- D.K. Boyd, whose property is four miles from the WCS CISF at the nearest point. *See* Exhibit 07.

IV. STATUTORY FRAMEWORK

A. Nuclear Waste Policy Act

The NWPA is Congress’ “comprehensive scheme for the interim storage and permanent disposal of high-level radioactive waste generated by civilian nuclear power plants.” *Ind. Mich. Power Co. v. DOE*, 88 F.3d 1272, 1273 (D.C. Cir. 1996). The NWPA establishes distinct roles for the federal government and spent fuel generators with respect to the storage and disposal of

spent fuel. The “Federal Government has the responsibility to provide for the permanent disposal of ... spent nuclear fuel” but “the generators and owners of ... spent nuclear fuel have the primary responsibility to provide for, and the responsibility to pay the costs of, the interim storage of ... spent fuel until such ... spent fuel is accepted by the Secretary of Energy.” 42 U.S.C. § 10131. Thus, Section 111 of the NWPA specifically provides that the federal government will not take title to spent fuel until it has opened a repository. 42 U.S.C. § 10131(a)(5).

B. Administrative Procedure Act

The Administrative Procedure Act prohibits, and requires reviewing courts to hold unlawful and set aside, federal agency action that is “not in accordance with law,” or “in excess of statutory jurisdiction, authority, or limitations, or short of statutory right.” 5 U.S.C. §§ 706(2)(A), (C). These prohibitions have prevented other agencies from ignoring the mandates of the NWPA. For example, after the Yucca Mountain project was abandoned, the DOE determined it need not revise the annual fee nuclear power producers must pay pursuant to the NWPA to cover the costs of nuclear waste disposal. *Nat'l Ass'n of Regulatory Util. Comm'rs v. U.S. Dep't of Energy*, 736 F.3d 517, 519-520 (D.C. Cir. 2013). The D.C. Circuit struck that decision down as “contrary to law.” *Id.* In striking similarity with Holtec’s and ISP’s assumptions discussed in detail below, DOE premised its determination on an assumption that a temporary storage facility could be constructed *without* NRC first issuing a license for the construction of a permanent facility. *Id.* Of course, the NWPA requires that precondition. The Court thus held that while “it is one thing to anticipate minor statutory additions to fill gaps,” it is “quite another to proceed on the premise of a wholesale reversal of a statutory scheme. The latter is flatly unreasonable.” *Id.*

V. FACTUAL BACKGROUND

A. History of Spent Fuel Storage and Policy in the U.S.

While the NWPA calls for construction of a repository for disposal of spent fuel, no repository has been licensed or built to date. Therefore, a significant quantity of spent fuel has accumulated at reactor sites. The spent fuel is stored in water-filled fuel storage pools and dry storage casks. NUREG-2157, Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel at 2-11 (Sept. 2014) (“Continued Storage GEIS”). As of 2011, approximately 67,500 MT of spent fuel had accumulated at commercial nuclear power plants, with the inventory growing by about 2,000 MT per year. Continued Storage GEIS at 2 –11. This inventory of stored spent fuel is now greater than the Congressionally imposed limit on the capacity of the Yucca Mountain repository of 70,000 MT. 42 U.S.C. § 10134(d).

Despite the increasing quantity of spent fuel stored at reactor sites, the NRC has concluded that onsite spent fuel storage poses no significant environmental risks, even for an indefinite storage period. Continued Storage GEIS at xlvi – xlvi. ³ Consistent with the GEIS, neither ISP nor Holtec has argued that spent fuel would pose less of a radiological risk if it were transported to an away-from reactor storage site.

Under Section 302 of the NWPA, 42 U.S.C. § 10222, reactor licensees were required to pay into a Nuclear Waste Fund for construction of a repository. When the repository failed to materialize, licensees began to recover contract damages for the purpose of covering the cost of continuing to store spent fuel at their reactor sites. *See, e.g., Maine Yankee Atomic Power Co. v. United States*, 225 F.3d 1336, 1341–42 (Fed. Cir. 2000); *see also Nat’l Ass’n of Regulatory Util.*

³ The only exceptions to the NRC’s finding of “small” environmental impacts related to the potentially “large” adverse impacts to historic and cultural resources, and “moderate” environmental impacts by related nonradioactive waste. *Id.*

Comm'rs, 736 F.3d at 520; *Ind. Michigan Power Co.*, 88 F.3d at 1276-77 (finding that DOE's obligation under Section 302(a)(5)(B) of the NWPA to start disposing of spent nuclear fuel by a set date was not limited by the lack of a repository that Section 302(a)(5)(A) required prior to DOE taking title; only the remedy the courts could provide for DOE's failure to start disposing was limited). Contract damage lawsuits under the NWPA are now commonplace, and the DOE pays damages on a cyclical basis to reactor licensees. *See, e.g., Nat'l Ass'n of Regulatory Util. Comm'rs*, 736 F.3d at 520.

In 1987, Congress amended the NWPA by directing DOE to narrow the focus of its search for a repository site to a single location, Yucca Mountain in Nevada. But after two decades passed without significant progress, the DOE announced in 2009 that it no longer considered Yucca Mountain a viable option for a final repository and announced plans to withdraw its license application for the site. President Obama thereafter created the Blue Ribbon Commission on America's Nuclear Future ("BRC").

In 2012, the BRC issued a set of recommendations for managing spent nuclear fuel, including that the U.S. government pursue consolidated interim storage of spent fuel, as part of an integrated program for spent fuel disposal. BRC Report at 40. The BRC cautioned that "a program to establish consolidated storage will succeed only in the context of a parallel disposal program that is effective, focused, and making discernable progress in the eyes of key stakeholders and the public." *Id.* A "robust repository program . . . will be as important to the success of a consolidated storage program as the consolidated storage program will be to the success of a disposal program," and therefore "[p]rogress on both fronts is needed." *Id.* The BRC also recognized that federal legislation would be needed before construction of a consolidated storage facility could begin. *Id.* at 41.

In January 2013, in response to the BRC Report, the DOE released *Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste* (ML13011A138) (“DOE Strategy”) to provide “a basis for the Administration to work with Congress to design and implement a program to meet the government’s obligation to take title to and permanently dispose of used nuclear fuel and high-level radioactive waste.” *Id.* at 3. The DOE endorsed the BRC’s recommendation that the government should pursue consolidated interim storage of spent fuel, but recognized that:

The NWPA currently constrains the development of a storage facility by limiting the start of construction of such a facility until after the Nuclear Regulatory Commission (NRC) has issued a license for construction of a repository. This restriction has effectively eliminated the possibility of having an interim storage facility as an integral component of a waste management system.

Id. at 5-6. With respect to the issue of transferring ownership of spent fuel to the DOE during transportation, the DOE Strategy also states:

[T]he Department is proceeding with planning activities for the development of transportation capabilities and storage facilities to facilitate the acceptance of used nuclear fuel at a pilot interim storage facility within the next 10 years and later at a larger consolidated interim storage facility. The Administration will undertake the transportation planning and acquisition activities necessary to initiate this process with the intent to transfer them to a separate organizational entity *if and when it is authorized by Congress and in operation.*

Id. at 6-7 (emphasis added). Thus, both the BRC and the DOE recognized that an interim spent fuel storage facility entailing U.S. government ownership of spent fuel could not be built or operated without authorizing legislation by the U.S. Congress.

B. Holtec License Application for the Holtec CISF

On March 30, 2017, Holtec filed an application to the NRC for construction and operation of the proposed Holtec CISF in Lea County, New Mexico. Holtec Hearing Notice, 62 Fed. Reg. 13,802. The proposed Holtec CISF would “initially store 500 canisters or 8,680 metric

tons of uranium in the CISF and eventually store up to 10,000 canisters in the CISF.” *Id.*

Ultimately, Holtec proposes to store a total quantity of 173,600 MTUs of spent fuel, over twice the capacity limit of the Yucca Mountain repository. Holtec SAR, Table 1.0.1 at 1-4. Holtec proposes to operate the facility for as long as 120 years (40-year license term plus 80 years of extensions). Holtec Environmental Report at 1-1.

In its license application, Holtec proposes to build and manage the Holtec CISF as a private company. Holtec SAR at 1-1. Nevertheless, Holtec’s Environmental Report reveals that Holtec does not plan to begin construction of the facility until “after Holtec successfully enters into a contract for storage with the U.S. Department of Energy (DOE).” Holtec Environmental Report at 1-1. Holtec also assumes that ownership of spent fuel will be transferred to the DOE *before* it is shipped to the CISF. *See* Holtec Environmental Report at 3-104 (“DOE would be responsible for transporting SNF from existing commercial nuclear power reactor storage facilities to the CIS Facility.”). Thus, as demonstrated by Holtec’s Environmental Report, Holtec’s entire operation depends on the assumption that DOE will take responsibility for the spent fuel that is transported to the CISF and stored there.⁴

⁴ In various parts of its application, Holtec asserts that ownership or liability may rest with “either” licensees or the DOE. *See, e.g.*, HI-STORE CIS Facility Financial Assurance and Project Life Cycle Cost Estimates, Rev. 0 (Report No. HI-2177593) at 3 (“Additionally, as a matter of financial prudence, Holtec will require the necessary user agreements in place from the USDOE and/or the nuclear plant owners.”) But these disclaimers are meaningless in light of the crucial fact that Holtec does not intend to begin construction of the facility until DOE has taken title to spent fuel and assumed responsibility for transporting it to the facility. The suggestion that DOE would transfer spent fuel *back to licensees* is absurd, given that the NWPA anticipates that spent reactor fuel is ultimately destined for federal ownership and disposal in a repository. *See* Section IV.A, *supra*.

C. ISP License Application for WCS CISF

Like Holtec, ISP has applied for a license to build and operate a CISF, in Andrews County, Texas. ISF Hearing Notice, 83 Fed. Reg. 44,070 (Aug. 29, 2018). The proposed WCS CISF site is approximately 40 miles from the proposed Holtec CISF site. The WCS CISF would house a total of 40,000 MTU of spent fuel over a period of 60 years. WCS Environmental Report, Rev. 2 at 1-1 .

Like Holtec, ISP assumes federal ownership of the spent fuel to be shipped to and stored at the proposed WCS CISF. And like Holtec, ISP attempts to avoid the legal implications of that assumption by claiming a possibility that spent fuel ownership will rest with private licensees.

The first application for a centralized interim spent fuel storage facility at the WCS site in Texas was filed by Waste Control Specialists L.L.C. on April 28, 2016. *See* Waste Control Specialists LLC’s Consolidated Interim Spent Fuel Storage Facility Project, License Application; docketing and opportunity to request a hearing and to petition for leave to intervene, 82 Fed. Reg. 8,773 (Jan. 30, 2017). WCS candidly asserted that “[t]he U.S. Department of Energy (DOE) will be contractually responsible for taking title of the spent fuel at the commercial reactor sites and transporting the spent fuel to the CISF, by rail.” WCS License Application, Rev. 0 at 101. Furthermore, the application stated that “WCS shall not receive [spent nuclear fuel] until such a contract with the DOE is provided to the NRC as a condition of the license.” *Id.* at 1-6.

In 2017, WCS asked the NRC to suspend its review of its application. Then, in 2018, ISP formed as a new joint venture between WCS and Orano CIS, L.L.C., and submitted a revised application. 83 Fed. Reg. at 44,070-71. In all aspects where WCS’ application had previously referred to the DOE’s responsibility for spent fuel at the proposed facility, ISP now substituted the phrase “the U.S. Department of Energy (DOE) *or other holders of the title to SNF at*

commercial nuclear power facilities (SNF Title Holder(s)).” *See id.* ISP added this information without any comment, explanation, or evidence as to why it now thinks “other holders” would be willing to retain title to the waste during transportation and storage.

Thus, for instance, the License Application states:

The U.S. Department of Energy (DOE) *or other holders of the title to SNF at commercial nuclear power facilities (SNF Title Holder(s)) will hold title to the SNF during transportation to and from and while in storage at the CISF.*

WCS License Application at 1-1 – 1-2 (emphasis in original). Similarly, it states: “The funding for constructing the CISF is expected to be primarily through future contracts for storage of SNF with the DOE *or other SNF Title Holder(s).*” *Id.* at 1-6 (emphasis in original). And:

ISP will obtain funds to operate the CISF pursuant to future contracts with the DOE or other SNF Title Holder(s). ISP shall not receive SNF until such a contract with the DOE or other SNF Title Holder(s) is provided to the NRC as a condition of the license.

Id. at 1-7 (emphasis in original).

ISP also seeks an exemption from the NRC’s regulations for financial assurance for decommissioning, based on federal ownership of the spent fuel. WCS License Application at 1-7. The application asserts that if it fails to have a contract with DOE, it will obtain a surety bond for private owners, but again the assertion is *pro forma*:

ISP seeks this exemption for the case where the DOE will be contractually responsible for taking title of SNF prior to transport and while it is placed into interim storage at the CISF. The NRC has recognized that a contract by the DOE specifically guaranteeing that funds will be made available to decommission equipment, facilities, and land is an equivalent financial assurance instrument that may be relied upon and that will save tax payers in a manner that is in the public interest.

WCS License Application at 1-9. *See also* WCS Environmental Report at 3-5 (emphasis in original) (“The DOE *or the SNF Title Holder(s)* would be responsible for transporting spent nuclear fuel (SNF) from existing commercial nuclear power reactors to the CISF. SNF would be transported to the CISF by rail”); WCS Environmental Report at 7-15 (emphasis in original)

(asserting that “ISP expects to enter into a contract(s) with DOE or the SNF Title Holder(s) that will provide the funding for facility construction, operation, and decommissioning.”).

Thus, both Holtec and ISP rely on the assumption that the DOE will take responsibility for spent fuel during transportation and storage at their sites. And both Holtec and ISP also seek to legitimate their assumptions by citing the BRC Report and the DOE Strategy. Holtec Environmental Report at 1-3, WCS Environmental Report at 1-3. While they hedge this assumption by referring to the possibility of private ownership, such meaningless and unsupported references serve as nothing more than fig leaves over the essential premise of their proposals – that these facilities will be built *only* if DOE owns the waste.

VI. ARGUMENT: THE NRC MAY NOT ISSUE LICENSES TO HOLTEC AND ISP BECAUSE THEY ASSUME FEDERAL OWNERSHIP OF SPENT FUEL DURING STORAGE AND TRANSPORTATION IN VIOLATION OF THE NWPA.

The NRC must dismiss Holtec’s and ISP’s license applications because the key condition of both applications -- federal acquisition of title to commercially-generated spent fuel prior to the opening of a permanent repository -- is contrary to the NWPA, which precludes licensees from transferring title of spent fuel to the DOE until a repository has opened. *Indiana Mich. Power Co.*, 88 F.3d at 1273 (holding that DOE’s obligation to take title to spent fuel does not begin until a repository is opened.). Until such time as a repository opens and the DOE takes title to spent fuel, “[t]he generators and owners of high-level radioactive waste and spent nuclear fuel have the primary responsibility to provide for, and the responsibility to pay the costs of, the interim storage of such waste and spent fuel.” 42 U.S.C. § 10131. *See also* 42 U.S.C. § 10143 (providing that “[d]elivery, and acceptance by the Secretary [of Energy], of any high-level radioactive waste or spent nuclear fuel *for a repository* . . . shall constitute a transfer to the

Secretary of title to such waste or spent fuel” (emphasis added)); 42 U.S.C. § 10222(a)(5)(A) (providing that DOE will “take title” to spent fuel *only* “following commencement of operation of a repository”).⁵ There is no dispute that a final repository is not operational, let alone even licensed.

Thus, the NWPA establishes a clear sequential order for transference of title, possession, and physical movement of spent fuel: DOE may only transport spent nuclear fuel *subsequent to* taking title to the spent fuel, and DOE may only take title after a repository is operational. Given that no spent fuel repository has opened, the NWPA precludes DOE from taking title to the spent fuel, and thereby also precludes it from having any responsibility for the transportation of the spent fuel between a reactor storage facility and an interim storage facility.⁶

By assuming that DOE will take title to the spent fuel to be stored at the CISFs, Holtec and ISP flout the clearly stated limitations of the NWPA and federal government policy of giving spent fuel generators the “responsibility” of coming up with “their own interim storage solutions.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-29, 56 NRC 390, 404-06 (2002). Taking responsibility for spent fuel logically includes all

⁵ The language of 42 U.S.C. § 10222(a)(5)(A) is memorialized in the Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste, 10 C.F.R. § 961.11 (“This contract applies to the delivery by Purchaser to DOE of SNF ... acceptance of title by DOE to such SNF ... , subsequent transportation, and disposal of such SNF” and “The terms of this contract shall be from the date of execution until such time as DOE has accepted, transported from the Purchaser’s site(s) and disposed of all SNF...”). *See also* 10 C.F.R. § 961.1 (“This part establishes the contractual terms and conditions under which the Department of Energy (DOE) will make available nuclear waste disposal services ... DOE will take title to, transport, and dispose of spent nuclear fuel ...”).

⁶ As discussed above in note 7, under the statutory scheme of the NWPA and as a practical matter, DOE would never take title for transportation and return it to licensees.

obligations incident to the ownership of spent fuel, such as financing the cost of building and maintaining a facility to safely house the spent fuel, and liability for operational problems and accidents.

Notably, in *Private Fuel Storage*, the Commission concluded that the NWPA did not preclude it from licensing a private away-from-reactor spent fuel storage facility. 56 NRC at 405-06. But that decision concerned only privately-owned waste. The Commission has never asserted that in licensing a private spent fuel storage facility, it could ignore the NWPA's prohibition against transfer of title of spent fuel to the federal government in the absence of a repository. Thus the NWPA contains no current provision that would allow DOE to assume title and responsibility for the spent fuel to be stored at the proposed Holtec CISF or the WCS CISF.⁷

While both Holtec and ISP claim to rely on the BRC Report and DOE Strategy for support of their bids for NRC licensing of their proposed operations, neither document countenances their actions. As discussed above in Section V.A, the BRC explicitly stated that initiatives for consolidated interim storage of spent fuel should come from the U.S. government, should be integrated with an active spent fuel disposal program, and should be allowed by

⁷ The *only* NWPA provision that allows transfer of title to spent fuel from commercial licensees to the DOE, prior to the opening of a repository, is the emergency "Interim Storage Program" found in Subtitle B of the NWPA. *But the Interim Storage Program expired in 1990.* And the program also imposed extreme requirements that are not met here. For instance, the Interim Storage Program limited the amount of spent fuel that could be transferred to the DOE to only 1,900 MT. 42 U.S.C. §§10151(b)(2), 10155(a)(1). In contrast, both the Holtec and ISP seek to initially store over 5,000 MT of spent fuel, and Holtec would eventually store over 173,000 MT. Moreover, before transferring that stopgap quantity of spent fuel to DOE, a reactor licensee was required to persuade the NRC that a lack of adequate spent fuel storage capacity at an operating nuclear reactor would jeopardize "the continued, orderly operation" of the reactor. 42 U.S.C. § 10151(a)(3). Finally, the Interim Storage Program required that spent fuel must be stored at a public facility, not a private facility. 42 U.S.C. § 10151(b)(2). None of those circumstances exist here, and thus the Program's requirements could not be satisfied even if it were still available.

federal legislation. Given the federal government's abandonment of its repository siting program for Yucca Mountain, there is no active spent fuel disposal program with which Holtec's and ISP's proposals could be integrated. Furthermore, the DOE Strategy also acknowledged that consolidated interim storage could not go forward with federal ownership of spent fuel without Congressional authorization.

Accordingly, the NWPA precludes the DOE from taking title to commercial spent fuel for storage at Holtec and ISP's proposed facilities. And by the same token, the Administrative Procedure Act precludes the NRC from acting "contrary to law" or "in excess of statutory authority" by issuing a license premised on a wholesale reversal of the statutory scheme established by the NWPA. 5 U.S.C. §§ 706(2)(A), 706(2)(C).

VII. CONCLUSION

Given the fundamental incompatibility of Holtec's and ISP's license applications with the NWPA, the NRC has no lawful basis to review the applications. Therefore, the NRC should dismiss the applications and terminate the proceedings opened in the Holtec and ISP Hearing Notices.

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 /signed electronically by/

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