

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Commission**

In the Matter of)	Docket No. 72-1051
Holtec International)	
(HI-STORE Consolidated Interim Storage Facility))	June 3, 2019
)	

* * * * *

NOTICE OF APPEAL OF LBP-19-4 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 AND NUCLEAR ISSUES STUDY GROUP, AND BRIEF IN SUPPORT OF APPEAL

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NOTICE OF APPEAL

Petitioners Don't Waste Michigan, Citizens' Energy Coalition, Citizens for Alternatives to Chemical Contamination, Nuclear Energy Information Service, Public Citizen, Inc., San Luis Obispo Mothers for Peace, and Nuclear Issues Studies Group (hereinafter "DWM, *et al.*," or "Joint Petitioners"¹), by and through counsel, pursuant to 10 C.F.R. § 2.311(c), hereby give notice of their appeal to the U.S. Nuclear Regulatory Commission ("Commission") from the Atomic Safety and Licensing Board's ("ASLB") ruling, LBP 19-4, "Memorandum and Order (Ruling on Petitions for Intervention and Requests for Hearing)" (ML19127A026) (May 7, 2019) ("Memorandum and Order") in the Holtec International Consolidated Interim Storage Facility proceeding.

DWM *et al.* appeal the ASLB's denial to them of legal standing as intervenors, and also seek reversal of the ASLB's decisions denying admission of their proffered contentions for adjudication.

/s/ Terry J. Lodge
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¹Nowhere in LBP-19-4 did the Licensing Board acknowledge the participation of Citizens' Energy Coalition ("CEC") as a petitioning intervenor. CEC is a grassroots organization from upstate New York which sought standing and intervention along with the six other groups comprising the Joint Petitioners. *See* "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 and Nuclear Issues Study Group to Intervene and Request for Adjudicatory Hearing," ("Petition to Intervene") (ML18257A334), pp. 17-19 (asserting that Citizens' Environmental Coalition members live from 1.5 to 10 miles from major northeastern U.S. rail trunk lines likely to be used for transport of spent nuclear fuel); *see also*, "Declaration of Thomas Ellis," "Declaration of Linda Stefano," "Declaration of Peter E. Swords," "Declaration of Charles L. Bowman," "Declaration of Joanne E. Hameister," and "Declaration of Lynda H. Schneekloth," (ML18257A338), all of which are CEC members' sworn declarations establishing their interest in the proceeding and their physical proximity to anticipated rail shipping routes.

BRIEF IN SUPPORT OF APPEAL

I. INTRODUCTION

On September 14, 2018, Joint Petitioners filed their “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 and Nuclear Issues Study Group to Intervene and Request for Adjudicatory Hearing” (ML18257A334) (“Petition to Intervene”). The assigned Atomic Safety and Licensing Board (“ASLB”) ruled on May 7, 2019 that Joint Petitioners lacked legal standing, had pleaded no admissible contention and terminated the case:

None of the Joint Petitioners has demonstrated standing. Moreover, because Joint Petitioners have not proffered an admissible contention, as discussed *infra*, their request for an evidentiary hearing must be denied on that ground as well.

C. Joint Petitioners’ petition is denied. Joint Petitioners’ contentions are not admitted.

V. This proceeding is terminated.

Memorandum and Order at 15, 135, 137 (Emphasis in original). These are the ultimate holdings of the ASLB and they are the subjects of this appeal.

The specific grounds for the petition are:

(1) The ASLB erred in finding that Joint Petitioners’ asserted grounds for legal standing to proceed as intervenors were “too remote and speculative an interest on which to establish standing.” Memorandum and Order at 14. To the contrary, Joint Petitioners depicted considerable factual evidence of “proximity plus” standing and met the NRC’s tests for it.

(2) The ASLB erred in rejecting Joint Petitioners’ proffered Contentions 1, 2, 3, 4, 7, 9, 11, and 14.

The portion of a prehearing conference order which grants or wholly denies a petition for leave to intervene is appealable under 10 C.F.R. § 2.311 (formerly § 2.714a). *Mississippi Power & Light Co.* (Grand Gulf Nuclear Station, Units 1 & 2), ALAB-130, 6 AEC 423, 424 (1973). A petitioner may appeal an order under 10 C.F.R. § 2.311 if the effect thereof is to deny a petition to intervene in its entirety – *i.e.*, to refuse petitioner entry into the case, and only if the Board rejects all of the intervenor’s proposed contentions. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-07-2, 65 NRC 10, 11 (2007). The ASLB denied Joint Petitioners entry into the case and rejected all of their proffered contentions in the May 7, 2019 Memorandum and Order, hence the order is appealable to the full Commission as a matter of right under § 2.311.

II. FACTUAL BACKGROUND

If built, Holtec’s proposed Consolidated Interim Storage Facility (“CISF”) in the southeastern corner of New Mexico would be the largest configuration of stored radioactive waste—specifically, spent nuclear fuel (“SNF”)—on Earth. From 100,000 to 173,600 MTU of SNF is planned for delivery to the Holtec site over a 20-year period, slated for shallow burial in the New Mexico desert from 120 years² or until there is a deep geological repository elsewhere.³ Holtec, expects to build a CISF with “a minimum service life of 300 years.”⁴

²Holtec Environmental Report, Rev. 1, p. 13/543 of .pdf.

³According to the Holtec ER Rev. 1, p. 19/543 of .pdf: “Holtec anticipates the SNF could be stored at the CIS Facility for up to 120 years, *or until a permanent geologic repository is opened consistent with the NRC’s Continued Storage Rule.*” (Emphasis added).

⁴Letter, Joy Russell, Holtec Vice-President, to DOE, “Response to RFI on Private Initiatives to Develop Consolidated SNF Storage Facilities,” 1/27/2017, <https://www.energy.gov/sites/prod/files/2017/02/f34/Jan%2027%2C%202017%20-%20Joy%20Russell%20-%20Response%20to%20the%20RFI%20on%20Private%20Initiatives.pdf>

The *sine qua non* of this vast radioactive waste storage effort is transportation of spent nuclear fuel across most of the lower 48 U.S. states, from the majority of the 100 current and former commercial nuclear power reactor sites. There are no nuclear plants in New Mexico, and each of the estimated 10,000 SNF shipments will be required to travel hundreds of miles by rail, heavy haul truck on highways and on barges over the Atlantic and Pacific Oceans, the Great Lakes and even American rivers. In all, SNF shipments will travel more than a million miles and easily 95% of those shipping miles accrue from railroad delivery.

Presently, SNF is cooled in engineered pools at reactor sites after being removed from the reactor core, then placed indefinitely in either vertical or horizontal dry storage casks at the sites. The current generation of dry storage casks was intended for relatively short-term on-site storage and not for shipping purposes or for permanent disposal in a geological repository. Of the 51 different NRC-licensed designs for dry cask storage, a very few are licensed for use as shipping or permanent repository canisters. Robert Alvarez, former nuclear waste policy advisor to the Secretary of the U.S. Department of Energy, calculates that by the time DOE opens a repository in 2048, the number of dry casks in use at reactor sites will rise from 1,900 to 12,000.⁵ The waste in these canisters may have to be repackaged in as many as 80,000 smaller canisters either at reactor sites or at Holtec's facility. Repackaging will be necessary to implement use of standard, containers capable of being compactly entombed that can also withstand post-closure heat loads while containing radioactivity and fissile materials. Repackaging expenses will vary according to the transportability of the canisters and on the compatibility of the canisters with heat loading

⁵<http://www.beyondnuclear.org/storage/kk-links/Alvarez%20SNF%20at%20closed%20reactors%20rev%202.pdf>, cited in DWM *et al.*'s Petition to Intervene at 42.

requirements for disposal.⁶

The seven grassroots entities comprising the Joint Petitioners are located hundreds of miles from Holtec's New Mexico site, but their members live, work and recreate proximate to highway, barge and railroad corridors highly likely to be used to deliver the thousands of SNF shipments to Holtec. Joint Petitioners sought standing to intervene to protect the interests of their members based on both the expected routine radiation exposure resulting from the transport of thousands of SNF cargoes, and on the prospect that members will be subjected to heightened risks from radiation exposure from accident, sabotage, vandalism or terrorist acts that befall shipments.

III. THE ASLB IMPROPERLY REFUSED TO CONFER LEGAL STANDING ON THE JOINT PETITIONERS

Joint Petitioners urged in their Petition to Intervene that their members, who live, work and recreate within a few miles of water, highway and rail transportation corridors Holtec is highly likely to use for transport of SNF, possess "proximity plus" legal standing by virtue of their geographical proximity and because of the inherent and extraordinarily dangerous traits of spent nuclear fuel. But the ASLB found their theory "too remote and speculative an interest on which to establish standing:"

Joint Petitioners are comprised of seven different organizations, each presenting a similar standing issue. Although Public Citizen, Inc. and the Nuclear Issues Study Group have each submitted a declaration from a member who lives in New Mexico, neither lives anywhere near the proposed facility. The other five organizations rely entirely on declarations from members who live in other states. All seven organizations, therefore, base their standing claims not on their members' proximity to the proposed facility, but on their proximity to potential transportation routes by which spent nuclear fuel might travel to the proposed facility.

⁶Alvarez, *id.*, cited at DWM et al.'s Petition to Intervene at 42.

This is too remote and speculative an interest on which to establish standing. As the Commission stated in 2004: “[M]ere geographical proximity to potential transportation routes is insufficient to confer standing.”⁷ Even before 2004, licensing boards rejected standing arguments based on proximity to likely transportation routes. As the Commission observed in 2001, licensing boards have regularly declined to find that a mere increase in the traffic of radioactive materials near a petitioner’s residence, without more, constitutes an injury traceable to a licensing decision “that primarily affects a site hundreds of miles away.”

Although Joint Petitioners cite one licensing board decision for the proposition that standing may be based on proximity to transportation routes, we decline to follow it. In our view, either the result in *Duke Cogema* was influenced by what that Board characterized as the “unique circumstances” surrounding transportation of mixed oxide fuel or, alternatively, the decision is simply an outlier that failed to anticipate the position of the Commission as expressed in later cases. Regardless, it is not binding on this Board.

Moreover, other licensing boards have rejected petitioners’ standing claims because the mere fact that additional radioactive waste will be transported if the NRC licenses a project “does not ipso facto establish that there is a reasonable opportunity for an accident to occur at [any location], or for the radioactive materials to escape because of accident or the nature of the substance being transported.” Here, although Joint Petitioners try to predict future transportation routes, Holtec’s proposed facility as yet has no customers, and the routes by which spent fuel might travel to Lea County, New Mexico from nuclear power plants around the country have not yet been established. Joint Petitioners’ standing claims are therefore even more speculative than the rejected claims of petitioners who could at least show a reasonable probability that the transportation routes they lived near would actually be used.

None of the Joint Petitioners has demonstrated standing.

Memorandum and Order at 13-15.

Respectfully, the ASLB’s determination is based on a defective grasp of the scope of Holtec’s present and projected customer base, a labored reading of standing principles, and the unwarranted rejection of precedent conducive to a finding of Joint Petitioners’ standing, all of which are explained below.

⁷*U.S. Dep’t of Energy* (Plutonium Export License), CLI-04-17, 59 NRC 357, 364 n.11 (2004) (quoting *Diablo Canyon ISFSI*, LBP-02-23, 56 NRC at 434). See also *Energy Solutions, LLC* (Radioactive Waste Import/Export Licenses), CLI-11-03, 73 NRC 613, 623 (2011) (denying petitioners’ standing claim for failing to show there would be any impact from the transport of radioactive materials to be imported).

A. Contrary to the ASLB Conclusion, Holtec Has Established Customer Relationships Which Point To Extensive Transportation Need

The ASLB insisted that “Holtec’s proposed facility as yet has no customers, and the routes by which spent fuel might travel to Lea County, New Mexico from nuclear power plants around the country have not yet been established.” Memorandum and Order at 15. To the contrary, Holtec’s largest customer for the early phases of its CISF operations is likely to be Holtec itself. Using a wholly-owned subsidiary as part of an international joint venture, Holtec has acquired, or is in the process of purchasing, five nuclear power plants: Indian Point Units 2 and 3 (New York), Pilgrim Nuclear Power Station (Massachusetts), Palisades Power Plant (Michigan) and Oyster Creek Nuclear Plant (New Jersey).⁸ Holtec already provides onsite canister storage adjacent to the two San Onofre units in California; the routes to Holtec’s CISF from SONGS is depicted by Holtec in Figure 4.9.1 of its Environmental Report.⁹ Holtec owns Holtec Decommissioning International (“HDI”), which functions as licensed operator for Holtec-acquired nuclear power plants and provides licensee oversight of Comprehensive Decommissioning International (“CDI”), a jointly-owned general contractor of Holtec and SNC-Lavalin.¹⁰ Holtec’s advanced and sophisticated decommissioning management objectives is evidenced by its April 17, 2019 “Response to Request for Additional Information letter from HDI to the NRC” (ADAMS ML19109A177) concerning Pilgrim: “HDI will be using a fleet model to manage and conduct the decommissioning of its shutdown nuclear power plants. . . by establishing standard

⁸“Holtec doubles down on plans to acquire, shut down nuclear plants,” <https://www.bizjournals.com/philadelphia/news/2019/04/17/holtec-doubles-down-on-plans-to-acquire-shut-down.html>

⁹Cited at DWM *et al.*’s Petition to Intervene at 11, 12, 66.

¹⁰<https://holteciinternational.com/productsandservices/decommissioning/>

processes, procedures, and approaches at the corporate level and at the decommissioning sites, similar to the model used by many operating plant fleets.” Also, “[a]dditional support during multiple decommissioning projects will be provided by the CDI corporate organization, which because of its affiliation with both SNC-Lavalin and Holtec International . . . parents, has easy access to technical and project resources as needed. . . .” Holtec is preparing for multiple, simultaneous plant decommissioning efforts and anticipates the expansion of its market share to many more plant shutdowns. The ASLB was flatly wrong to say that “Holtec has no customers” and to disregard Joint Petitioners’ members’ proximity to several main stem transportation routes which Holtec will inevitably have to use to transport SNF from Holtec’s own sites.

There is additional customer evidence the ASLB did not consider, namely, Holtec’s Environmental Report discussion of transportation infrastructure at a dozen decommissioned plants, which “tiers from the analysis prepared for the proposed WCS CIS Facility in Andrews County, Texas (WCS 2016).” The Interim Storage Partners/Waste Control Specialists’ (“ISP/WCS”) proposed CISF site is located only 39 miles from the Holtec site, providing a useful analysis for Holtec to parrot. See Holtec ER (Rev. 1), p. 198/543 of .pdf (Holtec refers to the ISP/WCS Environmental Report (Rev. 0) (“ISP/WCS ER”). Page 2-71 of the ISP/WCS ER contains Figure 2.2-4, a map showing every major railroad line in the lower 48 United States.¹¹ One can easily discern the trunk railroad line running southwesterly from New England and

¹¹The Holtec ASLB is very familiar with Figure 2.2-4, as many of the same Joint Petitioners cited it in their Petition to Intervene in the ISP/WCS proceeding, Docket No. 72-1050, also pending before the Commission. The composition of the ISP/WCS and Holtec licensing boards is identical. 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 (SEED) Coalition and Leona Morgan, individually cite Figure 2.2-4 in their Petition to Intervene in the WCS case at pp. 15, 34, 35 and 43.

across upstate New York, which is the line to which the Petitioner Citizens' Environmental Coalition declarants refer. Also visible are the Michigan rail system from greater Detroit to southwest Michigan, referenced by members of Petitioners Don't Waste Michigan and Citizens for Alternatives to Chemical Contamination; the rail lines mentioned by the Chicago-based members of Petitioner Nuclear Energy Information Service;¹² and the solitary rail route that undoubtedly will be used by the Diablo Canyon plant owner. There is considerably more corroborating evidence later in this brief.

The ISP/WCS analysis, according to the Holtec ER, draws from an oft-updated U.S. Department of Energy ("DOE") study, "Preliminary Evaluation of Removing Used Nuclear Fuel from Shutdown Sites,"¹³ which delineates infrastructure deficiencies and transport considerations for shipping SNF and high-level radioactive waste to the proposed Yucca Mountain repository. Holtec ER (Rev. 1) at p. 199/543 of .pdf. A dozen "stranded" sites are addressed in the DOE evaluation, *i.e.*, they have dismantled fuel pools and all SNF is presently stored onsite in dry storage casks. The SNF at these sites is first in line for transport to either Holtec or ISP/WCS, the only two potential CISFs. Some of the site owners currently use Holtec storage systems. It is highly probable that Holtec will receive deliveries of SNF from many of these sites, and it was erroneous for the ASLB to conclude that because there are supposedly no firm customer contracts that there will consequently be zero Holtec-related SNF shipments across many rail and

¹²DWM's, CACC's and NEIS's members reviewed the map projecting some hundreds of shipments to Yucca involving Lake Michigan barges from Michigan and Wisconsin power plants. www.nirs.org/wp-content/uploads/factsheets/mibargefactsheet92804.pdf, map cited at DWM Petition to Intervene at 12.

¹³The Preliminary Evaluation, updated 3 times after initial publication, is found at <https://www.energy.gov/ne/downloads/preliminary-evaluation-removing-used-nuclear-fuel-shutdown-sites>

highway corridors. Holtec's only CISF competition is ISP/WCS, and the maximum capacity of ISP/WCS will be a fraction (25-40%) of Holtec's planned capability. Since the expected total inventory of SNF will be 100,000 MTU or more, and WCS can only accommodate 40,000 MTU, simple mathematics shows that inevitably, Holtec will end up storing at least 60% of the total SNF generated by the nuclear power industry. And 95% of the planned 10,000 separate cargoes of SNF to Holtec will travel main railroad arteries identified by the members of the Joint Petitioner groups, even if the absolute numbers of shipments are not presently known.

B. The ASLB Omitted Consideration Of Analogous DOE Route Projections Of Yucca High-Level Radioactive Waste Transport

In light of the sparse Environmental Report discussion of transportation of SNF to the densest "interim" radioactive waste dumping ground on the planet, Petitioners alternatively reviewed many official maps to identify likely rail and highway transport routes to New Mexico. They started with the national map at p. 207/543 of the Holtec ER (Rev. 1), Figure 4.9.1, entitled "Transportation Routes for SNF," which depicts three expected routes by which SNF and GTCC will be delivered to Holtec: "Maine Yankee to CISF," "San Onofre to CISF," and "CISF to Yucca Mountain." The path of the rail route for Maine Yankee across the northern portion of New York and thence across eastern and midwestern states, alone, confirms that many of the 10,000 cargoes delivered to Holtec will use an established main rail corridor out of the East proximate to Petitioner Citizens' Environmental Coalition.

Joint Petitioners considered additional projected transportation route information found in the record of the Yucca Mountain NRC proceeding.¹⁴ Two sets of detailed DOE maps, one

¹⁴<http://www.state.nv.us/nucwaste/news2017/115th%20Congressional%20Districts%207252017.pdf> (at page 3); <http://www.state.nv.us/nucwaste/news2017/State%20Maps.pdf>; <https://www.nir>

designating rail and truck routes for high-level radioactive waste (“HLRW”) through 20 U.S. metropolitan areas, and the other showing rail and truck routes through the lower 48 states, constitute DOE’s authoritative identification of the most likely structurally-qualified main rail and heavy-haul highway trucking routes to be used to deliver thousands of high-level nuclear waste shipments to Nevada. They also logically suggest probable SNF shipment thoroughfares to New Mexico.

The ASLB failed to review and appreciate the significance of the routes appearing on the maps. Several Don’t Waste Michigan’s members, for example, attested that they reside from 2.5 to 6 miles from the *only existing trunk rail line for transport of SNF from the Fermi 2 nuclear plant*, identified by the DOE¹⁵ near Monroe, Michigan. The only rail route proceeds northward from Monroe, through interior Detroit and thence northwesterly to Lansing, the state capital, before arcing through southwestern Michigan,¹⁶ and thence, west toward Chicago. Another DWM member attested to residing 10 miles from a rail line related to the shipment of SNF from the Palisades nuclear plant in west Michigan that may involving, in addition, being barged down the Lake Michigan shore.¹⁷ The DOE routing map for Michigan shows only one DOE-qualified

s.org/wp-content/uploads/factsheets/mibargefactsheet92804.pdf; http://www.state.nv.us/nucwaste/news2017/pdf/Cities_Affected.pdf. All citations appeared at DWM *et al.*’s Petition to Intervene at 12.

¹⁵See p. 6/20 of maps identified at http://www.state.nv.us/nucwaste/news2017/pdf/Cities_Affected.pdf

¹⁶See p. 20/45 of state maps cited by DWM *et al.*’s Petition to Intervene at 12, <http://www.state.nv.us/nucwaste/news2017/State%20Maps.pdf>

¹⁷See <https://www.nirs.org/wp-content/uploads/factsheets/mibargefactsheet92804.pdf>

rail line available for that leg of SNF delivery.¹⁸

In the Chicago region, Glenview, Illinois appears on p. 3 of the DOE urban maps,¹⁹ and Petitioner Nuclear Energy Information Service's member, who lives there, declared that a rail trunk line likely to be used for the transport of SNF is located two miles from her home. Glenview is due south of the Port of Milwaukee. Milwaukee has been identified by DOE as the likely point of delivery of HLRW barges proceeding south on Lake Michigan from Point Beach and Kewaunee nuclear plants (hundreds of projected shipments in all).²⁰ That rail line running north-south near Glenview, therefore, will see considerable SNF transport.

The sole means of shipping HLRW or SNF from the Diablo Canyon nuclear plant, located northwest of Los Angeles, are one highway and one railroad route, according to map 9/20 of the maps relied on by the Joint Petitioners.²¹ Thus the declarations proffered by San Luis Obispo Mothers for Peace members living 3 and 5 miles from the rail line serving Diablo Canyon refer to the only two routes over which several hundred SNF shipments will pass.

An east-west heavy haul truck route through Albuquerque, New Mexico identified by the DOE for high-level radioactive waste shipments to Nevada could also be used for shipments to Holtec from the west.²² The Nuclear Issues Study Group declarant identified a rail route cutting through Albuquerque a mile from her home, and the heavy haul truck route appears to travel

¹⁸*Id.*

¹⁹See p. 3/20 of maps identified in fn. 15, *supra*.

²⁰See <https://www.nirs.org/wp-content/uploads/factsheets/mibargefactsheet92804.pdf>

²¹See map 9/20 of maps identified in fn. 15, *supra*.

²²See p. 28/45 of state maps at <http://www.state.nv.us/nucwaste/news2017/State%20Maps.pdf>

nearby, also through the heart of the city.

One of Petitioner Public Citizens' declarants lives in Fort Worth, Texas, two miles from the DOE-identified main rail line running westward toward Holtec that appears on the urban areas map for Dallas, and is the sole rail or heavy haul route from the Comanche Peak nuclear power plant.²³ Petitioner Public Citizen demonstrates "proximity plus" (explained below) by having a member geographically close to a rail line that is the only current means of transport of hundreds of inherently dangerous SNF shipments.

C. The ASLB Failed To Consider DOE's 50-Mile 'Region Of Influence' Non-Routine Incident Danger Zone Along HLRW Transit Corridors

The Joint Petitioners also adopted the DOE's "region of influence" principles in support of their standing argument. The SNF delivered to Holtec will pose largely identical radiological dangers to those of HLRW transported to a permanent repository. The 50-mile "region of influence" ("ROI") referent in the Yucca Mountain application²⁴ is consistent with the dangers of SNF, especially given that the contemplated delivery of 100,000 to 173,600 MTU of SNF to Holtec dwarfs the 70,000 MTU of HLRW projected for Yucca Mountain. The Yucca ROI for public health and safety along DOE-predicted haul routes is 800 meters (0.5 mile) from the centerline of the transportation rights-of-way for incident-free (non-accident) conditions, and 80 kilometers (50 miles) in the event of potential human health and safety effects from accidents.²⁵

²³See p. 5/20 of maps identified at http://www.state.nv.us/nucwaste/news2017/pdf/Cities_Affected.pdf; also, see Texas map at <http://www.state.nv.us/nucwaste/news2017/State%20Maps.pdf>, at 38/45 of .pdf

²⁴"Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada, Volume I" (February 2002), §§ 3.2.1, p. 3-119.

²⁵Joint Petitioners asserted these principles beginning at p. 12 of their Petition to Intervene.

Nowhere in its ER does Holtec define, diagram or mention a ROI for public health and safety as the U.S. DOE did in the Yucca licensing case. Absent a region of influence designation, it was prudent for the Joint Petitioners to borrow from the DOE prototype. A major SNF truck or rail cargo canister breach and spill event in urban areas such as Chicago, Dallas, Ft. Worth, St. Louis, Los Angeles, Philadelphia, Baltimore, Atlanta, Albuquerque, *etc.*, could cause serious problems for large populations miles downwind or downstream from the incident site.

D. The ASLB Refused To Consider Implications Of ‘Return To Sender’ As Multiplier Of Shipping Mileage

Holtec has proposed a controversial policy in its application. While Holtec denies that casks or canisters with defects, breaches, leaks, external contamination or containing defective fuel will even be delivered to the Holtec site, if they are, they will supposedly be swiftly returned to their points of origin at nuclear power plant sites. Holtec calls this its “Start Clean/Stay Clean” policy. Petitioners call it Holtec’s policy of “Return to Sender.” Holtec proposes no means of dealing with the arrival of a leaky, cracked or externally contaminated cask or canister at its facility except for “return to sender” and the return of such canisters or casks to their point of origin translates into more shipments—conceivably dangerous ones—beyond the 10,000 conjectured cargo deliveries to Holtec.²⁶

E. Petitioners Overall Demonstrated Their ‘Proximity-Plus’ Standing

In non-reactor cases there is no presumption of standing based upon geographic proximity to the nuclear facility seeking licensure. The Commission allows a “proximity-plus” showing, where a petitioner may depict her geographical closeness to a “significant source of radioactivity

²⁶Joint Petitioners raised this argument in their Petition to Intervene at 47-48 and 62-63.

producing an obvious potential for offsite consequences.” *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 n.22 (1994). Movement of SNF in transit is incontestably a “significant source of radioactivity producing an obvious potential for offsite consequences.” “Even though it is no longer useful for nuclear power, SNF poses a dangerous, long-term health and environmental risk. It will remain dangerous ‘for time spans seemingly beyond human comprehension.’” *Nuclear Energy Inst., Inc. v. EPA*, 373 F.3d 1251, 1258 (D.C. Cir. 2004) (*per curiam*).

The Joint Petitioners produced member declarations explaining that they live, work and recreate proximate to anticipated railroad, highway or barge route corridors through which canisters containing SNF will be passing, which should have qualified them to serve as organizational intervenors. The postulated harms and threats from SNF of both a routine and non-routine nature. They claimed a threat from “routine” radiation exposures from being physically stuck in traffic proximate to truck or rail loads of SNF, and “non-routine” threats and harms from spills and water runoff from accidents or leakage from those transport vehicles; downwind air and water radioactive contamination exposure from defective transport vehicles; and possible radioactive contamination of water sources caused by accidents.

F. The ASLB Precedent To Deny Standing Is Incongruous

The Licensing Board ruled that “[M]ere geographical proximity to potential transportation routes is insufficient to confer standing,” Memorandum and Order at 15, citing *U.S. Department of Energy* (Plutonium Export License), CLI-04-17, 59 NRC 357 (2004) and *Energy Solutions, LLC* (Radioactive Waste Import/Export Licenses), CLI-11-03, 73 NRC 613, 623 (2011). The plutonium export case involved a one-time shipment of weapons-grade plutonium,

which, outside of a weapon, poses a minimal safety threat compared to SNF, which will constantly emits potentially lethal levels of radiation for many hundreds of years to come. Holtec seeks, not a one-time, discrete shipment, but to transport from 10,000 to even 80,000 separate, lethality-laden cargoes of SNF, many over routes of 1,000 miles or more. More than a million miles of prospective SNF transport is an inherently dangerous activity that exposes the incomparability of underlying facts. The same is true of the ASLB's reliance on *Energy Solutions, LLC*, where the ASLB decided that transport of low-level radioactive waste did not involve "a significant source of radioactivity producing an obvious potential for offsite consequences. *Id.* at 622. SNF, by contrast, is such a "significant source of radioactivity."

The ASLB's reliance on *Pacific Gas and Electric Company* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), 56 NRC 413 (2002) is also unavailing. There, the petitioners were denied standing based solely on "mere proximity" to rail and highway routes likely to be used for transport of SNF. *Id.* at 434. That is factually at odds with the instant matter, where the petitioners allege detailed routine and non-routine radiological damage, some of which is covered in the Environmental Report, as bases for standing. See following section.

This same distinction—geographical proximity to less-dangerous radioactive waste in transit—undercuts the Licensing Board's allusion to *Northern States Power Company* (Pathfinder Atomic Plant), 31 NRC 40 (1990).²⁷ The Pathfinder petitioner lived a mile south of Interstate 90, hundreds of miles west of the plant on a route likely to be used for transport of low-level radioactive waste further west to Hanford, Washington. The lesser threat of low-level radioactive waste and lack of a credible accident scenario doomed the request, in contrast to this case.

²⁷See Memorandum and Order at 14, fn. 71.

Further, *Exxon Nuclear Co.* (Nuclear Fuel Recovery and Recycling Center), LBP-77-59, 6 NRC 518 (1977), mentioned by the Licensing Board in the present matter as justification to reject Joint Petitioners' standing,²⁸ is inapt because of "tenuous assumptions that the spent fuel by the named carrier and an accident might occur." *Id.* at 43.

Similarly, the ASLB's reference to *International Uranium (USA) Corporation* (White Mesa Uranium Mill), 54 NRC 27 (2001)²⁹ is malapropos. The specific finding there was that the mere increase in the volume of traffic of low-level radioactive material on a highway one block from the petitioner's residence and place of work posed no different or greater danger than presented by previous low-level waste shipped to the same mill. *Id.* at 29. The presiding officer found that "the radiological emissions from the material were minute and that any potential exposure, even in the case of an accident, would be negligible." *Id.* *International Uranium* is just too factually anomalous to the present circumstances to lend any authority.

***G. The ASLB Misread Joint Petitioners' Requests As Premised
Exclusively On Geographical Proximity To Transport Routes***

The ASLB incorrectly treated Joint Petitioners' standing claims as though they relied solely on proximity to rail lines and highways. They don't; the Joint Petitioners also described threats of harm of both a "routine" as well as "non-routine" sort from the radioactive materials in the canisters to buttress their rightful status as intervenors.

1. Routine Threats Of Harm

The Licensing Board got it wrong: Joint Petitioners alleged more than geographical

²⁸See Memorandum and Order at 14 fn. 71.

²⁹*Id.*

proximity to transportation routes as harmful. Each member-declarant mentioned the threat of harm from routine radiological exposures, including encounters with rail-borne canister derailments or prolonged delays on rail sidings for days; driving on highways parallel to rail lines or truck-hauled SNF and being exposed; or coming into the high-emissions zone of a spent fuel canister at a rail crossing, resulting in prolonged exposure.³⁰

Consistent with the ASLB decision of *Duke Cogema Stone & Webster*, Joint Petitioners demonstrated standing based on distinct claims of potential radiological exposure injury arising from transportation of spent fuel to the Holtec CISF.³¹ In *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 417 (2001), the ASLB accorded standing to grassroots organizations whose members stated an injury-in-fact by asserting threatened harm to health from unwanted ionizing radiation doses incurred on the

³⁰The declarations each contain these paragraphs:

7) I note that in the ER, Holtec states that it will strictly follow a “return to sender” policy, where if a cask is delivered to their New Mexico facility with a radiation leakage problem, it will be returned to the point of origin. Thus actively-leaking casks will travel close to my home, place of employment and/or places where I seek recreation. I believe that the risks of a radiation accident will be increased during such shipments. The Holtec practice seems to me to be in violation of federal regulations and possibly even amounts to a criminal act and an adverse risk that neither my family nor I should have to bear. I note that the Environmental Report contains no analysis of the potential scenarios involving a breached cask and that there is no analysis in the ER that addresses the potential contamination of land, water and property resources or the threat to public health and the environment from such a practice.

8) I understand the casks, once set on rail cars, will be extremely heavy and concentrated loads on the tracks, and similarly will be unusually heavy loads on the specially-built truck trailers used to transport them on highways. I am concerned that scenarios not contemplated by Holtec in its ER could occur, such as a radioactive cask being so overweight that it derails and sits for days or longer in an area in which I live/work/recreate; or a truck trailer load bearing failure that requires transfer of the transport cask onto another trailer near me or others in my household.

9) The thought of being stuck in traffic at a rail crossing or on a parallel highway near a cask containing SNF or GTCC causes me concern for my health and safety and that of people and animals in my household. Multiple transports in the thousands suggests to me that there may be cumulative radiation effects on people, plants and property from even normal transports of SNF and GTCC wastes along the proposed rail and highway routes.

³¹*Duke Cogema Stone & Webster* is argued in DWM *et al.*'s Joint Petition at 4.

highways. The ASLB noted that even a minor exposure during incident-free shipping of plutonium, within regulatory limits, states an injury-in-fact. *Id.*, citing *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 247-48 (1996). Further, injury to the health and safety of Petitioners' members from ionizing radiation was "clearly encompassed by the health and safety interests protected by the Atomic Energy Act." *Id.*, 54 NRC at 417.

2. Non-Routine Threats Of Harm

Joint Petitioners also pointed out that Holtec conceded the potential for there to be non-routine radiological harm threats which justify standing. One is the "return to sender" policy, which could cause radiation exposure from known leaky or contaminated canisters or casks.³² Holtec also admitted that a "maximum reasonably foreseeable accident associated with SNF transport to the CIS Facility" in an urban area could result in an estimated population radiation dose of about 16,000 person-rem, and if in a rural area, could total about 21 person-rem. In an urban area or rural area, the maximally exposed individual would receive 34 rem based on the individual being 1,100 feet downwind from the accident, where the maximum dose would occur (DOE 2008, Section 6.3.3.2)." ER § 4.9.3, p. 201/543 of .pdf.³³

In determining whether the Joint Petitioners have standing to intervene, the ASLB must construe the petition most favorably to the Petitioners. *U.S. Department of Energy* (High Level Waste Repository), LBP-09-06, 11 (2006); *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 & 4), LBP-08-16, 68 NRC 361 (2008). That did not happen here. Joint Petitioners exceeded the threshold set by licensing boards and the Commission in *Diablo Canyon*

³²Noted in DWM *et al.*'s Joint Petition at 9-10.

³³This was raised in DWM *et al.*'s Joint Petition at 10.

ISFSI, Pathfinder, Exxon Nuclear Co. and White Mesa Uranium Mill that more than mere geographical proximity and tenuous assumptions about the dangers are required to establish standing. Joint Petitioners have shown the requisite actual or threatened, concrete and particularized injury-in-fact falling within the zone of interests protected by the statutes governing NRC proceedings, that they are fairly traceable to the challenged licensing action and are likely to be redressed by a favorable decision. *White Mesa*, 54 NRC at 30; *Duke Cogema & Webster*, 54 NRC at 413. Because their claimed actual or threatened injuries could be cured or ameliorated by action of the Commission either to deny the license to Holtec, or to impose conditions on it, Joint Petitioners have established redressability. *Sequoyah Fuels Corp.* (Gore, Oklahoma, Site Decommissioning), CLI-01-2, 53 NRC 2, 14 (2001).

IV. THE ASLB UNJUSTLY DECLINED TO ADMIT ANY OF JOINT PETITIONERS' PROFFERED CONTENTIONS FOR ADJUDICATION

The Joint Petitioners object to the ASLB's refusal to admit any of their contentions. As detailed below, the licensing board departed from the received wisdom that burden on a petitioner in asserting contentions is not heavy. *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 359 (contention admissibility standards "insist upon some 'reasonably specific factual and legal basis' for the contention." Petitioners are required only to "articulate at the outset the specific issues they wish to litigate." *Id.* at 359). As will be shown, the ASLB turned the threshold admissibility requirements should not be turned into "a fortress to deny intervention." which is forbidden by *Power Authority of the State of New York, et al.* (James FitzPatrick Nuclear Power Plant; Indian Point Nuclear Generating Unit 3), CLI-00-22, 52 NRC 266, 295 (2000).

***Contention 1: Redaction Of Historic And Cultural Properties
Precludes Public Consultation And Participation***

In Contention 1, the Joint Petitioners allege that Holtec has violated § 106 of the National Historic Preservation Act (NHPA) by redacting 144 pages, about one-quarter of the ER, containing extensive details about two historic or cultural properties referenced elsewhere in the Environmental Report that will be destroyed by construction of Holtec's CISF and that public involvement in determining mitigation plans is curtailed. Joint Petitioners maintain that Section 106 of the NHPA (16 U.S.C. §§470-470t) and that the NRC's NEPA regulation requiring consideration and balancing of the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects is also violated. 10 C.F.R. § 51.45 (c).

The ASLB denied admission of the contention, saying that "the Staff will make available to the public any information that would not harm . . . potential historic properties;" that DWM *et al.* did not raise a genuine dispute with the application, and that Petitioners should have availed themselves of SUNSI access within the first 10 days after receiving notice of the opportunity to request a hearing. Memorandum and Order at 91.

The Commission should reverse and remand Contention 1 for hearing. SUNSI access, would not resolve the contention, because Petitioners are attempting to exercise their rights under the NHPA and NEPA. Their allegation of injury to the purely legal interest--the right to public consultation and comment involvement in mitigation--is sufficient to support standing. *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), LBP-90-15, 31 NRC 501, 506(1990), *reconsid. denied*, LBP-90-25, 32 NRC 21 (1990) (petitioner successfully alleged deprivation of right to notice and opportunity for hearing provided by § 189a of the AEA). The protracted

cloyed SUNSI process will not yield *public* disclosure of details that would allow the *public* to decide for themselves whether the two unidentified cultural resources that would be directly affected by the project are eligible for nomination to the National Register; to determine whether required consultations have occurred; and to ascertain whether there are preservation or mitigation measures available if the properties will be destroyed and advocate for mitigation or preservation. The ER does not even tell whether the resources would be destroyed by the project.

Contention No. 2: Insufficient Assurances Of Financing Of The Project

Joint Petitioners allege that Holtec cannot provide “reasonable assurance” that it can obtain the necessary funds to cover the costs of construction, operations, maintenance and decommissioning of the CISF, as required by 10 C.F.R. § 72.22. Holtec inconsistently states that it will solely finance the CISF from internal resources, but that it must have definite contractual arrangements with the U.S. DOE in order to undertake the CISF project. Joint Petitioners amended the contention to plead that new language in Holtec’s ER Rev. 3, which adds the possibility of private utility customer financing, does not render Holtec’s financial assurance plan lawful because the Nuclear Waste Policy Act does not allow the federal government to possess or own the SNF. DWM *et al.* sought amendment a second time, alleging that the costs of continued licensee ownership at a CISF have not been fully explored or revealed by Holtec and appear, based on existing information, to be significantly higher than management at the reactor sites. Petitioners’ expert witness, Robert Alvarez, explained that high burnup spent fuel will be less stable and create much greater expense for transport and CISF storage. He further asserted that a “dry transfer system” (“DTS”) will be required before the end of the first century of CISF storage to repackaging SNF and remediate leaking or externally contaminated canisters.

The ASLB denied admission of Contention 2 because the second attempt to amend did not provide new information since “Holtec’s license application seeks approval of only the first of twenty potential phases” puts Joint Petitioners’ “claims about financial assurances for later phases or for storage beyond the licensed term. . . outside the scope of this proceeding. . . .” Memorandum and Order at 98. The ASLB profoundly misunderstands the scope of this licensing case. Holtec itself disagrees that the scope of its application is limited to the first of 20 phases:

If the requested license is issued by the NRC, Holtec anticipates subsequently requesting an amendment to the license to request authorization to possess and store SNF containing additional 500 canisters for each of 19 subsequent expansion phases to be completed over the course of 20 years. Ultimately, Holtec anticipates that approximately 10,000 canisters of SNF would be stored at the CIS Facility upon completion of 20 phases. ***In total, this ER analyzes the environmental impacts of possession and storage of SNF containing 100,000 MTUs (each canister type contains different design basis MTUs).***

ER, Rev. 5 (ML1909/ML19095B800), p. 1-1. The ASLB may not lawfully dispense with full and thorough consideration of all aspects of the Holtec CISF plan under NEPA to a later time. Under NEPA, all 20 phases are interconnected, are located at the same geographical location, have direct and indirect effects and the latter 19 SNF delivery phases are reasonably foreseeable. An EIS “must analyze not only the direct impacts of a proposed action, but also the indirect and cumulative impacts of ‘past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.’” *Colorado Envtl. Coalition v. Dombeck*, 185 F.3d 1162, 1176 (10th Cir.1999) (quoting 40 C.F.R. § 1508.7); see also 40 C.F.R. § 1508.25(c) (stating that the “scope” of an EIS includes consideration of “cumulative” impacts). The types of impacts for consideration are “ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health [effects].” 40 C.F.R. § 1508.8. “Agencies

. . . have a duty to discuss in the FEIS impacts that are reasonably foreseeable.” *Utahns for Better Transp. v. U.S. Dept. of Transportation*, 305 F.3d 1152 (10th Cir. 2002). The 20 phases are either “connected” “interdependent parts of a larger action and depend on the larger action for their justification,” 40 C.F.R. § 1508.25(a)(1), or they are “similar” because “when viewed with other reasonably foreseeable or proposed agency actions, [they] have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.” 40 C.F.R. § 1508.25(a)(3).

Contention No. 3: Underestimation Of Low-Level Radioactive Waste Volume

DWM *et al.* claim that the ER contains a gross underestimation of the volume of low-level radioactive waste (“LLRW”) that will be generated by the use of concrete and other materials for bunkering of the SNF canisters, and by replacement of the canisters themselves during the operational life of the CISF. They argue that Holtec’s estimate of “small quantities” distorts understanding of the waste management burdens, cost, oversight and disposition obligations because there may be an underestimate of perhaps 8,000,000 tons of concrete LLRW and no accounting for thousands of tons of irradiated metal canisters from the 10,000 deliveries of SNF to Holtec as well as necessary repackaging every 100 years and/or for SNF disposal.

Despite evidence of significant volumes of unremediable contaminated concrete, soil and canisters--LLRW waste--the ASLB required DWM *et al.* to explain why the entire 8,000,000+ tons cannot all be decontaminated.³⁴ The ASLB wrongly upheld Holtec’s argument that DWM *et*

³⁴From ASLB Hearing Tr. 162 (1/23/2019):

JUDGE ARNOLD: Now I inferred from what you said that you also believe that if it does become radioactive that it can't be decontaminated. Do you have any support for that?

MR. LODGE: No. And we weren't making the argument that it is impossible to decontaminate it. We were making the argument that the initial quantification is tremendously off base.

al. impermissibly challenged the Continued Storage Generic Environmental Impact Statement and Continued Storage Rule. But the Rule expressly allows consideration of environmental effects in an ISFSI licensing proceeding that will occur during the license term: “This section does not alter any requirements to consider the environmental impacts of spent fuel storage during the term of a reactor operating license or combined license, or a license for an ISFSI in a licensing proceeding.” 10 C.F.R. § 51.23(c). The ASLB’s decision must be reversed.

***Contention No. 4: Continued Storage GEIS Presumptions
Support NEPA Consideration Of Lack Of DTS***

DWM *et al.* assert that Holtec may not avoid NEPA or AEA (SAR) scrutiny of its decision to not have a Dry Transfer System (“DTS”) available before the end of the first 100 years of operation because of the Continued Storage GEIS. The GEIS (NUREG-2157) assumes that a “DTS will be built at each ISFSI location during the long-term storage time frame to facilitate spent fuel transfer and handling.” *Id.* at 1-16. Instead of a technological means of remediating SNF waste handling problems and the likely obligations of repackaging for disposal—another key assumption--Holtec plans no DTS and a policy of “return to sender,” discussed *supra*. The ASLB held that “when it comes to ‘size, operational characteristics, and location of the facility, the NRC will evaluate the site-specific impacts of the construction and operation of any proposed facility as part of that facility’s licensing process.’” The Board also ruled that “because Holtec does not intend to build a dry transfer system during the initial license term, the analysis will not be required until Holtec pursues a dry transfer system as a separate action.” Memorandum and Order at 104-105. But the ASLB may not segment consideration of environmental effects.

But the Continued Storage Rule allows required consideration of environmental effects

in an ISFSI licensing proceeding that will occur during the license term.³⁵ And an agency conducting a NEPA analysis “generally must examine both the probability of a given harm occurring and the consequences of that harm if it does occur. Only if the harm in question is so ‘remote and speculative’ as to reduce the effective probability of its occurrence to zero may the agency dispense with the consequences portion of the analysis.” *New York v. Nuclear Regulatory Commission*, 681 F.3d 471, (D.C. Cir. 2012); *Limerick Ecology Action, Inc. v. Nuclear Regulatory Commission*, 869 F.2d 719, 739 (3d Cir.1989). Holtec cannot consider the probability of leaking or contaminated canisters or casks arriving at the CISF to be zero; it cannot discount the need for a DTS well before the end of the first 100 years of operations for emergencies, remediation and repackaging. The ASLB must be reversed, and this contention admitted.

Contention No. 7: The ‘Start Clean/Stay Clean’ Policy Must Be Evaluated For Its Safety And Environmental Consequences

Joint Petitioners originally asserted that Holtec’s policy of rejecting and returning canisters that have unacceptable external radioactive or structural damage will create potential exposure routes that pose radioactive contamination threats to the public, nuclear workers, and the environment, and that the presence of a DTS might ameliorate the concerns. The ASLB faulted DWM *et al.* for not providing an expert opinion to show how the spent fuel would leave the reactor site leaking or damaged notwithstanding quality assurance programs; how the spent fuel canisters could become credibly damaged in an accident scenario resulting in excessive dose rates; and how use of a sequestration sleeve for a troubled canister is an inadequate remedy in the

³⁵“This section does not alter any requirements to consider the environmental impacts of spent fuel storage during the term of a reactor operating license or combined license, or a license for an ISFSI in a licensing proceeding.” 10 C.F.R. § 51.23(c).

event of damage. The ASLB dismissed the contention based on *Private Fuel Storage* (Indep. Spent Fuel Storage Facility), CLI-04-22, 60 NRC 125, 136-37 (2004). Memorandum and Order at 113. But in *PFS*, the NRC had already generically determined that an accidental canister breach was not credible, unlike Holtec's situation. Holtec believes a breach scenario is sufficiently credible that it intends to have a "start clean/stay clean" policy with "return to sender" as an option. Notably, the Holtec ER does not mention 10 C.F.R. § 71.47, which provides external radiation standards for all packages. That regulation itself cautions that "[e]ven this radiation limit is not absolute; it can be exceeded if certain additional conditions are met." 10 C.F.R. § 71.47(b). The ASLB's rejection of Contention 7 exemplifies use of the rules to create a fortress denying intervention, and it should be reversed.

Contention 9: Incomplete and Inadequate Disclosure of Transportation Routes

There is only one map published in the Environmental Report that shows any routes that will be used for cross-country delivery of SNF and GTCC waste to Holtec, and it only mentions transport of radioactive material from two reactors. *DWM et al.* urge a contention of omission, that the lack of information of actual intended routes does not fulfill NEPA expectations for disclosure and analysis. They contend that 10 C.F.R. § 51.45(b)(1) requires the ER to address impacts of the proposed action on the environment, "discussed in proportion to their significance;" that adverse environmental effects which cannot be avoided must also be addressed under 10 C.F.R. § 51.45(b)(2); that alternative routes must be discussed under 10 C.F.R. § 51.45(b)(3); and that any irreversible and irretrievable commitments of resources which would be involved in the proposed action must be disclosed per 10 C.F.R. §51.45(b)(5).

The ASLB rejected Contention 9 because Joint Petitioners failed to demonstrate how

NEPA or NRC regulations require a specific assessment of possible transportation routes; that the use of representative routes is an established NRC means of evaluating transportation impacts; and that because SNF transportation route identification requires separate review and approval by the NRC and the Department of Transportation and others, “Such coordination is not relevant at this point in the licensing process.” Memorandum and Order at 115-116.

The transportation campaign to deliver SNF to New Mexico would be the largest movement of nuclear waste in human history, the more so because supposedly at a later point in time, all the SNF will be moved yet again to a permanent repository. According to the Continued Storage GEIS:

For transportation of radioactive material from a nuclear power plant site, the affected environment includes all rural, suburban, and urban populations living along the transportation routes within range of exposure to radiation emitted from the packaged material during normal transportation activities or that could be exposed in the unlikely event of a severe accident involving a release of radioactive material. The affected environment also includes people in vehicles on the same transportation route, as well as people at truck stops and workers who are involved with the transportation activities.

“Continued Storage GEIS,” NUREG-2157, § 3.15, p. 3-38.

Separating consideration of the transportation component from the storage component of the Holtec project segments a single project into smaller projects and defies effective analysis and public understanding as required by NEPA. *Stewart Park & Reserve Coal., Inc. (SPARC) v. Slater*, 352 F.3d 545, 559 (2d Cir. 2003). “Only if the harm in question is so ‘remote and speculative’ as to reduce the effective probability of its occurrence to zero may the agency dispense with the consequences portion of the analysis.” *New York v. Nuclear Regulatory Commission*, 681 F.3d 471, (D.C. Cir. 2012). “We must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental

effects as ‘crystal ball inquiry.’” *Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1092, 156 U.S.App. D.C. 395 (D.C. Cir. 1973). NRC’s NEPA regulations require the disclosures sought by the Joint Petitioners, and a remand for adjudication.

Contention 11: NEPA Requires Significant Security Risk Analyses Of The Proposal

Joint Petitioners claim that the ER should contain an analysis of terrorist attacks as an environmental impact, consistent with the Ninth Circuit’s decision in *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1032 (9th Cir. 2006). DWM *et al.* provided a lengthy expert report that recommended Holtec create site specific and programmatic EIS process because of its “vertical monopoly” in the energy industry; seeking for the NRC and/or Holtec to define design basis events and threats for the duration of the transportation campaign; suggesting that the NRC incorporate consent-based siting, waste transport, and storage based on the Blue Ribbon Commission and National Academy of Sciences report recommendations. While acknowledging that *San Luis Obispo* is the law of the states comprising the Ninth U.S. Circuit, the ASLB held that “for all licensing actions outside the Ninth Circuit, ‘terrorist attacks are too far removed from the natural or expected consequences of agency action to require environmental analysis.’” Memorandum and Order at 119. The ASLB dismissed also because there was no material issue raised by the contention.

Joint Petitioners maintain that NEPA and AEA regulations require far greater security consciousness than is evidenced in the Holtec application. 10 C.F.R. § 72.122(b); 10 C.F.R. § 72.40(a)(5); 10 C.F.R. § 72.40(a)(13); 10 C.F.R. § 72.90; 10 C.F.R. § 72.98; 10 C.F.R. § 51.45(b) and (c). Accordingly, they argue for reversal and remand for trial.

Contention 14: Holtec Allegedly Made Material False Statement

DWM *et al.* allege that Holtec made a material false statement in its license application by stating repeatedly that title to the waste to be stored at the CISF would be held by DOE and/or the nuclear plant owners. The statement that caused Joint Petitioners to move for a formal citation was made in a January 2, 2019 Holtec newsletter entitled “Holtec Highlights,” one article in which Holtec asserts that “While we endeavor to create a national monitored retrievable storage location for aggregating used nuclear fuel at reactor sites across the U.S. into one (HI-STORE CISF) to maximize safety and security, its deployment will ultimately depend on the DOE and the U.S. Congress.” The statement reflects that Holtec knows DOE taking title violates the Nuclear Waste Policy Act (NWPA) and an act of Congress is needed to make it legal; and that Holtec made a material false statement in its application documentation and in its Answer to Sierra Club’s original Petition to Intervene when it stated its intent was for nuclear plant owners to possibly retain title to the waste.

The “Reprising 2018” statement confirms Holtec’s longstanding intent that DOE take title to the waste, and in perspective, Holtec’s contrary application statements and in answer to Sierra Club’s Petition to Intervene were materially false.

The ASLB cited its denial of Sierra Club’s Contention 26, which also avers that Holtec made a material false statement, as its reason for denying DWM *et al.*’s Contention 14. The ASLB ruled that “We have no reason to assume that, having acknowledged on the record that (with limited exceptions) it would be unlawful to contract directly with DOE under the NWPA as currently in effect, Holtec will nonetheless try to do just that. Nor may we assume that DOE would be complicit in a violation of the NWPA.” Memorandum and Order at 84-85, referenced

by the ASLB, *id.* at 123.

This ruling allows Holtec to escape with an astonishingly belated admission of its counsel, coming months after multiple contentions and accusatory motions had to be filed by all but one of the Petitioners. Holtec finally, unapologetically, admitted that which was obvious to all. This matter should be remanded for adjudication.

V. CONCLUSION

DWM *et al.* “articulate[d] at the outset the specific issues they wish to litigate,” Dominion Nuclear Conn., Inc., CLI-01-24, 54 NRC 359, but the ASLB turned the contention admissibility standards into “a fortress to deny intervention.” *Northeast Nuclear Energy Company*, 53 NRC 27. Joint Petitioners should be granted legal standing and their Contentions 1, 2, 3, 4, 7, 9, 11 and 14 should be admitted for adjudication.

/s/ Terry J. Lodge
Terry J. Lodge, Esq.
Counsel for Joint Petitioners

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I hereby certify that on this 3rd day of June 2019, the foregoing “Notice of Appeal Pursuant to 10 C.F.R. § 2.311 and Brief in Support of Appeal” was deposited by me in the Electronic Information Exchange (the NRC’s E-Filing System) in the above captioned proceeding for automated distribution to all registered counsel and parties.

/s/ Terry J. Lodge
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