UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Commission

In the Matter of	)	Docket No. 72-1050
Interim Storage Partners LLC	)	January 7, 2020
(Consolidated Interim Storage Facility)	)	
	)	

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NOTICE OF APPEAL OF LBP-19-11 BY INTERVENOR SUSTAINABLE ENERGY AND ECONOMIC DEVELOPMENT COALITION AND BRIEF IN SUPPORT OF APPEAL

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TABLE OF CONTENTS

TABLE OF AUTHORITIES

NOTICE OF APPEAL

Intervenor Sustainable Energy and Economic Development ("SEED") Coalition, ("SEED Coalition," "Intervenor," or "Appellant"), by and through counsel, pursuant to 10 C.F.R. § 2.311(c), hereby gives notice of appeal to the U.S. Nuclear Regulatory Commission ("Commission") from the Atomic Safety and Licensing Board's ("ASLB") December 13, 2019 ruling, LBP 19-11, "Memorandum and Order (Ruling on Motion for Leave to File Late-Filed Contention and Terminating Proceeding)" (ML19347A381) ("Memorandum and Order") in the Interim Storage Partners LLC Consolidated Interim Storage Facility licensing proceeding ("ISP").

SEED objects to and appeals the ASLB's denial of leave to SEED to file a late-filed contention (SEED Contention 17) and terminating the proceeding.

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BRIEF IN SUPPORT OF APPEAL

I. INTRODUCTION

On August 29, 2018, after receiving a revised license application to construct and operate a Consolidated Interim Storage Facility ("CISF") for Spent Nuclear Fuel ("SNF") from Interim Storage Partners LLC, the Nuclear Regulatory Commission published a Federal Register notice that allowed the public to request a hearing and petition to intervene by October 29, 2018. The

Secretary of the Commission later extended this deadline to November 13, 2018. On November 13, 2018, SEED Coalition, as one organizational member of a coalition of seven (7) Joint Petitioners and one individual, co-filed the "Petition of Don't Waste Michigan, Citizens' Environmental Coalition, Citizens for Alternatives to Chemical Contamination, Nuclear Energy Information Service, Public Citizen, Inc., San Luis Obispo Mothers for Peace, Sustainable Energy and Economic Development Coalition and Leona Morgan, Individually to Intervene and Request for Adjudicatory Hearing" (ML18317A433) ("Petition to Intervene"). The assigned Atomic Safety and Licensing Board ("ASLB") ruled on August 23, 2019 that of the Joint Petitioners, only SEED was accorded legal standing. The ASLB further ruled that the Joint Petitioners had pleaded no admissible contention, and terminated the case as to them:

> Among the eight Joint Petitioners, only Sustainable Energy and Economic Development Coalition (SEED) has demonstrated standing. SEED's petition, however, must be denied for lack of an admissible contention.
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> ***** ***** *****
>
> As set forth above, Beyond Nuclear, Sierra Club, SEED (of Joint Petitioners), and Fasken have demonstrated standing in accordance with 10 C.F.R. § 2.309(d). Only Sierra Club has proffered an admissible contention meeting the requirements of 10 C.F.R. § 2.309(f)(1). Therefore, in accordance with 10 C.F.R. § 2.309(a), the Board denies Beyond Nuclear's, Joint Petitioners' and Fasken's respective petitions, and grants the request for hearing and petition for leave to intervene by Sierra Club.
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> ***** ***** *****
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> C. Joint Petitioners' petition is denied. Joint Petitioners' contentions are not admitted.
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> ***** ***** *****
>
> F. ISP's motion to strike a portion of Joint Petitioners' reply on Joint Petitioners Contention 9 is granted.

LBP-19-7, 90 NRC at __ (slip op. at 2, 105, 106).

` On October 23, 2019, SEED filed a "Motion for Leave to File Late-Filed Contention and Contention 17" (ML19297A223) ("Motion for Leave"), raising a new contention which states:

> The Environmental Report for the ISP/WCS CISF fails to satisfy NEPA in light of findings in a 2019 report published by the U.S. Nuclear Waste Technical Review Board. The NWTRB, as principal scientific and engineering governmental advisory panel for SNF disposition, has concluded that 50 to 80 years will be necessary for DOE to prepare for and accomplish the transportation of spent nuclear fuel to the ISP/WCS facility in west Texas. The NWTRB also found that the lead time needed for resolution for associated technical issues related to transport of the vast majority of the SNF is 10 years or more; that the NRC lacks data to establish a technical basis for the long-term storage of high-burnup SNF and reliability of its fuel cladding under high burnup conditions and will not have results of a DOE study presently under way for about 7 more years; and that there is inadequate data as yet to determine whether high burnup SNF can withstand the rigors of long-distance transportation. Mitigation plans and the discussion of alternatives to shipment of all SNF within a 20-year period consequently have not been sufficiently addressed and disclosed as required by NEPA.

Id. at 5.

SEED urged in support of Contention 17 that the findings in a September 23, 2019 report of the U.S. Nuclear Waste Technical Review Board[1] "vindicate and go beyond the problems raised in SEED Coalition's earlier contentions" which the Board had ruled inadmissible in LBP-19-7. Both ISP and the NRC Staff oppose SEED's motion,[2] and SEED timely replied.[3]

The ASLB ruled that "SEED fails to demonstrate that Contention 17 is based on new and

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[1]https://www.nwtrb.gov/docs/default-source/reports/nwtrb_nuclearwastetransport_508.pdf?sfvr1 sn=6 (copy attached).

[2]NRC Staff "Answer in Opposition to Sustainable Energy and Economic Development Coalition's New Contention 17" (Nov. 18, 2019) ("NRC Staff Answer"); "Interim Storage Partners LLC's Answer Opposing Petitioner Sustainable Energy and Economic Development Coalition's Motion for Leave to Submit Late-Filed Contention 17" (Nov. 18, 2019) ("ISP Answer").

[3] "Reply of Intervenor Sustainable Energy and Economic Development Coalition in Support of Litigation of Proposed Contention 17 (Nov. 25, 2019) ("SEED Reply").

materially different information, as required by 10 C.F.R. § 2.309(c)(1)," and that "[e]ven if SEED had demonstrated good cause for proffering Contention 17 after the initial deadline for filing a hearing petition. . . SEED fails to raise a genuine dispute with ISP's application, as required by 10 C.F.R. § 2.309(f)(1)(vi). Contrary to SEED's claims, the findings of the NWTRB Report do not contradict ISP's plans." LBP-19-11 at 10.

The ASLB concluded by ordering that "A. SEED's motion for leave to late-file Contention 17 is denied," and "B. This proceeding is terminated." LBP-19-11 at 14.

SEED's specific ground for appeal is that the ASLB erred in rejecting SEED's proffered Contention 17 and in ordering termination of this proceeding before the Draft Environmental Impact Statement has been published, with attendant opportunities for Intervenor to participate further in the proceeding.

The portion of a prehearing 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 SEED Coalition leave to litigate any contention in this licensing proceeding by its December 13, 2019 Memorandum and Order (LBP-19-11), as a consequence of which that order is appealable to the full Commission as a matter of right under § 2.311.

II. BACKGROUND

ISP's proposed Consolidated Interim Storage Facility ("CISF") on the Texas-New Mexico border would be a large-volume storage project for commercial spent nuclear fuel ("SNF"). Some 40,000 MTU of SNF is planned for delivery to the ISP/WCS site over a 20-year period. In its first year of operations, ISP proposes to store up to 5,000 metric tons of uranium of commercial spent nuclear fuel ("SNF") and greater-than-Class-C radioactive waste ("GTCC") above-ground on specially-built pads. Over the initial 20 years of operation, ISP anticipates delivery of a total of 40,000 metric tons of SNF and GTCC waste. Estimates vary of how long the facility will operate, from 60 to more than 100 years, to "indefinitely."

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 more than 125 current and former commercial nuclear power reactor sites. Each of the estimated 3,000 SNF shipments will 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, of which 95% of the shipping miles will be rail miles.

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 at reactor sites, some of which cannot be shipped, and none used for permanent disposal in a repository. Of the 51 different NRC-licensed designs for dry cask storage, some are licensed for transport, but non for repository canisters. The waste bound for ISP may have to be repackaged into as many as 30,000 smaller canisters either at reactor sites or at the ISP's facility.

Repackaging will be necessary to implement use of standard containers capable of handling that waste and which can be entombed in a permanent repository so as to withstand post-closure heat loads while containing radioactivity and fissile materials. Repackaging expenses will vary according to transportability of the canisters and on the compatibility of the canisters with heat loading requirements for disposal.[4]

SEED was accorded standing by virtue of submission of a supporting declaration of one member who lives about five miles from the proposed facility. This distance is well within the limits that have been found to confer standing to challenge much smaller storage facilities.

SEED Coalition sought, pursuant to 10 C.F.R. §§ 2.309(f)(1) and 2.309(f)(2), leave to file a new Contention 17 which alleges unaddressed technical and integration issues that the U.S. Department of Energy ("DOE") must resolve to ensure that spent nuclear fuel ("SNF") can be transported to the ISP/WCS facility. SEED maintained in its Motion for Leave that these unresolved issues must be noticed, analyzed and disclosed in the Environmental Impact Statement ("EIS") for the CISF, and the resolutions delineated and implemented within the Safety Analysis Report ("SAR") for the CISF proposal.

SEED Coalition claimed the new information which forms the basis for proposed Contention 17 is contained in a report published September 23, 2019 by the U.S. Nuclear Waste Technical Review Board.

On November 13, 2018, Intervenor SEED was one of the seven petitioning organizations and one individual that filed a Petition to Intervene. The Petition, among other things, alleged

[4]Robert Alvarez, former senior advisor to DOE secretary, cited at DWM *et al.*'s Petition to Intervene at 69-70.

two contentions which enumerated deficiencies in the ISP/WCS application to the NRC for a 40-year CISF construction and operation license. SEED Coalition and the others maintained that the ISP/WCS Environmental Report ("ER") understated the volume of low-level radioactive waste ("LLRW") that would be generated by activities including the repackaging of SNF in standardized DOE canisters for transportation, aging and disposal ("TAD canisters"), and the resulting waste stream caused by disposal of the transport canisters following delivery of the SNF to west Texas.

In its original Contention 4,[5] SEED Coalition described a massive transportation campaign necessary to bring an estimated 40,000 MTU of SNF to the ISP/WCS site over a 20-year period.[6] The Petitioners sought inclusion within the calculation of LLRW volumes at the CISF to include volumes resulting from the mandatory repackaging of SNF and GTCC waste, at least some of which was expected to occur at the WCS site when SNF would be reloaded into DOE-required transportation, aging and disposal ("TAD") canisters. SEED's expert, Robert Alvarez, detailed the DOE policy decision that would require reloading at some point of all existing SNF wastes from existing at-reactor dry storage and transport canisters into 80,000

[5]Contention 4 states: "The ISP Environmental Report significantly underestimates the volume of3 low-level radioactive waste ('LLRW') that will be generated by the interim storage project. ISP fails to count irradiated concrete and other materials toward the gross total volumes of LLRW. ISP further fails to acknowledge and properly quantify LLRW volumes resulting from mandatory repackaging of [spent nuclear fuel] and GTCC waste, at least some of which will occur at the WCS site to meet likely DOE requirements for transportation, aging and disposal ('TAD') canisters to be delivered to the final geological repository. ISP provides an incomplete perspective of the waste management obligations at the CISF as well as the financial burdens arising from creation, oversight and disposition of thousands of additional tons of LLRW. This truncated perspective in turn has caused a seriously inaccurate picture of the true costs of constructing, operating and decommissioning the WCS CISF." Petition to Intervene at 64.

[6]See Petition, id. at pp. 64-71

smaller, standardized canisters for efficient disposal in a permanent repository.[7] But the ISP/WCS application neither mentions need for reloading nor discusses or analyzes the locus of reloading activities (*i.e.*, at reactor sites vs. at the ISP/WCS or Holtec CISF sites).

When it originally denied admission of Contention 4, the ASLB noted that ISP's application is for a 40-year license, that the ER relies on the Continued Storage Rule and Continued Storage GEIS and that for these reasons the application need not express any intent to repackage spent fuel nor analyze the costs of repackaging the fuel. LBP-19-7 at 73. Because the Continued Storage Rule does not require a spent fuel storage facility applicant under Part 72 to include such an analysis beyond the license term, Contention 4 was ruled "outside the scope of this proceeding." The ASLB added, "And, to the extent Joint Petitioners assert that ISP must discuss waste generated by repackaging fuel canisters into DOE transportation, aging and disposal casks, this claim is necessarily outside the scope of this proceeding as well." *Id.*

In their original Contention 11, SEED Coalition maintained that the NRC must require SNF reloading capability at the CISF site, asserting:

> ISP's plan to not have a dry transfer system ("DTS") or other technological means of handling problems with damaged, leaking or externally contaminated [spent nuclear fuel] canisters or damaged fuel in the canisters at the WCS site, from the date of commencement of operations, contradicts the expectations of the Continued Storage GEIS, and the unanalyzed risks, and increased possibilities of minor to severe radiological accidents must be addressed in the Environmental Impact Statement. There is no plan for radiation emissions mitigation or radioactive releases at the CISF site. These refusals to contingently prepare for radiological problems at the site are a byproduct of ISP's "start clean/stay clean" policy, are unrealistic and must be addressed in the EIS as well as in licensing conditions.

In denying admission o f Contention 11, the ASLB held that Joint Petitioners failed to raise a

[7] *Id.* at 70.

genuine dispute with ISP's application and had merely "speculated" that damaged containers might arrive at the site of the proposed storage facility in violation of NRC regulations and, in the absence of repackaging capability, create various dangers. The Board determined that "[n]either the GEIS nor NRC regulations require ISP to construct a dry transfer system during the initial 40-year license for its proposed facility." LBP-19-7 at 86-87.

In its Motion for Leave, SEED Coalition urged that the Nuclear Waste Technical Review Board findings identified fundamental problems with the overall plan to load spent nuclear fuel at dozens of reactor sites into canisters and transport casks for delivery to the ISP/WCS CISF in Texas. SEED asserted that the NWTRB findings transcended their earlier objections expressed in Contentions 4 and 11.

Specifically, SEED asserted that nowhere in the ISP/WCS ER is there reference to, or discussion of, the DOE mandate of standardized transportation, aging and disposal (TAD) canisters. The discussion of highway and railroad infrastructure necessary for the project does not contemplate maintenance and construction beyond the 20-year shipment phase indicated in the application. In 2006, DOE had published a notice of intent to supplement in the Federal Register that expressed the prospective policy would be that "the proposed surface and subsurface facilities would allow DOE to operate the repository following a primarily canistered approach in which most commercial spent nuclear fuel would be packaged at the commercial sites in multipurpose transport, aging and disposal canisters (TADs), and all DOE materials would be packaged in disposable canisters at the DOE sites." 71 Federal Register 60490 (October 13, 2006). In the resulting "Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca

Mountain, Nye County, Nevada, Vol. I (2008)" ("Yucca SEIS"), the DOE policy was stated as

> us[ing] a primarily canistered approach to operate the repository; under this approach, most commercial spent nuclear fuel would be packaged at the reactor sites in TAD canisters. DOE would repackage commercial spent nuclear fuel that arrived in packages other than TAD canisters into these canisters in newly designed surface facilities at the repository. The Department would package essentially all DOE material in disposable canisters at the DOE sites. Most spent nuclear fuel and high-level radioactive waste would arrive at the repository by rail. Some shipments would arrive by truck. At the repository, DOE would place the TAD and other disposable canisters in waste packages that were manufactured from corrosion resistant materials. DOE would array the waste packages in the subsurface facility in tunnels (emplacement drifts).

Id. at § 1.4.2, p. 1-14 (Emphasis added).

The NWTRB's September 23, 2019 report, Preparing for Nuclear Waste Transportation ("NWTRB Report"), identifies 18 technical issues regarding transportation of nuclear waste that are not addressed or discussed in the ISP/WCS ER. The critical determination from that report is as follows:

> DOE has examined the trend in SNF dry storage at nuclear power plant sites (Williams 2013). On average, during 2004-2013, the nuclear utilities discharged SNF that has higher burnups (approximately 45 Gwd/MTU) than previously discharged SNF and, therefore, is thermally hotter and more radioactive. In addition, the nuclear utilities are loading SNF into larger dry-storage casks and canisters to improve operational efficiency and reduce cost. The largest of these canisters now holds as many as 37 PWR assemblies or 89 BWR assemblies. As a result, these larger casks and canisters are hotter than earlier dry-storage casks and canisters; therefore, they will take longer to cool sufficiently to meet transportation requirements.
>
> DOE estimated that if SNF was repackaged from large casks and canisters to smaller standardized canisters (and using standard assumptions about the operating lifetime of the U.S. fleet of nuclear reactors), DOE could remove SNF from all nuclear power plant sites by approximately 2070. However, if no repackaging occurs, some of the largest SNF canisters storing the hottest SNF would not be cool enough to meet the transportation requirements until approximately 2100 (Williams 2013).

NWTRB Report, p. 77. Hence if an NRC license were issued to ISP/WCS in 2021, as the company predicts, there is no scenario under which the total volume of waste destined for west Texas could be transported to the facility in the 20-year time frame proposed by ISP/WCS, or

possibly even within the initial 40-year licensing period. These facts, SEED Coalition maintains, are not identified or discussed in the ISP/WCS ER.

SEED Coalition provided an opinion from an expert on SNF management, Robert Alvarez, a former senior policy adviser to the Secretary of Energy and deputy assistant secretary for national security and the environment from 1993 to 1999, and presently a senior scholar at the Institute for Policy Studies. In 2003 Alvarez co-authored an extensive report on reducing the storage hazards of spent power reactor fuel in the United States which has largely been corroborated in subsequent reviews by the National Research Council.

Mr. Alvarez concluded that:

- With about a third of the world's spent power reactor fuel (SNF), the magnitude of proposed long-distance transport of spent nuclear fuel and high-level radioactive waste in the United States is unprecedented.

- Concerns surrounding the integrity of high-burnup spent nuclear fuel in dry storage are not resolved and may result in prolonged at-reactor storage for several decades.

- There is a substantial lack of data regarding potential damage of SNF during transport.

- Repackaging SNF for transport and disposal is an important missing element that has a major impact on the timing and implementation of a national SNF transportation program.

Respecting Mr. Alvarez's first conclusion, the NWTRB Report, at p. 37, notes that although DOE has some historical experience transporting small quantities of nuclear waste for long distances, the agency has no experience with transporting large quantities (thousands of metric tons) of waste. The NWTRB opined that "transporting large quantities of SNF and HLW has not been done and will require significant planning and coordination." NWTRB Report, p.

xxii. There is no assurance that transportation of the gross quantity of SNF (40,000 MTU) contemplated for storage by ISP/WCS could be accomplished within the 20-year schedule proposed by ISP/WCS. Mr. Alvarez pointed out in his declaration that new transportation casks will have to be developed for licensing, a process that would take at least 10 years, and that inspection equipment and procedures will have to be developed to inspect the containers presently holding SNF in dry storage. The ISP/WCS ER does not address either of these issues.

Mr. Alvarez also mentioned problems involving transportation of high burnup fuel. At pp. 77-79 of the NWTRB Report, it states:

> A simple (and expected) example of a condition outside the limits of a CoC is a case in which the SNF cask or canister has not been cooled for the minimum time required by the CoC. In this case, the licensee will allow more time for the SNF to cool before attempting to transport the cask or canister holding the SNF. However, this approach will lead to delays in the removal of SNF from some nuclear power plant sites . . . .

The NWTRB Report further discusses the minimum burnup versus the initial enrichment, referred to as the loading curve, and points out that the loading curve and what is called the burnup credit have not been addressed for newer, larger-capacity dry storage casks and canisters. These matters must be addressed before the SNF can be transported to a CIS.

Mr. Alvarez also raised the problem of repackaging in order to transport high burnup fuel. As noted at the outset, if the fuel is repackaged into smaller containers, it would take until approximately the year 2070 for the SNF to all be removed from nuclear power plant sites. NWTRB Report p. 77. And repackaging the waste will be expensive and time-consuming. As Mr. Alvarez stated in his declaration, a repackaging facility would have to be developed and constructed at reactor sites where there presently is no capability for unloading and loading canisters, a prospect likely to cost $1,000,000,000 to $2,000,000,000 each, and would take a

decade or more to complete. Development of DTS capability at reactor sites would also require significant advance planning. The additional cost and delay to accommodate repackaging would not allow the waste to be transported to the CISF in line within ISP/WCS's schedule. Indeed, absent resolution by DOE and the participating reactor owners in the form of using standardized TAD canisters to complete SNF deliveries to ISP/WCS by 2070, the NWTRB predicts that conclusion of the transportation campaign will take until 2100:

> However, if no repackaging occurs, some of the largest SNF canisters storing the hottest SNF would not be cool enough to meet the transportation requirements until approximately 2100 (Williams 2013).

NWTRB Report, p. 77. Not only is one 40-year license period insufficient to accomplish all SNF transport, but two consecutive 40-year license periods may not be time enough. The infusion of reality from NWTRB expands the anticipated time line for the project from 50 to 80 years.

Additionally, the economics of at-reactor storage and CISF storage will change dramatically. At-reactor storage requires DOE payments to utility companies; payments also will be made from DOE to ISP/WCS for an extra generation to cover operations and maintenance of CISF storage operations.

The ISP/WCS ER does not discuss high burnup fuel issues relative to the questions of thermal limitations during transport or thermal requirements relative to canister size and volume, nor does the significantly-changed cost-benefit analysis from an 80-year transport effort appear in the ER. The current Environmental Report does not suffice to satisfy NEPA.

Mr. Alvarez also found there to be a substantial lack of data regarding potential damage to the SNF during transport:

> No comprehensive examinations of U.S. commercial SNF have been conducted following transportation to determine if the SNF was damaged in transit. However, SNF handling,

> loading, and shipping operations can subject the SNF assemblies to vibration loads, small impulse loads (e.g., bumps in the road), and, in severe conditions such as an accident, strong shock loads. How these vibrations and impulse loads may affect the SNF and its ability to meet transportation requirements are not fully understood, but they are the subject of ongoing DOE research.

NWTRB Report p. 38. The ISP/WCS ER has not addressed this topic in any systematic way, and transportation arrangements cannot be made until the implications of possible damage to the SNF during transit are adequately understood.

III. THE ASLB IMPROPERLY DENIED ADMISSION OF CONTENTION 17

A. There was 'Good Cause'

The ASLB ruled "that the information in the NWTRB Report on which SEED relies was either previously available or not materially different from information that was previously available" and therefore SEED Coalition did not demonstrate "good cause" for Contention 17. LBP-19-11 at 5. That conclusion is incorrect.

The ASLB agreed with the NWTRB that "the purpose of the NWTRB Report is to review the Department of Energy's (DOE's) preparedness to transport spent nuclear fuel and high-level radioactive waste," citing p. 1 of the Report (LBP-19-11 at 5). But the ASLB ignored the significant findings made in September 2019 by the NWTRB, holding instead that a report made in 2013 by a solitary member to the NWTRB, which predicted possible delays in shipment, rendered the 2019 adoption by the Board of those 2013 conclusions untimely. The 2019 report is the first time that single member's opinion became the officially-adopted NWTRB finding. The NWTRB accepted the Year 2070 and Year 2100 milestones as substantiation of its findings that the timing of construction and availability of the ISP Consolidated Interim Storage Facility in west Texas is beyond ISP/WCS's predictions. The Year 2070 and Year 2100 milestones for

delivery of high burnup fuel via either by one universal canister, or in multiple canister types, are formal advice by the NWTRB to the U.S. Department of Energy ("DOE"). The September 2019 Report is the first authoritative use to which the individual expert conclusions about transportation timing was put.

The NWTRB was created by Congress in the 1987 Nuclear Waste Policy Amendments Act to evaluate the technical and scientific validity of activities undertaken by the Secretary of Energy to implement the Nuclear Waste Policy Act. Taken as a whole, the NWTRB Report, not its constituent (and discrete) scientific and engineering bases and opinions, must be viewed as new information in support of Contention 17. The report is a set of authoritative recommendations by the NWTRB members acting within their authority as a federal government advisory panel on the topic of disposition of spent nuclear fuel ("SNF").

B. The Information Is Materially Different from ISP/WCS's Application

The ASLB considered that ISP/WCS's commitment to accepting at its facility only transportation packages that have been approved by the NRC and licensed under Part 71 means that SEED did not demonstrate a material difference between the NWTRB report and ISP's application. LBP-19-11 at 12-13.

SEED maintains that a mere undetailed commitment to follow the rules is insufficient disclosure for purposes of the Environmental Report ("ER"), which does not even refer to or discuss DOE mandated standardized transportation, aging and disposal (TAD) canisters. There is no mention, much less analysis or discussion, of the DOE's unequivocal policy statement in the "Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County,

Nevada, Vol. I (2008)."

The NWTRB Report extensively covers TADs and the probable need for DTS or other loading capability earlier in the SNF storage process than the end of the first century. That is a material difference, sharply distinguishable from the silence of ISP/WCS's application.

The ASLB simply agreed, *ipse dixit*, that the ISP/WCS application foresees no need for DTS capability, hence, the contention need not be taken seriously:

> As we explained in LBP-19-7, "ISP's application does not set forth any intent to repackage spent fuel or any analysis of the costs of repackaging the fuel, and the Continued Storage Rule does not require a spent fuel storage facility applicant under Part 72 to include such an analysis beyond the license term."

LBP-19-11 at 13. This is specious reasoning by the ASLB. Whether or not ISP's application expresses an intention of repackaging spent fuel or analyze costs of repackaging is quite beside the point. The NWTRB Report states that failure to repackage into TADs – a topic entirely missing from the ER – pushes the NWTRB-predicted 2070 terminus for SNF deliveries back an additional 30 years, to 2100. This enormous difference in logistics, cost and the need for DTS capability ***must*** be admitted, analyzed, discussed and disclosed in the ER. If an NRC license were issued to ISP in 2021, as the company expects, there is no scenario under which the waste destined for west Texas would all be transported to the facility within the first 20 years envisioned by ISP, or even within the initial 40-year licensing period. These facts are neither disclosed nor discussed in the ER. Whether or not the GEIS requires consideration of these issues beyond the initial 40-year licensing period or not, the question of whether SNF transportation be completed, or substantially finished within the first 40 years is unanswered. The TADs for transport of SNF haven't yet been designed; even the parameters imposed by high-burnup fuel haven't been established. ISP/WCS's CISF project is being considered separately from likely

dramatic alterations in the timing and technology that will be used for transport.

SEED Coalition, contrary to the ASLB ruling, established significant material difference between Contention 17 and ISC/WCS's application.

C. The NWTRB Critiqued the Whole Project, Not Merely The Segmented Facility

The ASLB held that the NWTRB has "no ability to 'effectively revise the scope' of ISP's project or of this adjudication." LBP-19-11 at 11. The Board's treatment of SEED Coalition's point is a bit inauthentic; SEED argued that the ISP/WCS facility has been improperly segmented in defiance of NEPA requirements from the massive transportation campaign which is the *sine qua non* for the CISF's very existence. SEED was not saying that NWTRB, a DOE arm, has power to *determine* the scope. However, NWTRB Report has identified some serious scientific, engineering and temporal bottlenecks that have gone almost completely unconsidered in the Environmental Report because of segmentation of the CISF from obligatory transportation considerations.

Segmentation is "an attempt to circumvent NEPA by breaking up one project into smaller projects and not studying the overall impacts of the single overall project." *Stewart Park & Reserve Coal., Inc. (SPARC) v. Slater,* 352 F.3d 545, 559 (2d Cir. 2003). Where an agency attempts to consider related actions separately by segmenting the mandated unified review into multiple independent analyses that insulate each project from the impacts created by its sister projects, it "fails to address the true scope and impact of the activities that should be under consideration" and therefore runs afoul of NEPA. *Delaware Riverkeeper Network v. FERC,* 753 F.3d 1304, 1313 (D.C. Cir. 2014). The ASLB rejects Contention 17, among other things, because the underlying NWTRB advice flows from a 30,000 foot view of the whole project, not just the

profit-generating CISF.

ISP's segmentation of the CISF facility from the various problems identified by the NWTRB effectively denies the public the "hard look" required by NEPA. The ASLB persists in wrongly refusing to order NEPA consideration of environmental effects along hundreds of miles of transportation corridors containing some 200,000,000 people within 50 miles of the routes. The NWTRB's concerns about high burnup fuel transport and the unavoidable reality-based logistics of having canister reloading capability at a dozen or more closed reactor sites and by implication at the ISP/WCS CISF expose a much larger "affected environment" than within the ISP boundary fence. The environment that will be "affected: by the project "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. It also includes people in vehicles alongside 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. The transportation impacts of the overall ISP project are of high significance to completion of the storage project and must be addressed pursuant to 10 C.F.R. § 51.45(b)(1).

Under NEPA an "agency need not foresee the unforeseeable, . . . [r]easonable forecasting and speculation is . . . implicit in NEPA. . . ." *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). But an agency must fulfill NEPA investigation and disclosure duties to "the fullest extent possible." *Id.*

Here, that investigation has not happened because of adjudicatory confinement of the

scope of the project to the CISF facility itself. But "connected actions" have to be addressed in a single EIS. *Thomas v. Peterson,* 753 F.2d 754, 758 (9th Cir. 1985) ("the timber sales cannot proceed without the road, and the road would not be built but for the contemplated timber sales").

IV. THE ASLB IMPROPERLY RAISED THE BURDEN FOR CONTENTION ADMISSIBILITY

The ASLB improperly and unlawfully rejected SEED's proffered Contention 17 by incorrect imposition of burdens. The burden of asserting contention admissibility is not heavy. *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 359 (petitioners are required only to "articulate at the outset the specific issues they wish to litigate."). The ASLB turned the admissibility requirements into "a fortress to deny intervention" to SEED, something prohibited 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).

V. CONCLUSION

Joint Petitioners need not prove the contention at this stage, but must only allege some credible foundation for it. *Connecticut Yankee Atomic Power Co.* (Haddam Neck Plant), LBP-01-21, 54 NRC 33, 47-48 (2001). They need merely to provide sufficient alleged factual or legal bases to support the contention now. *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004). The AEA requires only "a minimal showing that material facts are in dispute, thereby demonstrating that an 'inquiry in depth' is appropriate." *Gulf States Utilities Co.,* 40 N.R.C. 43, 51 (1994). SEED Coalition met these requirements,

Intervenor-Appellant prays that the Commission reverse the ASLB decision denying

admission of Contention 17 for adjudication and remand it for further proceedings.

Respectfully,

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CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I hereby certify that on this 7th day of January 2020, the foregoing " NOTICE OF APPEAL OF LBP-19-11 BY INTERVENOR SUSTAINABLE ENERGY AND ECONOMIC DEVELOPMENT COALITION 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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