UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Atomic Safety and Licensing Board

In the Matter of	)	Docket No. 72-1050 NRC-2016-0231
WCS Consolidated Interim Spent Fuel Storage Facility	)	November 25, 2019
	)	

* * * * *

REPLY OF INTERVENOR SUSTAINABLE ENERGY AND ECONOMIC DEVELOPMENT COALITION IN SUPPORT OF LITIGATION OF PROPOSED CONTENTION 17

Now comes Sustainable Energy and Economic Development Coalition ("SEED Coalition"), Intervenor herein, by and through counsel, and replies in support of its "Motion for Leave to File Late-Filed Contention and Contention 17." SEED's reply is directed at the arguments raised in the "NRC Staff Answer in Opposition to Sustainable Energy and Economic Development Coalition's New Contention 17" ("NRC Answer") and "Interim Storage Partners LLC's Answer Opposing Petitioner Sustainable Energy and Economic Development Coalition's Motion for Leave to Submit Late-Filed Contention 17" ("ISP Answer").

Reply to NRC and ISP Arguments That NWTRB's Recommended 50-Year and 80-Year Delivery Phases Are Not New Information

The NRC Staff asserts that "information asserting that SNF might not meet transportation requirements until as late as 2100 was previously presented in 2013," and that "Because this information was presented and publicly available nearly six years ago, Petitioner fails to show good cause as to why it did not raise its contention prior to the initial filing deadline." NRC Answer at 6-7.

Interim Storage Partners ("ISP") propounds that "DOE does *not* have any role in the development and licensing of the ISP CISF;" that "the information underpinning Petitioner's late-filed contention is not materially different from information readily available to Petitioner well before the start of this proceeding;" and that "Section 2.3 of the NWTRB Report explicitly notes that it 'compile[s] a list of technical issues' that the NWTRB identified in various documents generally available to Petitioner for some time." ISP Answer at 9 (emphasis in original).

SEED does not have the burden of a good cause showing. In 2013, a sole member of the NWTRB presented predictions of likely timing and delays to the Nuclear Waste Technical Review Board. But the 2019 report, "Preparing for Nuclear Waste Transportation"[1] ("NWTRB Report") signifies NWTRB's formal adoption of those 2013 predictions as the Board's recommended reality check to DOE and presumably, ISP.[2] The NWTRB accepts the Year 2070

---

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

[2]ISP protesteth too much. Their claims that DOE has no role in the development or operation of its CISF belie ISP's devout wishes to the contrary. In the ISP Environmental Report, Rev. 2, the company states:

> *ISP* anticipates that the NRC would issue the Final Environmental Impact Statement (FEIS) and License by *September 2020*. Phase 1 construction would begin after issuance of the license and after *ISP* successfully enters into a contract for storage with the U.S. Department of Energy (DOE) *or holders of the title to SNF at commercial nuclear power facilities (SNF Title Holder(s)*.

(Emphasis original). ER § 1.0, p. 1-2.

> And in the "Costs Analysis" section of the ER, ISP asserts:
> However, prior to commencing construction, operation, and receipt of licensed material at the WCS CISF, *ISP* expects to enter into a contract(s) with DOE *or the SNF Title Holder(s)* that will provide the funding for facility construction, operation, and decommissioning.

(Emphasis original). ER § 7.3, p. 7-15. And ISP says this regarding startup financing:

> The initial source of this funding for planning and permitting is *ISP* and other project team members, including in-kind contributions of time and expertise. However, *ISP* would seek to recover these costs through a future contract with DOE *or the SNF Title Holder(s)*.

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 well beyond the applicant'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 core advice by the NWTRB to the U.S. Department of Energy ("DOE").

The "new information is not the opinions of experts describing a realistic transportation phase for CISFs. It's the authoritative use to which that information has been put in the NWTRB reportt. 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 piecemealed) scientific and engineering bases and opinions, is new information in support of Contention 17. It is an official and presumably persuasive set of recommendations made by industry and governmental insiders, who as NWTRB are acting

---

> After receiving the license, the CISF's construction will begin to move forward, which will require the services of engineers and construction personnel. As the site is constructed, it will be necessary to ensure and confirm the quality of construction. The total cost for this phase is estimated to be approximately $9.9 million, as derived from the 2009 EPRI report. As explained in the license application, funding of construction is expected to be primarily through a future contract with DOE *or the SNF Title Holder(s)*.

(Emphasis original). ER § 7.3.1, p. 7-16. Concerning transportation and construction expenses, ISP maintains,

> Under *ISP*'s approach, DOE *or the SNF Title Holder(s)* would be responsible for transportation, including associated costs. As explained in the license application, funding of construction is expected to be primarily through a future contract with DOE *or the SNF Title Holder(s)*.

(Emphasis original). ER § 7.3.2, p. 7-18. Then ISP admits this about garnering operating funds:

> As explained in the license application, *ISP* will obtain funds to operate the CISF pursuant to a future contract with DOE *or the SNF Title Holder(s)*. *ISP* also intends to collect funds for the decommissioning of equipment, facilities, and land at the CISF pursuant to a future contract with DOE.

ER § 7.3.3, p. 7-21.

within their authority as a federal government advisory panel on the topic of disposition of spent nuclear fuel ("SNF").

The only timeliness issue – whether SEED brought the report's conclusions to the notice of the Atomic Safety and Licensing Board ("ASLB") within 30 days of their publication – is conceded by both the NRC Staff and ISP.

Reply to NRC Assertion That the Information Is Not Materially Different from ISP's Application

The NRC Staff argues that SEED . . . "fails to demonstrate how this information is materially different from ISP's application, because ISP commits in its application to storing SNF only in dry cask storage systems licensed by the NRC." NRC Answer at 7.

But a mere, undetailed commitment to follow the rules is insufficient disclosure for purposes of the Environmental Report ("ER"). The ER contains ***zero reference to, or discussion of, DOE mandated standardized transportation, aging and disposal (TAD) canisters***. There is no disclosure, 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[3] (2008)" ("Yucca SEIS") that:

> As now proposed, DOE would use 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

[3]https://www.energy.gov/sites/prod/files/EIS-0250-S1-FEIS-01-2008.pdf

> 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).

While it's desirable that ISP agree to follow the regulations, ISP inconsistently agrees to follow those regulations but on a timetable deemed unrealistic (if not surrealistic) by a couple generations. The NWTRB found that "the nuclear utilities are loading SNF into larger dry-storage casks and canisters to improve operational efficiency and reduce cost," and that "[a]s 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." Consequently, failure to repackage into TADs – a topic entirely missing from the ER – pushes the (ISP-unacknowledged) 2070 terminus for SNF deliveries back an additional 30 years, to 2100. It remains that 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.

The Staff's point that "Because ISP proposes to only use NRC-approved cask systems, concerns raised by Petitioner based on the NWTRB report over a delayed time frame to transport SNF based on conditions outside the limits of a CoC fail to present materially different information" is also unavailing. NRC Answer at 8. The TAD or TADs for transport of SNF haven't yet been designed; even the parameters imposed by high-burnup fuel haven't been established. This obvious segmentation of the CISF project from potentially dramatic alterations in the timing and technology that will be used for transport cannot be concealed behind an

undetailed repetition that the applicant will follow all rules. "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).

Reply to NRC Staff Assertion That Transportation Can Take Place Within the 20-Year Window

The NRC Staff opposes SEED's argument that transportation of SNF to ISP will exceed ISP's projected 20-year window because non-high burnup fuel can be transported within a few years while the larger problems with HBU fuel are worked out. The Staff professes – and Intervenor SEED agrees – that the NWTRB report "specifies that the beginning of transportation of SNF is not precluded" within the coming decade. NRC Answer at 11-12. But the NWTRB has forecast that unresolved questions surrounding high-burnup fuel (which will be the much larger portion of SNF deliveries) and undesigned/unapproved/unimagined TADs will sustain the delivery phase for up to 60 years beyond ISP's 20-year, near-term, waste receipt efforts. This great time drag has undeniable, and important, implications for the economics of the project, both for taxpayers and ratepayers, as well as to ISP itself. A lengthier and possibly more eventful delivery phase calls into question ISP's dogmatic refusal to have dry transfer system ("DTS") capability on-site. There is inevitably going to be a different cost-benefit picture caused by the sequencing of deliveries foreseen by the NWTRB versus the shorter timeline advanced by ISP.

Without considering the authoritative recommendations or the scientific and factual basis of the NWTRB, the current ER cannot satisfy NEPA.

Although the NRC Staff tries to portray SEED's position as being an impermissible challenge to the adequacy of as-yet unmade, future 10 C.F.R. Part 71 licensing decisions, the NWTRB says that future Part 71 licensing decisions will have to take account of "SNF handling, loading, and shipping operations" that "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 at 38. This warning by the NWTRB directly undermines the credibility of ISP's position that it will not need a DTS for the first 100 years of operation. How can ISP be allowed to escape with the blithe pledge that all arriving canisters will be NRC-certified? The research hasn't even been completed, consequently the ER, as written, is categorically inadequate under NEPA. Arrangements for transportation cannot be made until the implications of possible damage to the SNF during transit are adequately understood and mitigated. Those implications cannot be understood without further research. The ER does not truthfully report these circumstances.

Reply to ISP's Denial of Its Anticipated 20-Year SNF Transportation Campaign

Curiously, ISP repeatedly denies any intention that it is planning to have 40,000 MTU of SNF delivered to its Texas site over a 20-year period.[4] This denial is contradicted, however, by

[4]"[C]ontrary to Petitioner's belief, ISP is not seeking authorization on behalf of itself, DOE, or any other entity to transport any SNF—much less 40,000 MTUs in a 20-year time frame—to the CISF." ISP Answer at 13.

ISP's Environmental Report:

> ISP is currently requesting authorization to possess and store 5,000 Metric Tons of Uranium (MTUs), which includes a small quantity of mixed oxide fuel, and related GTCC waste. If the requested license is issued by the NRC, ***ISP anticipates subsequently requesting amendments to the license to request authorization to possess and store an additional 5,000 MTUs of SNF for each of seven subsequent expansion phases to be completed over the course of 20 years.***

"WCS Consolidated Interim Spent Fuel Storage Facility Environmental Report," Docket Number 72-1050, Revision 2 (ML18206A518), § 1.0, p. 1-1. "Completion" of a 40,000 MTU waste facility over a 20-year period implies that all 40,000 MTU are to be delivered within a 20-year period. But that's beside the point: nowhere in the ER does ISP concede that the delivery window may run out to 50, or 80, years. Intervenor has carried its burden of articulating a contention. The ER fails to acknowledge all of these hints found in publicly-available commentary and literature for years that SNF deliveries to CISFs will more probably than not take a generation or two longer and cost billions of dollars more. That's a major divergence from the story ISP is presently peddling.

Related to this, ISP accuses SEED of claiming "that the near-term and safe transport of SNF to the ISP CISF is a commercial and technological impossibility."[5] ISP Answer at 13-14. Perhaps SEED should have more clearly stated that "there is no scenario under which ***all*** the waste destined for west Texas could be transported" within the 20-year time frame. But SEED never said that the "near-term and safe transport of SNF to the ISP CISF is a commercial and technological impossibility." ISP's interpretation is breathtakingly misleading. Indeed, ISP's

[5]To support this argument, ISP points to SEED's statement (SEED Motion at 8) that "there is no scenario under which the 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."

haggling of the facts appears aimed at conning the ASLB into summary dismissal of Contention 17 on its merits, which would violate established principles.

In pleading for the admission of a contention, an intervenor is not required to prove the contention, but must only allege some credible foundation for it. *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-880, 26 NRC 449, 457 (1987), remanded, *Sierra Club v. NRC*, 862 F.2d 222 (9th Cir. 1988); *Connecticut Yankee Atomic Power Co.* (Haddam Neck Plant), LBP-01-21, 54 NRC 33, 47-48 (2001). Intervenors are not obliged to prove their case, or to provide an exhaustive list of possible bases, but simply to provide sufficient alleged factual or legal bases to support the contention at the outset. *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004). The AEA does not require a petitioner to support its claims in "formal evidentiary form," or provide support "as strong as that necessary to withstand a summary disposition motion." *Gulf States Utilities Co.,* 40 N.R.C. 43, 51 (1994). It requires only "a minimal showing that material facts are in dispute, thereby demonstrating that an 'inquiry in depth' is appropriate." *Id*. (internal citations omitted). Because at its essence, an acceptable contention need only be specific and have a basis, the standard for admitting a contention is not meant to be equivalent to the standard of evidence at a trial on the merits; the truth or falsity of the contention is reserved for adjudication. *Washington Public Power Supply System* (WPPSS Nuclear Project No. 2), ALAB-722, 17 NRC 546, 551 n. 5 (1983).

Reply to ISP Arguments That Contention 17 Is 'Beyond the Scope'

ISP insists that Intervenor SEED fails to understand the scope of its application. See ISP

Answer at 13;[6] 16;[7] 17;[8] 19;[9] and 21.[10] ISP conflates and confuses the notion of "scope of application" with "scope of *project.*" The scope of the *project* is considerably broader than ISP's proprietary waste dump, and includes the elements of transportation, canister deployment and the location, timing and technology for reloading SNF into TADs. The erratic and evolving positions ISP has held on taking title to and overseeing transportation of the SNF, at first left solely to DOE, but later, encompassing private SNF title owners, lacks the realistic perspective of the NWTRB report. The NWTRB sees that the DOE will be calling all managerial shots and dictating to ISP how it is to operate the CISF. ISP may claim to be at the receiving end of a major campaign to move tens of thousands of tons of SNF, but the overall campaign is before the NRC for consideration. Without a NEPA-compliant, expansive Environmental Impact Statement that

---

[6]"ISP, a private applicant, is seeking NRC authorization to possess and store 5,000 MTUs of SNF. The DOE and NWTRB have no role in the CISF licensing process, and certainly cannot 'alter' the scope of this proceeding."

[7]"Accordingly, insofar as Contention 17 raises issues related to the safety or environmental impacts of prolonged storage and transportation of high-burnup SNF, it raises issues that are outside the scope of the proceeding, improperly challenges NRC regulations in Parts 51 and 71, lacks adequate support, and fails to raise a genuine dispute on a material issue of law or fact, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(iii)-(vi)."

[8]"This argument, on its face, is outside the scope of the proceeding. This Part 72 proceeding involves the licensing of a 5,000 MTU spent fuel storage facility for a 40-year term—not DOE's implementation of a 'nationwide campaign' to transport 'the nation's entire inventory of waste' (which is the focus of the NWTRB Report, not this proceeding)."

[9]"As explained above, ISP is not seeking a license for a repository or NRC approval to conduct repackaging operations at the proposed CISF. Thus, Petitioner's concerns relating to the alleged need for repackaging of SNF to accommodate disposal in a repository are outside the scope of this proceeding and immaterial to the NRC Staff's licensing review."

[10]"Neither the NWTRB Report nor the DOE Yucca Mountain-related documents cited in the Motion require ISP or its prospective utility customers to repackage SNF into TAD canisters or to construct DTSs to transport and store CISF-destined spent fuel. In addition, because ISP has not proposed to undertake such actions in its Application, Petitioner's arguments are outside the scope of this proceeding."

realistically acknowledges the scope of the project to include all SNF shipments from reactor sites to ISP, there will be no public disclosure and analysis of the most significant nuclear fuel transport crusade in human history. ISP doesn't get to confine the meaning of "scope" to mean its pecuniary interest. Segmentation of the unified review into multiple independent analyses that insulate each project from the impacts created by its sister projects "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 NWTRB Report significantly expands the expected time period (and the presumed taxpayer largesse) needed to complete the action of transporting SNF to the ISP CISF. The "scope" of the EIS must encompass "the range of actions, alternatives, and impacts to be considered in an environmental impact statement." 40 C.F.R. § 1508.25. The NRC regulation governing the scope of the EIS (10 C.F.R. § 51.29(a)(1)) cross-references to a CEQ regulation directing that "Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement." 40 C.F.R. § 1502.4(a). The EIS must include all "connected actions" if they "[c]annot or will not proceed unless other actions are taken previously or simultaneously," or they "[a]re interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1)(ii) and (iii).

ISP, aided and abetted by the NRC Staff, must not be allowed to isolate the CISF, the destination for 40,000 MTU of spent nuclear fuel, as the "project." Billions of dollars and hundreds of thousands of barge, truck and rail delivery expeditions are the only means by which the CISF can exist. The ASLB must resist looking through the wrong end of the scope to define

the project.

WHEREFORE, Intervenor SEED Coalition prays the Atomic Safety and Licensing Board, pursuant to 10 C.F.R. § 309(c), admit Contention 17 as a late-filed contention.

/s/ Terry J. Lodge
Terry J. Lodge, Esq.
316 N. Michigan St., Ste. 520
Toledo, OH 43604-5627
(419) 205-7084
tjlodge50@yahoo.com/lodgelaw@yahoo.com
Counsel for Sustainable Energy and Economic Development (SEED) Coalition, Intervenor

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I hereby certify that on November 25, 2019, a copy of the foregoing "REPLY OF INTERVENOR SUSTAINABLE ENERGY AND ECONOMIC DEVELOPMENT COALITION IN SUPPORT OF LITIGATION OF PROPOSED CONTENTION 17" was deposited in the Electronic Information Exchange (the NRC's E-Filing System) in this proceeding, for automated distribution to all registered counsel and parties.

/s/ Terry J. Lodge
Terry J. Lodge, Esq.
Counsel for Intervenor SEED Coalition