March 22, 2019

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	Docket No. 72-1051
Holtec International	)	
	)	ASLBP No. 18-958-01-ISFSI-BD01
HI-STORE Consolidated Interim Storage Facility	)	
	)	

Holtec Opposition to Don't Waste Michigan, et al.'s
Motion to Amend Contention 2

Pursuant to 10 C.F.R. § 2.309(i)(1), Holtec International ("Holtec") submits this opposition to Don't Waste Michigan, Citizens' Environmental Coalition, Citizens for Alternatives to Chemical Contamination, Nuclear Energy Information Service, Public Citizen, San Luis Obispo Mothers for Peace, and Nuclear Issues Study Group's (collectively, "DWM") late-filed motion to again amend its contention 2.[1] The Atomic Safety and Licensing Board (the "Board") should find that DWM has not met the standards for a late-filed amended contention under 10 C.F.R. § 2.309(c)(1)(i)-(iii). And, even if DWM had met those standards, it has not met the standards for an admissible amended contention. As a result, the Board should reject DWM's late-filed motion to re-amend its contention in addition to rejecting the original contention and its first effort to amend the contention.[2]

[1] Motion by Petitioners Don't Waste Michigan, et al. to Amend Their Contention 2 Regarding Holtec's Proposed Means of Financing the Proposed Consolidated Interim Storage Facility (Feb. 25, 2019) ("Motion"). Attached to the Motion is Don't Waste Michigan et al.'s Amended Contention 2 (Feb. 25, 2019) (the "Amended Contention") and the Declaration of Robert Alvarez on the Holtec International Application for a Consolidated Interim Storage Facility License (Feb. 23, 2019) (the "Alvarez Report").

[2] If, as Holtec shows below, the Board should find that the DWM's late-filed contention is unjustifiably tardy, the Contention 2 as originally submitted should be rejected for the reasons set forth in Holtec International's Answer

I. DWM's Re-Amended Contention 2.

DWM's original Contention 2 stated that "Holtec cannot provide reasonable assurances that it can obtain the necessary funds to cover the costs of construction, operation maintenance and decommissioning of the [Consolidated Interim Storage Facility]."[3] The text of Contention 2 has not changed, but DWM has asked to amend the basis of the contention twice. In its first effort to amend Contention 2, DWM asked to add the following to the basis of the Contention:

> Language in Rev. 3 of Holtec's Environmental Report, which presents federal ownership as a possible alternative to private ownership of spent fuel, does not render Holtec's financial assurance plan lawful. As long as Holtec includes the federal government as a potential guarantor or financer of the project, which in turn requires federal ownership of spent fuel, the application violates the NWPA.[4]

DWM now seeks to amend the basis of Contention 2 a second time.[5] The re-amended contention does not appear to include the language that DWM sought to add in its first amendment,[6] but instead now alleges a number of new bases in Section B and C of the Contention basis. Though DWM stated that the new amendment to its contention would appear in boldface type,[7] DWM failed to do so. Holtec has therefore performed a comparison of this Amended Contention 2 and DWM's original Contention 2 as pled and is including it as an Attachment to this Opposition for the Board's reference.[8]

Opposing the 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 Petition to Intervene and Request for an Adjudicatory Hearing on Holtec International's HI-STORE Consolidated Interim Storage Facility Application (Oct. 9, 2018) ("Holtec Answer").

[3] Petition of Don't Waste Michigan, [et. al.] to Intervene and Request for an Adjudicatory Hearing at 31 (Sept. 14, 2018) ("DWM Petition").

[4] Motion by Petitioners Don't Waste Michigan, et al. to Amend Their Contention 2 Regarding Federal Ownership of Spent Fuel in the Holtec International Revised License Application (Feb. 6, 2019) ("Feb. 6, 2019 Motion") at 8.

[5] *See generally* Motion.

[6] *See generally* Amended Contention.

[7] Motion at 8

[8] The re-amended Contention is being compared to the original Petition because, as noted, the first amendment to Contention 2 appears to have been omitted in the re-amended Contention.

In short, DWM Contention 2 was re-amended to add the following bases: that "financing of the [Centralized Interim Storage Facility ("CISF")] by plant owners holding title to SNF is quite improbable" and that "customer financing implies different arrangements from DOE taking title that must be identified and disclosed."[9] The first new basis claims that "private financing" "need[s] examination," because it is a "vapid and wholly unlikely alternative."[10] In support of this conclusory argument, DWM relies on the Alvarez Report to claim that: (1) Holtec needs to provide cost projections;[11] (2) the "problematic policy" of not providing double containment of high-burnup fuel;[12] and (3) repackaging may increase costs.[13] DWM then relies on a new legal argument, wholly unrelated to financing of the CISF,[14] to claim that the Application needs to address Price Anderson coverage.[15]

The second new basis challenges (1) Holtec's decommissioning costs and the "$27.3 Million in annual operating expenditures" in the Financial Assurance Plan and claims that financial assurances must be demonstrated at an evidentiary hearing[16] and (2) alleges that the Environmental Report ("ER") does not adequately analyze costs under the National Environmental Policy Act ("NEPA") because it does not analyze the economic costs of certain alternatives.[17]

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[9] Amended Contention at 4-16.

[10] *Id.* at 5.

[11] *Id.* at 6.

[12] *Id.* at 7-8.

[13] *Id.*

[14] DWM's only attempt to make its Price Anderson argument timely is to erroneously claim that Holtec omitted the discussion of Price Anderson "because of [the Application's] excessive focus on having DOE take title to the SNF, which would automatically bring Holtec within the coverage of Price-Anderson." Amended Contention at 10. On the contrary, it is clear that only DWM had an excessive focus on having DOE take title to the SNF, as the Application contemplates plant owner funding in multiple locations. *See* Financial Assurance Plan at 3; SAR Rev. 0C at 26; Proposed License for Independent Storage of Spent Nuclear Fuel at 2 (ML17310A223).

[15] Amended Contention at 8-9.

[16] *Id.* at 12-16.

[17] *Id.*

II. DWM Has Failed to Demonstrate Good Cause for Its Late-Filed Motion to Amend Contention 2.

"There simply would be no end to NRC licensing proceedings if petitioners could disregard our timeliness requirements and add new contentions at their convenience during the course of a proceeding based on information that could have formed the basis for a timely contention at the outset of the proceeding."[18] This is now the second time within a thirty-day period in which DWM has filed a motion to amend its Contention 2 based on allegedly new information.[19] However, this information, in fact, has been in the Holtec HI-STORE Consolidated Interim Storage Facility ("CISF") License Application ("Application")[20] since the Application was initially filed.[21] DWM has repeatedly disregarded the Commission's timeliness requirements in an attempt to remedy a poorly drafted contention and, in this instance, introduce an impermissibly late-filed expert report. As the *AmerGen* decision warned, if this pattern of filing continues there will simply be no end to this proceeding.

Just as with DWM's prior attempt to amend Contention 2, the Board should reject DWM's second late-filed motion to amend Contention 2 because the motion is untimely, and because DWM has failed to demonstrate the required good cause for its untimely filing. A motion for leave to file a new or amended contention after the intervention deadline "*will not be entertained* absent a determination by the presiding officer that a participant has demonstrated good cause" for the late filing.[22] The good cause demonstration requires the petitioner to show that:

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[18] *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 N.R.C. 235, 272 (2009) (footnotes and internal quotation marks omitted).

[19] *See* Feb. 6, 2019 Motion.

[20] The original Holtec International HI-STORE CISF License Application ("Application") is available at ADAMS Accession No. ML17115A431.

[21] *See, e.g.*, SAR Rev. 0 at 1-6 (ML17116A106); Proposed License for Independent Storage of Spent Nuclear Fuel at 2 (ML17116A107).

[22] 10 C.F.R. § 2.309(c)(1) (emphasis added).

(i) The information upon which the filing is based was not previously available;

(ii) The information upon which the filing is based is materially different from information previously available; and

(iii) The filing has been submitted in a timely fashion based on the availability of the subsequent information.[23]

In this case, as with DWM's first effort to amend Contention 2, the information upon which DWM bases its filing was both previously available and is not materially different from information already in the Application.

A. The So-Called "New" Information from the January 24, 2019 Oral Argument Relied on in DWM's Amended Contention Is Not New.

DWM claims that its proposed amendment to Contention 2 is based on new information disclosed at the January 24, 2019 oral argument.[24] Specifically, DWM identifies the following statement by Holtec counsel as "new" information:

> But I will agree with you that, on their current legislation, DOE cannot take title to spent nuclear fuel from commercial nuclear power plants, under the current statement of facts, but that could change, depending on what Congress does.[25]

This statement, DWM claims, "was the first time that Holtec unequivocally has admitted that there is no U.S. Department of Energy subsidy of CISF operations."[26]

On the contrary, given that the purported DOE "subsidy for CISF operations" is a matter of DWM's own creation[27] and has no connection with the quoted statement by Holtec's counsel,

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[23] 10 C.F.R. § 2.309(c)(1)(i)-(iii).

[24] Motion at 8.

[25] *Id.* at 5 (quoting Hearing Transcript of Holtec International (HI-STORE Consolidated Interim Storage Facility) (Jan. 24, 2019) (ML19029B498) at 250 (hereinafter, "Day 2 Transcript")).

[26] *Id.* at 8.

[27] In its original Contention 2, DWM incorrectly assumed that Holtec would rely federal subsidies for the HI-STORE CISF and, despite Holtec's clear refutation of this false assumption, has continued to assert this fallacy. *See* Petition at 32-36; Combined Reply 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 Holtec and NRC Answers (Oct. 16, 2018) ("DWM Reply") at 27.

there has been no change in Holtec's stance. Holtec's Financial Assurance Plan,[28] Safety Analysis Report ("SAR"),[29] and Answer to DWM[30] all make clear that DOE was never going to "subsidize" the HI-STORE CISF operations. Indeed, Holtec has stated clearly in its Application and its previous Answer to DWM that Phase One of the HI-STORE CISF construction will be "funded by Holtec in its entirety"[31] with contracts in place to pay for storage.[32] Furthermore, Section 1.0 of Holtec's Financial Assurance Plan states that the CISF and Holtec's SMR-160 reactor development program "are both being funded *entirely* by the company" and notes that Holtec "will require the necessary user agreements in place (from the USDOE and/*or the nuclear plant owners*)."[33]

Despite this, the crux of DWM's original Contention 2 was based on DWM's own notion that Holtec "will not construct the CISF without financial guarantees from the U.S. Department of Energy."[34] Holtec explained that this was incorrect in its October 9, 2018 Answer to DWM's original contention, pointing out that "[n]othing in the Financial Assurance Plan — or in any part of the Application — indicates that Holtec considers DOE to be the CISF's 'sponsoring party.'"[35] As Holtec clearly stated, it "is not relying on DOE contracts to demonstrate its financial

[28] Holtec International & Eddy Lea Energy Alliance (ELEA) Underground CISF - Financial Assurance & Project Life Cycle Cost Estimates (Feb. 23, 2018) (ML18058A608) at 2 (hereinafter, "Financial Assurance Plan") ("The HI-STORE CIS in New Mexico, the subject of this report, is also funded by Holtec *in its entirety*.") (emphasis added).

[29] Licensing Report on the HI-STORE CIS Facility Rev. 0C (ML18254A413) at 489 (hereinafter referred to as "SAR Rev. 0C") ("The method of financial assurance as specified in 10 CFR 72.30(e)(3) will be met by Holtec International.").

[30] Holtec Answer at 31 ("Contention 2 repeatedly and incorrectly claims that Holtec is relying on contracts with DOE to show that it is financially qualified to construct, operate, and decommission the CISF.").

[31] Financial Assurance Plan at 2; Holtec Answer at 29.

[32] Financial Assurance Plan at 3.

[33] *Id*.

[34] DWM Petition at 32.

[35] Holtec Answer at 29, 33.

qualifications,"[36] indeed "the Application makes it clear that the project's financing will be provided from the Company's resources and is not dependent on DOE contracts."[37] Moreover, as the Application's proposed license condition makes clear, "the construction program will be undertaken only after a definitive agreement with the prospective user/payer for storing the used fuel (USDOE *and/or a nuclear plant owner*) at HI-STORE CIS has been established."[38]

In his report, Mr. Alvarez relies on these same incorrect assumptions, claiming that his report is based on "Holtec's admission that the *only* lawful way to finance the project was from the licensee owners of the waste using the CISF for interim storage."[39] Despite Mr. Alvarez's characterization, Holtec has consistently stated that Phase One of the construction of the project will be financed by Holtec's own resources after contracts are entered into with the prospective user/payer to pay for storing the used fuel. Claims to the contrary are untimely and incorrect.

DWM has an "iron-clad obligation to examine the publicly available documentary material . . . with sufficient care to enable it to uncover any information that could serve as the foundation for a specific contention."[40] DWM failed to fulfill that obligation when it failed to challenge the funding methods actually included in the Application. Indeed, DWM's October 16, 2018 Reply to Holtec makes it clear that this re-amended contention is based on nothing new. As DWM argued at that time,

> Holtec huffs (Answer at 32) that "Joint Petitioners' contention relies entirely on reading out of the application the acknowledgment *(sic)* that the Applicant may obtain its funding by enter into contracts with utilities rather than with DOE." Holtec's insistence that private utilities might contract with the firm poses an

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[36] *Id.* at 31.

[37] *Id.* at 32.

[38] Proposed License for Independent Storage of Spent Nuclear Fuel at 2 (ML17310A223) (emphasis added).

[39] Alvarez Report at 1 (emphasis added).

[40] *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 N.R.C. 481, 496 (2010) (internal citations omitted).

> issue of fact within the license application. The NRC is being asked, in effect, to approve *two* applications, one that postulates a legal pathway to financing and decommissioning but is economically improbable; and one that lays out a legally impossible pathway. The environmental impacts and implications of each option differ significantly and Holtec uses the supposed option of private utility payers to camouflage the prerequisite of Federal largesse.[41]

But while DWM conceded that private ownership of spent fuel was in the Application, it chose to ignore this alternative in favor of disparaging Holtec, referring to the alternative as a "camouflage" for the "arrangement of federal welfare."[42] DWM's choice to *ignore* Holtec's Application, Financial Assurance Plan, and Holtec's October 9, 2018 Answer in favor of maintaining its own false narrative,[43] does not now enable it to claim that the same information is new when reiterated at oral argument. To allow this to constitute new information would make a mockery of the Commission's timeliness requirements. DWM should not be permitted to backfill an incorrect and inadequate Contention 2 by manufacturing allegedly "new" information out of its own misunderstanding. Thus, DWM's claim that Holtec's plan to privately finance the HI-STORE CISF is new information should be disregarded and the re-amended Contention 2 should be dismissed as inexcusably untimely.[44]

Based on the Application, DWM had ample information on which to file this version of Contention 2 with its original Petition. Even giving DWM the benefit of the most generous interpretation of the deadline, its motion to amend should have been filed no later than November

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[41] DWM Reply at 18.

[42] *Id.*

[43] *Id.* at 27 ("Holtec presents a seriously misleading financing plan by counting corporate welfare from the Federal government as a potential source.").

[44] The Commission has previously held that, where a petitioner relies on "new information" that "merely summarize[es] earlier documents or compil[es] preexisting, publicly available information," it is not new or materially different to satisfy the standards set out in 10 C.F.R. § 2.309(c)(1). *Entergy Nuclear Vermont Yankee, LLC & Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 N.R.C. 333, 344 (2011). Moreover, a petitioner cannot establish good cause for a late filing where the same information prompting the contention has "been evident since the outset of the proceeding." *Id.* at 342.

8, 2018, i.e., within 30 days after the exact same information was clearly stated in Holtec's Answer. That DWM only now manufactures this "new" information based on incorrect inferences from statements at the January 24, 2019 oral argument is a clear attempt to introduce an inexcusably late-filed expert report on issues unrelated to the original contention.

Once again, DWM also attempts to use an allegation of false statements to bolster its timeliness arguments.[45] That attempt fails. The false statement allegations are irrelevant to the amended contention, which is based entirely on information that was already available to DWM. Additionally, there is no separate timeliness standard related to the purported submission of false statements. Nor do any of the cases cited by DWM support such a standard.[46]

In summary, none of the information referenced by the DWM is sufficient to support the late filing of an amended contention. All of the information upon which DWM purportedly bases the amended contention was previously available in Holtec's original Application and in Holtec's October 9, 2018 Answer to DWM.

B. The Amended Contention is Not Timely, as DWM's Arguments Could Have Been Raised in the Initial Petition.

All of the arguments DWM raises in its amended Contention 2 are based on information that was available from "the outset of the proceeding," and are therefore untimely.[47]

DWM's claim that "private financing is improbable" was, as explained above, already identified in its October 16, 2018 Reply.[48] Indeed, DWM also recognized that private contracts

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[45] *See* Motion at 6-7.

[46] The cases cited by DWM (Motion at 7) are of no relevance to this case. For example, the *Orem* case involved approval of a settlement agreement and was unrelated to untimely contentions. *Randall C. Orem, D.O.* CLI-93-47, 37 N.R.C. 423, 427 (1993).

[47] *Amergen Energy Co., LLC* (License Renewal for Oyster Creek Nuclear Generating Station), CLI-09-07, 69 N.R.C. 235, 272 (2009) (Petitioners may not "add new contentions at their convenience during the course of a proceeding based on information that could have formed the basis for a timely contention at the outset of the proceeding.").

[48] DWM Reply at 18.

were an option to finance the CISF.[49] Clearly this issue is not "new." In support of its improbability claim, DWM also seeks to raise, for the first time, a legal argument regarding the applicability of the Price-Anderson Act to the HI-STORE CISF.[50] However, DWM bases its argument on the Financial Assurance Plan in Holtec's original Application and makes no effort to identify how this argument is based on new information, while the applicability of Price-Anderson remains unchanged from the outset of this proceeding. Thus, this argument could have been made in DWM's initial petition and it is now untimely.

DWM's second new basis (that consumer financing is "different" and "must be identified and disclosed") is also clearly untimely and, could have been raised in DWM's initial petition. As demonstrated above, DWM predicates this entire amended Contention 2 on its prior incorrect assumption that Holtec was somehow relying on funding from the DOE. Nor is there any other new information; even DWM's citations date back to at least 2011.[51] Each of these arguments could have been made at the outset of this proceeding.

C. Mr. Alvarez's Report is Also Untimely, and Should Not Be Admitted, as it Contains No "New" Information.

Mr. Alvarez's Report should also be denied as untimely. The Alvarez Report on which DWM relies is also based on no new information. Mr. Alvarez refers to a 2015 study on costs;[52]

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[49] *Id.* at 27.

[50] Amended Contention at 9-10.

[51] First, DWM relies on two Commission decisions—from 1997 and 2000—to argue that an evidentiary hearing is required for financial assurances. Amended Contention at 12. Second, DWM cites to Council on Environmental Quality regulations and federal case law from 1977 to 2011 for the proposition that a NEPA cost-benefit analysis is required. *Id.* at 13.

[52] Alvarez Report at 3 n.8.

studies and evidence ranging from 2000[53] to 2016[54] on high burnup fuel;[55] and DOE reports from 2012, 2013, and 2015 on repackaging.[56] The studies and reports cited by Mr. Alvarez "have been publicly available for too long to be considered 'new information.'"[57] DWM makes no argument as to why it could not have also brought these issues forward in its initial petition or why the Alvarez Report could not have been submitted at that time. DWM cannot now seek to remedy its deficient Contention 2 with a late-filed expert report. As a result, the Alvarez Report does not meet the Commission's standards for a late-filed contention (or its purported support) because it does not contain any new information, and nothing prevented DWM from submitting the Report with its original contention.[58] DWM makes no attempt to excuse its failure to have submitted the Alvarez Report or the information that it contains in its initial Petition, and thus the Report must be rejected.

When the Nuclear Regulatory Commission amended 10 C.F.R. § 2.309 in 2012, it clarified that "previously available information cannot be used as the basis for a new or amended contention filed after the deadline."[59] The same is true today. DWM had a duty to review the publicly available material in the licensee's filing and timely file contentions or motions to amend contentions based on that information. The above discussion makes clear that DWM failed to meet its obligation in this case and thus the motion to amend falls short of the 10 C.F.R.

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[53] *Id.* at 6 n.13.

[54] *Id.* at 9 n.23.

[55] Indeed, other Petitioners raised a similar issue regarding high burnup fuel in their original petitions. *See, e.g.*, Petition to Intervene and Request for Adjudicatory Hearing by Sierra Club (Sep. 14, 2018) at 67 (Contention 20).

[56] Alvarez Report at 11-13.

[57] *Entergy Nuclear Vermont Yankee, LLC & Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 N.R.C. 333, 342 (2011).

[58] *Crow Butte Res., Inc.* (North Trend Expansion Project), LBP-08-6, 67 N.R.C. 241, 256-258 (2008), *aff'd in part, rev'd in part*, CLI-09-9, 69 NRC 331 ("Although Exhibits A and B are not themselves either 'petitions' or 'contentions,' we find it appropriate to consider the timeliness of their filing under 10 C.F.R. § 2.309(c) and (f)(2), given that the exhibits are offered in support of Petitioners' standing and certain of their contentions.").

[59] Amendments to Adjudicatory Process Rules and Related Requirements, 77 Fed. Reg. 46,562 (Aug. 3, 2012).

§ 2.309(c)(1) standards for entertaining late-filed amendments to contentions. For all of the foregoing reasons, the Board should not consider DWM's motion to amend Contention 2 and should reject the Alvarez Report.

III. DWM's Amended Contention Is Inadmissible.

Even if the Board were to find good cause for the late-filing of the amended contention (which it should not do), the Board should nevertheless find that the amended contention fails to comply with the Commission's contention admissibility requirements in 10 C.F.R. § 2.309(f)(1).

A. DWM's Late-Filed Claim on Private Financing is Inadmissible.

DWM's claims in its first new basis (that private financing needs examination) fall far short of the Commission's contention admissibility requirements in 10 C.F.R. § 2.309(f)(1). These new assertions are not material to the findings that the NRC must make, lack sufficient factual or expert support, are outside the scope of the proceeding, and otherwise fail to raise a genuine dispute on a material issue.[60]

First, in an apparent effort to establish materiality, DWM claims that the "environmental impacts could vary considerably with a private financing scheme" because it "would look very different" due to the "vagaries of private sector capital ebbs."[61] Ignoring the fact that private ownership was already part of the original Application,[62] DWM then enters into a series of claims about storage costs, high-burnup fuel, repackaging SNF, and Price Anderson coverage that it argues could increase costs.

None of these claims raises a genuine dispute with the Application because they all ignore an obvious and significant form of funding included in the Application: the Standard

[60] 10 C.F.R. § 2.309(f)(1)(iii-vi).

[61] Amended Contention at 5.

[62] Financial Assurance Plan at 3.

Contract and settlement agreements. As we previously explained in our Answer to DWM's Petition:

> [I]t is clear that "sponsoring party" [in Financial Assurance Plan at 6] refers to potential Holtec customers who have negotiated settlement agreements with the DOE for their breach of contract lawsuits against DOE. Since 1998, nuclear utilities have brought these lawsuits to recover damages incurred by the utilities as a result of the DOE's failure to begin accepting the utilities' spent nuclear fuel by the 1998 deadline established by the Nuclear Waste Policy and the Standard Contract. The "DOE settlement agreement" obviously refers to the *settlements* arising out of those lawsuits, not a future agreement between DOE and Holtec under which DOE would take title to spent fuel for interim storage.[63]

As also explained in our Answer, the DOE has already paid billions of dollars in damages to the utilities that hold title to the spent nuclear fuel and will continue to pay damages going forward for potentially any costs incurred by the title holder.[64] DWM does nothing to address or even acknowledge this significant form of financial recovery that is not dependent on the "vagaries of private sector capital ebbs and flows."[65]

DWM also ignores, again, that--in addition to the contracts for operating costs that will be in place prior to construction--Holtec is not relying on external funding for the CISF construction. As previously explained in Holtec's Answer to DWM's Petition, and as the Application's Financial Assurance Plan states, the CISF will be funded by Holtec's internal

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[63] Holtec Answer at 33 (footnote omitted) (referring to Financial Assurance Plan at 6 (PDF at 6, Plan at 5) ("Anticipated operating costs for the HI-STORE facility are $10 million annually. All financial commitments related to annual operations will be tied to the sponsoring party's agreement with Holtec (viz., DOE settlement agreement).")).

[64] As of September 2017, the DOE and nuclear utilities have settled 39 lawsuits involving the DOE's breach of contract. As of September 2017, the Government has paid $4.9 billion to the settling utilities in delay damages. An additional $2.0 billion has been paid to utilities that litigated to final judgment their breach of contract cases. The DOE estimates its remaining liabilities for its breach of contract to be $27.3 billion. An earlier industry estimate of the utilities' damages was for an estimated $50 billion. United States Department of Energy, Nuclear Waste Fund, Annual Financial Report as of and for the years ended September 30, 1917 and 2016 (May 16, 2018), at 20-21, (attachment to DOE Office of Inspector General, Audit Report, DOE OIG-018-34 (May 2018)).

[65] Amended Contention at 5.

resources.[66] Yet, DWM does not address how its current allegations would in any way impact Holtec's financial strength, such as its "profitab[ility] in *every* year of operation since the Company's inception over 30 years ago"; "no long term debt"; a history of funding large projects "without any long term borrowing"; a "robust multi-billion dollar backlog" of work; a " (l)arge and diversified customer base"; and "140+ contracts active at this time," most of which are large contracts "giving the Company a predictable stable cash flow."[67]

DWM also fails to address other relevant information included in the Application, including the existing cost estimates.[68] While DWM argues that there are "missing storage cost projections,"[69] cost projections are clearly included in the Application with construction costs and annual operating and maintenance costs.[70] By ignoring the Application, DWM again fails to raise a genuine dispute with the Application on a material issue of fact or law.[71]

Instead of addressing the Application and Holtec's estimated costs, DWM claims that Holtec is "missing" storage cost projections and relies on the Alvarez Report to put forth a separate and seemingly unsupported claim of projected costs. DWM claims (based on Table 1 of the Alvarez Report) that Consolidated Interim Storage for approximately 5000 MTU of SNF would cost $4.72 billion over 80 years.[72] Unfortunately, there is no clear support for the values in Table 1 of the Alvarez Report (the referenced documents are either unavailable or unclear and

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[66] Financial Assurance Plan at 3 ("The proof of long term commitment can be found in the Consolidated Interim Storage Facility in New Mexico (the focus of this report) and the SMR-160 reactor development program . . . which are both being funded *entirely* by the Company.").

[67] *Id.* at 2.

[68] *Id.* at 5-6; ER, Rev. 1 at 256-258, 262-264.

[69] Amended Contention at 6.

[70] ER, Rev. 1 at 256-258, 262-264.

[71] 10 C.F.R. § 2.309(f)(1)(iv).

[72] Amended Contention at 6.

do not appear to support the Table), nor is there an explanation of why a CISF cost estimate would even involve adding up the costs of separate reactor ISFSI sites. Nor are the reactor-site estimates in Table 1 even logical: many of the values appear to be scaled based purely on the MTU in storage,[73] which cannot be accurate given the facility-specific and non-size dependent nature of operating and maintenance costs.[74] Thus, the values in Table 1 appear to be either speculative or wrong.[75] Yet, DWM takes those values and speculates even further by adding another MTU multiplier to come up with an entirely unsupported cost estimate for use in Contention 2.[76] DWM's attempt to fashion a contention from baseless speculation while also ignoring relevant portions of the Application is impermissible and may not form the basis of an admissible contention.

Further, DWM's claims regarding high-burnup fuel and repackaging are equally unavailing. DWM does not explain or provide any support for its claim that high-burnup fuel will have an impact on cost estimates[77] and Mr. Alvarez's other miscellaneous claims on high-burnup fuel[78] have no relevance to Contention 2. Meanwhile, DWM's claims regarding repackaging[79] are also speculative and ignore the cost-recovery mechanisms available against

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[73] For example, according to Table 1, Duane Arnold has approximately 13.97 times the MTU of LaCrosse and 13.97 times the estimated cost at both 40 and 80 years. Likewise, according to Table 1, Oyster Creek has 19.8 times the MTU of LaCrosse and 19.8 times the estimated cost, while Yankee Rowe has 3.3 times the MTU of LaCrosse and 3.3 times the estimated cost.

[74] As demonstrated in the Application, Holtec does not anticipate O&M costs increasing based on the amount of fuel stored at the site. ER, Rev. 1 at 263.

[75] It is of note that Mr. Alvarez does not have the qualifications to perform an independent economic or financial analysis. He has no degree in economics, finance, or business. Indeed, the Curriculum Vitae accompanying his report indicates that he has no degrees in any field. *See* Alvarez Curriculum Vitae at 4 ("EDUCATION – Attended the Dana School of Music in Youngstown, Ohio, 1964-68. Majored in music theory and composition.").

[76] Amended Contention at 6 (using a 20 times multiplier to scale costs based entirely on MTU).

[77] *Id.* at 7-8.

[78] Alvarez Report at 6-11.

[79] Amended Contention at 8-9.

DOE.[80] DWM does not dispute the adequacy of current storage containers, nor does it provide any basis to assume that DOE would require Holtec to repackage spent fuel. More importantly, DWM once again ignores the existing cost recovery methods against DOE available to spent fuel owners and does not address or evaluate the Federal Government's liability, even if repackaging were required.[81] Nor does DWM establish why repackaging must be considered in Holtec's environmental analysis. DWM also does not establish why it should now have another bite at the apple and introduce a new expert report at this late stage after already, and insufficiently, attempting to argue increased costs from repackaging in its initial Petition.[82]

Finally, DWM's argument that Holtec should now address Price Anderson Act coverage for the CISF is also deficient. First, DWM is incorrect in alleging that the Price Anderson Act coverage would not apply to transportation, as transportation-related incidents will still be covered under the provisions of the Price-Anderson Act, AEA § 170, 42 U.S.C. § 2210, and regulatory implementing provisions, including 10 C.F.R. Part 140.[83] Moreover, to the extent that DWM is arguing that coverage under the Price Anderson Act should be required for the CISF, DWM is improperly challenging the general NRC policy that does not extend Price Anderson to Part 72 licensees and the provision of the Atomic Energy Act which gives the Commission the authority to determine whether Price-Anderson coverage should be extended to centralized

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[80] *See supra* n. 64.

[81] Because DOE's breach necessitated moving spent fuel *into* dry cask storage, DOE would also be liable for any costs of removing spent fuel *from* dry cask storage, if repackaging were necessary. Further, if repackaging were required to ship SNF to DOE, DOE would be responsible under the Standard Contract for providing the new cask or canister. 10 C.F.R. § 961.11 (Standard Contract, Art. IV.B.2, DOE to provide transportation casks "suitable for use at the Purchaser's site").

[82] DMW Petition at 41-42.

[83] *See also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-00-6, 51 N.R.C. 101, 132 (2000).

interim storage facilities.[84] Finally, DWM does nothing but speculate that liability coverage might be necessary for "accidents, sabotage, terrorist attacks, *etc.*,"[85] without quantifying any risk or the potential cost of such a risk. Nor does DWM justify why Holtec should have to consider sabotage or terrorism in this context when settled Commission policy does not require NEPA analysis of hypothetical terrorist attacks.[86]

For the forgoing reasons, this purported new basis is unsupported, outside the scope of this proceeding, and fails to raise a genuine dispute with the application and therefore must be denied.

B. DWM's Late-Filed Claim that Holtec has Failed to Provide Reasonable Assurances and that an Evidentiary Hearing Is Required Is Inadmissible.

DWM's first claim in the second new basis—that Holtec has not provided reasonable assurances to satisfy 10 C.F.R. § 72.22—is similarly unavailing and fails to meet the Commission's contention admissibility requirements in 10 C.F.R. § 2.309(f)(1). This new assertion is not material to the findings that the NRC must make, lacks sufficient factual or expert support, and otherwise fails to raise a genuine dispute on a material issue.[87]

DWM attempts to establish materiality by claiming that Holtec has not adequately estimated operating or decommissioning costs to satisfy the requirements of 10 C.F.R. § 72.22.[88]

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[84] 42 U.S.C. § 2210; *PFS*, 51 at 132 ("[A]t this juncture the agency has decided not to invoke its discretionary authority relative to Part 72 ISFSIs."); *see also* Exemption Requests to Reduce Liability Insurance Coverage for Decommissioning Reactors After Transfer of All Spent Fuel from a Spent Fuel Pool To Dry Cask Storage, SECY-04-0176 at 7 (Sep. 29, 2004) ("ISFSIs not directly associated with a reactor licensee are not indemnified under Price-Anderson and have no legislated insurance obligation.").

[85] Amended Contention at 9 (emphasis in original).

[86] "[E]nvironmental effect caused by third-party miscreants is … simply too far removed from the natural or expected consequences of agency action to require a study under NEPA," and the "claimed impact is too attenuated to find the proposed federal action to be the proximate cause of that impact." *Amergen Energy Company, LLC* (License Renewal for Oyster Creek Nuclear Generating Station), CLI-07-08, 65 N.R.C. 124, 128-29 (2007).

[87] 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

[88] Amended Contention at 11.

However, none of these claims raise a genuine dispute with the Application because they (1) ignore the license conditions in the Holtec Application regarding financial assurances, and (2) are based on the Alvarez Report's largely unsupported claim of projected costs.

First, DWM fails to dispute the financial assurance license conditions in Holtec's Application. The Commission decision in *Private Fuel Storage*, which DWM cites for support, holds that "[o]utside of the reactor context it is sufficient for a license applicant to identify adequate mechanisms to demonstrate reasonable financial assurance, such as license conditions and other commitments."[89] Holtec has provided for such license conditions in its Application, which state:

> 18. The licensee shall:
>
> (1) include in its service contracts provisions requiring customers to retain title to the spent fuel stored, and allocating legal and financial liability among the licensee and the customers;
>
> (2) include in its service contracts provisions requiring customers to provide periodically credit information, and, where necessary, additional financial assurances such as guarantees, prepayment, or payment bond;
>
> (3) include in its service contracts a provision requiring the licensee not to terminate its license prior to furnishing the spent fuel storage services covered by the service contract.[90]

Despite this, nowhere in its amended contention does DWM challenge, nor even reference, these proposed license conditions on financial assurance. Rather DWM makes the broad, conclusory claim that "there is insufficient financial assurance that reactor owners would retain title to the waste and take financial responsibility."[91] This is insufficient to raise a material dispute. "[T]he mere casting of doubt on some aspects of proposed funding plans is not by itself sufficient to defeat

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[89] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 N.R.C. 23, 30 (2000) (citing *Louisiana Energy Services* (Claiborne Enrichment Center), CLI-97-15, 46 N.R.C. 294 (1997)).

[90] Proposed License for Independent Storage of Spent Nuclear Fuel at 2 (ML17310A223).

[91] Amended Contention at 12.

a finding of reasonable assurance"[92] and "[t]he Commission will accept financial assurances based on plausible assumptions and forecasts, even though the possibility is not insignificant that things will turn out less favorably than expected."[93] By ignoring the Application and failing to raise a specific issue with the existing license condition in the Application, DWM again fails to raise a genuine dispute with the Application on a material issue of fact or law.[94]

Further, to the extent DWM claims that, "[t]he Commission requires that a financial assurances showing be made at an evidentiary hearing," they overreach.[95] In *Private Fuel Storage*, the Commission was ruling on an interlocutory motion for summary disposition filed by the licensee, in which the financial assurance ruling had been directly referred to the Commission by the Board pursuant to 10 C.F.R. § 2.730(f).[96] Under Commission rules, a ruling of summary disposition requires an additional evidentiary hearing only when a Board finds, based on the papers filed, that there remains a genuine issue of material fact on a contention which has already been admitted.[97] It does not stand for the proposition that contentions raising financial assurance issues are guaranteed an evidentiary hearing even at the contention admissibility stage of the proceeding. Indeed, in this case, the Commission remanded consideration of draft service contracts to the Board, holding that the licensee "would still be entitled to summary disposition" in the case that "Intervenors do not raise further objections after reviewing the sample contract, or if the Board

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[92] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 N.R.C. 23, 31 (2000).

[93] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-10, 61 N.R.C. 131, 137-38 (2004) (quoting *N. Atl. Energy Serv. Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 N.R.C. 201, 222 (1999)).

[94] 10 C.F.R. § 2.309(f)(1)(iv); *see also Consumers Power Co.* (Midland Plant, Units 1 & 2) ALAB-691, 16 N.R.C. 897, 914 (1982) ("The mere existence of a question or discussion about the possible materiality of information does not *necessarily* make the information material.").

[95] Amended Contention at 12.

[96] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 N.R.C. 23, 28 (2000).

[97] *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), CLI-01-11, 53 N.R.C. 370, 384-85 (2001).

finds intervenors' objections insubstantial."[98] Thus, simply raising questions about financial assurances does not by itself justify an evidentiary hearing for an Intervenor. DWM's interpretation of *Private Fuel Storage* is overbroad, and it does not raise a genuine dispute of fact on a material issue.[99]

Finally, to the extent DWM relies on the cost projections in the Alvarez Report as support for this contention, as described above, those claims are unsupported and inadmissible. As outlined above, there is no clear support for the values in Table 1 of the Alvarez Report. Moreover, the values do not even appear rational given the lack of explanation for why a CISF cost estimate would even involve adding up the costs of separate reactor ISFSI sites and why many of the values appear to be scaled based purely on the MTU in storage.[100] Thus, the values in Mr. Alvarez's Report appear to be speculative and unsupported. The Commission has held that it will "accept financial assurances based on plausible assumptions and forecasts" which is what Holtec has provided here in its proposed license conditions and Financial Assurance Plan.[101] DWM's attempt to support a contention by (1) creating an unrealistic financial cost estimate and then (2) asserting that Holtec has failed to provide reasonable assurance that it will meet the funding requirements of *DWM's* unrealistic cost estimate is impermissible and may not form the basis of an admissible contention.

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[98] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 N.R.C. 23, 35 (2000).
[99] 10 C.F.R. § 2.309(f)(1)(vi).
[100] *See supra*, n. 73.
[101] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 N.R.C. 23, 31 (2000).

C. DWM's Late-Filed Claim that NEPA Requires a Cost-Benefit Analysis of Alternatives Is Inadmissible.

DWM's final new claim (that NEPA requires a cost-benefit analysis of alternatives) also fails to meet the Commission's contention admissibility requirements in 10 C.F.R. § 2.309(f)(1). In addition to being untimely, this new assertion is lacking in adequate factual and expert support, not material to the findings that the NRC must make and simply outside the scope of Commission jurisdiction.[102]

DWM argues that because they have "rais[ed] questions about the economic costs and related differences in environmental effects" "other operational models must be characterized as alternatives, and costed out for consideration economically as well as environmentally."[103] DWM then lists a series of alternatives that it argues must be considered, largely comprised of a list of alternatives for a dry transfer system and repackaging.[104]

However, DWM failed to allege or even attempt to establish that there would be any change in the environmental impact resulting from these alternatives and, at best, only speculated as to economic impacts. This is fatal to DWM's argument that these must be considered as alternatives in the NEPA analysis. First, DWM failed to provide any support, aside from speculation, for the claim that these alternatives should be evaluated due to any differences in the environmental consequences of each alternative, rendering the contention unsupported. Second, DWM's proposed contention is not material to the findings the NRC Staff must make, as the Commission is not obligated to consider the economic advantages of proposed alternatives.[105]

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[102] 10 C.F.R. § 2.309(f)(1)(iii-v).

[103] Amended Contention at 13-14.

[104] *Id.* at 14.

[105] *Florida Power & Light Co.* (Turkey Point Nuclear Generating, Units Nos. 3 and 4), ALAB-660, 14 N.R.C. 987, 1003 (1981).

"Neither NEPA nor any other statute gives [the Commission] the authority to reject an applicant's proposal solely because an alternative might prove less costly financially," particularly where "there has been no showing that significant environmental consequences attach to the utility's proposal."[106] Indeed, "consideration of an alternative based on economic superiority (and not environmental superiority) is not the responsibility of th[e] []NRC]."[107] Thus, the consideration of alternatives for purely economic reasons is immaterial to the NRC Staff's review and outside the scope of Commission jurisdiction, and may not form the basis for an admissible contention.

IV. Conclusion

In summary, DWM's re-amended Contention 2 is inexcusably late, fails to raise a genuine dispute with the application on a material issue of fact or law, and fails to provide supporting facts. As a result, the Board should reject late-filed amended Contention 2 as inexcusably and unjustifiably late, and in any event should reject the contention because it fails to meet the Commission's contention admissibility requirements.

[106] *Turkey Point*, 14 N.R.C. at 1007.

[107] *Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), LBP-85-34, 22 N.R.C. 481, 492 (1985).

For all of the foregoing reasons, the Board should reject the amended contention.

Respectfully submitted,

/Signed electronically by Jay E. Silberg/

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March 22, 2019

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ATTACHMENT

DON'T WASTE MICHIGAN *ET AL.*'S AMENDED CONTENTION 2

Holtec cannot provide reasonable assurances that it can obtain the necessary funds to cover the costs of construction, operation, maintenance and decommissioning of the CISF.

Basis for the Contention

Holtec cannot demonstrate, as required by 10 C.F.R. § 72.22, that it either possesses the necessary funds, or that it has reasonable assurance of obtaining the necessary funds, or that by a combination of the two, it will have the necessary funds available to cover the construction, operation and decommissioning of the CISF.

Pursuant to 10 C.F.R. § 72.22(e), Holtec is required to demonstrate "reasonable assurance" that it can fund the construction, operation and decommissioning of the CISF. Holtec inconsistently states that it will solely finance the CISF from internal resources, but inconsistently states at the same time that it must have definite contractual arrangements with the U.S. DOE and the outside funding that would come with those arrangements in order to undertake the CISF.

A. Financing By Having DOE Take Title to SNF Is Not Lawful, Hence Is Not Possible

Holtec enumerates in the financial plan included as part of its license application an estimate of construction costs that Holtec says it will cover with a line of credit from an unidentified creditor. At p. 4/10 of the "Holtec International & Eddy Lea Energy Alliance (ELEA) Underground CISF - Financial Assurance & Project Life Cycle Cost Estimates" ("Financial Assurance Plan"), Holtec specifically says:

> Additionally, as a matter of financial prudence, Holtec will require the necessary user agreements in place (from the USDOE and/or the nuclear plant owners) that will justify the required capital expenditures by the Company. However, if the NRC approves and the necessary contractual instruments are

> established insuring the minimum revenue stream needed to justify the facility, then Holtec will launch the construction using its own resources so as to bring the interim storage solution to the industry in the shortest possible time.

Holtec thus will not construct the CISF without financial guarantees from the U.S. Department of Energy. Under existing law, financial guarantees could be forthcoming from DOE only by means of DOE taking title to the spent nuclear fuel at the commercial nuclear reactor site. There is no legal authority under the Nuclear Waste Policy Act of 1983, as amended for DOE to enter into any agreement, either with Holtec or any commercial nuclear reactor utility, to pay for such centralized interim storage facility construction, operations, maintenance, decommissioning, etc. The need for an arrangement which is not lawful in the current circumstances is repeated later in the Financial Assurance Plan, at p. 6/10:

> 2.1 Annual Operating Costs
>
> Anticipated operating costs for the HI-STORE facility are $10 million annually. All financial commitments related to annual operations will be tied to the sponsoring party's agreement with Holtec (*viz.*, DOE settlement agreement).

Holtec considers DOE to be the "sponsoring party" of the CISF, and the term "DOE settlement agreements" apparently refers to agreements whereby DOE takes title to the spent nuclear fuel at reactor sites.

As part of the license application, Holtec submitted to the NRC a draft "License for Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste."[1] Paragraph 17 of the draft license states as follows:

> 17. In accordance with 10 CFR 72.22, the construction program will be undertaken only after a definitive agreement with the prospective user/payer for storing the used fuel (USDOE and/or a nuclear plant owner) at HI-STORE CIS has been established. Construction of any additional capacity beyond this initial capacity amount shall commence only after funding is fully committed that is adequate to construct such additional capacity.

[1] https://www.nrc.gov/docs/ML1731/ML17310A223.pdf

This formal license application document reiterates Holtec's insistence that it must have "a definitive agreement with the prospective user/payer for storing the used fuel," defined as "USDOE and/or a nuclear plant owner."

Holtec officers have repeatedly spoken of the company's requirement for federal subsidies to pursue the CISF. In July 2015, contemporaneously to the time that Holtec sent a letter of intent to the NRC to undertake the project, Holtec International Vice-President Oneid was quoted in the newsletter Spent Fuel that "Holtec's vision is that DOE would sign a contract with Holtec to be the customer, and thus DOE would take title to the fuel at the reactor site and be responsible for transporting it to the storage facility, just as it would if DOE were sending the spent fuel to a permanent repository."[2]

In a July 2015 World Nuclear News article about the Holtec letter of intent about to be sent to the NRC, Holtec's Vice-President Oneid stated that "We will surely soon have official talks with them on a contract whereby the DOE will hold the title to the fuel."[3]

And in ~~a~~ January 2016 ~~slide show, another~~, Holtec International Vice-President Joy Russell gave a presentation ~~including~~**with** a slide stating that Holtec "Requires federal funding to construct & operate CISF."[4]

In contradiction, if not repudiation, of these historic statements of intention, Holtec has asserted that it will have the assets to construct, operate and decommission the CISF. Under 10 C.F.R. § 72.22(e), Holtec must possess the necessary funds, have reasonable assurance of obtaining the necessary funds, or by a combination of the two, have the funds to undertake the

[2] www.uxc.com/p/products/pdf/SF1071.pdf

[3] http://www.world-nuclear-news.org/WR-Holtec-to-start-regulatory-process-for-New-Mexico-us ed-fuel-store-soon-30071501.html

[4] https://www.inmm.org/INMM/media/Documents/Presenations/Spent%20Fuel%20Seminar/2016%20Spent%20Fuel%20Seminar/W6-Russell_HI-STORE_INMM_JAN_2016_R2.pdf at slide #38.

CISF as a 20-year storage-construction program, and to operate it securely for 100 years total. Holtec stresses its inability to finance the construction from internal company resources beyond the first of 20 annual phases. Holtec then hedges on even this limited pledge by insisting that it must have guarantees--presumably arrangements wherein the DOE has taken title to the spent nuclear fuel--before it will construct the CISF at all. There is insufficient evidence that Holtec can comply with 10 C.F.R. § 72.22(e) without having financing, having reasonable assurance of obtaining financing, or some combination of the two.

Worse, Holtec cannot show that current law authorizes the proposed method of financing enumerated in its Financial Assurance Plan. The Nuclear Waste Policy Act of 1983, as amended, provides zero financial support **from DOE** to private away-from-reactor storage schemes unless there is an operating repository. And the NWPA does not contemplate a financial arrangement whereby DOE takes title to spent nuclear fuel for purposes of interim storage of a facility not owned by the U.S. Department of Energy.

~~In sum, Holtec cannot provide the requisite "reasonable assurance." Its financing plan is dependent upon an arrangement that is not disclosed within Holtec's narrative explanation and which does not appear to be authorized by the NWPA. If the ambiguous statement that Holtec requires a contract with DOE before it will undertake the CISF means that DOE must take title and assume liability for the waste, there is no currently lawful means in the NWPA that authorizes such an arrangement.~~

B. Financing By Of The CISF By Plant Owners Holding Title to SNF Is Quite Improbable

Holtec announced a major change of direction at the January 24, 2019 contention oral argument hearing in Albuquerque. Its lead counsel finally admitted that there cannot be any U.S. Department of Energy financial involvement in the Holtec CISF proposal:

> **But I will agree with you that, on their current legislation, DOE cannot take title to spent nuclear fuel from commercial nuclear power plants, under the current statement of facts, but that could change, *depending on what Congress does*.**

Transcript of Proceedings 1/24/2019 ("Tr."), p. 250 (Silberg) (Emphasis added).

At the Albuquerque hearing, Holtec's recurring statements of dependency on DOE's taking title to spent nuclear fuel ("SNF") was finally run to earth as a "contingent option" and not a real one. The belated sweeping aside of the misleading, impossible financing stream now exposes the highly likely, merely theoretical one. Holtec's position on financing, articulated at the hearing by their lead counsel, is that the distinction between DOE taking title and private customer payment is "irrelevant" because "whether it's DOE hold title or the utilities hold title or Holtec holds title, the environmental impacts are going to be identical." Tr. 250, 248.

Joint Petitioners beg to differ; the environmental effects could vary considerably with a private financing scheme. The private scheme envisions having "necessary user agreements in place (from . . . the nuclear plant owners) that will justify the required capital expenditures by the Company." Financial Assurance Plan at 3.

While technically possible under the Atomic Energy Act, a privately-financed Holtec is a vapid and wholly unlikely alternative which would look very different from DOE taking title, because of the vagaries of private sector capital ebbs and flows compared to the continuity of governmental funding, and also because a privately financed Holtec would present a different cost model. The Holtec financing discussion to this point has been overwhelmed by the DOE take-title fiction. Although Holtec maintains it is an irrelevant discussion, finally dispatching the DOE genie allows serious scrutiny of the sole remaining alternative.

In support of this needed examination of private financing, Joint Petitioners have attached a "Declaration of Robert Alvarez" ("Alvarez Report"). Mr. Alvarez is a former senior policy adviser to the U.S. Secretary of Energy and deputy assistant secretary for national security and the environment from 1993 to 1999. Presently he is a senior scholar at the Institute for Policy Studies. In 2003 he 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's curriculum vitae accompanies this proposed amended contention.

Mr. Alvarez observes that under the private-financing model, utilities "will have to address expectations as to the spent nuclear fuel canistering that would be less economically onerous if DOE were involved. The timing for shipment to Holtec's facility of high burnup fuel, and requirements of shipment integrity are interrelated and will be different if DOE is not directing the traffic. Private payers will have budget constraints and economic priorities that are different--and so affect timing of moving the fuel around--from a scenario where DOE is the contractor. Holtec will bear responsibility for repackaging SNF at its site, requiring dry transfer system capability close to the beginning of operations, something they presently have no intentions of developing until the end of the short term, or even longer." Alvarez Report at 2-3.

1. Holtec's Missing Storage Cost Projections

Holtec's Financial Assurance Plan mainly consists of trust-us assurances. Holtec will build the first of 20 phases with its own money, supplemented in the final 19 phases by silence and magical aspirations. According to Mr. Alvarez, Holtec was a participant in a study estimating that 5000 MTU of SNF would cost $4.72 Billion for CISF storage over an 80-year period. *Id*. at Table 1. It follows that 100,000 MTU, the volume Holtec expects to

store in New Mexico, will cost $94.4 Billion over 80 years. Taking the proposed quantity of 173,600 MT, which Holtec has explicitly stated at certain points in its LA documents, then the cost would go correspondingly higher.

2. High Burnup Fuel: A Tale Of Two CISFs

Mr. Alvarez unearths considerable variability between the Holtec and ISP approaches to transport and storage of high-burnup fuel (which he defines as fuel with burnup greater than 45,000 MWd/MTU). He says:

> **Of concern is the damage that high-burnup fuel may have on the cladding of the fuel. The Nuclear Regulatory Commission (NRC) and the nuclear industry do not have the necessary information to determine if prolonged storage of high-burnup fuel may damage fuel cladding and create leakage. Even NRC admits, "there is limited data to show that the cladding of spent fuel with burnups greater than 45,000 GWd/MTU will remain undamaged during the licensing period."**

Alvarez Report at 6. Mr. Alvarez further explains that "under high-burnup conditions, the zirconium cladding of the fuel rods may not be relied upon as a key barrier to prevent the escape of radioactivity," especially during prolonged storage in the "dry casks." *Id.* at 6. High burnup fuel temperatures "make the used fuel more vulnerable to damage from handling and transport; cladding can fail when used fuel assemblies are removed from cooling pools, when they are vacuum dried, and when they are placed in storage canisters." *Id.* at 7.

Mr. Alvarez additionally cites the lack of data regarding the impacts on high-burn-up spent fuel by transportation and multi-decade dry storage and concludes that "[t]he NRC and the nuclear industry do not have the necessary information to predict when storage of high-burnup fuel may cause problems." *Id.* He warns, "It will take the Energy Department at least a decade to complete a study involving temperature monitoring in a specially designed dry cask containing high burnup fuel." *Id.* at 9.

While Petitioners concede that the same laws of physics apply irrespective of Holtec's financing mode, Holtec has devised a problematic policy from the manifestation of those laws in the physical realm. According to Mr. Alvarez, Holtec's direct competitor, Interim Storage Partners in Andrews County, Texas, has stipulated in its NRC license application for a CISF that "all fuel with assembly average burnup greater than 45 GWd/MTHM shall be canned inside the canister,"[5] whereas Holtec has no plan to require double containment for high-burnup spent nuclear fuel. This represents a potentially large difference in pricing and management of the canisters at the reactor and New Mexico ends, poses ominous portents for transport risk and will further expand routine radiological exposures to populations along thousands of miles of shipping routes.

Holtec, Alvarez concludes, is "relying on speculative assumptions regarding the outcome of experimental data several years from now from the Energy Department, and undocumented regulatory changes by the NRC, which only permits transport of high-burn-up spent nuclear fuel on a case-by-case basis." *Id*. at 10-11.

3. Repackaging SNF May Triple Storage Expense

As Mr. Alvarez notes, there is no dry cask storage system licensed for disposal. Disposal canistering is experimental and quite preliminary. Alvarez Report at 11. Without DOE assuming title of SNF, there is unlikely to be detailed development of repackaging in line with DOE's 2006 policy. Holtec has promised to accept the gamut of canisters and has no intention of building a dry transfer system ("DTS") to remedy dangers that may arise in SNF hauling, much less for repackaging waste in standardized disposal containers.

[5] **U.S. Nuclear Regulatory Commission, LICENSE FOR INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE, NRC Form 588, Docket No.72-1050, page 2.**

On the face of things, a huge cost drain might be avoided by the private utility customers of Holtec – until, that is, there is a major transportation accident, a radiological onsite emergency in New Mexico, or a sudden determination at the Department of Energy toward standardization. The cost picture will indeed change. As Joint Petitioners maintain in their present Contention 3, low-level radioactive waste (LLRW) volume and cost considerations could be dramatically affected by a need to institute repackaging well ahead of the first century of CISF operations. It could produce thousands of discarded canisters, an event unforeseen in the current Holtec proposal.

Mr. Alvarez makes these salient points:

> **A nuclear industry study concluded in 2014 that "casks and canisters being used by the power utilities will be at least partially, and maybe largely, incompatible with future transport and repository requirements. This means that some if not all, of the [used nuclear fuel] that is moved to dry storage by the utilities will ultimately need to be repackaged." Existing large canisters can place a major burden on a geological repository, such as: handling, emplacement and post closure of cumbersome packages with higher heat loads, radioactivity and fissile materials. Repackaging expenses rely on the transportability of the canisters, but more importantly on the compatibility of the canister with heat loading requirement for disposal.**

Alvarez Report at 12. He points to DOE research showing that the costs of repackaging at a CISF could add roughly $40,000 to $87,000 per fuel assembly to loading and capital costs and calculates that the total expense of repackaging an estimated 244,000 spent nuclear fuel assemblies could range from $9.7 billion to $22.2 billion. The costs of repackaging alone, he says, "can effectively double or triple the high cost of interim storage." Alvarez Report at 13.

4. No Price-Anderson Coverage

Holtec's application documents don't discuss liability coverage for transportation to New Mexico, or for accidents, sabotage, terrorist attacks, etc. that might befall storage

operations. By 42 U.S.C. § 2210(a), access to Price-Anderson liability protections is committed to the discretion of the NRC. The NRC never provided Price-Anderson coverage to the Private Fuel Storage project in Utah. Despite periodic renewals of the Price-Anderson Act, Congress has never dislodged the principle that "a state may nevertheless award damages based upon its own law of liability." *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 256, 104 S.Ct. 615 (1984); *Skull Valley Band of Goshute Indians v. Private Fuel Storage, LLC*, 376 F.3d 1223, 1243 (10th Cir. 2004) ("Congress intended to stand by both concepts.").

The Price-Anderson Act does not cover 100% of all conceivable radiological events. It is triggered by formal declaration of an "extraordinary nuclear occurrence" ("ENO"). Some forms of nuclear damage fall below the threshold harms and losses required for an ENO. The core meltdown at Three Mile Island, Unit 2, notably, was never classified as an ENO by the NRC.

Perhaps because of its excessive focus on having DOE take title to the SNF, which would automatically bring Holtec within the coverage of Price-Anderson, Holtec's application documents lack any meaningful disclosure or discussion of liability management in the event of no continuing federal contract with the Department of Energy.

C. Customer Financing Implies Different Arrangements From DOE Taking Title That Must Be Identified And Disclosed

1. No Demonstration of 'Reasonable Assurance' Under AEA

~~NRC~~**Atomic Energy Act** regulations at 10 CFR § 72.22(e) require Holtec to disclose **the following** in its application for the license:

> (e) . . . [I]nformation sufficient to demonstrate to the Commission the financial qualifications of the applicant to carry out, in accordance with the regulations in this chapter, the activities for which the license is sought. . . . The information must show that the applicant either possesses the necessary funds, or

that the applicant has reasonable assurance of obtaining the necessary funds; or that by a combination of the two, the applicant will have the necessary funds available to cover the following:

(1) Estimated construction costs;
(2) Estimated operating costs over the planned life of the ISFSI; and
(3) Estimated decommissioning costs, and the necessary financial arrangements to provide reasonable assurance before licensing, that decommissioning will be carried out after the removal of spent fuel, high-level radioactive waste, and/or reactor-related GTCC waste from storage.

As the foregoing discussion suggests, Holtec has not adequately estimated the operating costs over the planned life of the CISF, nor an adequate estimation of decommissioning costs and associated financial arrangements to demonstrate reasonable assurance of decommissioning. Holtec projects a mere $27.3 Million in annual operating expenditures. Financial Assurance Plan § 2.1.

~~This is a content requirement for the application, so this contention is indisputably within the scope of this proceeding. Since the~~**The** truthful and accurate provision of ~~the~~ financing information may persuade the NRC to grant the requested license, **so** this ~~issue~~**contention** is material to the findings the NRC must make. Under Section 186(a) of the Atomic Energy Act, 42 U.S.C. § 2236(a),[6] the test for materiality is whether the information is capable of influencing the ~~decisionmaker~~**decision maker**, not whether the ~~decisionmaker~~**decision maker** would, in fact, have relied on it. Determinations of materiality require careful, common sense judgments of the context in which information appears and the stage of the licensing process involved. *Consumers Power Co.* (Midland Plant, Units 1 & 2), ALAB-691, 16 NRC 897, 910 (1982),

[6] "Any license may be revoked for any material false statement in the application or any statement of fact required under section 182, or because of conditions revealed by such application or statement of fact or any report, record, or inspection or other means which would warrant the Commission to refuse to grant a license on an original application, or for failure to construct or operate a facility in accordance with the terms of the construction permit or license or the technical specifications in the application, or for violation of, or failure to observe any of the terms and provisions of this Act or of any regulation of the Commission."

citing *Virginia Elec. & Power Co.* (North Anna Power Station, Units 1 & 2), CLI-76-22, 4 NRC 480 (1976), *aff'd sub nom. Virginia Elec. & Power Co. v. NRC*, 571 F.2d 1289 (4th Cir. 1978).

The NRC has discussed in previous cases what constitutes reasonable assurance of adequate funding. In *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), 46 NRC 294 (1997), the Commission determined that an NRC permit should contain strict financial assurance conditions before construction can begin.

Three years later, in *Private Fuel Storage LLC* (Independent Spent Fuel Storage Installation), 52 NRC 23 (2000), the Commission applied *Claiborne* to an application under 10 C.F.R. Part 72. The Commission allowed PFS to provide its financial assurance through license conditions after a showing of financial assurance was made through an evidentiary hearing. The Commission said:

> ***Claiborne* should not be interpreted, however, to hold that where the danger to public health and the environment presented by a proposed facility is not as great as the danger presented by a nuclear reactor, the Commission will grant a license to an applicant of dubious financial qualifications. Under the *Claiborne* approach, we still consider the financial prospects of the proposed license, but we do not hold the license applicant to Part 50-style specific means of showing financial capability.**

The Commission requires that a financial assurances showing be made at an evidentiary hearing. Holtec thus far has not made that showing.

Since Holtec finally admitted at the ASLB hearing on January 24, 2019, that DOE cannot legally take title to or have financial responsibility for the waste to be stored at the Holtec facility, and since there is insufficient financial assurance that reactor owners would retain title to the waste and take financial responsibility, Holtec has not complied with 10 C.F.R. § 72.22(e).

Although financial requirements could be placed in the license conditions, that must be determined on a case-by-case basis after an evidentiary hearing.

2. Inadequate Quantification Of Costs And Benefits Under NEPA

By 10 C.F.R. § 51.45(c) requires the ER to "include an analysis that considers and balances 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" and that "the analysis in the environmental report should also include consideration of the economic, technical, and other benefits and costs of the proposed action and its alternatives." Section 51.45(e) mandates that the information submitted "should not be confined to information supporting the proposed action but should also include adverse information."

The Council on Environmental Quality regulation that implements NEPA cost-benefit analysis, 40 C.F.R. § 1502.23, requires such analyses to be attached to the Environmental Impact Statement:

> **If a cost-benefit analysis relevant to the choice among environmentally different alternatives is being considered for the proposed action, it shall be incorporated by reference or appended to the statement as an aid in evaluating the environmental consequences. To assess the adequacy of compliance with section 102(2)(B) of the Act the statement shall, when a cost-benefit analysis is prepared, discuss the relationship between that analysis and any analyses of unquantified environmental impacts, values, and amenities. For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations. In any event, an environmental impact statement should at least indicate those considerations, including factors not related to environmental quality, which are likely to be relevant and important to a decision.**

Joint Petitioners have produced information raising questions about the economic costs and related differences in environmental effects to be expected from a privately-funded CISF, as opposed to a project with essentially regular cash flow and financing

because of the DOE.[7] While Holtec may properly propose its preferred alternative operating model CISF, other operational models must be characterized as alternatives, and costed out for consideration economically as well as environmentally. Such alternatives include, but are not limited to, the following:

- **consideration of the Holtec project design, but with a dry transfer system available from the date of commencement of receipt of SNF from reactor sites; and/or**
- **consideration of the Holtec project design with a dry transfer system and a formal policy of not rejecting arriving loads, but instead of remediating them at the New Mexico site; and/or**
- **consideration of the Holtec project design with DTS and can-in-can delivery for high burnup fuel; and/or**
- **consideration of the Holtec project design without DTS but with can-in-can delivery for high burnup fuel; and/or**
- **consideration of the Holtec project design with/without DTS, with full disclosure, investigation and analysis of transportation routes where SNF would travel through least- populated, medium-populated and heavily-populated areas en route to New Mexico; and/or**
- **consideration of the Holtec operational design, with SNF repackaging required to occur at the New Mexico site; and/or**
- **consideration of the Holtec operation design with SNF repackaging having been performed at the reactor sites; and/or**

[7] **Barring future governmental shutdowns and associated funding interruptions.**

- **analysis of environmental effects from transporting SNF in repackaged containers vs. projected environmental effects of transporting SNF in non-standardized containers. This last alternative encompasses both shipment from reactor sites to Holtec and thence to a final repository.**

NEPA does not permit an agency to:

> **. . . [C]ontrive a purpose so slender as to define competing 'reasonable alternatives' out of consideration (and even out of existence). . . . If the agency constricts the definition of the project's purpose and thereby excludes what truly are reasonable alternatives, the EIS cannot fulfill its role. Nor can the agency satisfy [NEPA].**

***Simmons v. United States Army Corps of Eng'rs*, 120 F.3d 664, 665 (7th Cir. 1997). See also *Van Abbema v. Fornell*, 807 F.2d 633, 638 (7th Cir. 1986) ("evaluation of 'alternatives' mandated by NEPA is to be an evaluation of alternative means to accomplish the general goal of an action; it is not an evaluation of the alternative means by which a particular applicant can reach his goals"); *also, Sierra Club v. Marsh*, 714 F.Supp. 539, 577 (D.Me. 1989) ("project's principal goals must override the stated preferences of the applicant for purposes of NEPA's 'reasonable alternatives' analysis"); *DuBois v. U.S. Dept. of Agric.*, 102 F.3d 1273, 1287 (1st Cir. 1996), *cert. denied*, 117 S.Ct. 1567 (1997) (existence of a reasonable, but unexamined, alternative renders the EIS inadequate). Courts must ensure that the ultimate site decision is made only after reasonable alternatives and their impacts are properly identified in the NEPA document. *Concerned About Trident v. Rumsfeld*, 555 F.2d 817 (D.C. Cir. 1977).**

Under NEPA, the environmental review must "rigorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. § 1502.14(a). NEPA expects a "substantial treatment of each alternative" to be considered in an EIS. 40 C.F.R. § 1502.14(b); see also, *Southeast Alaska Conservation Council v. FHWA*, 649 F.3d 1050 (9th Cir. 2011). An agency

must take a "hard look" at the environmental consequences of a proposed action before taking that action. *Nuclear Fuel Servs., Inc.*, LBP-05-8, 61 NRC 202, 207 (2005) (citing *Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519, 558 (1978) and quoting *Balt. Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 97 (1983)). The "hard look" requires the federal agency to make a "good faith" effort to predict reasonably foreseeable environmental impacts, and for the agency to apply a "rule of reason" after taking that "hard look" at potential environmental impacts. *Public Service Co. of Oklahoma* (Black Fox Station, Units 1 & 2), LBP-78-26, 8 NRC 102, 141 (1978).

March 22, 2019

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board Panel

In the Matter of	)	
	)	Docket No. 72-1051
Holtec International	)	
	)	ASLBP No. 18-958-01-ISFSI-BD01
HI-STORE Consolidated Interim Storage Facility	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Holtec Opposition to Don't Waste Michigan et al.'s Motion to Amend Contention 2 have been served through the EFiling system on the participants in the above-captioned proceeding this 22nd day of March 2019.

/signed electronically by Timothy J.V. Walsh/

Timothy J.V. Walsh