# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)	Docket No. 72-1050
INTERIM STORAGE PARTNERS LLC	)	
(Consolidated Interim Storage Facility)	)	December 10, 2018
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# INTERIM STORAGE PARTNERS LLC'S ANSWER OPPOSING HEARING REQUEST AND PETITION TO INTERVENE FILED BY SIERRA CLUB

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#### I. <u>INTRODUCTION</u>

Pursuant to 10 C.F.R. § 2.309(i)(1), Interim Storage Partners LLC ("ISP") submits this

Answer opposing the "Petition to Intervene and Request for Adjudicatory Hearing" filed by

Sierra Club ("Petitioner") with the U.S. Nuclear Regulatory Commission ("NRC") on the abovecaptioned docket on November 13, 2018 ("Petition"). The Petition concerns ISP's pending
application for a 40-year specific license under 10 C.F.R. Part 72 to build and operate a

Consolidated Interim Storage Facility ("CISF") in Andrews County, Texas, referred to as the
"WCS CISF" (the "Application"). As explained below, the Atomic Safety and Licensing Board
("Board") should deny the Petition because Petitioner has failed to satisfy its affirmative burden
to demonstrate standing, and has failed to submit an admissible contention.

Petitioner seeks representational standing in this proceeding on the basis that five of its members purportedly have standing in their own right. As a preliminary matter, one of those

Petition to Intervene and Request for Adjudicatory Hearing by Sierra Club (Nov. 13, 2018) (ML18317A411). The Petition also included multiple declarations, discussed below.

ISP, WCS CISF License Application, Rev. 2 (July 19, 2018) (ML18206A595) (including the Safety Analysis Report, Rev. 2 ("SAR") and Environmental Report, Rev. 2 ("ER")).

members is already represented by another entity in this proceeding, and cannot be double-represented by Petitioner. Moreover, a proximity-based *presumption* of standing is unavailable to Petitioner's members here because they have not demonstrated an obvious potential for offsite consequences from the WCS CISF—and, indeed, the Commission has determined, generically, that there is no plausible mechanism for offsite radiological consequences. And, when viewed under traditional standing principles, their alleged injuries are too vague, speculative, and attenuated to establish standing. Accordingly, the Petition must be rejected on this basis alone.

Setting aside its failure to establish standing, Petitioner also has failed to proffer an admissible contention. As explained below, each of Petitioner's 17 proposed contentions suffers from a combination of fatal defects for failure to satisfy each of the six elements of 10 C.F.R. § 2.309(f)(1). In general, Petitioner frequently misreads or misinterprets the Application and other documents, raises multiple issues that are not material to this proceeding, ignores information in the Application that addresses challenged topics, and fails to explain, much less provide adequate support for, its proposed contentions. Accordingly, because Petitioner has failed to submit an admissible contention, the Petition must be denied for this second independent reason.

### II. WCS CISF PROCEDURAL HISTORY

On April 28, 2016, Waste Control Specialists LLC ("WCS") submitted to the NRC an Application for a specific license pursuant to 10 C.F.R. Part 72 for a CISF on its site located in western Andrews County, Texas. WCS currently operates Low-Level Waste and Mixed Waste facilities on this site.

On January 30, 2017, the NRC published a notice in the *Federal Register* announcing its acceptance of the WCS CISF Application and an opportunity to request a hearing and petition

for leave to intervene.<sup>3</sup> On April 18, 2017, WCS requested that the NRC temporarily suspend all review activities associated with its Application.<sup>4</sup> Approximately 14 months later, by letters dated June 8, 2018, and July 19, 2018, ISP (a joint venture between WCS and Orano CIS, LLC) submitted a request to the NRC to resume review of the Application for the WCS CISF, and submitted an updated version of the Application (to revise the name of the applicant and make other changes).<sup>5</sup>

On August 29, 2018, the NRC published a notice in the *Federal Register* announcing its decision to continue reviewing the Application and providing a new opportunity to request a hearing and petition for leave to intervene.<sup>6</sup> On October 2, 2018, a number of organizations and individuals submitted a consolidated request for an extension of the hearing request deadline.<sup>7</sup> The Office of the Secretary issued an Order on October 25, 2018, extending the petition-filing deadline 15 days to November 13, 2018.<sup>8</sup> On November 13, 2018, Petitioner filed the instant Petition seeking a hearing and proposing 17 contentions.

See License Application; Docketing and Opportunity to Request a Hearing and to Petition for Leave to Intervene, 82 Fed. Reg. 8773 (Jan. 30, 2017) ("Original Notice of Hearing Opportunity"). On April 4, 2017, and in a corrected notice dated April 10, 2017, the NRC published in the *Federal Register* (82 Fed. Reg. 16,435; 82 Fed. Reg. 17,297) an order granting all petitioners an extension of time until May 31, 2017, to file hearing requests on WCS's Application.

Letter from R. Baltzer, WCS, to NRC Document Control Desk (Apr. 18, 2017) (ML17110A206). On April 19, 2017, WCS and the NRC Staff jointly requested that the Original Notice of Hearing Opportunity be withdrawn, pending possible future resumption of the Application review. Joint Request to Withdraw the Federal Register Notice Providing an Opportunity to Submit Hearing Requests (Apr. 19, 2017) (ML17109A480). On June 22, 2017, the Commission granted that request. *Waste Control Specialists LLC* (Consolidated Interim Storage Facility), CLI-17-10, 85 NRC 221, 222-23 (2017).

Although ISP is the new applicant name, the proposed facility name remains the "WCS CISF."

See Interim Storage Partner's Waste Control Specialists Consolidated Interim Storage Facility; Revised License Application; Opportunity to Request a Hearing and to Petition for Leave to Intervene; Order Imposing Procedures, 83 Fed. Reg. 44,070 (Aug. 29, 2018) ("Notice of Hearing Opportunity").

<sup>&</sup>lt;sup>7</sup> Request for Extension on Deadline for Intervention (Oct. 2, 2018) (ML18276A066).

<sup>&</sup>lt;sup>8</sup> Office of the Secretary, Order (Oct. 25, 2018) (unpublished) (ML18298A335).

### III. PETITIONER HAS NOT DEMONSTRATED STANDING

### A. <u>Legal Standards for Standing</u>

The Atomic Energy Act of 1954, as amended ("AEA"), allows individuals "whose interest may be affected" to intervene in specified NRC licensing proceedings. The Commission has long applied judicial concepts of standing to determine whether a petitioner's interest provides a sufficient basis for intervention. Both an individual and an organization may assert standing. An organization may assert standing in its own right (*i.e.*, organizational standing), or may assert a right to represent the interests of its members (*i.e.*, representational standing), which requires a showing that: (1) its members would otherwise have standing in their own right; (2) the interests that the organization seeks to protect are germane to its purpose; and (3) neither the claim asserted nor the relief requested requires an individual member to participate in the proceeding. In all cases, "[t]he petitioner bears the burden to provide facts sufficient to establish standing." In all cases, "[t]he petitioner bears the burden to

#### 1. Proximity-Plus Standing

In cases involving reactor facilities, the Commission will apply a standing presumption based on proximity to the site.<sup>14</sup> However, no such automatic presumption exists for nuclear materials proceedings, such as this one.<sup>15</sup> To show standing based on geographic proximity to a

<sup>9</sup> AEA § 189a (codified at 42 U.S.C. § 2239(a)).

<sup>10</sup> Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 30 (1998).

EnergySolutions, LLC (Radioactive Waste Import/Export Licenses), CLI-11-3, 73 NRC 613, 621 (2011).

<sup>&</sup>lt;sup>12</sup> *PFS*, CLI-98-13, 48 NRC at 30-31.

<sup>13</sup> PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 139 (2010).

<sup>&</sup>lt;sup>14</sup> Fla. Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 & 2), CLI-89-21, 30 NRC 325, 329 (1989).

See Nuclear Fuel Servs., Inc. (Erwin, Tennessee), CLI-04-13, 59 NRC 244, 248 (2004).

materials facility, a petitioner bears an affirmative burden to demonstrate that "the proposed action involves a significant source of radioactivity producing an obvious potential for offsite consequences." As the Commission has made clear, "conclusory allegations about potential radiological harm" are insufficient to satisfy this burden. <sup>17</sup>

Assuming the petitioner meets its burden to demonstrate an obvious potential for offsite consequences, the presiding officer then must determine the appropriate presumptive distance. This distance corresponds to the radius within which persons may "face a *realistic* threat of harm" from a release of radioactive material.<sup>18</sup> In reactor proceedings, the Commission has adopted a 50-mile presumptive distance; however, it has "required far closer proximity in other licensing proceedings."<sup>19</sup> The presumptive radius for ISFSI proceedings is particularly small, "because an ISFSI is essentially a passive structure rather than an operating facility, and there therefore is less chance of widespread radioactive release."<sup>20</sup> Nevertheless, in each materials proceeding, the appropriate distance must be evaluated on a "case-by-case basis, taking into account the nature of the proposed action and the significance of the radioactive source."<sup>21</sup>

Where a petitioner is unable to demonstrate "proximity-plus" standing to intervene, traditional standing principles will apply.<sup>22</sup>

Ga. Inst. of Tech. (Ga. Tech Research Reactor), CLI-95-12, 42 NRC 111, 116 (1995).

<sup>&</sup>lt;sup>17</sup> NFS, CLI-04-13, 59 NRC at 248.

Calvert Cliffs 3 Nuclear Project, LLC & UniStar Nuclear Operating Servs., LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 917 (2009) (emphasis added).

Consumers Energy Co. (Big Rock Point ISFSI), CLI-07-19, 65 NRC 423, 426 (2007) (quotation omitted).

<sup>&</sup>lt;sup>20</sup> *Id*.

<sup>&</sup>lt;sup>21</sup> Ga. Tech., CLI-95-12, 42 NRC at 116-17. See also Big Rock Point ISFSI, CLI-07-19, 65 NRC at 426.

See U.S. Army Installation Command (Schofield Barracks, Oahu, Hawaii, and Pohakuloa Training Area, Island of Hawaii, Hawaii), CLI-10-20, 72 NRC 185, 188-89 (2010); USEC Inc. (Am. Centrifuge Plant), CLI-05-11, 61 NRC 309, 311-12 (2005) (quoting NFS, CLI-04-13, 59 NRC at 248) (If "there is no 'obvious' potential for radiological harm at a particular distance frequented by the petitioner, it becomes the petitioner's 'burden to show a specific and plausible means' of how the challenged action may harm him or her.").

### 2. <u>Traditional Standing</u>

For traditional standing, a petitioner must establish that: (1) it has suffered or will suffer a distinct and palpable injury that constitutes injury-in-fact within the zones of interests arguably protected by the AEA or the National Environmental Policy Act of 1969, as amended ("NEPA"); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision.<sup>23</sup> To demonstrate a distinct and palpable injury-in-fact sufficient to establish standing, the petitioner must demonstrate that the injury-in-fact is both "(a) concrete and particularized and (b) 'actual or imminent,' not 'conjectural' or 'hypothetical.'"<sup>24</sup> The mere ability to *imagine* circumstances where a party could be affected is not enough—the petitioner must demonstrate that "the injury is certainly impending."<sup>25</sup> In the NRC licensing context, "unsupported general references to radiological consequences are insufficient to establish a basis for injury" to establish standing.<sup>26</sup> Accordingly, standing will be "denied when the threat of injury is too speculative."<sup>27</sup>

Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 168 (1998) (citing Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996)); see also N. States Power Co. (Prairie Island Nuclear Generating Plant Indep. Spent Fuel Storage Installation), LBP-12-24, 76 NRC 503, 507-08 (2012) (citing EnergySolutions, CLI-11-3, 73 NRC at 621). Both the Commission's Notice of Hearing Opportunity for this proceeding and its Rules of Practice require a petitioner to set forth: (1) the nature of its right under the AEA to be made a party to the proceeding; (2) the nature and extent of its property, financial, or other interest in the proceeding; and (3) the possible effect of any decision or order that may be issued in the proceeding on its interest. Notice of Hearing Opportunity, 83 Fed. Reg. at 44,071; 10 C.F.R. § 2.309(d)(1).

<sup>&</sup>lt;sup>24</sup> Lujan v. Defenders of Wildlife, 504 U.S. 555, 560 (1992); Sequoyah Fuels Corp. & General Atomics (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 72 (1994).

Nw. Airlines, Inc. v. Fed. Aviation Admin., 795 F.2d 195, 201 (D.C. Cir. 1986) (emphasis in original) (citing Babbitt v. United Farm Workers Nat'l Union, 442 U.S. 289, 298 (1979)).

Sacramento Mun. Util. Dist. (Rancho Seco Nuclear Generating Station), LBP-92-23, 36 NRC 120, 130 (1992).

Sequoyah Fuels, CLI-94-12, 40 NRC at 72 (finding detailed data and an expert affidavit demonstrating the technical plausibility of the alleged injury were sufficient to demonstrate standing) (citing *Whitmore v. Ark.*, 495 U.S. 488, 494 (1974); *L.A. v. Lyons*, 461 U.S. 95, 105 (1983)).

# B. Petitioner Is Estopped from Representing Ms. Gardner in This Proceeding

As a preliminary matter, to the extent Petitioner claims representational standing to represent its member, Ms. Rose M. Gardner, its claim is improper. Ms. Gardner already has authorized another entity, Beyond Nuclear, to represent her interests in this proceeding.<sup>28</sup> The Commission has explicitly rejected such "multiple representation" as "detrimental to the process of adjudication."<sup>29</sup> The Commission has explained that individuals cannot simultaneously authorize multiple organizations to represent their interests because it "might lead to confusion" as to which entity is speaking for the individual.<sup>30</sup> Accordingly, because Ms. Gardner already has authorized another entity to represent her interests, Petitioner is estopped from representing her in this proceeding, and cannot demonstrate representational standing based on Ms. Gardner's purported interests in this proceeding.

# C. <u>Petitioner Has Not Demonstrated Proximity-Plus Standing</u>

Petitioner appears to assert representational standing on the basis that its members have standing in their own right under the proximity-plus presumption.<sup>31</sup> However, as explained below, it has not demonstrated an "obvious" potential for offsite consequences from the WCS CISF, nor demonstrated that any of its members have any interests within a hypothetical radius of potential harm. Accordingly, proximity-plus standing is unavailable as a basis for Petitioner's standing here.

See Beyond Nuclear, Inc.'s Hearing Request and Petition to Intervene, Attach. 02, "Declaration of Rose M. Gardner" ¶ 14 (Sept. 13, 2018) (ML18276A242) ("authoriz[ing] Beyond Nuclear to request a hearing and intervene on [her] behalf").

<sup>&</sup>lt;sup>29</sup> Id

<sup>&</sup>lt;sup>30</sup> Big Rock Point ISFSI, CLI-07-19, 65 NRC at 426-27.

Petition at 3-7.

# 1. Petitioner Has Not Demonstrated an Obvious Potential for Offsite Consequences

Petitioner argues that "[t]he enormous quantity of radioactive waste proposed to be stored at the ISP facility, *by itself*, establishes a sufficiently 'obvious' potential for offsite harm, establishing a proximity presumption." However, Petitioner misstates the law. The Commission has explained that the mere existence of a source of radiation—even a significant one—does not, itself, demonstrate an "obvious potential for offsite consequences." To demonstrate proximity-plus standing, Petitioner bears the *further* burden of demonstrating "a plausible mechanism" through which those materials could cause offsite harm. Petitioner simply has not done so because it makes *no further arguments* regarding any purported "obvious" potential for offsite consequences from the WCS CISF.

Moreover, no such "obvious" potential exists. In promulgating its Part 72 emergency planning rule—declining to impose any offsite emergency planning requirements whatsoever on away-from-reactor ISFSIs such as the WCS CISF—the Commission determined there simply is no plausible possibility of offsite consequences.<sup>35</sup> The Commission's determination that only *onsite* emergency planning is required at away-from-reactor ISFSIs is directly relevant to proximity-based standing because the proximity presumption in reactor proceedings is *based* on the offsite emergency planning zone ("EPZ").<sup>36</sup> As the Commission explained:

<sup>32</sup> *Id.* at 7 (emphasis added) (citing *Pac. Gas & Elec. Co.* (Diablo Canyon Power Plant Indep. Spent Fuel Storage Installation), LBP-02-23, 56 NRC 413, 428-29 (2002)).

<sup>33</sup> Schofield Barracks, CLI-10-20, 72 NRC at 189 (quoting Sequoyah Fuels, CLI-94-12, 40 NRC at 72).

<sup>&</sup>lt;sup>34</sup> *Id*.

See, e.g., Emergency Planning Licensing Requirements for Independent Spent Fuel Storage Facilities (ISFSI) and Monitored Retrievable Storage (MRS); Final Rule, 60 Fed. Reg. 32,430, 32,439 (June 22, 1995) ("ISFSI EP Rule").

Strata Energy, Inc. (Ross In Situ Uranium Recovery Project), CLI-12-12, 75 NRC 603, 610 n.32 (2012) (explaining the presumptive distance "corresponds roughly to the emergency planning zone for ingestion pathways").

To be a potential radiological hazard to the general public, radioactive materials must be released from a facility and dispersed offsite. For this to happen:

- The radioactive material must be in a dispersible form,
- There must be a mechanism available for the release of such materials from the facility, and
- There must be a mechanism available for offsite dispersion of such released material.

Although the inventory of radioactive material contained in 1000 MTHM of aged spent fuel may be on the order of a billion curies or more, *very little is available in a dispersible form*; there is *no mechanism* available for the release of radioactive materials in significant quantities from [the] facility; and the *only* mechanism available for offsite dispersion is atmosphere dispersion.<sup>37</sup>

Because the Commission generically concluded that: (1) "[t]here exists *no significant dispersal mechanism* for the radioactive material contained within a storage cask";<sup>38</sup> and (2) "the postulated *worst-case* accident involving an ISFSI has *insignificant consequences to the public health and safety*;"<sup>39</sup> the final rule imposed onsite-only emergency planning requirements on away-from-reactor ISFSI licensees limited to dry storage of cooled fuel, such as the WCS CISF. In other words, the required EPZ limit is the site boundary. Notably, the Commission's conclusion does not rest simply on a finding that the possibility of offsite consequences is improbable (*e.g.*, would require the simultaneous failure of multiple independent safety systems); rather, it is based on the Commission's well-considered conclusion that there simply is no

ISFSI EP Rule, 60 Fed. Reg. at 32,431 (citing NUREG-0575, Final Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Power Reactor Fuel, Vol. 1 § 4.2.2, "Safety and Accident Considerations" (Aug. 1979) (ML022550127)) (emphasis added).

<sup>&</sup>lt;sup>38</sup> *Id.* at 32,439.

Id. at 32,431 (citing NUREG-1140, A Regulatory Analysis on Emergency Preparedness for Fuel Cycle and Other Radioactive Material Licensees (Jan. 1988) (ML12174A320)).

plausible offsite dispersal mechanism.<sup>40</sup> Ultimately, Petitioner offers nothing to contradict the Commission's generic conclusions in this regard.

Because Petitioner failed to carry its burden to demonstrate some "obvious" potential for offsite consequences specific to the ISP proceeding (and because the Commission generically determined such potential does not exist), it has not demonstrated proximity-plus standing.

# 2. <u>Petitioner Has Not Identified Any Member Interests Within Any Radius of Obvious Potential for Offsite Consequences</u>

Even assuming *arguendo* Petitioner had demonstrated some "obvious" potential for offsite consequences specific to the WCS CISF (despite marshalling no arguments to this effect), it still has failed to demonstrate that any interests of its members lie within any radius of potential harm. Specifically, Petitioner claims proximity-based representational standing based on the assertion that its members, Ms. Gardner and Ms. Henson, live "six miles from the site," and that "all five declarants [collectively, "Declarants"] live in cities through which the radioactive waste will be transported by rail." Neither of these statements demonstrates a basis for proximity-plus standing.

As a preliminary matter, the proximity-plus presumption does not apply to transportation routes; rather, it confers standing in some limited circumstances based on proximity to a *facility*. The Commission has plainly held that "mere geographical proximity to potential transportation

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Compare Ga. Tech., CLI-95-12, 42 NRC at 116 (finding a scenario in which "three independent redundant safety systems [] fail" did not "altogether strain[] credibility" and thus was enough to invoke the proximity presumption) and CFC Logistics, Inc. (Materials License), LBP-03-20, 58 NRC 311, 320 (2003) (finding that a "very strained accident scenario" was enough to invoke the proximity presumption because the scenario "could result in the dispersion of radioactive material into the air" (emphasis added)) with ISFSI EP Rule, 60 Fed. Reg. at 32,439 (noting that design basis events were "unlikely," and that "[n]o credible dynamic events have been identified that could" cause a cask rupture, but declining to impose offsite EPZ requirements on away-from-reactor ISFSIs for the second and additional reason that "[t]here exists no significant dispersal mechanism for the radioactive material contained within a storage cask").

Petition at 7.

routes is insufficient to confer standing."<sup>42</sup> Thus, Petitioner's assertion that its members live at some unspecified distance from some unspecified transportation route cannot demonstrate proximity-plus standing.<sup>43</sup>

Additionally, Petitioner's members—the closest of which reside 6 miles from the proposed WCS CISF—do not live within any radius of "obvious" potential offsite harm.

Petitioner acknowledges that the presumptive radius must be determined on a "case-by-case basis 'taking into account the nature of the proposed action and the significance of the radioactive source." Although Petitioner need not establish a "causal link" between the proposed action and its members' *specific* interests, it still must provide a rational basis for concluding that such interests are within a distance that *generally* could be affected by the purported "obvious" potential for offsite consequences.

Here, Petitioner claims that 30 miles is an appropriate presumptive radius because it corresponds to the "Region of Influence" [sic] defined in the ER.<sup>45</sup> However, the "Region of Interest" in the ER (to which the Petitioner apparently was referring) has no correlation to any purported potential offsite radiological consequences; it is simply a term used in the ER to describe, for site selection purposes, an area with "the basic characteristics appropriate for a CISF site."<sup>46</sup> Thus, neither this reference, nor Petitioner's references to other random radii (*i.e.*,

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<sup>&</sup>lt;sup>42</sup> U.S. Dep't of Energy (Plutonium Export License), CLI-04-17, 59 NRC 357, 364 n.11 (2004).

Moreover, Petitioner cites no authority for the proposition that waste bound for the WCS CISF would be transported by rail through Hobbs, New Mexico. Indeed, that assertion directly contradicts the ER, which anticipates SNF would be "transported by rail from Monahans, Texas," which is approximately 105 miles south of Eunice, New Mexico, and then from Eunice eastward to the CISF. *See* ER at 3-7. Hobbs, on the other hand, is approximately 20 miles *north*. *See id*. at 3-43. *See also id*. at 2-72, fig. 2.2-5 (depicting the regional railroad network generally, *i.e.*, not specific routes expected to be used for SNF transportation, and showing Hobbs is not on the route from Monahans to Eunice to WCS).

<sup>&</sup>lt;sup>44</sup> Petition at 4-5 (quoting *Ga. Tech.*, CLI-95-12, 42 NRC at 116-17).

<sup>45</sup> *Id.* at 7 (citing ER at 2-68; Fig. 2.2-1).

ER at 2-9 to 2-10.

unconnected to radiological consequences) referenced in the Yucca Mountain Environmental Impact Statement ("EIS"),<sup>47</sup> or the Continued Storage Rule ("CSR") Generic Environmental Impact Statement ("CSR GEIS"),<sup>48</sup> support its demand for a 30- or 50-mile presumptive radius here.

Furthermore, Petitioner's references to legal precedent for *dissimilar facilities* are unhelpful to its claims. For example, Petitioner notes that, in proceedings involving *spent fuel pool expansions* and *at-reactor* ISFSIs, presiding officers have used a presumptive distance of 17 miles. These proceedings, however, are fundamentally different than *away-from-reactor* ISFSI proceedings. Spent fuel pools and at-reactor ISFSIs entail wet storage, "fresh" spent fuel, and cask-loading or fuel-handling operations. These features present distinct radiological hazards not found at away-from-reactor ISFSIs limited to dry storage of cooled fuel. The Commission explicitly considered these differences in declining to impose offsite emergency planning requirements on dry away-from-reactor ISFSIs:

In the case of an operating nuclear power plant, the dispersal mechanism for radioactive material in the spent fuel is either derived from the heat produced during the fission process or the decay heat which exists in the short period immediately following shutdown. During these times, the potential exists for an accident that could cause the fuel cladding to fail. . . . On the other hand, spent fuel stored in an ISFSI is required to be cooled for at least one year. . . .

-

Petitioner argues the 50-mile "Region of Influence" in the Yucca Mountain EIS showed that "anyone living within 50 miles of the repository site was *at risk*." Petition at 6 (emphasis added). This is simply incorrect. Rather, 50 miles is a generic radius "routinely used by DOE for all calculations for DOE facilities, *regardless* of whether any doses are projected at that distance." *Shaw AREVA MOX Services* (Mixed Oxide Fuel Fabrication Facility), LBP-07-14, 66 NRC 169, 190 (2007) (emphasis added).

Petitioner also cites a 50-mile radius used in the CSR GEIS. Petition at 6. However, that distance was merely used to identify "other nuclear plants or storage facilities" for purposes of the NEPA *cumulative impacts* analysis, and is completely detached from any theoretical radiological injury. *Id.* (quoting NUREG-2157, Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel; Final Report, Vol. 1 at 6-55 to 6-56 (Sept. 2014) (ML14196A105)).

See, e.g., Petition at 5 (citing *Diablo Canyon ISFSI*, LBP-02-23, 56 NRC at 428-29 (adopting a 17-mile presumptive distance for an *at-reactor* ISFSI proceeding) and *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), LBP-99-25, 50 NRC 25, 29-31 (1999) (adopting a 17-mile presumptive distance for a spent fuel pool expansion proceeding)).

At this age, spent fuel has a heat generation rate that is too low to cause significant particulate dispersal in the unlikely event of a cask confinement boundary failure.<sup>50</sup>

Ultimately, neither the presumptive distance determinations in cases involving at-reactor ISFSIs, which entail vastly different potential radiological harms, nor the other inapt cases cited by Petitioner (i.e.,  $MOX^{51}$  and  $NEI^{52}$ ) are at all relevant to the "case-by-case" analysis at issue here.

Rather, the Board should look to the presumptive zone of harm codified in the relevant emergency planning regulations. By way of example, the 50-mile proximity presumption in reactor proceedings is based on the 50-mile offsite EPZ for reactors.<sup>53</sup> For Part 72 ISFSI licensing actions (based on the important differences in potential radiological harm noted above), the Commission determined that the zone of potential harm from "the consequences of worst-case accidents involving an ISFSI located on a reactor site" were bounded by the reactor EPZ; but, no offsite EPZ was necessary for away-from-reactor ISFSIs.<sup>54</sup> Thus, even assuming

See, e.g., ISFSI EP Rule, 60 Fed. Reg. at 32,439.

Petition at 5. *MOX* entailed an operating *plutonium fuel cycle* facility with "the potential for nuclear criticality," *MOX*, LBP-07-14, 66 NRC at 187, involving a radiological risk profile wholly dissimilar from the "passive structure" at issue here. *Big Rock Point ISFSI*, CLI-07-19, 65 NRC at 426. Moreover, the *MOX* facility was "unique" and would have required an entirely new "independent technical analysis" to determine the appropriate distance for offsite consequences, *MOX*, LBP-07-14, 66 NRC at 188, whereas ISFSIs involve consequences that have been extensively studied and are well understood—to the point that the Commission has generically determined offsite radiological releases are not plausible, *see supra* § III.C.1.

Petition at 5. In *NEI*, the court determined that a *permanent* spent fuel repository could eventually—thousands of years down the road—present offsite radiological consequences due to anticipated degradation of natural and engineered barriers. *See Nuclear Energy Inst. v. Envtl. Prot. Agency*, 373 F.3d 1251, 1257 (D.C. Cir. 2004). But that holding is entirely inapplicable to the instant case involving a request to *temporarily* store spent fuel for a limited duration (far shorter than "thousands of years") and in which the Commission has generically determined offsite radiological releases are not plausible, *see supra* § III.C.1.

Ross ISR, CLI-12-12, 75 NRC at 610 (explaining the presumptive distance "corresponds roughly to the emergency planning zone for ingestion pathways"); see also 10 C.F.R. § 50.47(c)(2) (establishing a 50-mile radius as the presumptive offsite EPZ for ingestion pathways). The lack of an offsite EPZ does not per se preclude proximity-plus standing. However, it casts serious doubt on any assertion that (unspecified) offsite radiological consequences are somehow "obvious."

<sup>&</sup>lt;sup>54</sup> ISFSI EP Rule, 60 Fed. Reg. at 32,439.

proximity-plus standing exists here, the radius of potential harm nonetheless is limited to the site boundary.

Notably, the Commission *explicitly rejected* the possibility of even a small, 1-mile offsite EPZ for away-from-reactor ISFSI licensees, concluding it was unwarranted.<sup>55</sup> In other words, the Commission has generically concluded that such facilities do not pose a "realistic threat" of offsite harm.<sup>56</sup> Nevertheless, even assuming *some* speculative radiological harm unique to this facility (not identified by Petitioner) could accrue at the site boundary, Petitioner offers no explanation for how this harm could travel a distance of six miles (or more) to its members' alleged interests in a form that could cause harm. This omission is particularly conspicuous where the Commission has generically determined that, at facilities such as the WCS CISF, "*very little* [radioactive material] is available in a dispersible form; [and] there is *no mechanism available* for the release of radioactive materials in significant quantities from the facility." <sup>57</sup> Ultimately, Petitioner's "conclusory allegations about potential radiological harm" are insufficient to satisfy its affirmative burden to *demonstrate* that a zone of potential harm extends beyond the site boundary—much less, that it extends more than six miles offsite. <sup>58</sup> Accordingly, Petitioner has failed to demonstrate the requisite elements of proximity-plus standing.

#### D. Petitioner Has Not Demonstrated Traditional Standing

Petitioner also offers the conclusory assertion that its members have standing, "not . . . based just on proximity, but based on facts showing injuries" "from transportation of radioactive

<sup>56</sup> *Cf. Calvert Cliffs*, CLI-09-20, 70 NRC at 917.

<sup>55</sup> *Id.* at 32,435.

<sup>&</sup>lt;sup>57</sup> ISFSI EP Rule, 60 Fed. Reg. at 32,431 (citing NUREG-0575, Vol. 1 § 4.2.2) (emphasis added).

<sup>&</sup>lt;sup>58</sup> NFS, CLI-04-13, 59 NRC at 248.

waste to the ISP facility."<sup>59</sup> The Petition then cites various standing case law, but otherwise assembles no arguments regarding the applicability of those cases to the instant proceeding, and more importantly, remains absolutely silent as to any "facts" which purportedly support this conclusion. As a threshold matter of pleading sufficiency, these fatal omissions render Petitioner's bare conclusion insufficient to "demonstrate" traditional standing. 60 Nevertheless, even assuming statements buried in the standing declarations—but not otherwise marshalled by Petitioner toward the legal elements of standing—could be considered by the Board, 61 such statements still fail to demonstrate traditional standing.

#### 1. Declarants' Alleged Transportation Safety-Related Harms Are Outside the Scope of This Proceeding

Declarants' assertions of radiological injury, purportedly stemming from "the radiation given off by each train passing through Hobbs, [New Mexico],"62 and an unspecified "rail accident with a train carrying nuclear waste to the proposed site,"63 amount to concerns regarding transportation safety. However, such concerns are not within the scope of this proceeding, and therefore cannot provide a basis for standing.

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<sup>59</sup> Petition at 8.

A bare claim such as Petitioner's, here, fails to "set forth with particularity" a statement that could demonstrate standing. Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 & 2), CLI-00-5, 51 NRC 90, 98 (2000). Moreover, petitions drawn by experienced counsel must exhibit a high degree of specificity. Kan. Gas & Elec. Co. (Wolf Creek Generating Station), ALAB-279, 1 NRC 559, 576-577 (1975). The Commission has explained that a lack of specificity is sufficient to reject claims of standing. Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 324-25 (1999).

<sup>61</sup> "The Commission cannot be faulted for not having searched for a needle that may be in a haystack." Pub. Serv. Co. of N.H. (Seabrook Station, Units 1 & 2), CLI-89-3, 29 NRC 234, 241 (1989).

<sup>62</sup> Declaration of Danielle Marie Dyer at 2 (Sept. 13, 2018); Declaration of Deanna Maria Dyer at 2 (Sept. 13, 2018); Declaration of Gordon Wayne Dyer at 2 (Sept. 13, 2018) (unnumbered attachments to the Petition) (collectively, "Hobbs Declarations"). These declarations are essentially identical.

<sup>63</sup> Declaration of Rose Gardner at 1 (Oct. 18, 2018); Declaration of Shirley Henson at 1 (Oct. 23, 3018) (unnumbered attachments to the Petition) (collectively, "Eunice Declarations"). These declarations are essentially identical, except as to the residential addresses provided in each.

ISP's Application seeks a specific-license for an ISFSI under 10 C.F.R. Part 72; it does not request approval of any new transportation package design or approval of any specific transportation route. Instead, the safety and security of SNF transportation are governed by the standards in 10 C.F.R. Parts 71 and 73 and through regulations issued by the Department of Transportation ("DOT").<sup>64</sup> For example, an *entirely separate application and approval process* are required for any planned road or rail routes over which SNF may be transported.<sup>65</sup> The appropriateness of the route selection—including whether SNF should (or should not) travel on the unspecified railroad(s) to which Declarants vaguely allude—simply is not at issue in this proceeding. The Commission has recognized that alleged harms from activities separately authorized and regulated by transportation licensing and regulatory oversight regimes are insufficient to establish AEA-based standing in non-transportation licensing proceedings.<sup>66</sup> Ultimately, Declarants' claims in this regard fail to identify any interest that may be affected by *this* ISFSI licensing proceeding.

# 2. <u>Declarants' Alleged Injuries Are Too Vague, Speculative, and Attenuated to Establish Traditional Standing</u>

Declarants' vague assertions fall far short of demonstrating a "concrete and particularized" injury. For example, Declarants assert that they reside at various specific

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See 10 C.F.R. § 71.0, "Purpose and scope." See also Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), LBP-99-34, 50 NRC 168, 176-77 (1999) (noting that "shipment of spent nuclear fuel [is] governed by Part 71 and do[es] not require a specific license under Part 72").

See 10 C.F.R. § 73.37(b)(1)(vi); see also NUREG-0561, Rev. 2, Physical Protection of Shipments of Irradiated Reactor Fuel §§ 2.1, "NRC Approval of SNF Shipment Routes," 2.1.1, "Route Selection Criteria" (Apr. 2013) (ML13120A230).

Cf., e.g., EnergySolutions, CLI-11-3, 73 NRC at 625 (finding radioactive materials transportation challenges outside the scope of an import/export proceeding); UniTech Services Group, Inc. (Export of Low-Level Waste), CLI-18-2, 87 NRC 78, 81-82 (2018) (finding claims of "chance highway encounters" and other transportation-related allegations of injury lacked a "sufficient nexus" to an export license proceeding to establish standing because transportation is "separately authorized . . . by transportation licensing" requirements).

<sup>67</sup> Sequoyah Fuels, CLI-94-12, 40 NRC at 72.

addresses in either Eunice, New Mexico, or Hobbs, New Mexico; and that they fear radiological exposure from a "train passing through" some unspecified point in Hobbs,<sup>68</sup> or some unspecified "rail accident" at some unspecified location.<sup>69</sup> However, statements merely alleging a member lives "close" to some transportation route—without identifying the route or explaining, with specificity, *how* close to that route the individual actually lives—are *per se* legally insufficient to demonstrate "injury-in-fact."<sup>70</sup> Thus, because Declarants offer no information about the distance from the unspecified route(s) to their alleged interests, their statements are too vague, *as a matter of law*, to demonstrate standing.

Furthermore, to the extent Declarants assume mere physical presence or property ownership on or near potential transportation routes establishes standing, their assumption is contrary to settled law. In 2004, the Commission unequivocally stated that "mere geographical proximity to potential transportation routes is insufficient to confer standing." Likewise, to the extent the Petition could be read to assert that a minor exposure from proximity to a shipment of spent nuclear fuel ("SNF") constitutes a sufficient injury-in-fact to establish standing, its assertion is incorrect. Specifically, the Petition's (unexplained) citation to an unreviewed standing discussion in a 2001 licensing board decision is unpersuasive on this point, in light of more recent—and controlling—precedent to the contrary. In 2011, the Commission

<sup>68</sup> See Hobbs Declarations at 2.

<sup>69</sup> See Eunice Declarations at 1.

<sup>&</sup>lt;sup>70</sup> Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-94-3, 39 NRC 95, 100-02 (1994).

DOE, CLI-04-17, 59 NRC at 364 n.11.

Petition at 8 (citing *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 417 (2001), rev'd on contention admissibility grounds without reviewing standing, CLI-02-24, 56 NRC 335 (2002)).

categorically held that "[m]ere potential exposure to minute doses of radiation within regulatory limits does not constitute a 'distinct and palpable' injury on which standing can be founded."<sup>73</sup>

Indeed, the *Diablo Canyon* case cited by Petitioner confirms this standing limitation.<sup>74</sup>
There, the Board observed that "simply showing the potential for any radiological impact, no matter how trivial, is not sufficient to meet the requirement of a showing of a 'distinct and palpable harm' under standing element one."<sup>75</sup> The Board concluded that an alleged radiological exposure "four or five orders of magnitude below average natural background radiation levels . . . . clearly falls below the level that can be considered substantial enough for standing purposes."<sup>76</sup> Here, the purported injury—alleged radiological exposure from SNF transportation—presents that identical factual scenario. The NRC has generically concluded that the potential radiological exposures to members of the public from routine transportation of SNF "are approximately four to five orders of magnitude less than the collective background radiation dose."<sup>77</sup> Thus, as a matter of law, the hypothetical and minute radiological exposures upon which Declarants assume traditional standing fall far short of demonstrating an injury-in-fact.

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EnergySolutions, CLI-11-3, 73 NRC at 623 (emphasis added). Collectively, this case, *id.*, and the *DOE* case, CLI-04-17, 59 NRC at 364 n.11, cast serious doubt on the persuasive value of the unreviewed and non-controlling standing discussion in the *Yucca Mountain* Board decision, cited by Petitioner for the contrary proposition. Petition at 8 (citing *U.S. Dep't of Energy* (High-Level Waste Repository), LBP-09-6, 69 NRC 367 (2009)). Furthermore, the *Yucca* case is factually distinguishable because the petitioner was a state government asserting standing related to transportation on state roads, not an individual claiming harm from radiological exposures "orders of magnitude" below background levels, as is the case here.

Petition at 7.

Diablo Canyon ISFSI, LBP-02-23, 56 NRC at 428.

<sup>&</sup>lt;sup>76</sup> *Id.* at 429.

NUREG-2125, Spent Fuel Transportation Risk Assessment at xxiv (Jan. 2014) (ML14031A323). *See also* ER at 4-14 to 4-15 ("All of the NRC's assessments have concluded that the risk from radiation emitted from a transportation cask during routine, incident-free transportation is a small fraction of the radiation dose received from the natural background").

Likewise, "tenuous assumptions" that a transportation accident "might occur" are "entirely speculative in nature," and therefore fail to establish standing.<sup>78</sup> Likewise, "[t]he mere fact that additional radioactive waste will be transported" does not, *per se*, demonstrate an injury-in-fact *vis-à-vis* a higher likelihood of an accident; any asserted injury on this basis is "purely speculative and legally insufficient to demonstrate standing." The Eunice Declarations' vague references to some speculative, and otherwise unexplained, "rail accident" utterly fail to demonstrate an injury-in-fact for these same reasons.<sup>80</sup>

Declarants' vague statements alleging injury from speculative non-transportation accident scenarios fare no better. Even assuming *arguendo* these scenarios (*e.g.*, an earthquake causing a cask to "crack and leak" were plausible—which neither Declarants nor Petitioner have attempted to demonstrate through a single supporting factual assertion—the Petition and declarations are completely devoid of any specific or plausible explanation of how such scenarios could result in harm to *their interests*, specifically. Petitioner "may not rely on the remote possibility, unsubstantiated by allegations of fact, that his situation might have been better had respondents acted otherwise, and might improve were the court to afford relief." Likewise, the Commission has held that allegations of harm stemming from terrorist acts, such as those offered by Declarants, are far too attenuated from NRC licensing actions to provide a

Exxon Nuclear Co. (Nuclear Fuel Recovery and Recycling Ctr.), LBP-77-59, 6 NRC 518 (1977).

<sup>&</sup>lt;sup>79</sup> *N. States Power Co.* (Pathfinder Atomic Plant), LBP-90-3, 31 NRC 40, 43 (1990).

See also Petition at 4 (implying, without any basis or explanation whatsoever, that "a radiological release that interferes or precludes continued [oil and gas] production in the Permian Basin" could occur).

See, e.g., Eunice Declarations at 1; see also Hobbs Declarations at 2 (alleging the possibility of fires or leaks without reference to any alleged triggering mechanism).

<sup>&</sup>lt;sup>82</sup> Warth v. Seldin, 422 U.S. 490, 507 (1975).

See, e.g., Eunice Declarations at 1; Hobbs Declarations at 2.

basis for standing.<sup>84</sup> Ultimately, Declarants' various assertions fall short of demonstrating any injury, fairly traceable to this proceeding, that is "certainly impending." Given that "the petitioner bears the burden to provide facts sufficient to establish standing," and Petitioner has not done so here, these claims are insufficient to demonstrate traditional standing.

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In summary, Petitioner has failed to demonstrate representational standing because it has failed to demonstrate that any of its members have standing in their own right, under either proximity-plus or traditional standing theories. Accordingly, the Petition must be denied.

#### IV. PETITIONER HAS NOT SUBMITTED AN ADMISSIBLE CONTENTION

### A. Legal Standards for Contention Admissibility

Under 10 C.F.R. § 2.309(f)(1), a hearing request "must set forth with particularity the contentions sought to be raised." In addition, Section 2.309(f)(1) states that each contention must:

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted:
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions, including references to the specific sources and documents that support the petitioner's position and upon which the petitioner intends to rely; and

*DOE*, CLI-04-17, 59 NRC at 365-66.

<sup>85</sup> Bell Bend, CLI-10-7, 71 NRC at 139.

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact.<sup>86</sup>

Failure to comply with any one of these six admissibility requirements is grounds for rejecting a proposed contention. These requirements are "strict by design." The rules were "toughened... in 1989 because in prior years 'licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation." The purpose of the six criteria is to "focus litigation on concrete issues and result in a clearer and more focused record for decision." The Commission has explained that it "should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing."

The petitioner alone bears the burden to meet the standards of contention admissibility.<sup>92</sup>
Thus, where a petitioner neglects to provide the requisite support for its contentions, the presiding officer may not cure the deficiency by supplying the information that is lacking or making factual assumptions that favor the petitioner to fill the gap.<sup>93</sup> A contention that merely

<sup>10</sup> C.F.R. §§ 2.309(f)(1)(i)-(vi). See also Susquehanna Nuclear, LLC (Susquehanna Steam Elec. Station, Units 1 & 2), CLI-17-4, 85 NRC 59, 74 (2017) (reciting the six Section 2.309(f)(1) admissibility factors).

<sup>87</sup> See Changes to Adjudicatory Process; Final Rule, 69 Fed. Reg. 2182, 2221 (Jan. 14, 2004); see also PFS, CLI-99-10, 49 NRC at 325.

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001).

<sup>89</sup> *Id.* (citing *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 334 (1999)).

Changes to Adjudicatory Process, 69 Fed. Reg. at 2202; see also Entergy Nuclear Operations, Inc. (Indian Point, Units 2 & 3), LBP-08-13, 68 NRC 43, 61 (2008).

Changes to Adjudicatory Process, 69 Fed. Reg. at 2202.

See Entergy Nuclear Operations, Inc. (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 325 (2015) ("[I]t is Petitioners' responsibility, not the Board's, to formulate contentions and to provide 'the necessary information to satisfy the basis requirement' for admission"); id. at 329; DTE Elec. Co. (Fermi Nuclear Power Plant, Unit 2), CLI-15-18, 82 NRC 135, 149 (2015) ("[T]he Board may not substitute its own support for a contention.").

<sup>&</sup>lt;sup>93</sup> See Palisades, CLI-15-23, 82 NRC at 329; Fermi, CLI-15-18, 82 NRC at 149; Ariz. Pub. Serv. Co. (Palo Verde Nuclear Station, Units 1, 2, & 3), CLI-91-12, 34 NRC 149, 155 (1991).

states a conclusion, without reasonably explaining why the application is inadequate, cannot provide a basis for the contention.<sup>94</sup> A "material issue" is one that would "make a difference in the outcome of the licensing proceeding."<sup>95</sup> "[T]he petitioner must demonstrate that the subject matter of the contention would impact the grant or denial of a pending license application."<sup>96</sup>

A contention that challenges an NRC rule is outside the scope of the proceeding because, absent a waiver, "no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding." This includes contentions that advocate stricter requirements than agency rules impose or that otherwise seek to litigate a generic determination established by a Commission rulemaking. Similarly, any contention that collaterally attacks applicable statutory requirements or the basic structure of the NRC regulatory process must be rejected as outside the scope of the proceeding. Accordingly, a contention that simply states the petitioner's views about regulatory policy—or takes issue with the nature of existing regulations—does not present a litigable issue. 100

Equally important, the Commission has stated further that the petitioner must "read the pertinent portions of the license application . . . state the applicant's position and the petitioner's

<sup>&</sup>lt;sup>94</sup> USEC, Inc. (Am. Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006).

<sup>95</sup> Oconee, CLI-99-11, 49 NRC at 333-34.

<sup>&</sup>lt;sup>96</sup> See Indian Point, LBP-08-13, 68 NRC at 62.

<sup>&</sup>lt;sup>97</sup> 10 C.F.R. § 2.335(a).

See Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-01-6, 53 NRC 138, 159-60, aff'd, CLI-01-17, 54 NRC 3 (2001) (rejecting the petitioner's contention that a license renewal applicant was required to prepare a probabilistic risk assessment, where NRC regulations did not require such an analysis).

Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Unit 1), LBP-07-11, 66 NRC 41, 57-58 (2007) (stating that a contention that attacks applicable statutory requirements "must be rejected by a licensing board as outside the scope of the proceeding") (citing *Phila. Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 & 3), ALAB-216, 8 AEC 13, 20 (1974)).

See Peach Bottom, ALAB-216, 8 AEC at 20-21.

opposing view," and explain why it disagrees with the applicant.<sup>101</sup> If a petitioner believes the license application fails to adequately address a relevant issue, then the petitioner is to "explain why the application is deficient."<sup>102</sup> A contention that does not *directly controvert* a position taken by the applicant in the application is subject to dismissal.<sup>103</sup> For example, if a petitioner submits a contention of omission, but the allegedly missing information is indeed in the license application, then the contention does not raise a genuine dispute.<sup>104</sup>

#### B. Proposed Contention 1 (NWPA) Is Inadmissible

Proposed Contention 1 states:

The NRC has no authority to license the ISP CIS facility under the NWPA nor the AEA. ISP has said DOE must take title to the waste, but the NWPA does not authorize DOE to take title to spent fuel in an interim storage facility. The AEA has no provision for licensing a CIS facility. <sup>105</sup>

Petitioner asserts that ISP's Application "assumes that the [DOE] will take ownership of the spent fuel to be stored at the ISP site." <sup>106</sup> It further claims that "[b]ecause the intent is for DOE to take title to the waste, the NWPA, not the AEA, controls the NRC's authority to license the proposed CIS facility." <sup>107</sup> According to Petitioner, because "the NWPA does not provide for the DOE to take ownership of spent fuel in interim storage facilities," the NRC cannot issue the

Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process; Final Rule, 54 Fed. Reg. 33,168, 33,170 (Aug. 11, 1989); *see also Millstone*, CLI-01-24, 54 NRC at 358.

Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170; *see also Palo Verde*, CLI-91-12, 34 NRC at 155-56.

See S.C. Elec. & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 & 3), CLI-10-1, 71 NRC 1, 21-22 (2010); Tex. Utils. Elec. Co. (Comanche Peak Steam Elec. Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992), vacated as moot, CLI-93-10, 37 NRC 192 (1993).

See Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 & 3), LBP-04-15, 60 NRC 81, 95 (2004); see also Summer, CLI-10-1, 71 NRC at 21-22.

Petition at 14.

<sup>&</sup>lt;sup>106</sup> *Id*.

<sup>107</sup> *Id.* at 17.

requested license. 108 Petitioner also claims that "there is no clear legal precedent that the NRC has authority to license an away-from-reactor storage facility." 109

As set forth below, Proposed Contention 1 should be rejected because it fails to satisfy the contention admissibility requirements in 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi). DOE's authority under the NWPA to hold title to SNF stored at an interim storage facility is neither within the scope of this proceeding nor material to the NRC's AEA-mandated findings on ISP's Application. Proposed Contention 1 also lacks a factual foundation and fails to raise a genuine material dispute because it incorrectly characterizes the Application as assuming that DOE (as distinguished from another SNF title holder) *must* hold title to the SNF to be stored at the facility before it can be licensed and built. Finally, Proposed Contention 1 is legally erroneous because it claims that the NRC lacks the necessary statutory authority to license the WCS CISF.

1. DOE's Authority Under the NWPA to Take Title to SNF Stored at a Privately-Owned CISF Is Neither Within the Scope of This Proceeding, Nor Material to the NRC's Required Findings on the WCS CISF Application

As defined by the Notice of Hearing Opportunity, the scope of this proceeding concerns ISP's request for a specific license under 10 C.F.R. Part 72 to construct and operate a CISF. 110

The NRC therefore must "make the findings required by the Atomic Energy Act of 1954, as amended (AEA), and the NRC's regulations." Additionally, the requirements in 10 C.F.R. § 72.40(a) for issuance of a Part 72 license, such as that requested by ISP, do not mandate or rely upon a determination by the NRC that DOE have authority under the NWPA to take title to SNF. Accordingly, this proceeding is *not* concerned with DOE's authority to use a privately-owned,

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109 *Id.* at 23.

<sup>&</sup>lt;sup>108</sup> *Id*.

Notice of Hearing Opportunity, 83 Fed. Reg. at 44,070.

<sup>111</sup> *Id.* at 44,071.

NRC-licensed CISF prior to the availability of a permanent geologic repository.<sup>112</sup> Petitioner, moreover, provides no basis to conclude that the NRC (or this Board) has *any* jurisdiction to decide whether DOE can take title to SNF prior to the availability of a permanent repository—whether within the context of this proceeding or otherwise.<sup>113</sup>

Thus, in arguing that the NWPA does not authorize DOE to take title to SNF in an interim storage facility, Petitioner raises a legally-immaterial issue that is outside the scope of this proceeding, in contravention of 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv).

2. <u>Proposed Contention 1 Lacks Adequate Factual Support and Fails to Raise a Genuine Material Dispute Because the Application States Unequivocally That ISP's Customers May Include DOE *or* Other SNF Title Holders</u>

The factual predicate of Petitioner's contention is that ISP assumes that DOE necessarily will take ownership of the SNF to be stored at the ISP site.<sup>114</sup> That premise, however, is false and plainly contradicted by numerous statements in the Application. The Application clearly and consistently states that *either* the owners of the nuclear plants from which the SNF originated (*i.e.*, the SNF Title Holders) *or* DOE will be the customer(s) for the proposed CISF.<sup>115</sup> For example, the Application expressly states that "[DOE] or other holders of the title to SNF at commercial nuclear power facilities (SNF Title Holder(s)) will hold title to the SNF during

In the context of this proceeding, DOE is another governmental agency and a potential future ISP customer. It is *not* an NRC license applicant in this proceeding.

Cf. PPL Susquehanna LLC (Susquehanna Steam Electric Station, Units 1 & 2), CLI-07-25, 66 NRC 101, 107 (2007) (denying an appeal claiming "that [the] NRC ought to concern itself with . . . matters within the jurisdiction of other state and federal agencies"); Entergy Nuclear Vermont Yankee, LLC & Entergy Nuclear Operations, Inc. (Vt. Yankee Nuclear Power Station), CLI-16-17, 84 NRC 99, 109 n.35 (2016) (noting that the NRC "lack[s] jurisdiction" to consider a licensee's compliance with FERC regulations); Hydro Res., Inc. (Albuquerque, NM), CLI-98-16, 48 NRC 119, 121-22 (1998) ("Congress granted us authority [in the AEA] merely to regulate radiological and related environmental concerns. It gave our agency no roving mandate to determine other agencies' permit authority. Our regulation . . . show[s] due respect to our sister agencies' responsibilities but do not add to our own regulatory jurisdiction.").

<sup>114</sup> *See* Petition at 15-17.

See Application at 1-1 to 1-2, 1-6 to 1-7; *Id.*, Attach. A (Proposed Condition 23); *Id.*, Attach. A, App. D, at 2-1.

transportation to and from and while in storage at the CISF."<sup>116</sup> Petitioner does not (and cannot) point to <u>any</u> statements in the Application that support its claim that approval of the Application hinges upon the assumption that DOE *must* hold title to any SNF that is transported to and stored at the WCS CISF. Ironically, Petitioner accuses ISP of attempting to "cloud" the issue and create a "smokescreen" through the Application's references to possible private ownership of the SNF to be stored at the proposed CISF. <sup>117</sup>

Petitioner, however, fails to demonstrate the existence of any actual legal or commercial impediments to the private ownership of SNF stored at the WCS CISF. Rather, it only opines that no "nuclear plant owner would want to retain title to the waste." Its attempts to support this position fall flat. Petitioner asserts that the "purpose and need statement" contained in ER Section 1.1 "states that the nuclear plant owners will be responsible for the expense of the waste stored at the reactor site unless the waste is removed to a CIS facility." It then infers that "the purpose of the [CISF] is to relieve the nuclear plant owners from that responsibility." Even assuming *arguendo* that the cited ER discussion is relevant here, Petitioner misreads ER Section 1.1 and overlooks key aspects of the purpose and need statement contained in that section.

ER Section 1.1 notes that surveillance, maintenance, emergency preparedness, and physical security activities related to continued onsite SNF storage can cost utilities \$6 million per year. Contrary to Petitioner's claims, however, ER Section 1.1 does *not* suggest that the sole or overriding purpose of the proposed CISF is to "relieve" nuclear plant owners of those

<sup>116</sup> *Id.* at 1-1 to 1-2.

Petition at 16, 20.

<sup>118</sup> *Id.* at 15.

<sup>119</sup> *Id*.

<sup>&</sup>lt;sup>120</sup> *Id*.

<sup>&</sup>lt;sup>121</sup> ER at 1-5.

costs. The purpose of the WCS CISF is to relieve current holders of the numerous burdens associated with *possession* of the SNF at reactor sites, not *ownership*. Indeed, ISP cites a number of other key considerations in describing the purpose of, and need for, the WCS CISF, as discussed in more detail in response to Proposed Contention 2 below. 122 For example, ER Section 1.1 refers to providing an alternative to on-site storage, releasing land for more beneficial uses, returning land to greenfield status, implementing the desires of local policymakers and stakeholders, providing an option until a permanent repository is available, and serving a national strategic need by transferring SNF from shutdown reactors to a safer and more secure centralized storage location. Thus, Petitioner's creative claim that the proposed CISF's principal purpose is to alleviate cost burdens for utilities is factually inaccurate.

Petitioner also cites an internal NRC memorandum summarizing a June 16, 2015 public meeting between the NRC Staff and WCS (the applicant at that time) to discuss its approach to preparing the ER and SAR.<sup>123</sup> Petitioner states that during this meeting, WCS noted that "DOE would take possession of the fuel at the originating storage site and would retain possession of the fuel after it reached the [CISF]," and that "it did not intend to move forward with the project if DOE would not take possession of the fuel."<sup>124</sup>

Although ISP does not dispute Petitioner's characterization of the NRC memorandum, it does dispute its relevance. The subject meeting occurred more than three years ago, shortly after WCS had submitted Revision 0 of the Application. As discussed above, ISP (a joint venture of WCS and Orano) is the new applicant and has since revised the Application to allow for an

See infra § IV.C.

Petition at 16.

<sup>124</sup> *Id*.

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alternative to DOE ownership of the SNF to be stored at the proposed CISF; *i.e.*, ownership by other SNF title holders.<sup>125</sup>

While Petitioner accuses ISP of subterfuge, it identifies no legal or regulatory bar to ISP's decision to modify the Application in the manner described. Nor does it provide any valid reason to question the veracity of ISP's statements in the ER and Application, which, by regulation, must be complete and accurate in all material respects. Importantly, the Commission has "long declined to assume that licensees will refuse to meet their obligations," and refused to impute ulterior motives to licensees. There is no reason to do so here, or to otherwise question ISP's stated intention in the Application to rely on DOE *or* private sector ownership and transport of the SNF to be stored at the WCS CISF, as necessary and appropriate.

In a related vein, Petitioner further asserts that ISP's Application "must discuss and analyze all of the issues in terms of both ownership scenarios, DOE or plant owners." Citing 10 C.F.R. § 72.22(e), it contends that "if ISP intends for the nuclear plant owners to retain title, the documentation must explain how that financing would occur." As explained below, the Application does exactly that—and Petitioner provides no reason to conclude otherwise.

As the Commission has aptly noted: "Nothing in [its] rules prevents an applicant from amending its application *at any time*. Permitting an application to be 'modified or improved' throughout the NRC's review is compatible 'with the *dynamic licensing process* followed in Commission licensing proceedings." *Entergy Nuclear Vt. Yankee* (Vt. Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333 (2011) (quoting *Curators of the Univ. of Mo.* (TRUMP-S Project), CLI-95-8, 41 NRC 386, 395 (1995) (emphasis added).

<sup>&</sup>lt;sup>126</sup> See 10 C.F.R. § 72.11.

Pac. Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), CLI-03-2, 57 NRC 19, 29
 (2003); GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000)
 ("Absent [documentary] support, this agency has declined to assume that licensees will contravene our regulations."); TRUMP-S Project, CLI-95-8, 41 NRC at 400.

Petition at 20.

<sup>&</sup>lt;sup>129</sup> *Id*.

Section 1.6.1 of the Application states that funding for constructing the WCS CISF is expected to be obtained primarily through future contracts for storage of SNF with DOE or other SNF Title Holder(s). The funding may include a combination of debt financing, equity investments, and net income. The Application further explains that because Orano and WCS are well-capitalized companies with established nuclear power-related businesses, ISP is financially qualified to conduct the activities for which the license is sought in accordance with the relevant NRC regulations. Orano and WCS will provide initial capitalization of ISP, and also will provide periodic capitalization, as necessary, to execute the business plan of ISP. Section 1.6.2 indicates that ISP will obtain funds to operate the WCS CISF pursuant to future contracts with DOE or other SNF Title Holder(s) before receiving SNF for storage. 131

Section 1.6.3 explains that ISP will provide financial assurance for decommissioning by either: (1) collecting funds for the decommissioning of equipment, facilities, and land at the WCS CISF pursuant to a future contract with DOE as described in Section 1.7 (Exemptions) of the Application; *or* (2) using a surety bond combined with a conformity external sinking fund as authorized by 10 C.F.R. § 72.30(e)(3). Section 1.7.1 explains that ISP is seeking a contract with DOE that guarantees decommissioning funds will be provided for use by ISP as "an *alternative* method of financial assurance that will guarantee the necessary funding for decommissioning the CISF authorized to store the material defined in . . . the license that is

See Application at 1-5 to 1-6.

<sup>&</sup>lt;sup>131</sup> See id. at 1-7.

<sup>132</sup> Id. Payments from storage operations would be deposited into the external sinking fund as waste is received. A surety bond would be used to assure the difference in the decommissioning cost estimate and the value of the sinking fund until the sinking fund is fully funded by SNF Title Holder(s). Id.

equivalent to the provisions of 10 CFR 72.30(e)."<sup>133</sup> Section 1.7.1 then presents a second alternative, one which ISP must pursue if it is not able to execute such a contract with DOE. It states that if DOE does not enter into a contract that specifically guarantees the availability of decommissioning funds for use by ISP, then ISP must have one of the financial assurance instruments specified in 10 C.F.R. § 72.30(e)—as specifically approved by the NRC—prior to receipt of SNF at the WCS CISF, as a condition of the license.<sup>134</sup>

Petitioner does not challenge any of the Application sections discussed above or any of several key proposed license conditions discussed therein, <sup>135</sup> including the following:

- Proposed License Condition 17 prevents ISP from commencing construction of the WCS CISF before adequate funding (equity, revenue, and debt) is fully committed. 136
- Proposed License Condition 18 requires ISP to include in its contracts with DOE or other SNF title holders provisions requiring those clients to retain title to the SNF/GTCC waste, allocating legal and financial liability among the Licensee and the client(s), requiring clients to periodically provide credit information, and, when necessary, additional financial assurances such as guarantees, prepayment, or payment bond(s). 137
- Proposed License Condition 23 requires that, before ISP can commence CISF operations, it must have an *executed* contract with the DOE *or* other SNF Title Holder(s) stipulating that the DOE *or* the other SNF Title Holder(s) is/are responsible for funding operations required for storing SNF/GTCC waste. <sup>138</sup>
- Proposed License Condition 24 requires that before ISP can receive SNF/GTCC waste for storage at the CISF, it must have a financial assurance instrument required pursuant to

<sup>133</sup> Id. at 1-8 (emphasis added). The contract with DOE would "require the DOE to pay the actual costs of decommissioning the facilities, equipment, storage systems, and land used to store the material at the CISF." Id.

<sup>&</sup>lt;sup>134</sup> *Id*.

The use of such license conditions by the NRC is a well-established practice. *See, e.g., Private Fuel Storage, LLC* (Indep. Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23 (2000); *PFS*, CLI-98-13, 48 NRC at 36; *La. Energy Servs.* (Claiborne Enrichment Ctr.), CLI-97-15, 46 NRC 294 (1997).

Application, Attach. A (Proposed License Conditions) at 2.

<sup>&</sup>lt;sup>137</sup> *Id*.

<sup>138</sup> *Id.* at 3.

10 C.F.R. § 72.30 that is acceptable to the NRC *or* an executed contract with DOE guaranteeing decommissioning funds will be provided for use by ISP. <sup>139</sup>

For the foregoing reasons, Petitioner has not met its obligation under 10 C.F.R.

§§ 2.309(f)(1)(v) and (vi) "to develop a *fact-based* argument that actually and specifically challenges the application." <sup>140</sup> Proposed Contention 1 incorrectly claims that the Application assumes that only DOE can hold title to the SNF to be stored at the WCS CISF. Petitioner provides no support and instead advances only groundless allegations. Furthermore, the Application explains how ISP will meet its financial assurance obligations—prior to receiving SNF—in the event that it is unable to meet those obligations through a contract with DOE.

Petitioner does not contest the viability of ISP's proposed financial assurance methods under NRC regulations, or challenge its ability to implement them. <sup>141</sup> Significantly, because ISP provides the above alternative paths for satisfying the NRC's financial assurance requirements, the NRC Staff does not need to find that ISP could today obtain a contract with DOE in order to approve the Application.

3. <u>Proposed Contention 1 Lacks Adequate Legal Support Because the NRC Clearly</u>
Has the Legal Authority Under the AEA to License the Proposed CISF

Contrary to Petitioner's claim, there is "clear legal precedent" establishing the NRC's authority to license the WCS CISF. In the *Private Fuel Storage* ("PFS") proceeding—in which the NRC issued a Part 72 license for another proposed CISF—the Commission "conclude[d] that Congress, in enacting the [AEA], gave the NRC authority to license privately owned, away-

Oconee, CLI-99-11, 49 NRC at 341 (emphasis added); see also id. at 342 (quoting PFS, LBP-98-7, 47 NRC at 181 ("a contention 'that fails directly to controvert the license application . . . is subject to dismissal").

<sup>&</sup>lt;sup>139</sup> *Id*.

<sup>10</sup> C.F.R. § 72.30(e) allows applicants/licensees to use a number of different financial assurance methods, including: (1) prepayment; (2) a surety, insurance, or guarantee; or (3) an *external sinking fund* in which deposits are made at least annually, *coupled with a surety method*, insurance, or other guarantee method, the value of which may decrease by the amount being accumulated in the sinking fund.

from-reactor (AFR) facilities."<sup>142</sup> The Commission held that "[n]othing in the text or legislative history of the NWPA suggests that Congress intended to alter this authority when it enacted the NWPA, which is primarily concerned with the responsibilities and duties of *federal agencies* [not private companies] with respect to spent fuel storage and disposal."<sup>143</sup> It also emphasized that while the AEA does not affirmatively direct the NRC to regulate SNF storage and disposal, it "gives the Commission regulatory jurisdiction over the constituent materials of spent nuclear fuel."<sup>144</sup>

Petitioner raises *Bullcreek v. NRC* and claims that it does not address the specific issue in this case. <sup>145</sup> *Bullcreek*, however, applies the same rationale and reaches the same conclusion as *PFS* and applies here. In *Bullcreek*, the State of Utah and others sought review of an NRC order denying a petition for rulemaking contending that NRC's rules for licensing a privately-owned, away-from-reactor SNF storage installation were superseded by provisions in the NWPA. In the process of rejecting Utah's arguments, the Court cited "the NRC's [pre-NWPA] authority under the [AEA] to license private away-from-reactor storage facilities." <sup>146</sup> It also explained that because "[t]he NRC's authority . . . to license *private generators* to *store* spent nuclear fuel originated with the AEA, . . . the NWPA's failure to 'authorize' storage at private facilities had

Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), CLI-02-29, 56 NRC 390, 392 (2002).

Id. at 411 (emphasis added); see also id. at 403 ("[t]here is, however, no irreconcilable conflict between a law imposing one set of restrictions on federal facilities (the NWPA), and another law imposing a different set of restrictions on private facilities (Part 72)").

<sup>Id. at 395; see also id. at 396 ("[v]arious courts have recognized [its] authority under the AEA to license and regulate the storage of spent nuclear fuel"). See Pac. Gas & Elec. Co. v. State Energy Res.
Conservation & Dev. Comm'n, 461 U.S. 190, 207 (1983); Jersey Central Power & Light Co. v. Lacey Township, 772 F.2d 1103, 1111 (3d Cir. 1985); Kelley v. Selin, 42 F.3d 1501 (6th Cir. 1995), cert. denied, 515 U.S. 1159 (1995); Illinois v. General Electric Co., 683 F.2d 206, 214-15 (7th Cir. 1982); Maine Yankee Atomic Power Co. v. Bonsey, 107 F. Supp. 2d 47, 53 (D. Me. 2000).</sup> 

Petition at 22 (citing 359 F.3d 536 (D.C. Cir. 2004)).

Bullcreek, 359 F.3d at 537-38.

no effect on this preexisting authority."<sup>147</sup> Petitioner's attempt to distinguish *Bullcreek* by claiming that it does not address the specific issue in this case thus rings hollow, as it squarely affirms NRC's authority to license private away-from-reactor storage facilities, such as the WCS CISE.

Even assuming for argument's sake that the Application presumed that DOE would hold title to any SNF stored at the proposed CISF, Petitioner still fails to explain how that presumption would preclude the NRC from licensing the facility pursuant to its AEA authority. The Commission's actions in the *PFS* proceeding are instructive on this point. The NRC issued a license to PFS on February 26, 2006, to build and operate the proposed ISFSI, despite the failure of the Bureau of Indian Affairs ("BIA") and Bureau of Land Management ("BLM") to issue approvals necessary for facility construction. In a September 2005 press release announcing the end of the *PFS* contested adjudication and the Commission's decision to authorize license issuance, the NRC noted that BIA and BLM approvals were "[s]eparate from the NRC's actions." Further, in a May 2006 letter to BLM, the NRC Staff stated:

The NRC's authority to license an away-from-reactor ISFSI is derived from the AEA. While the NWPA addresses interim storage at other sites, it does not reduce or limit the authority granted to the NRC by the AEA to license an away-from reactor ISFSI, and it does not preclude the NRC from issuing a license for the proposed PFS facility. This issue was raised by the State of Utah in the NRC adjudicatory proceeding, and has been resolved. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-29, 56 NRC 390 (2002). Moreover, the State of Utah's arguments challenging the NRC's continued authority to license an

Id. at 539 (emphasis added). Indeed, the NRC promulgated its Part 72 regulations governing the licensing of ISFSIs (both at-reactor and away-from-reactor) two years before Congress enacted the NWPA. Id. at 538, 543. Moreover, the NRC already has licensed several privately owned, away-from-reactor facilities—both before and after the NWPA's enactment. See, e.g., NRC License No. SNM-2513 (Private Fuel Storage); NRC License No. SNM-2500 (GE-Morris); NRC License No. SNM-2504 (Ft. St. Vrain); NRC License No. SNM-2508 (TMI-2 ISFSI); NRC License No. SNM-2512 (Idaho Spent Fuel Facility).

NRC News Release No. 05-126, "NRC Denies Utah's Final Appeals, Authorizes Staff to Issue License for PFS Facility" (Sept. 9, 2005) (ML052520163).

away-from-reactor ISFSI have been considered and rejected by the U.S. Court of Appeals. See Bullcreek v. Nuclear Regulatory Commission, 359 F.3d 536 (D.C. Cir. 2004). 149

The NRC's action in the PFS proceeding confirms that the alleged inability of DOE to take title to the SNF to be stored at the proposed CISF, even were it true, is not a legal impediment to the NRC's issuance of a license to ISP, particularly in light of ISP's identification of a viable alternative (utility ownership of the SNF) and associated license conditions. Indeed, the NRC has long held that it need not "stay its hand" on a requested licensing action merely because other agencies have not taken (or may not take) actions necessary for the planned activity. 150 Whether and when DOE will take title to the SNF are decisions reserved for DOE separate from this licensing action.

Accordingly, Proposed Contention 1 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

#### C. Proposed Contention 2 (Purpose and Need) Is Inadmissible

Proposed Contention 2 states:

The ISP environmental report, in attempting to describe the purpose and need for this project, claims that CIS is safer and more secure

<sup>149</sup> Letter from E. William Brach, NRC, to Pam Schuller, BLM, "NRC Staff's Comments in Response to the Bureau of Land Management's February 7, 2006, Request for Comments Related to Private Fuel Storage's Applications for Rights-of-Way," encl. at 3 (May 8, 2006) (emphasis added).

<sup>150</sup> See Pac. Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), CLI-02-16, 55 NRC 317, 334 (2002) ("[I]t would be productive of little more than untoward delay were each regulatory agency to stay its hand simply because of the contingency that one of the others might eventually choose to withhold a necessary permit or approval."); Cleveland Elec. Illuminating Co. (Perry Nuclear Power Plant, Units 1 & 2), ALAB-443, 6 NRC 741, 748 (1977) (citing S. Cal. Edison Co. (San Onofre Nuclear Generating Station, Units 2 & 3), ALAB-171, 7 AEC 37, 39 (1974)). Also, the fact that an applicant may face commercial or political uncertainties does not preclude issuance of a license where the NRC finds that the applicant has met all applicable safety and environmental requirements. It is the applicant's prerogative to accept such risks. See, e.g., Hydro Res., Inc. (Rio Rancho, NM), CLI-01-4, 53 NRC 31, 48-49, 55 (2001) (noting that the NRC "is not in the business of regulating the market strategies of licensees" or of "crafting broad energy policy involving other agencies," and that "[i]t remains nonetheless within [the applicant's] business discretion to determine whether market conditions warrant commencing [] operations").

than storing the waste at the reactor site. However, the environmental report cites no evidence or data to support this assertion. An agency cannot rely on self-serving statements, especially ones with no supporting data, from the prime beneficiary of the project.<sup>151</sup>

According to Petitioner, the statement of purpose and need in Section 1.1 of ISP's ER is deficient because it wrongly claims there is a strategic need for the orderly transfer of SNF to a "safer and more secure centralized storage location." Petitioner also claims that "the ER and subsequent EIS must examine the relative safety of Hardened On-Site Storage (HOSS) to substantiate the purpose and need for the ISP project."<sup>153</sup>

As demonstrated below, Proposed Contention 2 should be rejected because it: is inconsistent with NEPA requirements for the statement of purpose and need in an ER; misreads ISP's ER; and, by focusing on a single phrase from the statement of purpose and need, ignores other stated needs for the project. In this regard, the proposed contention does not raise an issue that is material to the findings the NRC must make to issue the requested license, fails to provide adequate support, and does not show the existence of a genuine dispute on a material issue of law or fact with the Application, as required by 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

By way of background, applications under Part 72 are subject to an environmental review under NEPA and the NRC's implementing regulations in 10 C.F.R. Part 51. Those regulations require a Part 72 applicant to submit an ER that considers the environmental impacts of the proposed action and compares those impacts to the impacts of reasonable alternatives. <sup>154</sup> To facilitate this review, 10 C.F.R. § 51.45(b) states that an ER "shall contain a description of the

<sup>151</sup> Petition at 23.

Id. at 24. See also infra § IV.D (explaining that Petitioner's related claim that the "safer and more secure" language somehow violates the CSR also is inadmissible).

<sup>153</sup> Petition at 27.

<sup>154</sup> See 10 C.F.R. §§ 51.60, 51.61 (requiring the ER to provide the information required by 10 C.F.R. § 51.45).

proposed action, [and] a statement of its purposes . . . . "155 NRC guidance on the scope of an ER's statement of purpose and need states that it "should explain why the proposed action is needed." 156 That guidance also states that "[e]xamples of need include a benefit provided if the proposed action is granted or descriptions of the detriment that will be experienced without approval of the proposed action. In short, the need describes what will be accomplished as a result of the proposed action." 157

Consistent with NEPA, NRC regulations, and the relevant regulatory guidance, Section 1.1 of ISP's ER identifies multiple, independent needs for the proposed CISF project:

- The only alternative currently available to the commercial nuclear power utilities is to continue to store SNF at an ISFSI located at an existing operating commercial nuclear reactor.
- Although 9 nuclear power plants across the U.S. have been decommissioned and the spent fuel pools have been dismantled and decommissioned, the SNF remains and continues to be stored in onsite ISFSIs.
- Many policymakers and stakeholders in the communities that host shutdown reactors
  want to have the SNF stored in onsite ISFSIs removed to complete decommissioning of
  the site and allow for more beneficial uses of the land.
- A CISF is needed to ensure that the SNF at these commercial reactor sites can be safely removed so that remaining lands can be returned to greenfield status.
- Nuclear power utilities continue to remain responsible for the surveillance, maintenance, emergency preparedness, and physical security of the SNF stored at their ISFSIs. These activities are estimated to cost each of the utilities an estimated \$6 million per year.
- Developing a CISF in Andrews County, Texas would serve a national strategic need by providing for an orderly transfer of SNF from the 12 shutdown reactors to a safer and more secure centralized storage location.

<sup>155 10</sup> C.F.R. § 51.45(b). The Council on Environmental Quality ("CEQ") regulations also state: "The statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." 40 C.F.R. § 1502.13.

NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs at § 6.1.1 (Aug. 2003) (ML032450279).

<sup>&</sup>lt;sup>157</sup> *Id*.

• Not only would the CISF serve the needs of the 12 shutdown reactors, it would also be available to serve the needs of the existing 99 operating commercial nuclear reactors in the U.S., including those located in Texas, until a permanent repository becomes available. 158

Accordingly, the ER has described and specified the need for the proposed construction and operation of the WCS CISF, along with the benefits of the project. The ER's statement of purpose and need thus complies with all applicable requirements.<sup>159</sup>

1. <u>Petitioner's Challenge to a Single Stated Purpose of the WCS CISF Fails to Challenge the Other Stated Purposes and Therefore Fails to Demonstrate a Material Deficiency</u>

Despite the ER identifying many needs for the proposed WCS CISF, Petitioner objects to a single statement in the ER that storage of SNF at the proposed CISF would be "safer and more secure" than on-site storage. Petitioner does not, however, object to any of the other needs for the WCS CISF identified in the ER, which makes this proposed contention immaterial. Even assuming one of the many purposes and needs enumerated in the ER somehow is unsupported, the other purposes and needs (*e.g.*, allowing multiple sites to be fully decommissioned and relieving utilities of maintenance and security obligations) remain unchallenged. Thus, because the ER still articulates purposes and needs for the proposed project, it fully satisfies applicable requirements under NEPA and Part 51. Accordingly, Proposed Contention 2 fails to raise a genuine material dispute and should be rejected. 163

ER at 1-5 to 1-6.

See 10 C.F.R. Part 51, App. A § 4; NUREG-1748 at 6-1.

Petition at 23-29 (referencing ER Section 1.1); Declaration of Gordon R. Thompson at 15-16 (Nov. 12, 2018) ("Thompson Declaration").

<sup>&</sup>lt;sup>161</sup> *Id*.

See ER at 1-5 to 1-6.

See, e.g., Summer, CLI-10-1, 71 NRC at 21-22.

# 2. <u>Petitioner Misconstrues the Standards Applicable to a Purpose and Needs</u> Discussion and Therefore Fails to Raise a Genuine Material Dispute

Petitioner also argues that some needs for the project identified in the ER are not actually needs at all. As explained below, however, these arguments fail to raise a material issue regarding the sufficiency of the ER. First, Petitioner claims that the "needs" identified in the ER are merely the desires or preferences of "reactor owners and operators to remove waste to an off-site storage facility" and "policymakers and stakeholders in the communities that host shutdown reactors" who want to remove the SNF "to complete decommissioning of the site and allow for more beneficial uses of the land." That the cited needs for the project also align with some policy preferences of a set of stakeholders is immaterial. Furthermore, this need is fully consistent with the recommendations of the Blue Ribbon Commission ("BRC") on America's Nuclear Future, which the Application seeks, in some degree, to advance. 1666

Petitioner also relies on a declaration from Dr. Thompson, who opines that the policy preferences of reactor owners, communities, and policymakers do not "identify any urgency or compelling need to establish the proposed ISP facility." Dr. Thompson, however, also fails to raise a material issue. Neither NEPA nor the NRC's Part 51 regulations require that an applicant demonstrate that a need be "urgent" or "compelling"; an applicant need only explain why a project is needed. The ER does this. Moreover, Petitioner and Dr. Thompson otherwise do not challenge the many needs proffered in ER Section 1.1 and outlined above.

Petition at 26-27.

Indeed, Petitioner would likely substitute the policy preferences of another set of stakeholders.

See Blue Ribbon Commission on America's Nuclear Future, Report to the Secretary of Energy at 32-35 (Jan. 2012) ("BRC Report"). As discussed in response to Proposed Contention 8, the fact that this Application seeks, in some small degree, to advance one of the recommendations in the BRC Report does not constitute "unwavering support" for the BRC Report or render this Application deficient in any way.

Thompson Declaration at 16.

3. <u>Petitioner's Argument Regarding the Absence of an Analysis of Hardened On-Site Storage Is Unsupported and Is Immaterial to the Sufficiency of the Purpose and Needs Discussion in the ER</u>

Petitioner also claims that the ER must evaluate the relative safety of implementing HOSS at reactor sites "to substantiate the purpose and need" for the WCS CISF. However, Petitioner fails to explain this assertion or its implication that the presence or absence of an evaluation of HOSS has *any* connection to the sufficiency of an ER's purpose and needs discussion. Nor does it. Moreover, to the extent Proposed Contention 2 could be construed to attack the ER's purpose and needs discussion as impermissibly narrow (*e.g.*, so as to foreclose consideration of HOSS as an alternative), its conclusory assertion in this regard is unsupported by fact or law.

One purpose of the WCS CISF, as set forth in the ER, is the removal of SNF from reactor sites to a centralized facility to allow the *complete decommissioning of sites to greenfield status*. <sup>169</sup> (In contrast, HOSS, as conceptualized by Petitioner and Dr. Thompson, would be constructed "at reactor sites" <sup>170</sup> and, therefore, would not move SNF from any reactor site.) But Petitioner fails to explain how ISP's broad objective in this regard purportedly amounts to an impermissible limitation on the goals of the proposed action. Nor does it. Petitioner asserts that an applicant "may not define the objectives of its action in terms so unreasonably narrow that only *one alternative*... would accomplish the goals of the [proposed] action." <sup>171</sup> However, ISP's stated goal of allowing reactor sites to return to greenfield status does no such thing—and

Petition at 27. Petitioner provides a description of HOSS that would include spaced dry storage modules, each on a concrete pad and surrounded by steel and concrete, backed up by a conical mound of earth, gravel and rocks, with various other structural components. *See id.* at 27-28.

See ER at 1-5 to 1-6.

Petition at 27.

Id. at 26 (citing Citizens Against Burlington v. Busey, 938 F.2d 190, 195 (D.C. Cir. 1991), cert. denied, 502
 U.S. 994 (1991)) (emphasis added).

Petitioner offers no argument to the contrary. Therefore, the ER's purpose and needs discussion fully complies with NEPA and Part 51, and Petitioner's unexplained and conclusory challenge fails to demonstrate a material defect in the ER.

\* \* \*

Accordingly, Proposed Contention 2 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

#### D. Proposed Contention 3 (Continued Storage Rule) Is Inadmissible

Proposed Contention 3 states:

The statement in the ER that CIS is safer and more secure than storage at a reactor site contradicts the NRC's Continued Storage Rule, which concludes that spent radioactive fuel can be safely stored at a reactor site indefinitely. Therefore, there is no basis for accepting the statement in the ER, and there is no purpose and need for the ISP project.<sup>172</sup>

Petitioner claims that the statement in ER Section 1.1 that storage of SNF at the proposed CISF is "safer and more secure" than at-reactor-storage somehow "contradicts" the CSR (10 C.F.R. § 51.23). This alleged contradiction is the sole basis for this contention. Petitioner argues that the CSR, which incorporates the CSR GEIS, concludes that SNF could be safely stored at reactor sites indefinitely and there is thus no purpose and need for the proposed project. This proposed contention, however, mischaracterizes the CSR GEIS, the CSR itself, and ISP's ER, and therefore is unsupported and does not demonstrate a genuine dispute of a material issue of law or fact with the Application, contrary to 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Petition at 29.

<sup>173</sup> *Id.* at 29-30. *See also supra* § IV.C (explaining that Petitioner's related claim that the "safer and more secure" language demonstrates a deficiency in the ER's purpose and needs discussion also is inadmissible).

Petition at 30.

By way of background, ER Section 1.1 states that the WCS CISF "would serve a national strategic need by providing for an orderly transfer of SNF from the twelve shut down reactors to a safer and more secure centralized storage location." Separate from the purpose and need, the ER discusses and relies upon the CSR and CSR GEIS. The CSR GEIS, however, does not include any comparative analysis of the *safety* benefits of at-reactor versus away-from-reactor consolidated storage, nor does it endorse any particular storage method. Rather, it presents the NRC's generic findings as to the *environmental* effects of the continued storage of SNF at both reactor sites and away-from-reactor ISFSIs. 177

Petitioner misconstrues the CSR GEIS and the CSR by attempting to extend the conclusions in the GEIS on environmental impacts to include the safety and security of on-site storage, which is not the focus of the CSR or the CSR GEIS.<sup>178</sup> The CSR GEIS found that SNF may continue to be stored at a reactor site with mostly small environmental impacts.<sup>179</sup> That finding fits with ISP's ER and the no-action alternative discussed therein, in which decommissioned and currently-operating sites would continue to store SNF onsite.<sup>180</sup>

Petitioner claims that the CSR GEIS concluded that "spent radioactive fuel can be safely stored at the reactor site indefinitely" and argues that this means there is no purpose and need for

See id.; ER at 1-6.

See generally NUREG-2157.

Compare Petition at 30 (asserting the CSR "determined that on-site storage was safe" (emphasis added)) with NUREG-2157 at iii (noting the CSR GEIS "generically determines the *environmental* impacts of continued storage" (emphasis added)).

See NUREG-2157 at xlvii-xlviii, tbl.ES-3 ("Summary of Environmental Impacts of Continued At-Reactor Storage").

ER at 2-1. Similarly, Petitioner's argument that because SNF can be stored at reactor sites, there is no need to risk transportation and storage of the waste lacks any support whatsoever and fails to raise a genuine or material issue. NUREG-2157 concluded that the additional accumulated impacts from the transportation of the entire inventory of spent fuel from multiple reactors to an away-from-reactor ISFSI would also be minor. NUREG-2157 at 5-52. Petitioner did not provide any documents or expert opinion to contradict this conclusion.

the proposed project. <sup>181</sup> This argument, however, is unsupported. Nowhere in the ER does ISP disagree with the CSR GEIS or its conclusions in any way. And ISP never claims that storing SNF on-site at nuclear facilities is not safe or secure, or could not continue to be done so safely (which Petitioner seems to be implying). Rather, ISP's position is that storing SNF at a CISF would be *more* safe and *more* secure for multiple and obvious reasons (such as consolidating and enhancing monitoring and security functions). In short, the ER does not contradict the CSR GEIS in any way or suggest that on-site storage of SNF is unsafe.

Petitioner never explains or provides any factual or expert support for its argument that the conclusion in the CSR GEIS on the environmental impacts of continued storage has any bearing on the safety and security of the WCS CISF. And even if Petitioner provided some support for this argument, Petitioner cannot avoid the fact that the claim of safer and more secure storage is but one of several needs for the project, as discussed above in response to Proposed Contention 2. Since Petitioner did not challenge the several other identified needs, Petitioner failed to show a genuine and material dispute with the Application. For these reasons, the proposed contention should not be admitted. 183

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Accordingly, Proposed Contention 3 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

See supra § IV.C.

Petition at 29.

Summer, CLI-10-1, 71 NRC at 21-22; Sacramento Mun. Util. Dist. (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993) (stating that a proposed contention is fatally flawed when the petitioner identified no facts or expert opinion, and references no documents or other sources establishing the existence of a genuine dispute on a material issue of law or fact).

#### E. Proposed Contention 4 (Transportation Risk) Is Inadmissible

Proposed Contention 4 states:

Operation of the CIS site as proposed by ISP would necessitate the transportation of the radioactive waste from reactor sites to the CIS facility. Transportation from the reactors to the CIS site carries substantial risks. These risks must be evaluated in the ER. 184

Proposed Contention 4 asserts that the ER "does not adequately address the risks and consequences of a transportation accident and sabotage event," including the potential decontamination or cleanup costs of a transportation accident. Petitioner relies principally on an August 2001 report prepared by Matthew Lamb and Marvin Resnikoff of Radioactive Waste Management Associates ("RWMA") entitled "Worst Case Credible Nuclear Transportation Accidents: Analysis for Urban and Rural Nevada" ("RWMA Report"). Petitioner includes truck and rail accident "consequence assessment" results from the RWMA Report for urban and rural areas in Table 1 and Table 2, respectively, of Proposed Contention 4. Petitioner also claims that the ER's purported reliance on three NRC transportation studies is misplaced.

As demonstrated below, Proposed Contention 4 should be rejected as inadmissible under 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi). Instead of directly controverting the relevant sections of the ER, Petitioner merely presents an alternative analysis—the RWMA Report—that is clearly rooted in worst-case assumptions, which is not required by NEPA's rule of reason. More fundamentally, Petitioner fails to explain the relevance of that Report, and how it shows that ISP's analysis is unreasonable or inadequate under NEPA. In addition to making other factually

Petition at 31.

<sup>185</sup> *Id.* at 32, 38.

<sup>186</sup> *Id.* at 33.

<sup>&</sup>lt;sup>187</sup> See id. at 34-37.

<sup>&</sup>lt;sup>188</sup> See id. at 41-44.

irrelevant or unsubstantiated claims, Petitioner also seeks to raise two issues (sabotage and post-accident cleanup costs) that are not litigable in this proceeding.

1. Proposed Contention 4 Lacks Sufficient Support and Fails to Establish a Genuine
Dispute with the ER on a Material Issue of Law or Fact

Although Proposed Contention 4 suffers from multiple deficiencies that render it inadmissible, the most conspicuous flaw is its failure to directly challenge the pertinent discussion in the ER. <sup>189</sup> ER Section 4.2.6 discusses the radiological impacts associated with the transport of SNF to the proposed CISF site from both operating and decommissioned sites. <sup>190</sup> ER Section 4.2.7.1 discusses ISP's assessment of incident-free transportation doses, the results of which Petitioner does not challenge. <sup>191</sup> ER Section 4.8 summarizes ISP's analysis of the radiological transportation impacts that could potentially occur during off-normal events (*i.e.*, accidents). <sup>192</sup> Specifically, ISP evaluated three types of potential accidents involving the transportation of SNF by rail: (1) accidents involving no release (ER Section 4.2.8.1), (2) accidents involving a release of radioactive materials (ER Section 4.2.8.2), and (3) accidents resulting in a loss of shielding (ER Section 4.2.8.3). <sup>193</sup> Section 4.2.8 states that ISP found the calculated dose risks to be small for all three types of accidents, and that this finding is consistent with previous studies conducted by the NRC. <sup>194</sup>

<sup>&</sup>lt;sup>189</sup> See 10 C.F.R. § 2.309(f)(1)(vi).

<sup>190</sup> See ER at 4-12 to 4-16.

See id. at 4-17 to 4-22. Petitioner alleges generally that there is a risk of radiation being emitted from containers during shipment, and the ER must address impacts of these risks. To the extent Petitioner may be suggesting that there could be releases under non-accident conditions, Proposed Contention 4 provides no basis or credible scenario by which such releases might occur. Insofar as this allegation may be intended to refer to dose along the transportation route from exposure from incident-free transportation, that impact is addressed in ER Section 4.2.7.1 and Tables 4.2-4 through 4.2-7, which Petitioner fails to address or dispute.

<sup>192</sup> See id. at 4-23 to 4-28.

<sup>193</sup> See id. at 4-24 to 4-28, Attach. 4.1.

<sup>194</sup> *Id.* at 4-23.

Furthermore, ER Table 4.9-1, reproduced below, presents the estimated dose and dose risk for a severe loss of shielding accident for the three representative transportation routes analyzed in the ER.<sup>195</sup>

Table 4.2-9, Estimated Dose and Dose-Risk for Loss of Shielding Accidents			
Estimated Dose and Dose Risk for Each Transportation Route for a Loss of			
Shielding Accident			
Route	State	Dose	Dose Risk
		Sv (rem)	Person-Sv (person-rem)
Main Yankee NPP to	CT	2.6E-3 (0.26)	2.6E-12 (2.16E-10)
the CISF			
SONGS to the CIS	CA	1.23E-3 (0.12)	1.2E-12 (2.6E-10)
the CISF to YUCCA	TX	3.84E-4 (0.038)	3.8E-13 (3.8E-11)
Mountain			

After briefly describing the RWMA Report and presenting results from that Report in Tables 1 and 2 of the Petition, Petitioner states only that "[t]he ISP environmental report contains radiation doses (Table 4.2-9, Estimated Dose and Dose-Risk for Loss of Shielding Accidents), but the doses are far smaller than those that appear in Table 1 above." Petitioner makes no attempt to discuss the analysis contained in ER Section 4.2.8 (the source of Table 4.2-9), much less explain why it is inadequate or unreasonable for NEPA purposes. Instead, Petitioner merely assumes—without any apparent technical basis—that ISP's assessment is inadequate because it yielded estimated doses that are "far smaller" than those admittedly worst-case results generated in the RWMA Report prepared 17 years earlier for litigants opposing the Yucca Mountain project.

Significantly, Petitioner makes no effort to explain how any of the RWMA Report information presented in Tables 1 and 2 of the Petition relates to the estimated doses and dose risks for severe loss of shielding accidents contained in ER Table 4.2-9. Petitioner utterly fails to

<sup>195</sup> The reported radiation doses are expressed as the summation of both gamma rays and neutrons. Id. at 4-25.

<sup>196</sup> Petitioner at 38-39.

directly challenge any aspect of the discussion contained in ER Section 4.2.8.3, explain why ISP's methodology and/or results are inadequate under NEPA, or why the RWMA Report casts any doubt on the adequacy of those results. For these reasons, Petitioner does not meet its burden under 10 C.F.R. § 2.309(f)(1)(v) to provide *sufficient* alleged facts or expert opinions to support its position on the issue. "[A]n expert opinion that merely states a conclusion (e.g., the application is 'deficient,' 'inadequate,' or 'wrong') without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the Board of the ability to make the necessary, reflective assessment of the opinion" as it is alleged to provide a basis for the contention. Petitioner also fails to meet its burden under 10 C.F.R. § 2.309(f)(1)(vi) to provide sufficient information to show that a genuine dispute exists by including references to specific portions of the ER that Petitioner disputes and "the supporting reasons for each dispute."

The fact that the RWMA Report contains larger dose values obtained using different methodologies and/or assumptions does not make Proposed Contention 4 admissible. It is well-established that a petitioner must show that the applicant's "ER analysis fails to meet a statutory or regulatory requirement," and that "[p]resentation of an alternative analysis is, without more, insufficient to support a contention alleging that the original analysis failed to meet applicable requirements." As the Commission explained in another NEPA-related context (*i.e.*, the analysis of severe accident mitigation alternatives):

[I]t may always be possible to conceive of alternative and more conservative inputs, whose use in the analysis could result in greater estimated accident consequences. But the proper question is not whether there are plausible alternative choices for use in the analysis, but whether the analysis that was done is reasonable under NEPA. We have long held that contentions admitted for litigation must point to a deficiency in the application, and not merely

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<sup>&</sup>lt;sup>197</sup> *USEC*, CLI-06-10, 63 NRC at 472.

<sup>198</sup> *Indian Point*, LBP-08-13, 68 NRC at 187.

"suggestions" of other ways an analysis could have been done, or other details that could have been included. . . . A contention proposing alternative inputs or methodologies must present some factual or expert basis for why the proposed changes in the analysis are warranted (e.g., why the inputs or methodology used is unreasonable, and the proposed changes or methodology would be more appropriate). Otherwise, there is no genuine material dispute with the [] analysis that was done, only a proposal for an alternative NEPA analysis that may be no more accurate or meaningful." 199

Petitioner here clearly has failed to show that alternative analysis is even relevant, much less "more accurate or meaningful" *for purposes of NEPA*.

Furthermore, Petitioner's alternative analysis is far from accurate or meaningful, particularly when viewed through the lens of NEPA's rule of reason. The RWMA Report was prepared in connection with DOE's Yucca Mountain geologic repository project. In preparing its Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Waste at Yucca Mountain, Nye County, Nevada (2008) ("DOE FSEIS"), DOE specifically considered but rejected the estimates prepared by Lamb and Resnikoff in the RWMA Report for the State of Nevada:

The State of Nevada has provided analyses that indicate that the consequences of severe transportation accidents would be much higher than those in this Repository SEIS. For example, the State has estimated that a rail accident in an urban area could result in 13 to 40,868 latent cancer fatalities in the exposed population (DIRS 181756-Lamb et al. 2001, pp. 24 and 25), while DOE estimates that about 9 latent cancer fatalities would occur in the exposed population.

likely truck and rail transportation corridors en route to the geologic repository at Yucca Mountain.").

NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 323-24 (2012) (citing USEC, CLI-06-10, 63 NRC at 472) (emphasis added). See also Duke Energy Corp. (McGuire Nuclear Station, Units 1 and Catawba Nuclear Station, Units 1 & 2), LBP-03-17, 58 NRC 221, 238 (2003), aff'd on other grounds, CLI-03-17, 58 NRC 419 (2003) ("The Intervenors merely point out that, by using their models in the manner they are recommending, a different result would be achieved. This is an insufficient

basis to formulate a valid contention.").

See, e.g., RWMA Report at 1 ("This study estimates site-specific accident consequences for select urban and rural locations in the State of Nevada. These were chosen based on the locations of proposed and

The State estimated these consequences using computer programs that DOE developed and uses. However, the State's analysis used values for parameters that would be at or near their maximum values. DOE guidance for the valuation of accidents in environmental impact statements (DIRS 172283-DOE 2002, p. 6) specifically cautions against the evaluation of scenarios for which conservative (or bounding) values are selected for multiple parameters because the approach yields unrealistically high results.

DOE's approach to accident analysis estimates the consequences of severe accidents having frequencies as low as 1 x 10-7 per year (1 in 10 million) (DIRS 172283-DOE 2002, p. 9) using realistic yet cautious methods and data. DOE believes that the State of Nevada estimates are unrealistic and that they do not represent the reasonably foreseeable consequences of severe transportation accidents. 201

It is clear from the DOE FSEIS that the RWMA estimates represent a worst-case analysis. And the Commission has consistently reaffirmed that NEPA does not require a "worst case" analysis, which "creates a distorted picture of a project's impacts and wastes agency resources."202 The purpose of the NRC's environmental review "is to inform the decisionmaking agency and the public of a broad range of environmental impacts that will result, with a fair degree of likelihood, from a proposed project, rather than to speculate about 'worst case' scenarios and how to prevent them."<sup>203</sup> "NEPA requires only a discussion of *reasonably* foreseeable impacts."<sup>204</sup> Petitioner provides no information indicating that the RWMA estimates are based on reasonable assumptions.

Petitioner makes several additional arguments that fail to establish a genuine material dispute with regard to the ER and lack sufficient factual support. Petitioner first references an

<sup>201</sup> DOE FSEIS at 6-23 (emphasis added).

Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 352 (2002) (citing Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 354-55 (1989)).

<sup>203</sup> *Id.* at 347.

<sup>204</sup> *Id.* (quotation marks and footnote omitted, emphasis added).

advocacy piece by the American Public Health Association that recommends eliminating transport of SNF as much as possible, and a statement by a professor of global health at the University of Washington that "[t]he potential hazards and risks are huge, so minimizing transport makes sense." Neither of these references provides any estimate of the risk or consequences of SNF transportation, and therefore neither document provides any basis to dispute the assessment of transportation accident consequences in the ER. Thus, these references fail to demonstrate any genuine, material dispute with the Application or ER.

Petitioner also seeks to distinguish several of the comparable transportation analyses discussed in the ER—*i.e.*, NUREG-1714, NUREG-2125, and NUREG-2157.<sup>206</sup> Petitioner's attempts to distinguish these evaluations are baseless. Specifically, Petitioner incorrectly asserts that ISP may not rely on NUREG-1714, NUREG-2125, and NUREG-2157 because those evaluations purportedly looked at cask systems that will not be used at the WCS CISF.<sup>207</sup> Petitioner fails to explain its baseless assertion that "the specific details of the cask system are important in evaluating the impacts of transporting radioactive waste to the ISP CIS facility."<sup>208</sup> Ultimately, Petitioner fails to demonstrate that specific cask models somehow are material to the conclusions in these evaluations, particularly given that each of the cask system designs referenced in the Application, SAR, and ER must be approved and certified by the NRC.

Petitioner also argues that ISP cannot rely on NUREG-2157 because it "does not consider the impact of deteriorating railroad infrastructure on transportation risks," noting two derailments

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<sup>&</sup>lt;sup>205</sup> Petition at 32-33.

ER Section 4.2.6.2 (ER at 4-14 to 4-16) discusses each of those NRC studies. It notes that "[t]he NRC's assessments have concluded that the risk from radiation emitted from a transportation cask of is a small fraction of the radiation dose received from the natural background; moreover, the risk from accidental release of radioactive material is several orders of magnitude less than previously assessed."

<sup>&</sup>lt;sup>207</sup> *See* Petition at 41-43.

<sup>208</sup> *Id.* at 43.

in New Mexico in July 2018.<sup>209</sup> Petitioner's claim regarding NUREG-2157 is unfounded. The NRC's analysis therein included both "incident-free *and accident risks*" from shipping SNF by railroad and other means, and found both such risks to be small.<sup>210</sup>

Petitioner also lists 13 examples of "oil train" derailments in the U.S. and Canada, and assert that "it is not hypothetical or speculative that there will be train wrecks involving fires during transportation of radioactive waste."<sup>211</sup> But Petitioner does not explain how those "oil train" derailments are relevant to the transportation of SNF. Nor does it explain why a release from a transportation cask in the event of such a derailment is likely to occur given NRC's stringent cask licensing requirements.<sup>212</sup> Furthermore, to the extent Petitioner asserts that those requirements somehow are inadequate,<sup>213</sup> it points to no support. Such assertions constitute an attack on NRC regulations,<sup>214</sup> which is impermissible under 10 C.F.R. § 2.335, and fails to raise an admissible issue.<sup>215</sup>

<sup>&</sup>lt;sup>)9</sup> *Id*.

NUREG-2157 at 5-51 to 5-52 (emphasis added).

Petition at 39-40.

As noted in ER Section 4.2.6.2, in NUREG-2125, "Spent Nuclear Fuel Risk Transportation" (Jan. 2014), the NRC concluded, among other things, that: (1) if there were an accident during a spent fuel shipment, there is only about one-in-a-billion chance that the accident would result in a release of radioactive material; (2) if there were a release of radioactive material in a spent fuel shipment accident, the dose to the maximally exposed individual (MEI) would be less than 2 Sv (200 rem) and would not result in an acute lethality; and (3) none of the fire accidents investigated in this study resulted in a release of radioactive material. ER at 4-15.

See, e.g., Petition at 38, 40-41 (acknowledging "[t]ransportation casks are required to withstand a half hour fire at 1475°F," which refers to the requirements in 10 C.F.R. § 71.73(c)(4), but arguing that "many rail fires have burned hotter for considerably longer time periods" and asserting, without support, that "hydrocarbon fires burn at 1850°F and above").

See 10 C.F.R. § 71.73(c)(4) (requiring evaluation of a hypothetical accident scenario involving "a hydrocarbon fuel/air fire" under certain conditions specified in the regulation).

Contentions that advocate stricter requirements than agency rules impose are inadmissible as outside the scope of adjudicatory proceedings. *See* Turkey Point, LBP-01-6, 53 NRC at 159-60, *aff'd*, CLI-01-17, 54 NRC 3.

Petitioner also ignores route approval and inspection requirements that are intended to avoid infrastructure-related issues. NRC rules require licensees to obtain NRC approval for planned road and rail routes over which SNF is to be shipped. NRC guidance on the route approval application states that the application should include "confirmation that a route inspection was performed" and specifies route selection criteria that include preference for rail routes featuring advanced safety design features, including high-grade track. In addition, DOT regulations require a rail carrier transporting certain hazardous waste (encompassing SNF) to perform and maintain route analyses. If DOT finds that a chosen route is not the safest and most secure practicable route available, then DOT's Federal Railroad Administration ("FRA") may require the use of an alternative route.

In summary, all of the evaluations referenced in the ER found SNF transportation impacts to be small. Because Petitioner has failed to dispute the estimate of accident consequences in ER Section 4.2.8, as discussed above, its attempt to distinguish these evaluations is unsupported, immaterial, and fails to raise any genuine material dispute with the ER.

<sup>&</sup>lt;sup>216</sup> 10 C.F.R. § 73.37(b)(1)(vi).

See NUREG-0561 at 5-6. Additionally, DOT regulations require a rail carrier transporting certain hazardous waste (encompassing SNF) to perform and maintain route analyses. 49 C.F.R. § 172.820. FRA policy calls for shippers of SNF to notify the FRA with carrier and route information at least 90 days before initial shipment; states that the route section process will consider track classification to ensure the highest-rated track is utilized; and provides that the FRA will consult with the shipper, carrier and agency on route selections, inspect the track, and coordinate with the rail carrier to ensure that a rail flaw detection vehicle is operated over the entire designated rail route. See Safety Compliance Oversight Plan for Rail Transportation of High-Level Radioactive Waste and Spent Nuclear Fuel (June 1998) at 5, 7-9, Appendix B (FRA High Level Nuclear Waste Rail Transportation Inspection Policy), available at https://www.hsdl.org/?view&did=15760.

<sup>&</sup>lt;sup>218</sup> 49 C.F.R. § 172.820.

<sup>49</sup> C.F.R. § 172.822(j); see also 49 C.F.R. § 209.501 (FRA review of rail transportation safety and security route analysis).

#### 2. Proposed Contention 4 Raises Issues That Are Outside the Scope of the Proceeding and Not Material to the NRC Staff's Environmental Review

Petitioner suggests that the ER is inadequate because it does not discuss (1) potential sabotage events, or (2) the costs of decontamination following a transportation accident.<sup>220</sup> Neither of these issues falls within the scope of this proceeding or is material to the NRC Staff's NEPA review, contrary to the requirements of 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv). First, as discussed in ISP's response to Proposed Contention 4 from Don't Waste Michigan et al., incorporated by reference here,<sup>221</sup> controlling precedent holds that NEPA does not require analysis of the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities (including the proposed WCS CISF<sup>222</sup>) that are located outside the jurisdiction of the U.S. Court of Appeals for the Ninth Circuit.<sup>223</sup> Second, Petitioner fails to identify any legal requirement or precedent that requires ISP or the NRC Staff to estimate the cleanup costs of a hypothetical SNF transportation accident for purposes of licensing a proposed CISF. Nor does Petitioner attempt to explain why such an analysis is "reasonably necessary" to evaluate the project's environmental consequences under NEPA.<sup>224</sup>

<sup>220</sup> See ER at 31, 38, 42.

<sup>221</sup> Interim Storage Partners LLC's Answer Opposing Hearing Request and Petition to Intervene Filed by Don't Waste Michigan et al. § IV.F (Dec. 10, 2018) ("ISP Answer to DWM Hearing Request").

<sup>222</sup> The proposed site for the WCS CISF is Andrews County, Texas, Application at 1-1, which is within the jurisdiction of the U.S. Court of Appeals for the Fifth Circuit. See 28 U.S.C. § 41.

<sup>223</sup> See AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 128-29 (2007), aff'd by N.J. Dep't. of Envtl. Prot. v. NRC, 561 F.3d 132, 139-40 (3d Cir. 2009) (finding the chain of causation of third-party criminal acts was "too attenuated to require NEPA review," and expressly disagreeing with the Ninth Circuit's view).

<sup>224</sup> La. Energy Servs. (Nat'l Enrichment Facility), CLI-06-15, 63 NRC 687, 706 (2006) (quoting Fuel Safe Washington v. FERC, 389 F.3d 1313, 1329 (10th Cir. 2004)) ("An 'FEIS need only furnish such information as appears to be reasonably necessary under the circumstances for evaluation' of a proposed action.").

Accordingly, Proposed Contention 4 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

### F. Proposed Contention 5 (De Facto Repository) Is Inadmissible

Proposed Contention 5 states:

The ER states that waste would be stored at the CIS facility for 60-100 years until a permanent repository is found. The ER and the subsequent EIS must address the purpose and need and the environmental impacts if a permanent repository is not found, and the ISP facility becomes a de facto permanent repository.<sup>225</sup>

Petitioner argues that the ER must consider the potential environmental impacts of the WCS CISF becoming a *de facto* repository because "there is no assurance . . . that a permanent repository will ever be found" and the CISF would therefore "become a permanent repository without the protections of a permanent repository."<sup>226</sup>

Proposed Contention 5 is inadmissible because it presents an unambiguous, unauthorized challenge to the CSR (10 C.F.R. § 51.23), in that it is focused on the environmental impacts of storage of SNF long after the proposed term of the WCS CISF license. But Section 51.23(b) states that ERs prepared pursuant to 10 C.F.R. § 51.61 (the provision applicable to the Application) are not required to consider the environmental impacts of SNF storage beyond the term of the requested license. Petitioner asserts precisely the opposite and, therefore, directly challenges the Commission's regulations, contrary to 10 C.F.R. § 2.335. Accordingly, Proposed Contention 5 is immaterial and outside the scope of the proceeding, and inadmissible pursuant to 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv).

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Petition at 44.

<sup>&</sup>lt;sup>226</sup> Id

# 1. <u>The ER Appropriately Evaluates Environmental Impacts from Storage of SNF</u> During the Proposed Term of the WCS CISF License

As described in the Application, ISP is requesting a license for a term of 40 years—the maximum authorized by 10 C.F.R. § 72.42—to construct and operate a CISF.<sup>227</sup> ISP also may seek a 20-year renewal of the license pursuant to 10 C.F.R. § 72.42 (which would require its own NEPA review as a separate major Federal action). ISP therefore "anticipates continued storage for approximately 60 years or until a permanent repository is licensed and operating."<sup>228</sup> In this proceeding, the major federal action at issue is limited in duration to the requested 40-year term. The major federal action here is *not* the licensing of construction and operation of a permanent geologic repository, which is governed by a separate regulatory framework,<sup>229</sup> and in any event would be part of a separate licensing proceeding.

ISP is required by 10 C.F.R. § 51.61 to prepare an ER that meets the requirements of 10 C.F.R. § 51.45(b)(1). Therefore, ISP's ER is required to provide a description of the impacts of the proposed action (*i.e.*, the construction and operation of the WCS CISF for a 40-year term) on the environment, as well as a description of any adverse environmental effects which cannot be avoided. In ISP's case, such impacts include those resulting from the storage of SNF at the WCS CISF during the 40-year term of its license.

Thus, the ER properly considers the impacts of construction and operation of the WCS CISF on the environment for 40 years, as required by NEPA and 10 C.F.R. § 51.45(b).

Application at 1-5.

<sup>&</sup>lt;sup>228</sup> ER at 1-2.

See, e.g., 10 C.F.R. Parts 60, 63.

# 2. <u>Petitioner's Challenge to the CSR Is Impermissible and Outside the Scope of This Proceeding</u>

As discussed above, Proposed Contention 5 asserts that the ER must instead consider the potential impacts from the WCS CISF becoming a *de facto* repository for SNF; *i.e.*, the potential impacts from storage beyond the term of the WCS CISF license. Specifically, Petitioner argues that the environmental impacts of long-term storage of SNF must be analyzed in this proceeding.<sup>230</sup> And Petitioner asserts that, "the longer the waste is stored at the ISP facility, the greater the likelihood of an adverse impact."<sup>231</sup>

However, the CSR explicitly exempts ISP's ER from having to consider the environmental effects of long-term storage of SNF. Namely, 10 C.F.R. § 51.23(b) states that the "environmental reports described in . . . § 51.61 are not required to discuss the environmental impacts of spent nuclear fuel storage in . . . an ISFSI for the period following the term of the . . . ISFSI license." Section 51.61 applies to the WCS CISF, which is a Part 72 ISFSI. The CSR "has generically determined that the environmental impacts of continued storage of spent nuclear fuel beyond the licensed life for operation . . . are those impacts identified in NUREG-2157."<sup>232</sup> The NRC's findings in the GEIS are therefore codified in the regulations and incorporated by ISP in its ER.<sup>233</sup>

The CSR GEIS, at Section 5.0, describes in detail the environmental impacts of away-from-reactor storage, including land use, socioeconomics, environmental justice, air quality, climate change, geology and soils, surface-water quality and use, groundwater quality and use, terrestial resources, aquatic ecology, special status species and habitats, historical and cultural

Petition at 47.

<sup>231</sup> *Id.* at 48.

<sup>&</sup>lt;sup>232</sup> 10 C.F.R. § 51.23(a).

<sup>&</sup>lt;sup>233</sup> See, e.g., ER § 8.3.

resources, noise, aesthestics, waste management, transportation, and public and occupational health.<sup>234</sup> For each of these categories, the CSR GEIS considers the impacts over the course of three timeframes: (1) short-term storage, defined as 60 years beyond the expiration of reactor operations, *i.e.*, the activity that generated SNF, and assumes that a geological repository becomes available in this timeframe; (2) long-term storage, defined as 100 years after the end of the short-term storage timeframe, and assumes that a geologic repository becomes available in this timeframe; and (3) indefinite storage, which assumes no repository becomes available, and therefore the away-from-reactor facility must continue to handle and store SNF.<sup>235</sup> In short, the CSR GEIS, which ISP incorporated into its ER, does everything that Petitioner argues ISP must do.

Petitioner cites to a 2012 decision of the United States Court of Appeals for the D.C. Circuit ("New York v. NRC I")<sup>236</sup> for its proposition that the NRC must "consider the possibility that a permanent repository would never be found"<sup>237</sup> in this licensing action. But in response to New York v. NRC I, which vacated the NRC's previous generic environmental analysis of the impacts of storage of SNF, the NRC promulgated the CSR and the CSR GEIS.<sup>238</sup> As discussed above, the GEIS does consider the potential environmental impacts of away from reactor storage of SNF in the indefinite timeframe, i.e., if a permanent repository is not built. And as Petitioner admits, <sup>239</sup> the CSR and CSR GEIS were upheld on review by the D.C. Circuit ("New York v.

NUREG-2157 at xlviii to lix.

<sup>235</sup> *Id.* at 1-13 to 1-15.

Petition at 45-46 (citing *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012)).

Petition at 45.

<sup>&</sup>lt;sup>238</sup> See New York v. NRC, 824 F.3d 1012, 1016 (D.C. Cir. 2016).

Petition at 46 ("In upholding the Continued Storage Rule, the Court in [New York v. NRC II] . . . .")

NRC II").<sup>240</sup> Thus, insofar as Petitioner believes that New York v. NRC I requires an environmental analysis of the impacts of indefinite SNF storage, the CSR and CSR GEIS provide exactly that analysis, which—by force of law—is binding on this proceeding. Because Proposed Contention 5 amounts to a direct challenge to 10 C.F.R. § 51.23, it must be rejected as outside the scope of this proceeding. NRC regulations are not subject to attack in adjudicatory proceedings absent a waiver<sup>241</sup>—which Petitioner neither sought nor obtained.

Proposed Contention 5 further purports to rely upon the declaration of Dr. Gordon

Thompson to argue that the CSR GEIS includes "some assumptions that preclude reliance on the [CSR] from being used to avoid considering long-term storage in this case." Specifically, Petitioner cites to statements in Dr. Thompson's Declaration that the ER is inadequate because there is the potential that fuel in dry cask storage would become damaged during the *indefinite* period of operations, either because it was damaged prior to loading into dry cask storage and the WCS CISF will not contain a dry transfer system ("DTS") that could repackage the waste, or because the fuel will be stored so long at the WCS CISF that "institutional controls" would be lost. But both of these assertions amount to direct challenges to, and alleged failures of, the CSR GEIS, which is codified by the CSR. Thus, Dr. Thompson's criticisms also amount to an impermissible challenge to NRC regulations pursuant to 10 C.F.R. § 2.335.

New York v. NRC II, 824 F.3d at 1014.

<sup>10</sup> C.F.R. § 2.335(a) states: "no rule or regulation of the Commission, or any provision thereof, . . . is subject to attack by way of . . . argument . . . in any adjudicatory proceeding subject to this part."

Petition at 46-47. The same Thompson Declaration was submitted in the separate hearing request filed by Joint Petitioners in this proceeding.

<sup>243</sup> *Id.* at 47.

<sup>244</sup> *Id.* at 48.

Petitioner makes the further argument, relying on language in *New York v. NRC II*, that a site-specific analysis of the impacts of indefinite storage must be presented in ISP's ER because the NRC allegedly agreed at oral argument in that case that site-specific analyses of continued storage must be performed in each licensing action.<sup>245</sup> Petitioner cites<sup>246</sup> to the following language from that case:

The face of the [CSR] also makes clear that it is not a licensing action. To the contrary, the [CSR] "codif[ies] [the NRC's] generic determinations regarding the environmental impacts of continued storage of spent fuel at-reactor, or away-from-reactor sites beyond a reactor's licensed life for operation." "[T]he rule does not authorize the storage of spent fuel at any site [and] . . . reflects only the generic environmental analysis for the period of spent fuel strorage beyond a reactor's licensed life for operation and before disposal in a repostiory." Because the GEIS is only an input for future sitespecific reactor licensing and does not itself impose regulatory requirements on reactors, the NRC need not have considered the alternative of ceasing licensing in the GEIS. The NRC instead analyzes that alternative during site-specific licensing proceedings. ("The alternative of not issuing or not renewing a nuclear power plant license is considered during the site-specific review of an individual license application.")<sup>247</sup>

In claiming that ISP must perform a site-specific analysis of continued storage impacts here, Petitioner misrepresents the D.C. Circuit's decision. In the italicized text above, the D.C. Circuit did not determine that the impacts of indefinite storage must be considered on a site-specific basis in future licensing proceedings. Rather, the Court was addressing arguments that the CSR, itself, constituted a licensing action that required an analysis of alternatives to the proposed action (*e.g.*, ceasing licensing all nuclear reactors).<sup>248</sup> As the Court explained, "[b]ecause the [CSR] is not a licensing action, the NRC need not have considered the alternatives to licensing in

<sup>245</sup> *Id.* at 46.

<sup>246</sup> Id

New York v. NRC II, 824 F.3d at 1017-18 (emphasis added) (citations omitted).

New York v. NRC II, 824 F.3d at 1016-17.

the GEIS."<sup>249</sup> Rather, alternatives to each proposed licensing action must be considered on a site-specific basis.<sup>250</sup> ISP's ER fully considers alternatives to licensing the WCS CISF, and neither the CSR nor *New York v. NRC II* requires more.

\* \* \*

Accordingly, Proposed Contention 5 is inadmissible pursuant to 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

### G. Proposed Contention 6 (Earthquake Potential) Is Inadmissible

Proposed Contention 6 states:

The ER and the subsequent EIS must evaluate the potential for earthquakes at the ISP site and the environmental impact of earthquakes. Likewise, the Safety Analysis Report (SAR) must adequately evaluate the earthquake potential of the proposed site. Both the ER and SAR are inadequate in this respect.<sup>251</sup>

Petitioner claims that earthquakes have been reported in the area (including several with a magnitude of 3 or greater since 1975) and the "potential for earthquakes would be an aspect of the environment affected and the environmental impacts of the project that must be included in the ER, pursuant to 10 C.F.R. § 51.45."<sup>252</sup> Similarly, Petitioner claims that 10 C.F.R. § 72.103(b) requires the SAR to contain an adequate analysis of the earthquake potential in the area, including "increased incidents of earthquakes induced by fossil fuel extraction in the area of the ISP CIS facility."<sup>253</sup>

<sup>&</sup>lt;sup>249</sup> *Id.* at 1017.

See id. ("Because the GEIS is only an input for future-site specific reactor licensing and does not itself impose regulatory requirements on reactors, the NRC need not have considered the alternative of ceasing licensing in the GEIS.").

Petition at 49.

<sup>252</sup> *Id.* at 49-52.

<sup>&</sup>lt;sup>253</sup> *Id.* at 49-53.

As demonstrated below, Proposed Contention 6 entirely ignores the extensive discussion of earthquakes, including consideration of induced seismicity from hydrocarbon extraction, that already is included in the Application. That evaluation complies fully with Sections 51.45 and 72.103 and shows that the seismic hazard at the site would not result in damage to the facility, and thus no environmental impact is to be considered under Section 51.45. For these reasons, Proposed Contention 6 raises issues that are not material, are unsupported, and fail to demonstrate a genuine dispute on a material issue of fact or law with the Application, contrary to 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

#### 1. Petitioner's Challenge to the ER Is Not Admissible

Petitioner challenges the discussion of earthquakes in the ER, stating that "[t]he ER submitted by ISP does not even discuss the impact of earthquakes" and "the ER must evaluate the impacts of earthquakes at the proposed site." As noted by Petitioner, 10 C.F.R. \$ 51.45 requires an ER to provide "a description of the environment affected" and the "impact of the proposed action on the environment." Petitioner cites to no other regulatory requirement for this proposed contention, except for 10 C.F.R. \$ 72.103.

The ER for the WCS CISF evaluates earthquakes and fully satisfies 10 C.F.R. § 51.45. The sections most relevant to earthquakes are Section 4.3 (Geology and Soils Impacts) and Section 3.3 (Geology and Soils), including Subsections 3.3.2 (Basic Geologic and Seismic Information), 3.3.3 (Vibratory Ground), and 3.3.4 (Faulting). Petitioner does not challenge any of the specific information in these sections, and itself characterizes ER Subsections 3.3.3 and

<sup>255</sup> See id. at 49-50.

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<sup>254</sup> *Id.* at 50.

See id. at 49-50, 53.

3.3.4 as concluding "that there is essentially no chance of an earthquake in the area."<sup>257</sup> To the extent Proposed Contention 6 is a contention of omission, it is plainly wrong. And to the extent it is one of sufficiency, Petitioner's failure to identify or challenge this relevant information in the ER renders the proposed contention inadmissible for failure to demonstrate a genuine dispute. A contention that does not directly controvert a position taken by the applicant is subject to dismissal.<sup>258</sup>

To the extent Petitioner is claiming that the ER must somehow assume there are impacts from an earthquake that hypothetically damages the facility, that is simply not required. As noted above, the ER addresses earthquakes in a number of sections, which have not been challenged by Petitioner. Indeed, ER Subsection 3.3.3 concludes that "[t]he absence of late-Quaternary faulting and the low to moderate rate of background seismicity, even that associated with petroleum recovery activities, results in relatively low seismic hazard at the CISF site." ER Section 4.3 further concludes that construction and operation activities "will create little disruption to the subsurface and should not produce any induced seismic activity or affect subsurface faults in a way that may result in the accidental discharge of radioactive materials . . . ." And Table 4.14-1 states that the construction, operation, and integrated impacts for seismic are all "NONE." As Section 51.45 only requires consideration of the "impact of the proposed action," it does not require further evaluation of the "impact of earthquakes" if there are no such impacts. Any claims to the contrary are simply immaterial and unsupported. Likewise, any claim that the ER does not address earthquakes is false.

<sup>7</sup> *Id.* at 52.

<sup>&</sup>lt;sup>258</sup> See Summer, CLI-10-1, 71 NRC at 21-22.

ER at 4-70.

Petitioner refers to two papers and an Exhibit 1 regarding oil and gas activities in Texas and "increased incidents of earthquakes induced by fossil fuel extraction in the area of the ISP CIS facility," and claims that "the ER makes no mention of induced earthquakes as documented in the above cited studies." But that is also incorrect. ER Subsection 3.3.3 directly addresses this topic by explaining that "[s]ome occur[r]ences of *induced seismicity* have also proven to be spatially correlated to active *hydrocarbon production* in the region" and referring to "low to moderate rate of background seismicity, even that associated with *petroleum recovery activities*." That subsection also relies on and references the Probabilistic Seismic Hazard Evaluation prepared by the Applicant to support the WCS CISF. That detailed Evaluation includes an entire section devoted to induced seismicity. The results of that review are incorporated throughout the seismic hazard evaluation in the Application. Here again, Petitioner has failed to identify or challenge information in the ER on the very subject matter being challenged, thus rendering the proposed contention inadmissible. 264

Even had Petitioner identified the above information in the ER, Petitioner's discussion of the two referenced papers and Exhibit 1 does not support any challenge to the ER. Petitioner's discussion of the University of Texas/Southern Methodist University paper simply mentions "increased incidents of earthquakes induced by fossil fuel extraction"; its discussion of Exhibit 1 simply alleges drilling in the area; and its discussion of the Stanford paper simply refers to prior

<sup>&</sup>lt;sup>260</sup> Petition at 51-52.

Emphasis added. See also SAR § 2.6.2.

<sup>&</sup>lt;sup>262</sup> ER at 3-11.

As explained below, although some of this information is non-public, Petitioner could have requested the information, but chose not to do so, in response to the Order included with the Notice of Hearing Opportunity.

<sup>&</sup>lt;sup>264</sup> See Summer, CLI-10-1, 71 NRC at 21-22.

earthquakes in the area.<sup>265</sup> As noted above, the ER discusses seismic history and hydrocarbon exploration in and around the region. Petitioner's discussion identifies no dispute with the Application, and does not support any challenge to its conclusions. In this regard, a contention that merely states a conclusion, without reasonably explaining why the Application is inadequate, cannot provide a basis for the contention.<sup>266</sup>

#### 2. Petitioner's Challenge to the SAR Is Not Admissible

Petitioner's arguments regarding the SAR are brief and simply conclude that there have been earthquakes in the region since 1975, and that no public portion of the SAR addresses the seismic review required by 10 C.F.R. § 72.103.<sup>267</sup> As discussed above, the Application includes a significant amount of information evaluating seismic hazards, including induced seismicity. ISP performed a detailed site investigation, which is described in various sections of the SAR and related attachments.<sup>268</sup> Although Petitioner mentions SAR Section 2.6.2 and the Seismic Hazard Evaluation, it challenges none of the extensive information therein. Here again, a contention that does not directly controvert a position taken by the applicant is subject to dismissal.<sup>269</sup>

Instead of challenging the SAR, Petitioner complains that the Seismic Hazard Evaluation is not public. Petitioner, however, had an opportunity to request access to this non-public

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See Petition at 51-52.

<sup>&</sup>lt;sup>266</sup> See USEC, CLI-06-10, 63 NRC at 472.

<sup>&</sup>lt;sup>267</sup> Petition at 52-53.

The evaluation of geological characteristics, soil stability problems, or potential for vibratory ground motion at the site is provided throughout SAR Chapter 2 and its attachments. This includes SAR Section 2.6, which is titled "Geology and Seismology," and includes Subsections 2.6.1 (Basic Geologic and Seismic Information), 2.6.2 (Vibratory Ground Motion), 2.6.3 (Surface Faulting), 2.6.4 (Stability of Subsurface Materials), 2.6.5 (Slope Stability), and 2.6.6 (Volcanism). Relevant SAR attachments include Attachment D (Seismic Hazard Evaluation for WCS CISF) and Attachment E (Geotechnical Investigation for WCS CISF). SAR Section 3.2.3 also addresses the seismic design of SSCs.

<sup>&</sup>lt;sup>269</sup> See Summer, CLI-10-1, 71 NRC at 21-22.

information, but chose not to do so. Specifically, the Notice of Hearing Opportunity for this proceeding, published on August 29, 2018, included an "Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation." That Order directed any potential party to seek access to protected information, including proprietary information in the Application, within 10 days of the publication of the Notice of Hearing Opportunity (*i.e.*, by September 10, 2018). Petitioner did not do so, and thus forfeited its right to challenge the withheld information in a contention. 272

\* \* \*

Accordingly, Proposed Contention 6 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

### H. <u>Proposed Contention 7 (No-Action Alternative) Is Inadmissible</u>

Proposed Contention 7 states:

An ER is required to discuss alternatives to the proposed action. Pursuant to NEPA, this includes an examination of the no-action alternative. The discussion of the no-action alternative in the ISP ER is deficient because it does not discuss safer storage methods at the reactor sites, such as HOSS, nor does it acknowledge the NRC's Continued Storage Rule that concludes that waste can be safely stored at the reactor site indefinitely.<sup>273</sup>

Notice of Hearing Opportunity, 83 Fed. Reg. at 44,073-075.

<sup>271</sup> *Id.* at 44,073.

Petitioner was well aware of the requirement to request access to proprietary information within 10 days of the Notice of Hearing Opportunity. In the *Holtec* proceeding, Petitioner was part of a group of petitioners that had requested an extension to submit hearing requests due to a pending Freedom of Information Act Request. *See* Letter from W. Taylor, Sierra Club Counsel, to Commission, Holtec International HI-STORE Consolidated Interim Storage Facility Project Docket No. 72-1051 (July 19, 2018). On August 20, 2018, the Secretary of the Commission rejected that extension request, explaining that any petitioners could have requested access to proprietary information within 10 days of the *Federal Register* notice providing the opportunity to submit hearing requests in that proceeding. Order, Docket No. 72-1051 (Aug. 20, 2018) (unpublished). That order rejecting the extension request was served on Petitioner and issued less than 10 days prior to the Notice of Hearing Opportunity in this ISP proceeding. Additionally, the Seismic Hazard Evaluation has been identified as proprietary since 2016, when WCS initially submitted the Application.

Petition at 53.

Petitioner claims that ISP's ER is deficient because the no-action alternative does not discuss HOSS or acknowledge the CSR.<sup>274</sup> Petitioner argues that, because the no-action alternative would leave SNF at reactor sites, ISP "must include a discussion of the NRC's Continued Storage Rule . . . and the implementation of HOSS at the reactor site."<sup>275</sup> However, Petitioner fails to explain, much less demonstrate, how these purported omissions amount to a material deficiency in the ER's treatment of the no-action alternative. Accordingly, Petitioner's unsupported and immaterial Proposed Contention 7 fails to demonstrate a genuine dispute with the Application on a material issue of law or fact, and must be rejected.

#### 1. The ER Appropriately Describes the No-Action Alternative

As explained in ISP's response to Proposed Contention 2,<sup>276</sup> NRC regulations require an applicant to submit an ER which discusses alternatives to the proposed action.<sup>277</sup> Relevant NRC guidance states that "[t]he no-action alternative is a discussion of the results from a lack of action (*i.e.*, the status quo or existing state)."<sup>278</sup> The guidance also states that "[f]or the no-action alternative, the proposed action would not take place. This serves as a baseline for comparing alternatives."<sup>279</sup> The guidance provides an example that is particularly relevant to this Application: "For example, in a license application proposing new construction and/or activities the no-action alternative would be to not grant the license (i.e., no construction or activity)."<sup>280</sup>

<sup>&</sup>lt;sup>274</sup> *Id*.

<sup>275</sup> *Id.* at 55-56.

See supra § IV.C.

<sup>&</sup>lt;sup>277</sup> 10 C.F.R. § 51.45(b).

<sup>&</sup>lt;sup>278</sup> NUREG-1748 at 3-9 (Section 3.4.4).

<sup>279</sup> *Id.* at 5-6 (Section 5.2.3).

<sup>&</sup>lt;sup>280</sup> *Id*.

ISP's ER contains a no-action alternative fully consistent with this guidance<sup>281</sup> and NRC regulations in Part 51. The ER states that "[t]he no action alternative for ISP would be to not construct and operate the CISF. Under the no action alternative, the NRC would not approve the license application that would allow ISP to construct and operate the proposed facility."<sup>282</sup> The no-action alternative would result in decommissioned reactor sites not being returned to greenfield status, and the sites would continue to host an ISFSI for on-site storage of SNF.<sup>283</sup> The no-action alternative would also result in currently-operating reactors constructing new or expanding existing ISFSIs and maintaining existing physical security programs for the ISFSIs.<sup>284</sup> The description of the no-action action alternative in ISP's ER thus provides the necessary information to set a baseline to compare alternatives as required by NRC regulations.

# 2. <u>Proposed Contention 7 Fails to Identify Any Material Deficiency in the ER's</u> Discussion of the No-Action Alternative

#### a. HOSS Is Not a "Reasonable" Alternative

Petitioner claims that the ER's no-action alternative is deficient because it does not analyze HOSS as an alternative method of storing fuel at existing reactor sites.<sup>285</sup> However, Petitioner provides no basis for this assertion. Nor is there one. As a matter of law, an applicant's ER "need only discuss those alternatives that are reasonable and 'will bring about the ends' of the proposed action."<sup>286</sup> As discussed in ISP's response to Proposed Contention 2,<sup>287</sup> a key purpose of the proposed project is the removal of SNF from at-reactor ISFSIs. HOSS, which

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<sup>&</sup>lt;sup>281</sup> E.g., NUREG-1748 at 3-9 (Section 3.4.4).

<sup>&</sup>lt;sup>282</sup> ER at 2-1.

<sup>283</sup> *Id.* at 2-1 to 2-2.

<sup>284</sup> *Id.* at 2-2.

<sup>&</sup>lt;sup>285</sup> Petition at 53, 56.

<sup>&</sup>lt;sup>286</sup> *Hydro Res.*, CLI-01-4, 53 NRC at 55 (quoting *Busey*, 938 F.2d at 195).

See supra § IV.C.

Petitioner envisions being built at reactor sites, 288 would not fulfill this purpose. As the Commission has observed, "[w]hen the purpose is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved."<sup>289</sup> Accordingly, HOSS was properly excluded from the no-action alternative discussion in the ER. Because Petitioner fails to provide any support for its baseless assertion to the contrary, Proposed Contention 7 must be rejected.<sup>290</sup>

Even assuming, for argument's sake, HOSS could satisfy the purpose and need of the proposed action, there simply is no requirement for an applicant to examine a "conceptual design"<sup>291</sup> such as HOSS in its discussion of alternatives. The Supreme Court has held that NEPA's "concept of alternatives must be bounded by some notion of feasibility," and has recognized that:

> NEPA was not meant to require detailed discussion of . . . alternatives [] deemed only remote and speculative possibilities . . . not meaningfully compatible with the time-frame of the needs to which the underlying proposal is addressed. . . . [Moreover, NEPA documents] cannot be found wanting simply because the [author] failed to include every alternative device and thought conceivable by the mind of man. Time and resources are simply too limited to hold that [a NEPA document] fails because the [author] failed to ferret out every possible alternative, regardless of how uncommon or unknown that alternative may have been . . . . <sup>292</sup>

<sup>288</sup> Petition at 53.

<sup>289</sup> Hydro Res., CLI-01-4, 53 NRC at 55 (quoting Busey, 938 F.2d at 195, in turn citing City of Angoon v. Hodel, 803 F.2d 1016, 1021 (9th Cir. 1986) (per curiam), cert. denied, 484 U.S. 870 (1987)).

To the extent Petitioner is seeking to enlarge the regulatory requirements of what must be addressed in the no-action alternative, this is an impermissible challenge to NEPA and NRC regulations, and cannot support an admissible contention. 10 C.F.R. § 2.335(a); Shearon Harris, LBP-07-11, 66 NRC at 57-58 (stating that a contention that attacks applicable statutory requirements "must be rejected by a licensing board as outside the scope of the proceeding") (citing *Peach Bottom*, ALAB-216, 8 AEC at 20).

<sup>291</sup> Letter from Roy Zimmerman, Director of the Office of Nuclear Security and Incident Response to Mark Jacobs, Indian Point Safe Energy Coalition (Nov. 10, 2004) (ML042660116).

Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, 435 U.S. 519, 551 (1978) (quoting Nat. Res. Def. Council v. Morton, 458 F.2d 827, 837-38 (D.C. Cir. 1972)).

HOSS is precisely the type of "remote and speculative" alternative contemplated by the Court. Petitioner touts the alleged benefits of HOSS by way of reference to a 2003 report prepared by Dr. Thompson.<sup>293</sup> However, that report explicitly acknowledges the remote and speculative nature of this theoretical proposition. Specifically, Dr. Thompson notes that the HOSS theory involves multiple unresolved "technical issues" that will require "[a]dditional analysis, supported by experiments . . . to test and refine this design approach" to even "determine the *feasibility* of implementing" it.<sup>294</sup> Then, assuming this extensive research and development yields a conclusion that HOSS is, in fact, feasible, additional "detailed, engineering-design studies" and "a variety of governmental actions," such as "new regulations and guidance" and "new legislation" would be required prior to implementation.<sup>295</sup> Because HOSS is a remote and speculative alternative, ISP had no duty to consider it in the ER. Thus, Proposed Contention 7 fails to identify, with adequate support, a genuine material dispute with the Application for this additional reason.

b. <u>Petitioner's Other Unsupported Assertions Fail to Demonstrate a Genuine</u>
<u>Material Dispute with the Application</u>

Petitioner claims that the ER analysis of the no-action alternative must discuss the CSR "that concludes that spent fuel can remain at the reactor site indefinitely."<sup>296</sup> However, Petitioner fails to provide any explanation for this assertion. Moreover, its purported relevance to Proposed Contention 7 and the no-action alternative is far from obvious. The CSR addresses the environmental impacts of continued storage *after* the term of the license. And the ER discusses

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Petition at 26-29 (citing G. Thompson, Robust Storage of Spent Nuclear Fuel: A Neglected Issue of Homeland Security (Jan. 2003) ("Thompson Report"), *available at* https://www.nirs.org/wp-content/uploads/reactorwatch/security/sechossrpt012003.pdf).

Thompson Report at 8 (emphasis).

<sup>&</sup>lt;sup>295</sup> *Id*.

<sup>&</sup>lt;sup>296</sup> Petition at 55-56.

the CSR in Chapter 8—a discussion Proposed Contention 7 wholly ignores. Ultimately, Petitioner's unsupported assertion that the ER is somehow deficient in this regard—without so much as an explanation—fails to demonstrate a genuine material dispute with the Application.<sup>297</sup>

Petitioner also claims that the ER lacks a discussion "of the relative benefits and costs of leaving the waste at the reactor site compared to the benefits and costs of sending waste from many reactors to the ISP site."<sup>298</sup> But Petitioner then concedes in the next paragraph that "Chapter 7 of the ER does discuss costs and benefits."<sup>299</sup> Petitioner's sole objection appears to be with Section 7.2, which discusses the benefits of the project, including reduced payments from the federal government.<sup>300</sup> Petitioner points out that because a permanent repository has not been built, the federal government will still be required to reimburse for the costs of the SNF stored at the WCS CISF. But Petitioner then makes the unsupported assumption that the amount of reimbursement will be the same whether the SNF is kept on site at multiple locations or moved to the WCS CISF, and therefore there is "no economic benefit to the CIS facility as compared to the no action alternative."<sup>301</sup> This argument ignores the relevant portion of the ER, which explains that, by consolidating the SNF at a central location, savings will be realized through "economies of scale" as to security, monitoring, and other functions.<sup>302</sup> Petitioner's imprecise reading of the ER cannot form the basis for a litigable contention.<sup>303</sup> By ignoring the

Summer, CLI-10-1, 71 NRC at 21-22; Rancho Seco, LBP-93-23, 38 NRC at 247-48 (holding that a proposed contention is fatally flawed when the petitioner identified no facts or expert opinion, and references no documents or other sources establishing the existence of a genuine dispute on a material issue of law or fact).

Petition at 55.

<sup>&</sup>lt;sup>299</sup> *Id*.

<sup>&</sup>lt;sup>300</sup> *Id*.

<sup>301</sup> *Id*.

<sup>&</sup>lt;sup>302</sup> ER at 7-36.

<sup>303</sup> Ga. Tech., LBP-95-6, 41 NRC at 300.

relevant discussion, Petitioner has failed to raise a genuine dispute with the Application and is unsupported.<sup>304</sup>

\* \* \*

Accordingly, Proposed Contention 7 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

### I. <u>Proposed Contention 8 (Blue Ribbon Commission) Is Inadmissible</u>

Proposed Contention 8 states:

ISP relies heavily on the assertion that the Blue Ribbon Commission on America's Nuclear Future (BRC) has recommended CIS as the answer to the country's nuclear waste problem. On the contrary, the BRC report should not be viewed uncritically and does not necessarily deserve blind support in assessing the ISP application. ISP's ER therefore mischaracterizes both the BRC report's conclusions and the relative risks of CIS versus onsite storage. The EIS must therefore independently and fully address the relative risks and benefits of both storage options.<sup>305</sup>

Petitioner claims that ISP's ER places an "unwavering reliance" on the BRC Report and mischaracterizes the report's recommendation to justify the proposed CISF "as the solution to the country's nuclear waste problem." But Petitioner does not explain how this alleged mischaracterization and purported unwavering reliance renders the ER or the Application defective in any way. Instead, Petitioner only argues that the EIS prepared by the NRC Staff "must therefore independently and fully address the relative risks and benefits of both storage options." As discussed below, Proposed Contention 8 is inadmissible because it mischaracterizes the ER, does not raise a material issue, is unsupported and does not demonstrate

<sup>&</sup>lt;sup>304</sup> See Millstone, LBP-04-15, 60 NRC at 95; see also Summer, CLI-10-1, 71 NRC at 21-22.

Petition at 56.

<sup>306</sup> *Id.* at 57.

<sup>307</sup> *Id.* at 59.

a genuine dispute with the Application on a material issue of law or fact as required by 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

The ER references the BRC Report largely to explain that the WCS CISF would be *consistent* with the BRC's recommendation regarding consolidated interim storage.<sup>308</sup> Petitioner argues that ER Sections 1.1 and 2.1 are "dictated to a great extent by the BRC report."<sup>309</sup> In other words, Petitioner is arguing that ISP used the BRC Report almost exclusively to justify this project in its statement of purpose and need and in describing the no-action alternative. Petitioner's argument, however, completely mischaracterizes the ER and ignores many of the identified needs for the project that do not rely on the BRC Report.

As discussed in ISP's response to Proposed Contention 2 above,<sup>310</sup> ISP identified several needs for the proposed project. The ER complies with NEPA and relevant NRC regulations.

Only one of the many needs identified in the ER references the BRC Report.<sup>311</sup> And even then, the reference is to the BRC's estimate for the cost to utilities for maintaining their on-site ISFSIs.<sup>312</sup> There is thus no basis for Petitioner's argument that ISP exclusively relied on the BRC Report to identify the needs for the proposed project. Although the ER states that the WCS CISF would advance strategic national needs (and align with <u>some</u> BRC recommendations),<sup>313</sup> nowhere does it state or even imply that the project was dictated by the BRC Report.

Petitioner also refers to ER Section 2.1 (the no-action alternative) in the proposed contention, but does not explain how the description of the no-action alternative relies on the

<sup>&</sup>lt;sup>308</sup> ER at 1-3, 2-2, 2-63.

Petition at 56.

<sup>310</sup> See supra § IV.C.

ER at 1-5.

<sup>&</sup>lt;sup>312</sup> *Id*.

<sup>313</sup> *Id.* at 1-6 and 2-2.

BRC Report or how this reliance somehow creates an issue with the Application. Of course there is no support for such an argument. The ER states that the no-action alternative would, in addition to maintaining the status quo, result in continuing inaction on the BRC's recommendations. But nowhere in the ER does ISP use this potential inaction on BRC recommendations to justify the proposed project. Additionally, as discussed above in response to Proposed Contention 7, the ER's no-action alternative satisfies all relevant requirements. In short, this proposed contention is inadmissible because Petitioner's mischaracterization of the ER and ISP's reliance on the BRC Report is unsupported and does not raise a material issue nor demonstrate a genuine dispute with the Application. 315

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Accordingly, Proposed Contention 8 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

# J. Proposed Contention 9 (Decommissioning Financial Assurance) Is Inadmissible

Proposed Contention 9 states:

10 C.F.R. § 72.30 establishes requirements for decommissioning interim storage facilities. An application for licensing a CIS facility must contain a decommissioning plan explaining how the plan will satisfy the requirements in the regulation. The application for the ISP CIS facility does not comply with these requirements. <sup>316</sup>

Petitioner asserts that the decommissioning plan submitted by ISP fails to meet the requirements of Section 72.30 because it does not provide a detailed decommissioning cost estimate and fails to provide reasonable assurance that funds will be available to decommission

Rancho Seco, LBP-93-23, 38 NRC at 247-48; Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 76 (1996).

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<sup>314</sup> *Id.* at 2-2.

Petition at 60.

the WCS CISF.<sup>317</sup> Petitioner also challenges the decommissioning funding assurance alternatives presented in the Application. Specifically, Petitioner asserts that, because there is no assurance that SNF Title Holders will agree to pay for decommissioning, the Application does not satisfy the requirements of 10 C.F.R. § 72.30(e), and that the Application fails to provide an adequate basis for the alternative decommissioning funding assurance standard presented in an exemption request should DOE take title to the SNF.<sup>318</sup> As explained below, Proposed Contention 9 is inadmissible for multiple reasons.

First, to the extent the proposed contention is one of omission—*i.e.*, that "the plan does not give a detailed cost estimate of the total cost of decommissioning"<sup>319</sup>—the proposed contention fails even to acknowledge or challenge with requisite specificity the detailed Decommissioning Cost Estimate ("DCE") provided in Chapter 3 of Appendix D of the Application. The specific information Petitioner alleges to be missing is in fact included in the Application. As such, that portion of Proposed Contention 9 lacks any factual support and fails to directly controvert the relevant portions of the Application. Additionally, as explained below, Proposed Contention 9 seeks to litigate issues that are neither within the scope of this proceeding, nor material to the NRC's required findings under Part 72.

Second, to the extent Petitioner challenges the adequacy of ISP's basis for financial qualifications, they provide no basis for that claim. The Application in fact provides alternatives for two scenarios: one in which private commercial SNF Title Holders retain title to the SNF and are contractually obliged to ISP to fund decommissioning; and one in which DOE takes title and enters into a contract with ISP to fund storage and decommissioning. In the case of DOE as the

317 *Id*.

<sup>318</sup> *Id*.

<sup>319</sup> *Id.* 

customer, the Application provides two methods of assurance: one as specified in 10 C.F.R. § 72.30(e)(3) (sinking fund combined with surety), and the second, an exemption request recognizing direct contractual responsibility by DOE should it choose to enter into such a contract. Proposed Contention 9 argues, without either basis or support, that the alternatives presented in the Application fail to satisfy the decommissioning funding requirements in 10 C.F.R. § 72.30.

Finally, contrary to the prohibition in 10 C.F.R. § 2.335, Petitioner impermissibly challenges the NRC's Part 72 regulations, which permit the issuance of regulatory exemptions (including exemptions to the decommissioning funding alternative methods in 10 C.F.R. § 72.30(e)). As explained below, these unsupported, immaterial, and out-of-scope arguments must be rejected for failure to meet the contention admissibility requirements in 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

1. <u>Proposed Contention 9 Fails to Raise a Genuine Material Dispute Because It Fails</u>
<u>Even to Acknowledge, Much Less Refute, the DCE Provided in the Application</u>

Petitioner asserts that the Application fails to meet the requirements of 10 C.F.R. § 72.30 because it does not "give a detailed cost estimate of the total cost of decommissioning."<sup>321</sup>

Petitioner says nothing more in furtherance of this conclusion. In reference to the applicable standard, the proposed contention makes passing reference to several requirements in subparts of 10 C.F.R. § 72.30, but does not allege these attributes of ISP's DCE are somehow either deficient or lacking. Petitioner does not even acknowledge the existence of Appendix D, "Decommissioning Funding Plan," or the "Site Specific Decommissioning Cost Estimate" provided at Chapter 3 of that Appendix. Therein, the Application describes the assumptions used

Application at 1-6 to 1-9.

Petition at 60.

and details of the estimated costs, following the approach recommended in NRC guidance.<sup>322</sup> Because Petitioner fails even to acknowledge this information, much less challenge it in any way, Petitioner fails to raise a genuine material dispute, contrary to 10 C.F.R. §§ 2.309(f)(1)(iv) and (vi).

2. Proposed Contention 9 Fails to Address and Dispute Pertinent Information in the Application Regarding Decommissioning Funding Assurance Alternatives and Therefore Lacks Basis and Fails to Demonstrate a Genuine Material Dispute

The Application describes decommissioning funding assurance in either of two scenarios: one for the case of private ownership of SNF (*i.e.*, the SNF Title Holder), and the other for DOE ownership. In Proposed Contention 9, Petitioner claims that these decommissioning funding assurance alternatives are not adequate to satisfy 10 C.F.R. § 72.30(e). In opposition to the SNF Title Holder alternative—using an external sinking fund as described in 10 C.F.R. § 72.30(e)(3) supplied by contract payments combined with a surety bond—Petitioner only speculates that SNF Title Holders would not enter into such contracts.<sup>323</sup> For the scenario in which DOE takes title to the SNF and is ISP's customer, the Application includes the same option plus an additional alternative in the form of an exemption request under 10 C.F.R. § 72.7 for approval of an equivalent method of assurance provided via the contract with DOE. In response to both DOE alternatives, Petitioner asserts the NWPA prohibits DOE taking title and argues, therefore, that ISP's showing is insufficient to meet 10 C.F.R. § 70.30(e).

As demonstrated in response to Petitioner's Proposed Contention 1 above,<sup>324</sup> NRC's authority to make its licensing determination is not altered by the NWPA. Further, Petitioner

See generally NUREG-1757, Vol. 3., Rev. 1, Consolidated NMSS Decommissioning Guidance – Financial Assurance, Recordkeeping, and Timeliness (Feb. 2012) (ML12048A683).

Petition at 62.

See supra § IV.B.

only speculates as to DOE's authority. In fact, DOE already has on multiple occasions exercised its inherent authority under the AEA to take legal title to and possession of commercial nuclear fuel from numerous commercial entities to transport and store it pending disposal.<sup>325</sup> Petitioner cites no basis for a conclusion to the contrary.<sup>326</sup> Regardless, in no alternative does Petitioner address and dispute the information provided in the Application, provide a basis to challenge that information, or raise a genuine material dispute on an issue on which the NRC must make a finding.

> Petitioner Provides No Basis in Opposition to the Decommissioning a. Funding Assurance Provided for the Private SNF Ownership Alternative

Application Section 1.6.3 describes a method of financial assurance in the case of private ownership of SNF, consistent with 10 C.F.R. § 72.30(e)(3)—i.e., an external sinking fund combined with a surety bond. Chapter 2 of the Decommissioning Funding Plan provides:

> A fully executed written contract between ISP and the United States Government, Department of Energy (DOE) or the other SNF Title Holder(s), will be established prior to receipt of SNF or reactorrelated GTCC LLW at the CISF.

If other SNF Title Holder(s), other than DOE, (Client(s)), enter into a contract with ISP for storage services, the contract shall allocate legal and financial liability among the licensee and the clients and shall include provisions requiring clients to periodically provide credit information, and, when necessary financial assurances to cover their decommissioning obligations.

<sup>325</sup> See U.S. Nuclear Waste Technical Review Board, Management and Disposal of U.S. Department of Energy Spent Nuclear Fuel (December 2017) at § 2.1, Table A1-1, available at https://www.nwtrb.gov/docs/default-source/reports/nwtrb-mngmntanddisposal-dec2017-508a.pdf?sfvrsn=12.

<sup>326</sup> Although not raised by Petitioner, the Commission already has decided that § 10155(h) of the NWPA did not abrogate previous authority granted under the AEA. See PFS, CLI-02-25, 56 NRC 390, 401 (2002); Cf. Bullcreek, 359 F.3d at 539. Regardless, as shown in ISP's response to various other NWPA issues raised in this proceeding, whether DOE currently has authority to use the CISF or chooses to use it is irrelevant to NRC's licensing authority. See, e.g., Interim Storage Partners LLC's Answer Opposing Beyond Nuclear, Inc.'s Hearing Request and Petition to Intervene at 32-34 (Oct. 29, 2018); supra § IV.B.

This concept is reflected and made a formal requirement of the Proposed License in Conditions 18, 23 and 24.<sup>327</sup> Petitioner's only quarrel with this alternative is its speculation that private title holders likely would not view moving the fuel off of their reactor sites as sufficient incentive to enter into such contracts unless they also were freed of financial responsibility.<sup>328</sup> Even for this wholly-insufficient challenge,<sup>329</sup> Petitioner fails to provide any support; it fails to identify any issue, provide any basis, or raise any genuine material dispute regarding ISP's decommissioning funding assurance for privately-owned SNF. Accordingly, this portion of the proposed contention must be rejected under 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

b. <u>Petitioner Also Fails to Raise a Genuine Material Dispute with the</u>
<u>Decommissioning Funding Assurance Provided for DOE SNF Ownership</u>
<u>Alternatives</u>

In the same sections cited above, the Application also describes the alternative bases for assurance in the case of DOE ownership. In the case of DOE ownership, Chapter 2 of the Decommissioning Funding Plan provides:

A fully executed written contract between ISP and the United States Government, Department of Energy (DOE) or the other SNF Title Holder(s), will be established prior to receipt of SNF or reactor-related GTCC LLW at the CISF. Pursuant to this contract, if the DOE shall take legal title to the SNF and reactor-related GTCC LLW prior to receipt, DOE shall also be responsible for all costs associated with the decommissioning of the CISF allowing for its unrestricted release pursuant to 10 CFR Part 20 Subpart E at the time of license termination.

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Application, Attach. A, Proposed License Conditions.

Petition at 62.

See, e.g., Hydro Res., CLI-01-4, 53 NRC at 48-49, 55 (noting that the NRC "is not in the business of regulating the market strategies of licensees" or of "crafting broad energy policy involving other agencies," and that "[i]t remains nonetheless within [the applicant's] business discretion to determine whether market conditions warrant commencing [] operations").

And again, this concept is *formalized* in Proposed License Conditions 18, 23 and 24.<sup>330</sup> Petitioner provides no substantive challenge to the financial sufficiency of this method. Rather, it provides only three conclusory statements, none of which is explained, supported, or in any way developed.

First, Petitioner asserts DOE is prohibited by the NWPA from taking title to the waste until the waste is destined for a repository.<sup>331</sup> This conclusory statement includes no support whatsoever, or even a citation.<sup>332</sup> Even assuming this conclusion was adequately supported or correct as a matter of law, as explained in response to Proposed Contention 1, the question of whether DOE currently has authority to make use of ISP's license is irrelevant to NRC's authority to establish conditions under which ISP and DOE *could* make use of the facility.<sup>333</sup>

Second, Petitioner asserts the Application lacks evidence DOE would agree to enter into such an arrangement. Petitioner cites no requirement for such pre-agreement, nor is there one. Petitioner's conclusions all relate to its disagreement—as a matter of policy—with interim storage, but in no way touch on assurance of decommissioning funding. Thus, Petitioner's arguments fall well outside the scope of any finding the Staff must make under 10 C.F.R. § 72.30 to issue the requested license.

Finally, Proposed Contention 9 challenges the NRC's authority to consider the proposed exemption. Petitioner states: "the application does not provide any basis in law or regulation or practice to support the concept that NRC would or could grant an exemption from the

Application, Attach. A.

Petition at 61.

The 272 MTHM of commercial origin SNF already held in storage by DOE cited in the NWTRB's December 2017 Report provide substantial evidence to the contrary. *See supra* § IV.B.

See also id.

requirements of § 72.30(e)."334 This statement ignores Section 1.7.1 of the Application, titled "Exemption from 10 CFR 72.30(e) Requirements," which describes that basis in law, regulation, and practice for the requested exemption. Petitioner's failure to cite or take issue with any portion of it is contrary to 10 C.F.R. § 2.309(f)(1)(vi). Further, to the extent Petitioner appears to be challenging the NRC's authority under 10 C.F.R. § 72.7 to consider and issue the proposed exemption (thereby authorizing the funding alternative), absent a waiver, that argument raises an impermissible challenge to the Commission's rules, and must be rejected in accordance with 10 C.F.R. § 2.335.

As described above, those portions of Proposed Contention 9 that appear to be contentions of omission—as to a detailed decommissioning cost estimate and detailed basis for the proposed exemption request—must be rejected pursuant to 10 C.F.R. § 2.309(f)(1)(vi) because Petitioner fails to acknowledge those specific sections of the Application. And the remaining portions of Proposed Contention 9—which assert failure to satsify the requirements of Section 72.30(e)—fail to prove anything more than Petitioner's unsupported opinion (i.e., that neither private SNF Title Holders nor DOE would enter into such arrangements) and unsupported policy conclusion (i.e., related to the NWPA), and therefore are inadmissible.

Accordingly, Proposed Contention 9 should be rejected in its entirety for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

#### K. Proposed Contention 10 (Groundwater Impacts) Is Inadmissible

Proposed Contention 10 states:

The ISP CIS site sits atop the Ogallala Aquifer. The ER and SAR submitted by ISP appear to claim that the site does not sit atop the

<sup>334</sup> Petition at 62.

aquifer. Therefore, the ER and SAR do not accurately and adequately evaluate and consider the impacts to the aquifer from the CIS facility.<sup>335</sup>

In claiming that the WCS CISF site sits atop the Ogallala Aquifer, Petitioner seeks to dispute ISP's conclusion in the ER (and also in the SAR) that "[t]he Ogallala Formation, if present, is not water bearing in the [ISP] permitted CISF area."336 It also asserts that "[t]he ER does not adequately discuss the impact of a release on surface water flow and its effect on playa basins."337 As support for its contention, Petitioner offers a report prepared by geologist Dr. Patricia Bobeck, who opines that "the [ER] fails to provide the basic information necessary to adequately and thoroughly address the impact of cask rupture and discharge of radioactive material to ground and groundwater at the [ISP] site."338 Petitioner avers that because there is "a danger of release of radioactivity" from the canisters to be stored at the WCS CISF, the impact of such a release on groundwater and surface water must be considered in the ER. 339

As explained below, Proposed Contention 10 is inadmissible. Petitioner fails to provide the necessary factual or expert support for its claims, as required by 10 C.F.R. § 2.309(f)(1)(v), and fails to raise a genuine material dispute with the ER or SAR, as required by Section 2.309(f)(1)(vi). First, the contention relies on an inadequately-supported premise; *i.e.*, that WCS CISF operations could result in the release of radioactive material to the environment in the first place that, in turn, could be transported and impact groundwater and surface water at or near the

Id. at 63.

<sup>&</sup>lt;sup>336</sup> ER at 3-26. *See also* SAR at 2-22.

Petition at 65.

Patricia Bobeck, PhD, PG, "Geologic Review of Interim Storage Partners LLC WCS Consolidated Storage Facility Environmental Report," at 10 (Oct. 25, 2018) ("Bobeck Report").

Petition at 63.

site.<sup>340</sup> Neither Petitioner nor its proffered expert identifies any credible mechanism by which a dry storage "cask rupture" is likely to occur, much less result in release of transportable radioactivity to the surface or subsurface environment.<sup>341</sup> Second, Dr. Bobeck's criticisms of the ER do not give rise to a material dispute with that document's conclusion that groundwater and surface water are not likely to be impacted by any postulated radiological releases.<sup>342</sup>

- 1. Petitioner Fails to Provide Sufficient Information to Establish a Genuine, Material Dispute with Regard to the Potential for Release of Radioactive Material to the Environment
  - a. <u>Petitioner's Argument Regarding High Burnup Fuel ("HBF") Lacks</u> <u>Adequate Support and Fails to Establish a Genuine, Material Dispute</u>

Petitioner posits that "cask rupture is not an impossibility or speculation . . . because of the prevalence of high burnup fuel." It claims that HBF "causes damage to the cladding and thus reduces the protection from radioactivity," and "*likely* leads to leakage of radioactive material from the storage containers." Petitioner further asserts that HBF temperatures make the used fuel more vulnerable to damage from handling and transport, "which can cause cladding to fail when used fuel assemblies are removed from cooling pools, when they are vacuum dried, and when they are placed in storage containers."

Bobeck Report at 2.

Indeed, in her report, Dr. Bobeck states that "[a] discussion of the type and amount of materials that could be released from spent nuclear fuel casks as a result of such incidents are beyond the scope of this geologic review." Bobeck Report at 2. She nonetheless states that "a number of substances, both airborne and particulate, could impact surface and subsurface geological materials and groundwater at the site and in the region." *Id.* Such vague and conclusory statements, even by a proffered expert, fail to support the admission of the proposed contention.

See ER at 4-29 to 4-30.

Petition at 65.

<sup>344</sup> *Id.* at 66 (emphasis added).

<sup>345</sup> *Id.* at 66-67.

Petitioner's statement that cask rupture is "not an impossibility" does not establish that it is, in any way, reasonably "likely" to occur. Indeed, Petitioner's statement that cladding damage caused by HBF "likely" leads to radioactive material leakage is pure speculation, unsupported by documentary references or expert opinion. In claiming that HBF temperatures can cause cladding to fail during handling and transport, Petitioner relies on the same references cited in Proposed Contention 16. As explained in ISP's response thereto, <sup>346</sup> the cited documents, while discussing potential effects of HBF on cladding, do not establish that cladding performance issues are likely to occur in connection with the handling and transport of SNF canisters to be stored at the WCS CISF. <sup>347</sup> The proposed license conditions at Appendix A include an additional requirement at Condition 9 that HBF be stored inside an inner can, inside the sealed canister. Regardless, even if the concerns regarding the impacts of HBF on fuel cladding were supported, Petitioner describes no mechanism by which the inner weld-sealed canister could be breached, or could result in a release.

b. <u>Petitioner's Argument Regarding Fracking-Related Seismicity Lacks</u> <u>Adequate Support and Fails to Establish a Genuine, Material Dispute</u>

Petitioner also claims that hydraulic fracturing (fracking) near the ISP site has created "a significant potential for earthquakes at the ISP site" that, in *combination with* failed cladding, "would cause cracking in the [SNF storage] containers and thus allow radioactive leakage."<sup>348</sup>

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See infra § IV.Q.

As discussed in response to Proposed Contention 16, *infra*, the use of HBF that would be permitted by the Application is limited to that canned inside the storage canister. Nonetheless, whether HBF is canned or not, the safety of HBF is addressed through the earlier approval of the cask systems, not in the WCS CISF Application. The Technical Specification Bases provided in SAR Chapter 14 explains that the "canister designs authorized for storage at the WCS CISF requires certain limits on spent fuel parameters, including . . maximum burnup." SAR at 14-1. Similarly, the SAR states that "Fuel Cladding, including burnup and cladding temperature limits" remains unchanged from what has been previously reviewed and approved by the NRC. *Id.* at 15-3.

Petition at 67 (emphasis added).

For reasons explained in ISP's response to Proposed Contention 6,<sup>349</sup> that claim lacks support. In short, Petitioner ignores the extensive discussion of earthquakes, including consideration of induced seismicity from hydrocarbon extraction, that is included in the Application. That evaluation complies with 10 C.F.R. § 72.103, and shows that the seismic hazard at the site would not result in damage to the facility. Furthermore, the specific scenario postulated by Petitioner clearly is speculative in nature, as it requires: the presence of failed cladding caused by HBF inside an inner can, the seal-welded canister cracking caused by a fracking-induced earthquake (even though cask designs consider seismic hazards), the release of radioactive material from the canister through some unknown dispersion mechanisms, *and* the transport of that material beyond the WCS CISF to groundwater or surface water. Such a scenario–layering speculation on speculation—is not a reasonably-foreseeable one requiring analysis under NEPA.<sup>350</sup>

c. <u>Petitioner's Argument Regarding a Potential Terror Attack Lacks</u> <u>Adequate Support and Fails to Establish a Genuine, Material Dispute</u>

In her report, Dr. Bobeck states that the ER should address the "impact of a terrorist attack, for example, an aircraft striking the casks as they sit on the concrete pad at the site." As discussed in response to other proposed contentions, 352 the Commission has held that NEPA does not require analysis of the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities, and those arguments are outside the scope of this proceeding. 353 Additionally, Dr. Bobeck provides no information to suggest that such an attack is a credible

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See supra § IV.G.

See, e.g., ISFSI EP Rule, 60 Fed. Reg. at 32,431, 32,439.

Bobeck Report at 2.

<sup>&</sup>lt;sup>352</sup> *See, e.g., supra* § IV.E.2.

See Oyster Creek, CLI-07-8, 65 NRC at 128-29; see also NJDEP, 561 F.3d at 140.

event as that event is defined by the NRC, or that it would lead to the release of radioactive material.

d. <u>Petitioner Ignores Information in the SAR and ER That Demonstrates That</u> <u>a Release of Radioactive Material from the WCS CISF Is Highly Unlikely</u>

Petitioner ignores information in the SAR and ER that undermines its claim that radioactive material will be released from the WCS CISF. Specifically, the SAR and ER explain that:

- Only canisterized SNF/GTCC waste are authorized for storage at the WCS CISF. Canisters will not be opened, and neither SNF assemblies nor GTCC waste will be removed from the canisters at the CISF. Additionally, the SNF will be stored dry inside the canisters, so that no radioactive liquid is available for release.<sup>354</sup>
- There will be no liquid or process GTCC waste stored at the WCS CISF. 355
- There are no radioactive liquid wastes generated by the receipt, transfer and storage of canisterized SNF or GTCC waste at the WCS CISF. 356
- The only operation at the WCS CISF that may generate small volumes of solid waste is the possible decontamination of transportation casks, which will have no significant impact on the existing WCS licensed or permitted disposal facilities.<sup>357</sup>
- The WCS CISF will not process liquids or gases or contain, collect, store, or transport radioactive liquids. Any solid radioactive waste collected during canister transfer operations will be temporarily staged in a designated area in the Cask Handling Building until transferred to a licensed disposal facility as described in Section 6.4.<sup>358</sup>

<sup>&</sup>lt;sup>354</sup> SAR at 9-13.

<sup>355</sup> *Id.* at 3-3.

Id. at 6-3. See also id. at 9-18 ("There are no liquid or gaseous effluent releases from the WCS CISF."); 9-30 ("As described in Section 6.1.2.1, there are no radioactive liquid radioactive wastes to monitor for the WCS CISF."); Application at 5-1 ("Operation of the WCS CISF will not create any radioactive materials or result in any credible liquid or gaseous effluent release.").

<sup>357</sup> SAR at 6-8.

<sup>358</sup> *Id.* at 9-6.

- The cask storage pad is a potential source of low-level radioactivity that could enter runoff, but such an occurrence is highly unlikely. The storage system design and construction, coupled with environmental monitoring of the storage pad, make the potential for contaminant release through this system extremely low. Any potential radioactive discharges would be well below (two orders of magnitude or more) effluent discharge limits of 10 C.F.R. Part 20, Appendix B.<sup>359</sup>
- 2. <u>Petitioner Fails to Provide Sufficient Information to Establish a Genuine, Material Dispute with Regard to the Potential for Transport of Any Radioactive Release to Groundwater or Surface Water at or Near the WCS CISF Site</u>

Petitioner and Dr. Bobeck make a number of criticisms of the ER's discussion of site hydrogeologic and hydrologic conditions. As explained below, those criticisms are unfounded and, in any case, are insufficient to establish a genuine, material dispute with respect to the potential for contamination of groundwater or surface water, as analyzed in the ER.

a. <u>Petitioner's Criticisms of the ER's Discussion of the Site Geology and Hydrogeology Fail to Establish a Genuine, Material Dispute</u>

Dr. Bobeck suggests that the ER does not adequately define the geologic units present at the site or their properties and extents, including the possible presence of groundwater.<sup>360</sup> As noted in ER Section 3.3.1, ISP created two cross sections in the vicinity of the proposed CISF using boring logs (provided in ER Attachment 3-1) from previous site investigations.<sup>361</sup> ER Figure 3.3-1 shows the locations of the cross sections, which run in the North-South and East-West directions. ER Figures 3.3-2 and 3.3-3 contain the site-specific cross-sections.<sup>362</sup> Dr. Bobeck notes that while Figure 3.3-1 refers to "red beds," the cross-sections contain no such

ER at 4-31. That the Application does not consider credible a mechanism for transport of radionuclides should not be surprising at all. Indeed, the Commission reached the same conclusion in its consideration of whether to require an EPZ for away-from-reactor ISFSIs. See ISFSI EP Rule, 60 Fed. Reg. at 32,431.

Bobeck Report at 3-4.

<sup>&</sup>lt;sup>361</sup> ER at 3-8.

ER Figures 3.3-6 and 3.3-7 contain *regional* stratigraphic cross sections constructed in the vicinity of the WCS CISF site using oil and gas well logs. The locations of the cross sections are shown on the figures. These cross sections depict the major stratigraphic units that occur within about 610 meters (2,000 feet) below ground surface in the vicinity of the site.

term and refer instead to claystone, sandy gravel, gravelly sand, and caliche.<sup>363</sup> As is evident from the ER text and from the figures themselves, the term "red bed clays" is synonymous with the term "claystone." There is no material discrepancy in the ER figures cited by Dr. Bobeck.<sup>364</sup>

Dr. Bobeck also notes that SAR Figure 2-14 "indicates with certainty that the Ogallala *formation* is present at the ground surface at the WCS site." Contrary to Petitioner's belief, that statement does not establish that the Ogallala *Aquifer* is present beneath the WCS CISF site, as the terms "formation" and "aquifer" have distinct meanings and are not interchangeable. A geologic formation (or portions thereof) may not contain water or be water bearing, and therefore is not considered an aquifer.

During the licensing process for the WCS LLRW disposal facility, over 500 wells and core samples were reviewed by the State of Texas, and the State concluded that at no point does the WCS site affect the Ogallala Aquifer.<sup>367</sup> Based on those data, the Texas Water Development Board ("TWDB") re-mapped the Ogallala Aquifer to show that the Aquifer's boundary does not extend to WCS' property and to provide a more accurate depiction of the proper location of the Aquifer.<sup>368</sup> Indeed, this is evident from TWDB Report 380 (cited by Dr. Bobeck herself), which

Bobeck Report at 3.

Dr. Bobeck also notes that SAR Chapter 2, Attachment E, Section 3.1 (Geologic Conditions) and Appendix A discuss 18 boring logs installed in the WCS CISF site and surrounding area, but that the boring logs list geologic materials but not geologic units. The geologic units are shown in SAR Figures 2-11 and 2-12 and Figure 18 in SAR Attachment C.

Bobeck Report at 3.

A geologic "formation" refers to the fundamental unit in the local classification of rocks into geologic units based on similar characteristics in lithology (*i.e.*, the description of rocks on the basis of such characteristics as color, mineralogic composition, mode of deposition, and grain size). *Geologic Formation*, DEFINED TERM, https://definedterm.com/geologic\_formation (last visited Nov. 12, 2018). An "aquifer" is an underground body of porous materials, such as sand, gravel, or fractured rock, filled with water and capable of supplying useful quantities of water to a well or spring. *Aquifer*, DEFINED TERM, https://definedterm.com/aquifer (last visited Nov. 12, 2018).

See Environmental Protection, WASTE CONTROL SPECIALISTS, http://www.wcstexas.com/about-wcs/environment (last visited Nov. 12, 2018).

<sup>&</sup>lt;sup>368</sup> See id.

shows that the Ogallala Aquifer lies to the north and east of the WCS site.<sup>369</sup> In view of this fact, there is no basis for Dr. Bobeck's claim that the ER "does not identify the presence/absence of the Ogallala Formation/Ogallala Aquifer at the site, or the connectedness of the subsurface materials at the site with the Ogallala Aquifer."<sup>370</sup>

Dr. Bobeck also suggests that the ER does not adequately describe the Ogallala/Antlers/
Gatuña ("OAG") unit, including its depth and thickness and relationship to the Ogallala Aquifer
(which, as noted above, is not present beneath the WCS site).<sup>371</sup> However, the regional
stratigraphic cross sections in ER Figures 3.3-6 and 3.3-7 show the location of the OAG unit.<sup>372</sup>
Although ER Figures 3.3-2 and 3.3-3 do not refer to the OAG unit, they do show the site-specific
lithology. As the ER makes clear, there is neither an OAG "aquifer," nor numerous zones of
perched OAG water beneath the WCS CISF site. ER Section 3.4.14 states that "[t]he shallowest
water bearing zone is about 225 ft deep at the site," and that the groundwater contour map in
Figure 3.4-1 indicates that "the OAG unit is largely *unsaturated* beneath the WCS site."<sup>373</sup>

To the extent that Dr. Bobeck raises questions about potential "hydraulic connections" between different water-bearing units or aquifers underlying (or not underlying) the WCS site, she overlooks an important fact. Specifically, studies have confirmed that the upper portion of the Dockum Group (Cooper Canyon Formation) serves as an aquitard (*i.e.*, a geologic formation,

See Texas Water Development Board Report 380, at 3, 51 (July 2011), http://www.twdb.texas.gov/publications/reports/numbered\_reports/doc/R380\_AquifersofTexas.pdf?d=8218 .10000000005.

Bobeck Report at 6.

<sup>371</sup> *Id.* at 5. As explained in ER Section 3.4.14, the Ogallala, Antlers, and Gatuna Formations locally are situated in the same stratigraphic interval. Hydrogeologically, they represent a single hydrostratigraphic unit overlying the Triassic red beds. Thus, they are referred to as the OAG unit. ER at 3-24.

ER at 3-97 to 3-98.

<sup>373</sup> *Id.* at 3-24 to 3-25 (emphasis added).

usually a layer of material such as clay, that restricts the movement of groundwater)<sup>374</sup> in the regional and local study area, and that the Lower Dockum Aquifer is receiving essentially no recharge from cross-formational flow, as evidenced by the significant difference in hydraulic head between the Lower Dockum Aquifer and the Ogallala Aquifer.<sup>375</sup>

Thus, it is clear that none of Dr. Bobeck's various criticisms of the ER raises a genuine, material dispute, particularly given the nature of the stored fuel (*i.e.*, solid ceramic pellets), with the key conclusion set forth in ER Section 3.4.14: "The method of storage (dry cask), the nature of the storage casks, the extremely low permeability of the red bed clay and the depth to groundwater beneath the site preclude the possibility of groundwater contamination from the operation of the facility."<sup>376</sup>

Finally, it warrants mention that when the Texas Commission on Environmental Quality ("TCEQ") approved the license for the WCS LLRW disposal facility in 2009, it concluded that the facility posed no threat to groundwater beneath the site.<sup>377</sup> In fact, in rejecting a hearing request submitted by the Sierra Club, the TCEQ Executive Director stated:

The Executive Director does not believe that there is a likely impact on . . . health or property because of groundwater contamination. The Executive Director has determined that the license application provided adequate information on the characterization of the geology and hydrology of the proposed site and proposed design. The proposed design calls for excavation below the Ogallala-Antlers-Gatuna (OAG) formations for a disposal facility situated in the Cooper Canyon formation of the Dockum group. The Santa Rosa and Trujillo formation, regional aquifers of the Dockum group, are not likely conduits of potential contamination from the proposed disposal facilities to groundwater in Eunice. The Santa Rosa and Trujillo formations are separated from the aquitard clays of the

<sup>374</sup> Aquitard, DEFINED TERM, https://definedterm.com/aquitard (last visited Nov. 19, 2018).

<sup>&</sup>lt;sup>375</sup> ER at 3-28.

<sup>376</sup> *Id.* at 3-25.

See generally Licenses and Permits, WASTE CONTROL SPECIALISTS, http://www.wcstexas.com/facilities/licenses-permits (last visited Nov. 12, 2018).

Cooper Canyon formation above. The Santa Rosa formation is between 1,140 and 1,400 feet below the surface. The Trujillo formation is situated 600 to 700 feet below the surface.<sup>378</sup>

The TCEQ Executive Director thus concluded that "there is no likely impact of the regulated activity on . . . use of groundwater resources." 379

b. <u>Petitioner's Criticisms of the ER's Discussion of Surface Water Features</u> Fail to Establish a Genuine, Material Dispute

Dr. Bobeck also expresses the view that the ER does not discuss the impact of a release on surface water flow and its effect on surface water features, including playa basins. For example, she states that the ER does not address the impact of a release of contaminants and their surface water flow toward Monument Draw (an ephemeral stream that is the nearest surface water drainage feature, but is still located three miles west of the WCS CISF site). Dr. Bobeck also makes several references to "playa lakes" in her report, the ER does not use that term, and no such "playa lakes" exist near the WCS CISF site. Indeed, the ER explains that playas are small, internally-drained basins that "are dry most of the time." 382

Importantly, the SAR states that the WCS CISF will not process liquids or gases or contain, collect, store, or transport radioactive liquids.<sup>383</sup> Consequently, there is no potential for gaseous or liquid wastes to be created and released to the environment. As noted above, the ER indicates that the storage pad system design and construction, along with environmental

Application by Waste Control Specialists, LLC For New Radioactive Material License No. R04100, TCEQ Docket No. 2005-1994-RAW, Executive Director's Response to Hearing Requests, at 12 (Dec. 19, 2008), available at https://www.tceq.texas.gov/assets/public/comm\_exec/agendas/comm/backup/HR-RFR/2005-1994-RAW.EdR.pdf (emphasis added).

<sup>&</sup>lt;sup>379</sup> *Id*.

Bobeck Report at 7.

<sup>381</sup> *Id.* at 7, 9.

<sup>&</sup>lt;sup>382</sup> ER at 3-19.

<sup>&</sup>lt;sup>383</sup> SAR at 3-3, 9-6.

monitoring of the storage pad, combine to make the potential for contaminant release through this system extremely low.

In view of the above, Petitioner's proffered expert fails to raise any genuine, material dispute with the relevant ER discussion, which concludes that: (1) water resources at the site are virtually nonexistent; (2) there is no surface water body on the site; (3) the site region has a semi-arid climate, with low precipitation rates and minimal surface water occurrence; and (4) the potential for negative impacts on surface water resources is very low due to lack of water presence and formidable natural barriers to any surface or subsurface water occurrences.<sup>384</sup>

\* \* \*

Accordingly, Proposed Contention 10 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

# L. <u>Proposed Contention 11 (Site Selection Criteria) Is Inadmissible</u>

Proposed Contention 11 states:

Section 2.3.3 of the ER discusses 15 criteria ISP used to evaluate the suitability of the Andrews County site. These criteria were created by ISP and bear little or no relationship to any criteria in the statutes or regulations. Even the criteria that are relevant have not been adequately addressed.<sup>385</sup>

Petitioner's argument is two-fold. It first asserts that ISP's site selection criteria, themselves, are somehow deficient.<sup>386</sup> However, Petitioner fails to identify any legal requirement for a specific site-selection process, much less demonstrate how ISP's criteria purportedly fail to satisfy that unspecified requirement. Second, Petitioner attacks various

<sup>386</sup> See id. at 71, 75.

<sup>&</sup>lt;sup>384</sup> ER at 4-29 to 4-30.

Petition at 68.

statements in the ER's evaluation of the proposed site using the selection criteria.<sup>387</sup> Those attacks are conclusory and lack the requisite basis and specificity, and fail to identify any material deficiency in the ER's site selection discussion. Indeed, a contention challenging an ER's site selection analysis is material only if it alleges and demonstrates that another alternative is "obviously superior." Thus, Proposed Contention 11 should be rejected.

1. <u>Petitioner Fails to Demonstrate Any Material Defect in the ER's Site Selection Criteria</u>

As required by 10 C.F.R. § 51.45(b)(3), the ER provides an analysis of alternative sites for the proposed CISF. Specifically, Section 2.3 of the ER provides a description of the process for evaluating alternative sites, including a discussion of the Region of Interest ("ROI"), in Section 2.3.1; a description of the two-tiered screening process and the 15 criteria used to evaluate potential sites, in Section 2.3.3; detailed evaluations of those criteria for the four counties that screened into the second-tier evaluation, in Sections 2.3.4 to 2.3.7; and a summary of the alternative site comparison process, in Section 2.3.8. Although described in more detail in ER Section 2.3.3, the 15 criteria are as follows:

- 1. Political Support
- 2. Seismological and Geological Characteristics
- 3. Availability of Rail Access
- 4. Land Parcel Size
- 5. Land Availability
- 6. Utilities
- 7. Construction Labor Force
- 8. Operational Labor Force

- 9. Transport Routes
- 10. Amenities for Workforce
- 11. Environmental Protection
- 12. Discharge Routes
- 13. Proximity of Hazardous Operations/High-Risk Facilities
- 14. Ease of Decommissioning
- 15. Disposal of Low-Level Waste

<sup>&</sup>lt;sup>387</sup> See id. at 71-75.

<sup>&</sup>lt;sup>388</sup> Fla. Power & Light Co. (St. Lucie Nuclear Power Plant, Unit 2), ALAB-435, 6 NRC 541, 542-43 (1977).

In Proposed Contention 11, Petitioner alleges that the 15 criteria "bear little or no relationship to any criteria in the statutes or regulations." Conspicuously absent from the corresponding discussion, however, is mention of any specific "statute[] or regulation[]" prescribing site selection criteria. In order to be admissible, contentions must provide "a specific statement of the issue of law or fact to be raised or controverted," and "must explain, with specificity, particular . . . legal reasons requiring rejection of the contested [application]." Petitioner's failure to do so here is dispositive to the admissibility of its challenge to the criteria used by ISP. Applicant and the Board are left to guess what criteria Petitioner may intend, if any.

Moreover, Petitioner's complaints regarding the criteria are baseless and immaterial. For example, Petitioner complains that "only criteria 2, 11, 12 and 13 address the environmental impacts of the CIS project." But Petitioner identifies no legal requirement that would void those or the other criteria. To the extent Petitioner suggests the criteria improperly reflect ISP's siting preferences, it fails to explain how this alleged deficiency purportedly renders the criteria materially defective. Nor could it. The Commission has held that it is appropriate to accord *substantial weight* to the applicant's siting preferences. 392

Likewise, Petitioner makes the spurious claim that "[m]ost of these criteria involve manipulation of political or community support for the project." But Petitioner offers absolutely no corresponding support for this conjecture. Plainly contrary to Petitioner's

Petition at 68.

<sup>&</sup>lt;sup>390</sup> 10 C.F.R. § 2.309(f)(1)(i); *Millstone*, CLI-01-24, 54 NRC at 359-60 (emphasis added).

Petition at 68.

<sup>&</sup>lt;sup>392</sup> See, e.g., Hydro Res., CLI-01-4, 53 NRC at 55.

Petition at 71.

assertion, only *one* of the 15 criteria considers local support for the proposed facility.<sup>394</sup> And longstanding NRC case law demonstrates that consideration of institutional and legal obstacles to a project is an entirely appropriate site selection consideration.<sup>395</sup> At bottom, Petitioner simply fails to demonstrate that the criteria, themselves, are materially defective in any way. Thus, its complaint here fails to identify an admissible issue.

Because Petitioner's challenge to ISP's criteria fails to identify any legal basis for the contention, or otherwise provide any support, or demonstrate its materiality, it should be rejected as contrary to 10 C.F.R. §§ 2.309(f)(1)(i) and (iv)-(vi).

# 2. <u>Petitioner Fails to Demonstrate Any Material Defect in the ER's Evaluation of the Proposed Site Under the Site Selection Criteria</u>

The Commission has long held that the standard for approving a site is acceptability, not optimality.<sup>396</sup> Accordingly, a contention challenging an ER's site selection analysis is material only if it alleges and demonstrates that another alternative is "obviously superior."<sup>397</sup> The ER's site selection analysis provides ample evidence of the informed comparisons ISP made between the proposed site and individual alternatives,<sup>398</sup> and thus satisfies NEPA.<sup>399</sup> And as explained below, Petitioner's various complaints are unsupported and immaterial, and thus fail to show that the site selection discussion is deficient in any way. Nevertheless, even assuming *arguendo* that one or more of those complaints were both material and supported, Petitioner *still* fails to raise a

<sup>&</sup>lt;sup>394</sup> ER at 2-13 (Criterion 1).

<sup>&</sup>lt;sup>395</sup> See, e.g., Pub. Serv. Co. of N.H. (Seabrook Station, Units 1 & 2), ALAB-471, 7 NRC 477, 486 (1978).

<sup>&</sup>lt;sup>396</sup> Pub. Serv. Co. of N.H. (Seabrook Station, Units 1 & 2), CLI-77-8, 5 NRC 503 (1977).

<sup>&</sup>lt;sup>397</sup> *St. Lucie*, ALAB-435, 6 NRC at 542-43.

<sup>&</sup>lt;sup>398</sup> See generally, e.g., ER §§ 2.3.4 to 2.3.7.

<sup>&</sup>lt;sup>399</sup> Seabrook, ALAB-471, 7 NRC at 498.

material issue for litigation because it does not allege—much less demonstrate—that some other site is "obviously superior" to the proposed WCS CISF site.

For example, Petitioner challenges ISP's description of Andrews County as "tectonically stable." Petitioner's complaint is that "[t]his description completely ignores the earthquake information discussed above in [Proposed] Contention 6." But Petitioner offers no further explanation as to how the information it purports to incorporate by reference from another proposed contention allegedly renders the *site selection* discussion deficient. This is simply not enough for an admissible contention. 403

Moreover, Petitioner offers six topical complaints allegedly supporting its assertion that "even the criteria that are relevant have not been adequately addressed." <sup>404</sup> As explained below, these assertions are variously baseless and immaterial, and none of them raise a litigable issue.

### a. <u>Site Contamination</u>

In the ER, ISP explains that, under Criterion 11, "it is highly preferable that the site have existing, well-documented site surveys and monitoring studies for radiological, chemical, and hazardous material contamination, and that the site not be contaminated."<sup>405</sup> In its evaluation of Criterion 11 for Andrews County, ISP notes that "[n]o contamination of any kind has been detected near the proposed CISF site."<sup>406</sup> Petitioner complains that this assertion is inadequate

<sup>400</sup> Petition at 71 (citing ER § 2.3.4).

<sup>&</sup>lt;sup>401</sup> *Id*.

Indeed, Proposed Contention 6, itself, is inadmissible. See supra § IV.G.

Merely stating "a conclusion (*e.g.*, the application is 'deficient,' 'inadequate,' or 'wrong') without providing a reasoned basis or explanation for that conclusion is inadequate" to demonstrate an admissible contention. *USEC*, CLI-06-10, 63 NRC at 472.

<sup>404</sup> Petition at 68.

ER at 2-16.

<sup>406</sup> *Id.* at 2-23.

because "[t]here is nothing in the ER... to substantiate this allegation." To the contrary, the ER explains that "[t]he Waste Control Specialists site has been under a monitoring plan to detect the release of trace amounts of radiological and hazardous chemical constituents since it was permitted and licensed in 1997." Thus, Petitioner's assertion is not only unsupported, it is wrong. Petitioner further complains that this information is irrelevant because the environmental impact of the WCS CISF "is more important." But the information is, in fact, relevant to evaluation of Andrews County under Criterion 11. Moreover, the impacts of the proposed action—*i.e.*, construction and operation of the WCS CISF—are evaluated in detail in a separate section of the ER. Petitioner offers no explanation for how its assertion demonstrates some material deficiency in the site selection analysis. Nor could it. Ultimately, these unsupported and immaterial assertions do not raise an admissible issue.

# b. Floodplain Analysis

NRC regulations at 10 C.F.R. § 72.90(f) require that the WCS CISF "be sited so as to avoid to the extent possible the long-term and short-term adverse impacts associated with the occupancy and modification of floodplains." Petitioner argues that this regulation requires consideration of a 100-year floodplain.<sup>411</sup> It further alleges that "[t]he ER claims that the CIS site is not in a 500-year floodplain."<sup>412</sup> Thus, according to Petitioner, because the ER evaluated a 500-year floodplain instead of a 100-year floodplain for the proposed site, it somehow fails to

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Petition at 71.

<sup>&</sup>lt;sup>408</sup> ER at 2-23.

<sup>&</sup>lt;sup>409</sup> Petition at 71-72.

<sup>&</sup>lt;sup>410</sup> ER § 4.

Petition at 72.

<sup>&</sup>lt;sup>412</sup> *Id*.

satisfy § 72.90(f).<sup>413</sup> However, Petitioner simply misreads the ER, which clearly states that the floodplain analysis "indicates that the proposed CISF is not within the 100-year floodplain (SAR Chapter 2 Attachment B)."<sup>414</sup> Thus, its claim here is inadmissible because it is unsupported and fails to demonstrate a genuine dispute with the Application.

#### c. Climate Data

Petitioner faults the site selection discussion for failing to explain how various climate data discussed therein (*e.g.*, precipitation, wind direction and speed, and temperature) "is relevant to the environmental impacts of the CIS site and its operation." However, the ER explains that this information is relevant to *site selection* because "[t]he climate at the site supports efficient construction and operations with delays due to inclement weather being very unlikely or short and very infrequent." Moreover, the *environmental impacts of the proposed action* are found in an entirely separate section of the ER. <sup>417</sup> Petitioner fails to explain how the omission of that further discussion here somehow renders the *site selection* discussion in Section 2.3 deficient (pursuant to some unspecified requirement). Thus, Petitioner has not demonstrated the materiality of its assertion, or how it raises a genuine dispute with the Application, and fails to raise an admissible issue. <sup>418</sup>

#### d. Protected Species Discussion

Part of Criterion 11 considers whether a proposed or alternative site, as a baseline matter, contains habitat for U.S. Fish and Wildlife Service ("USFWS") federally-listed threatened or

ER at 3-20.

<sup>413</sup> *Id*.

<sup>&</sup>lt;sup>415</sup> Petition at 72-73.

ER at 2-23.

<sup>417</sup> *Id.* § 4.

USEC, CLI-06-10, 63 NRC at 472.

endangered species. Petitioner acknowledges the site selection discussion of protected species "in the area of the CIS site," but faults it for failing to "discuss the impacts of the CIS proposal" on protected species. Yet again, the environmental impacts of the proposed action are discussed in ER Chapter 4; whereas Petitioner fails to explain how the omission of that discussion here somehow renders the *site selection* discussion in Section 2.3 deficient (pursuant to some unspecified requirement). Accordingly, Petitioner has not demonstrated the materiality of its assertion, or how it raises a genuine dispute with the Application, and fails to raise an admissible issue.

#### e. Socioeconomic Data

Petitioner cites the ER's discussion of "socioeconomic data for the area of the CIS site" and claims this is ISP's "attempt to address the issue of environmental justice." In point of fact, ISP considers environmental justice ("EJ") issues throughout the ER, 424 including in Criterion 11 of the site selection discussion. Petitioner's alleged deficiency in the site selection discussion appears to be, without reference to any supporting authority, that ISP determined that it "does not need to comply" with EJ requirements. As further explained in ISP's response to Proposed Contention 15, which is incorporated by reference here as if

ER at 2-17.

Petition at 73.

<sup>421</sup> *Id.* at 72-73.

USEC, CLI-06-10, 63 NRC at 472.

Petition at 73.

See, e.g., ER § 4.11, App. A.

<sup>425</sup> *Id.* at 2-25 to 2-27.

Petition at 73.

republished in full, Petitioner's assertion is untrue.<sup>427</sup> ISP acknowledges and complies with all applicable EJ requirements.<sup>428</sup>

And as to the site selection discussion for Andrews County, under Criterion 11, it consists of six paragraphs considering socioeconomic and EJ issues. Petitioner makes no attempt to explain how ISP's consideration of EJ issues in the context of *site selection* purportedly is somehow deficient. For example, Petitioner notes that "almost all of the counties in the general area of the proposed CIS site have majority minority populations." But it offers no explanation of how ISP's selection of the proposed site—in an area with census block groups that are *not* majority minority—in any way fails to satisfy EJ requirements. Accordingly, Petitioner's unsupported and unexplained arguments as to socioeconomic data likewise fail to identify a litigable issue. Assume the site of the proposed of t

# f. Archaeological Resources

Finally, Petitioner criticizes ISP's consideration of archaeological resources in Section 3.8 of the ER.<sup>432</sup> As a preliminary matter, Petitioner provides no explanation of how any alleged omission or inadequacy in Chapter 3 could demonstrate some unspecified deficiency in the *site selection* analysis in Section 2.3. Thus, even at face value, it provides no support for Proposed Contention 11.<sup>433</sup>

429 ER at 2

See infra § IV.P.

<sup>&</sup>lt;sup>428</sup> *Id*.

ER at 2-25 to 2-27.

430 Petition at 73 (citing ER, App. A § 1.1.3).

USEC, CLI-06-10, 63 NRC at 472.

Petition at 74 (referring to ER § 3.8).

<sup>433</sup> *USEC*, CLI-06-10, 63 NRC at 472.

Moreover, Petitioner's specific complaints regarding ER Section 3.8 are immaterial and unsupported. For example, Petitioner derides ISP's field survey because the ER purportedly fails to explain "what that survey entailed or how it was actually conducted." To the contrary, ER Section 3.8.2 names the experts who conducted the study; Section 3.8.4 describes the physical extent of the survey; and Section 3.8.5 describes the survey techniques. To the extent Petitioner alleges omission of this information, it is simply unsupported; and to the extent it alleges some deficiency, it fails to explain what that deficiency may be, let alone provide any support for that unspecified alleged deficiency.

Petitioner also complains that the ER contains "no showing . . . that there was any discussion with the Texas Historical Commission [("THC")]." To the contrary, the ER explicitly describes various interactions with the THC, including its *concurrence* with the archaeological survey and corresponding conclusions explained in the ER. Thus, Petitioner's assertion is factually incorrect.

Likewise, Petitioner complains that no "credible assessment for potential deeply buried cultural deposits was conducted." But this assertion is contradicted by the ER, which explains that an initial review of various records, maps and surveys was conducted. This assessment is

434 Petition at 74.

<sup>435</sup> *Id.* at 74-75.

ER § 1.3.2.5 ("Coordination with the Texas Historical Commission (THC) . . . has been completed for the CISF"); *id.* at 4-45 ("No impacts to archeological sites would occur as a result of the proposed project . . . . No further work was recommended for archeological resources, and the THC concurred on July 29, 2015"); *id.* at 4-46 ("On June 1, 2015, THC concurred with the recommendation that no further survey is required for historic resources and that the project may proceed"); *id.* 5-5 ("The THC . . . concurred that further cultural resource investigations are not warranted prior to construction").

Petition at 75.

E.g., ER at 3-59 ("A data search of the Texas Archeological Sites Atlas maintained by the THC and the Texas Archeological Research Laboratory (TARL) was conducted in order to identify any previously recorded cemeteries, historical markers, NRHP properties or districts, SALs, archeological sites, and previous surveys in the archeological APE"); *id.* at 2-51 ("Soils information for the project area was

fully consistent with THC's Archaeological Survey Standards, cited by Petitioner, <sup>439</sup> which only recommend "deeper subsurface investigations" if the initial documentary review reveals a "potential for deeply buried cultural deposits." <sup>440</sup> Because "[n]o records of previously documented resources were found" <sup>441</sup> during ISP's initial review, no further inquiry was necessary pursuant to the THC Survey Standards. <sup>442</sup> Moreover, to the extent Petitioner purports to challenge the sufficiency of ISP's assessment of potential deeply buried cultural deposits, it only offers the general assertion that the assessment was not "credible," but utterly fails to identify any specific alleged deficiency. Such unexplained conclusory statements simply are not enough to demonstrate an admissible contention. <sup>443</sup> Accordingly, these allegations do not raise an admissible issue, and do not provide support for Proposed Contention 11.

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Accordingly, Proposed Contention 11 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(i) and (iv)-(vi).

#### M. Proposed Contention 12 (BWR Fuel Transportation) Is Inadmissible

Proposed Contention 12 states:

The minimum cooling time for transportation of fuel from a boiling water reactor (BWR) in a NUHOMS MP-187 cask is greater than calculated by TN Americas, the manufacturer of the cask. This implies that the cladding of BWR fuel will exceed allowable limits

obtained from the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) Web Soil Survey").

Petition at 75 (citing Texas Historical Commission, Archaeological Survey Standards for Texas (undated), available at http://counciloftexasarchaeologists.org/wordpress/wp-content/uploads/surveystandards.pdf ("Survey Standards")).

Survey Standards ¶ 4.

ER at 3-59.

See also generally id. at 8-2 ("In the unlikely event that buried cultural resource sites or artifacts are encountered during construction activities, the significance and potential for adverse impacts would be evaluated at that time").

<sup>&</sup>lt;sup>443</sup> *USEC*, CLI-06-10, 63 NRC at 472.

and will degrade. Cladding is an issue that must be adequately addressed.<sup>444</sup>

Although it is not completely clear, Petitioner appears to allege in Proposed Contention 12 that the ER must consider the impacts from the potential that BWR fuel transported to the WCS CISF in a NUHOMS®-MP187 cask system will overheat and degrade during shipment to the WCS CISF. This damage would result, according to Petitioner, because BWR fuel loaded into the NUHOMS®-MP187 transportation cask in accordance with its NRC-issued certificate of compliance ("CoC") allegedly would not be sufficiently cooled, and the high heat during transportation would cause fuel cladding failures. Petitioner therefore concludes that the evaluation of radiation risks from transportation in ER Section 4.2 and Attachment 4-1 is inadequate.

Proposed Contention 12 is inadmissible for multiple reasons. Most problematic for Petitioner is that the CoC for the NUHOMS®-MP187 does not even *allow* the loading of BWR fuel for transportation, so Petitioner's arguments do not make sense, much less raise a genuine dispute with the ER.<sup>448</sup> Additionally, Proposed Contention 12 is outside the scope of this proceeding because ISP is not seeking approval to transport BWR fuel—or any other NRC-regulated material—to the WCS CISF.

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Petition at 75.

See id. at 75-76.

<sup>446</sup> *Id.* at 77.

<sup>447</sup> *Id.* at 77-78.

See Certificate of Compliance for Radioactive Materials Licenses No. 9255, Rev. 14, NUHOMS MP187 Multi-Purpose Cask, Condition 5(b)(1)(c) (Nov. 28, 2018) (ML18330A248) ("Certificate of Compliance No. 9255").

1. The Certificate of Compliance for the NUHOMS®- MP187 Does Not Authorize Transportation of BWR Fuel

The current revision to the NUHOMS®-MP187 transportation package Certificate of Compliance No. 9255 is Revision 14.<sup>449</sup> As explained in Revision 14, the NUHOMS®-MP187 transportation package is a multipurpose system that consists of "an outer cask, into which one of the four different dry shielded canisters (DSC) is placed."<sup>450</sup> The CoC also specifies the characteristics of SNF that can be transported in Condition 5(b). Specifically, Certificate of Compliance No. 9255 states that the fuel assemblies approved to be shipped in the NUHOMS®-MP187 are restricted to pressurized water reactor ("PWR") fuel:

- (c) (i) The fuel authorized for shipment in the NUHOMS®-MP187 FO, FC, or FF DSC is [Babcock & Wilcox] 15x15 uranium oxide *PWR fuel assemblies* with a maximum initial pellet enrichment of 3.43% by weight of U235, and a total uranium content not to exceed 466 Kg per assembly.
- (ii) The fuel authorized for shipment in the NUHOMS®-MP187 24PT1-DSC is [Westinghouse] 14x14 stainless steel clad (SC) or zircaloy clad mixed oxide (MOX) *PWR fuel assemblies* as described in Table 2.<sup>451</sup>

Proposed Contention 12 and Exhibit 4 prepared by Dr. Marvin Resnikoff both explicitly discuss alleged concerns with the transportation of BWR fuel in the NUHOMS®-MP187 multipurpose canister. However, the NUHOMS®-MP187 CoC issued by the NRC does not

Certificate of Compliance No. 9255, Condition 5(a)(2).

<sup>449</sup> Certificate of Compliance No. 9255.

Certificate of Compliance No. 9255, Condition 5(b)(1)(c) (Pages 4-5) (emphasis added).

Petition at 76-77, Ex. 4. It appears that Petitioner may be challenging the wrong NUHOMS® transportation cask, as Exhibits 5 and 6 appear to be from the NUHOMS®-MP197HB cask from the MP197 Safety Analysis Report. Nevertheless, Petitioner only mentions the NUHOMS®-MP187 in Proposed Contention 12, and ISP has no obligation to research or correct Petitioner's filing. "[I]t is Petitioner['s] responsibility . . . to formulate contentions and to provide 'the necessary information to satisfy the basis requirement' for admission." Palisades, CLI-15-23, 82 NRC at 325. Further, as discussed below, even if Petitioner's challenge is to the cooling time for use of the NUHOMS®-MP197HB, it is still outside the scope of this proceeding.

authorize the transportation of BWR fuel. 453 Any NRC licensee wishing to transport SNF pursuant to the general license in 10 C.F.R. § 71.17 must comply with the conditions in the CoC. As a result, no NRC licensee could load BWR fuel to a NUHOMS®-MP187 system for transport to the WCS CISF. Additionally, SAR Table 1-1 (Storage Systems at the WCS CISF) restricts the use of the NUHOMS®-MP187 cask system to canisters that are limited to PWR fuel and GTCC waste, not BWR fuel. Thus, Petitioner's concerns about the potential for damage to BWR fuel in a NUHOMS®-MP187 system are illogical. More importantly, they are immaterial, unsupported, and fail to raise a genuine dispute with the Application, and should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

# 2. Proposed Contention 12 Is Outside the Scope of the Proceeding

Proposed Contention 12 describes Petitioner's concern that BWR fuel, even if it complied with the minimum cooling time restrictions of the CoC, would still be loaded too soon for safe transport. Proposed Contention 12 expressly states that "the minimum cooling time . . . is greater than calculated by TN Americas." In short, Petitioner asserts that the cooling time restrictions reviewed and approved by NRC in the NUHOMS®-MP187 CoC are wrong. However, Petitioner's challenge to that CoC (which was approved as part of a separate proceeding) is far beyond the scope of this proceeding, which involves only the Application submitted by ISP, under Part 72, to "store spent nuclear fuel and reactor-related Greater Than Class C (GTCC)" waste at the WCS CISF. Because the scope of the proceeding is defined by

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Certificate of Compliance No. 9255, Condition 5(b)(1)(c) (Pages 4-5) (authorizing only transportation of PWR fuel).

<sup>454</sup> Petition at 75.

<sup>455</sup> Application at 1-1.

the Notice of Opportunity for Hearing, which does not include adjudication of Certificate of Compliance No. 9255, Petitioner's challenge is beyond the scope of the proceeding.

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Proposed Contention 12 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

## N. Proposed Contention 13 (Important Species) Is Inadmissible

Proposed Contention 13 states:

The ER states that two species of concern, the Texas horned lizard and the dunes sagebrush lizard, have been seen at the ISP site or may be present. But there is no discussion of any studies or surveys to determine if the species are present and the impact of the project on those species. Therefore, the ER is inadequate in describing the affected environment.<sup>456</sup>

Although it acknowledges that the ER references both species cited in the contention, Petitioner alleges that "[w]ith no factual support, ER[] 4.5.10, claims that the CIS project will have no impact on the species." Petitioner also asserts that "there does not appear to have been an adequate survey to determine if the species are resident in the CIS[F] area" and the surveys cited in ER Section 3.4.16 "are not described well enough to allow members of the public to access the sources."

As discussed below, Proposed Contention 13 is inadmissible for multiple reasons. First, Petitioner fails to specify how the ER's detailed discussions of the Dunes Sagebrush Lizard (*Sceloporus arenicolus*) and the Texas Horned Lizard (*Phyrnosoma cornutum*) are "inadequate" or do not comply with NRC regulations or NRC guidance. Second, the ER's conclusion in

Id. at 79.

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<sup>456</sup> Petition at 78.

<sup>457</sup> *Id.* 

Section 4.5.10 that there will be no substantial impacts from the WCS CISF on either species, or any important species in general, is fully supported by the information in Chapters 3 and 4 of the ER, which has not been challenged by Petitioner with the requisite basis and specificity. Finally, the ER's description and summary of the several ecological surveys conducted in the area fully complies with NRC regulations and guidance. Accordingly, Proposed Contention 13 must be rejected for failing to satisfy 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

1. The ER Complies Fully with NRC Regulations and Guidance in Considering the Impact of the WCS CISF on Important Species

The NRC's regulations in 10 C.F.R. § 72.34 require that ISP submit an ER that complies with the requirements of 10 C.F.R. Part 51. Per Part 51, the ER must contain a baseline description of the environment that would be affected by the proposed construction and operation of the CISF, a description of the impact of the CISF on the environment, and a description of any adverse environmental effects which cannot be avoided. NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, provides guidance to the NRC Staff in reviewing applications for construction of ISFSIs, as well as guidance to applicants on the format and technical content of an ER.

With respect to the issues raised in Proposed Contention 13, NUREG-1748 directs applicants to provide a "[1]ist and description of important species and their spatial and temporal distributions" along with other information. NUREG-1748 defines the term "important species" as a species "[1]isted as a threatened, endangered, or other species of concern *by the State or States* in which the proposed facilities are located." NUREG-1748 also states that

462 *Id.* at 5-10, tbl. 2 (emphasis added).

<sup>&</sup>lt;sup>459</sup> 10 C.F.R. § 51.45(b).

NUREG-1748 at 6-1 to 6-35.

<sup>461</sup> *Id.* § 6.3.5.

<sup>1</sup>a. § 0.5.5

applications should evaluate whether any of the proposed activities are expected to impact communities or habitats that have been defined as rare or unique or that support threatened, endangered, or important species.<sup>463</sup>

The ER complies with these regulations and guidance. As an initial matter, neither the Dunes Sagebrush Lizard nor the Texas Horned Lizard are threatened or endangered species under federal law, 464 and only the Texas Horned Lizard is considered threatened under Texas law. 465

ER Section 3.5, Ecological Resources, contains an extensive description of the terrestrial communities of the proposed CISF area prior to any disturbances associated with construction or operation of the facility. ER Section 3.5.16 lists the ecological studies of the area conducted in 1997, 2004, 2007, and 2008. Moreover, the ER includes a fulsome discussion of the presence, or potential presence, of habitat for and populations of important species, including the Texas Horned Lizard, and other terrestrial species, including the Dunes Sagebrush Lizard. Specifically, ER Section 3.5.2 lists the Dunes Sagebrush Lizard and Texas Horned Lizard as species that occur within the environmental study area. ER Section 3.5.4 reports that the "Texas Horned Lizard has been reported as present on the property controlled by Waste Control Specialists by

<sup>463</sup> *Id.* § 6.4.5.

ER § 3.5.4, Table 3.5-1; see also Texas Parks and Wildlife, "Federal and Stated Listed Amphibians and Reptiles in Texas" (listing only Texas Horned Lizard as threatened under Texas law and not listing Dunes Sagebrush Lizard), available at https://tpwd.texas.gov/huntwild/wild/wildlife\_diversity/nongame/listed-species/amphibians-reptiles.phtml (last visited Nov. 21, 2018); see also USFWS, Environmental Conservation Online System, Species Profile for Dunes Sagebrush Lizard, available at https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=C03J (last visited Nov. 21, 2018) (indicating Dunes Sagebrush Lizard is not threatened or endangered) ("FWS Dunes Sagebrush Lizard Profile") and USFWS, Environmental Conservation Online System, Species Profile for Texas Horned Lizard, available at https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=7732 (last visited Nov. 21, 2018) (same for Texas Horned Lizard) ("FWS Texas Horned Lizard Profile").

<sup>&</sup>lt;sup>465</sup> ER § 3.5.4.

previous surveys . . . and it is likely that the species is widespread in the region, as reported by previous investigators."

Similarly, ER Section 3.5.3.2 states that the Dunes Sagebrush Lizard is potentially present in the area, but Section 3.5.4 notes that the nearest location where a juvenile Dunes Sagebrush Lizard was found was 2.5 miles southeast of the WCS CISF site, and Section 3.5.6 concludes that the WCS CISF site does not support Dunes Sagebrush Lizard habitat. And Attachment 3-3 to the ER contains a recent letter from the USFWS listing five threatened or endangered species as present or potentially present at the WCS CISF site. Importantly, the USFWS Letter did not list either the Texas Horned Lizard or the Dunes Sagebrush Lizard as threatened or endangered under federal law and did not identify any critical habitat concerns for any federally-listed species within the WCS CISF site.

ER Section 4.5, Ecological Resource Impacts, then discusses the potential impacts from the construction and operation of the WCS CISF on these species. As explained in ER Section 4.5.8, no communities or habitats defined as rare or unique or that support threatened and endangered species have been identified in the proposed area of the WCS CISF. Nevertheless, ER Section 4.5.8 specifically mentions that the Texas Horned Lizard may be impacted by construction and operation of the WCS CISF because "the species has adapted to areas of human activities such as overgrazed pastures, plowed fields, and fencerows" and thereby may be present, currently or in the future, at the WCS CISF.

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Id., Attach. 3-3, Letter from USFWS, "List of threatened and endangered species that may occur in your proposed project location and/or may be affected by your proposed project" at 3 (Apr. 14, 2015) ("USFWS Letter"). Subsequent to the date of the USFWS Letter, the USFWS delisted one of the species identified in the letter, the Lesser Prairie Chicken. Final Rule, Endangered and Threatened Wildlife and Plants; Lesser Prairie-Chicken Removed from the List of Endangered and Threatened Wildlife, 81 Fed. Reg. 47,047 (July 20, 2016).

See USFWS Letter.

With respect to the Dunes Sagebrush Lizard, although ER Section 4.5.8 identifies the presence of dune formations adjacent to the proposed area of disturbance with the potential to provide habitat for the Dunes Sagebrush Lizard, it identifies no such population at the site.

Based on referenced ecological surveys, ER Section 4.5.8 states that the closest Dunes Sagebrush Lizard population was three miles north of the National Enrichment Facility site, 468 and areas to the west, south, and east of the site do not appear to have any suitable habitat for the Dunes Sagebrush Lizard within 10 to 20 miles. Those studies also conclude there are several thousand acres of sand dune formations suitable for Dunes Sagebrush Lizard populations nearby that would not be impacted by the project. For both species, ER Section 4.5.4 concludes that "the ecological impacts of this land disturbance are expected to be small given the CISF area size, especially in relation to the vast amount of uninhabited and undisturbed land found throughout the region." "469

Petitioner provides no alleged facts or expert opinions to support its assertion that the ER's fulsome discussion regarding the Texas Horned Lizard and Dunes Sagebrush Lizard is somehow inadequate. Aside from briefly mentioning ER Sections 3.5.2 and 3.5.4, Petitioner does not acknowledge, much less make any effort to demonstrate with any specificity, how the ER fails to comply with applicable NRC regulations and guidance. Petitioner has failed to satisfy its burden to explain how the ER does not comply with NEPA or NRC regulations.

Accordingly, Proposed Contention 13 is inadmissible as unsupported, and for failing to raise a

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The National Enrichment Facility is 1 mile southwest of the WCS CISF site. ER § 2.2.1.

<sup>469</sup> *Id.* § 4.5.4 (emphasis added).

Contrary to Proposed Contention 13, the ER does not conclude that there will be "no impact" on either species. Petition at 78. Rather, ER Section 4.5.10 concludes that the impact on the Texas Horned Lizard, which is "highly adaptable," will be small.

Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170; *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003).

genuine dispute with the ER,  $^{472}$  and therefore should be rejected as contrary to 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

# 2. The ER Adequately Describes the Referenced Environmental Studies

Petitioner argues that the surveys referenced in the ER in "Section 3.4.16[<sup>473</sup>] . . . are not described well enough" and therefore "the public, and the NRC, are left with only unsupported statements in the ER." While it is not entirely clear, Petitioner appears to imply that the referenced studies must be available to the public for the ER to be sufficient. Petitioner also argues vaguely that there "does not appear to have been an adequate survey" for the two species. 475

Petitioner's assertion that the environmental studies relied upon in an ER must be publicly available is not supported by NRC precedent or guidance. In preparing the ER, ISP's obligation is to "present a detailed and thorough description of each affected resource for evaluation of the potential impacts to the environment. . . . This is consistent with one of the goals of NEPA, which is to concentrate on issues significant to the proposed action and their potential environmental impacts." Thus, the ER must—and does—provide a full description of the affected environment, including the potential presence of important species, and then discusses the potential impacts on the affected environment. Petitioner cites to no requirement that the ecological surveys referenced and summarized in the ER all must be publicly available.

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<sup>472</sup> Summer, CLI-10-1, 71 NRC at 21-22.

This citation appears to be in error. The ER does not contain a Section 3.4.16. ER Section 3.5.16 contains the list of ecological studies.

Petition at 79.

<sup>475</sup> *Id*.

<sup>&</sup>lt;sup>476</sup> NUREG-1748 at 6-1.

<sup>&</sup>lt;sup>477</sup> 10 C.F.R. § 51.45(b)(1); see also NUREG-1748 §§ 6.3.5, 6.4.5.

And Petitioner provides no basis to doubt the accuracy of the discussion of these species in the ER.

To the extent Proposed Contention 13 claims there has been no "adequate survey" for the referenced species, <sup>478</sup> Petitioner points to no rule, regulation, or guidance that would require ISP to conduct any additional studies. Nor could it, as the Commission has recently clarified that NEPA does not require "virtually infinite study" of a site's environment such as the creation of new studies if existing studies are adequate. Outside of this one phrase alleging that the surveys are vaguely "inadequate," Petitioner has not supported its claims with any factual or expert support, and such conclusory statements cannot provide a basis for the contention. <sup>480</sup>

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Accordingly, Proposed Contention 13 should be rejected pursuant to 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

# O. <u>Proposed Contention 14 (Container Licensing Period) Is Inadmissible</u>

Proposed Contention 14 states:

The containers in which the waste will be transported to and stored at the ISP site are licensed for a period of 20 years. ISP hopes to renew the license for an additional 40 years, and then apparently hoping [sic] for additional relicensing to the projected 100-year life of the CIS facility. However, many of the containers will already have been in service for years prior to being shipped to the ISP CIS facility. Furthermore, the Continued Storage Rule assumes that the spent fuel will be transferred to new containers after 100 years. ISP's proposal may present an unacceptable danger of radioactive

Petition at 79.

See Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 315 (2010). An EIS is not intended to be a "'research document,' reflecting the frontiers of scientific methodology, studies, and data." *Id.* Moreover, the Commission has noted that "while there will always be more data that could be gathered, agencies 'must have some discretion to draw the line and move forward with decisionmaking." *Id.* (internal quotation marks and citations omitted).

<sup>&</sup>lt;sup>480</sup> *USEC*, CLI-06-10, 63 NRC at 472.

release. Therefore, the ER must examine the environmental impact of the containers beyond their 20-year licensing period. 481

Proposed Contention 14's principal concern appears to claim that the ER is insufficient because ISP plans to seek, in accordance with NRC's regulations, renewal of canisters stored at the WCS CISF based on an Aging Management Program ("AMP"), and that such efforts somehow will not eliminate the risk of radiological releases from dry canister storage systems. Petitioner further alleges, as it also does in Proposed Contention 5, that the ER is insufficient because it fails to consider the potential impacts from indefinite storage assuming the WCS CISF becomes a *de facto* repository. Petitioner also alleges that ISP cannot rely upon the CSR because the CSR GEIS assumed that there would be a DTS available to retrieve waste from casks for inspection and repackaging, and the WCS CISF Application does not include plans for a DTS. Petitioner therefore asserts that ISP will be unable to address any potential leaks or cracks in storage canisters at the WCS CISF.

None of Petitioner's arguments supports admission of Proposed Contention 14. To the extent Proposed Contention 14 asserts that the ER must consider the impact of indefinite storage at the WCS CISF, it is barred by the CSR (10 C.F.R. § 51.23). Similarly, Petitioner's challenge to ISP's planned use of an AMP to support SNF storage cask renewal is a challenge to 10 C.F.R. § 72.240—NRC's regulation governing cask renewals. Finally, Petitioner asserts that the Application is inadequate because "[n]either ISP nor the source of the waste has a plan in

Petition at 79.

<sup>482</sup> *Id.* at 81.

<sup>&</sup>lt;sup>483</sup> *Id.* 

<sup>&</sup>lt;sup>484</sup> *Id*.

<sup>485</sup> *Id.* at 81-82.

See supra § IV.F.

place"<sup>487</sup> to address canisters that are leaking or damaged. However, it has not put forth any evidence suggesting that a radioactive release to the environment caused by damage to a dry cask storage system is a realistic possibility during the proposed term of the WCS CISF license; and it overlooks or ignores information in the Application that discusses precisely how ISP would address receipt of any potentially damaged dry cask storage canisters. Petitioner has thus not demonstrated a genuine dispute with the Application nor has it provided support for its claims, and Proposed Contention 14 should be dismissed pursuant to 10 C.F.R. §§ 2.309(f)(1)(iii), (v), and (vi).

## 1. Proposed Contention 14 Is Barred by the CSR

Proposed Contention 14 alleges that "the ER states that the waste will be stored at the CIS facility until a permanent repository is found, but in fact, [sic] there may never be a permanent repository, so the cask systems to be used at the ISP facility must be analyzed for the possibility of indefinite storage." Petitioner purports to rely upon *New York v. NRC I* to argue that the ER must consider this possibility. This is a direct and impermissible challenge to the CSR, which states in 10 C.F.R. § 51.23(a) that no such analysis need be included in an ER that falls under 10 C.F.R. § 51.61, such as ISP's. Thus, to the extent it asserts the dry cask storage containers to be used at the facility must be evaluated for indefinite storage, Proposed Contention 14 is inadmissible for the same reasons as discussed in ISP's response to Proposed Contention 5.490

Petition at 82.

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<sup>488</sup> *Id.* at 80.

<sup>489</sup> *Id.* at 81.

See supra § IV.F.

# 2. The ER and SAR Appropriately Credit AMPs

Petitioner next observes that, although the initial term of the CoCs for the dry cask storage canisters to be stored at the WCS CISF is 20 years, and the SAR states that the CoCs may be renewed for a period of up to 40 years, the total term of these licenses is less than the 100-year projected life of the WCS CISF. <sup>491</sup> Petitioner asserts that "[n]either the ER nor the SAR adequately discuss how the proposed relicensing based on an Aging Management Program can be assured."

The NRC issues CoCs for dry cask storage systems pursuant to 10 C.F.R. Part 72. And 10 C.F.R. § 72.240 specifically allows a certificate holder or licensee to "apply for renewal of the design of a spent fuel storage cask for a term not to exceed 40 years." Per that same regulation, a renewal application must include "time-limited aging analyses that demonstrate that structures, systems, and components important to safety will continue to perform their intended function for the requested period of extended operation." Further, the application must contain a "description of the AMP for management of issues associated with aging that could adversely affect structures, systems, and components important to safety."

The NRC is authorized to renew a CoC if "the application includes a demonstration that the storage of spent fuel has not, in a significant manner, adversely affected structures, systems, and components important to safety."<sup>495</sup> In approving the renewal of a design of a SNF storage cask, the "NRC may revise the [CoC] to include terms, conditions, and specifications that will

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Petition at 80.

<sup>492</sup> *Id.* at 81.

<sup>&</sup>lt;sup>493</sup> 10 C.F.R. § 72.240(c)(2).

<sup>&</sup>lt;sup>494</sup> 10 C.F.R. § 72.240(c)(3).

<sup>&</sup>lt;sup>495</sup> 10 C.F.R. § 72.240(d).

ensure the safe operation of the cask during the renewal term, including but not limited to terms, conditions, and specifications that will require the implementation of an AMP."<sup>496</sup> Nothing in 10 C.F.R. § 72.240 restricts an applicant from filing for a subsequent renewal.

ISP fully plans to implement such AMPs upon renewal of a CoC. In fact, the Application identifies Proposed License Condition 20 to implement AMPs for the NUHOMS® SNF storage canisters and NAC systems. And, as discussed above, the NRC is prohibited by 10 C.F.R. § 72.240(d) from issuing a renewal unless the AMP and time-limited aging analysis demonstrate that there would be continued safe operation of the cask during the renewal term.

Petitioner does not address these NRC's regulations or the proposed license condition regarding implementation of AMPs. Petitioner thus has failed to demonstrate a genuine dispute with the Application on a material issue and Proposed Contention 14 should be rejected. To the extent that Petitioner argues that the process of renewing a CoC in accordance with NRC regulations is insufficient to assure the safety of a dry canister storage system, it is a direct challenge to the NRC's Part 72 regulations, contrary to 10 C.F.R. § 2.335.

3. Petitioner Has Not Demonstrated a Genuine Dispute with the Application That Would Suggest Leaking or Damaged Canisters Would Be Present at the WCS CISF

Although Petitioner does not clearly describe how the ER or SAR is allegedly deficient, Petitioner ultimately asserts that the Application's failure to (1) include a DTS in the proposed design of the WCS CISF, and (2) specify how it would address any damaged storage system, means the ER has not described all of the potential radiological impacts.<sup>499</sup> Petitioner also

<sup>&</sup>lt;sup>496</sup> 10 C.F.R. § 72.240(e).

<sup>&</sup>lt;sup>497</sup> Application, Attach. A at 3 (Proposed License Condition 20).

<sup>498</sup> Oconee, CLI-99-11, 49 NRC at 333-34.

<sup>&</sup>lt;sup>499</sup> Petition at 82-83.

asserts, without citation to any facts or expert opinions, that "[t]he problem is that the canisters to be used at the ISP facility cannot be inspected, repaired or repackaged."500

Contrary to its claim that the "canisters to be used at the ISP facility cannot be inspected," Petitioner itself cites to SAR Sections 4.4 and 4.5 which discuss the precise methods by which ISP plans to inspect the storage systems delivered to the site before installing them in the WCS CISF. 501 These sections describe ISP's implementation of the "start clean/stay clean" policy whereby SNF is "sealed by welding at the originating nuclear power plants," 502 and the externals are then "surveyed and decontaminated, as necessary, before the cask leaves the originating site for transport to the WCS CISF."503 Once a canister arrives at the WCS CISF, ISP will inspect each canister by conducting an evacuated volume helium leak test "as [a] prudent measure[] to confirm that a canister remains able to perform its safety function."504

The SAR includes fulsome discussions of the process to inspect all dry cask storage systems prior to installation at the WCS CISF for each type of system that will be utilized at the WCS CISF.<sup>505</sup> Petitioner does not acknowledge, much less dispute, the SAR's discussion of this process, and has therefore failed to raise a genuine dispute with the Application.<sup>506</sup>

In responding to a similar contention in the *PFS* proceeding, the Commission noted that there were only three ways that a canister could be damaged: (1) if the canister left the originating reactor in a damaged condition, (2) became damaged during transportation, or

Id.

<sup>500</sup> *Id.* at 82.

<sup>501</sup> Id. (citing SAR §§ 4.4.1. 4.4.1.1, 4.5.1, and 4.5.5).

<sup>502</sup> SAR § 4.4.1.1.

<sup>503</sup> *Id.* § 4.4.1.

<sup>504</sup> *Id.* § 5.1.3.1.

<sup>505</sup> 

Millstone, CLI-01-24, 54 NRC at 358. 506

(3) was damaged at the CISF.<sup>507</sup> The Commission, however, "determined generically that accidental canister breach is not a credible scenario."<sup>508</sup> This is because licensees loading fuel into a dry canister storage system are required to have in place and comply with a Quality Assurance Program, and would have to violate that program in loading a defective canister.<sup>509</sup> Petitioner's vague assertions to the contrary are unsupported and must be rejected on that basis alone.<sup>510</sup>

Petitioner further suggests that leaking or damaged canisters cannot be returned to the title holder because "[1]eaking and cracking containers are not approved for transport" and cites to 10 C.F.R. § 71.44 for this requirement.<sup>511</sup> As an initial matter, the NRC has not promulgated a regulation 10 C.F.R. § 71.44.

And Petitioner has not credibly alleged that canisters can somehow be damaged while in storage at the WCS CISF. SAR Section 11.5, Protection of Stored Materials from Degradation, states that "canister materials for the authorized design were selected such that degradation is not expected during normal conditions of . . . the storage period at the WCS CISF." And SAR Section 12.2, Accidents, concludes that there are no credible design basis accident scenarios that would damage a canister and lead to radiological consequences at the WCS CISF. Thus, there is no credible need to return canisters damaged during storage. Petitioner does not acknowledge, much less dispute, these conclusions in the SAR. Accordingly, Petitioner has not demonstrated a genuine dispute as required by 10 C.F.R. § 2.309(f)(1)(vi).

Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 136-37 (2004) (citing ISFSI EP Rule, 60 Fed. Reg. at 32,438).

<sup>&</sup>lt;sup>508</sup> *PFS*, CLI-04-22, 60 NRC at 137 (citing ISFSI EP Rule, 60 Fed. Reg. 32, 438).

<sup>&</sup>lt;sup>509</sup> *PFS*, CLI-04-22, 60 NRC at 138.

<sup>&</sup>lt;sup>510</sup> *Turkey Point*, LBP-01-6, 53 NRC at 159-60.

Petition at 82.

Furthermore, to the extent Proposed Contention 14 vaguely asserts that cracks will somehow develop in canisters and need to be addressed during storage, Petitioner has not provided sufficient support. Nor does it address or dispute the provisions of ISP's Application that state that such damage would not occur. Specifically, SAR Section 5.1.1 states that "ISP will verify that canisters shipped to the WCS CISF comply with the terms, conditions of use, and technical specifications of" the dry cask storage systems that will be deployed at the WCS CISF. And the SAR explains that, while in storage, the canisters will be appropriately surveilled, in accordance with the WCS CISF technical specifications. Petitioner has not explained how compliance with these provisions would allow cracking to occur, much less how the ER is inadequate. Petitioner has therefore failed to specify how precisely the Application is deficient and Proposed Contention 14 should be dismissed. 514

Petitioner also cites to a report issued by the U.S. Nuclear Waste Technical Review Board to argue that "[t]here is no plan in place to prevent or stop cracks and leaks, repair cracks, or maintain and monitor the fuel and its containment in order to prevent leaks, explosions, or criticalities." But this report is specific to the performance monitoring and retrievability of a *geologic repository*. The report says nothing about an ISFSI or a CISF, and Petitioner does not explain how the report is applicable to such facilities. Petitioner's citation to this report thus fails to provide adequate support or raise a genuine dispute with the Application.

SAR § 5.1.1; *see also id.* § 11.5 (providing discussion of method ISP will use to confirm compliance with regulatory requirements of systems loaded at originating facility).

<sup>&</sup>lt;sup>513</sup> SAR § 5.1.3.2.

<sup>514</sup> Millstone, CLI-01-24, 54 NRC at 358.

Petition at 82.

U.S. Nuclear Waste Technical Review Board, "Geologic Repositories: Performance Monitoring and Retrievability of Emplaced High-Level Radioactive Waste and Spent Nuclear Fuel" (May 2018), *available at* https://www.nwtrb.gov/docs/default-source/reports/nwtrb\_perfmonitoring.pdf?sfvrsn=6).

Finally, to the extent it alleges that a DTS is required at the WCS CISF,<sup>517</sup> Petitioner provides no factual or legal support for such a requirement. Such conclusory statements cannot provide a basis for admission of the contention.<sup>518</sup> Moreover, as discussed above, ISP is not seeking authority for repackaging at the WCS CISF because there is no credible scenario in which the canister will become damaged during storage. Proposed Contention 14 thus fails to demonstrate a genuine dispute with the Application.

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Accordingly, Proposed Contention 14 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(iii), (v), and (vi).

## P. Proposed Contention 15 (Environmental Justice) Is Inadmissible

Proposed Contention 15 states:

The ER for the ISP CIS facility does not adequately investigate or analyze the impact of the CIS facility on minority and low income communities. Executive Order [("E.O.")] 12898 requires that the NEPA process include a discussion and analysis of the environmental justice [("EJ")] impacts of the proposed action. 519

The NRC's NEPA regulations require that ISP's ER evaluate alternatives to the proposed action and identify any disproportionately high and adverse impacts of the proposed action on low-income and minority populations. As explained below, the ER fully satisfies these requirements, and Proposed Contention 15 fails to identify any material deficiency therein. Further, the contention fails even to *plead* any alleged non-compliance with NEPA. The Commission has cautioned that such an approach *per se* is insufficient to identify a litigable EJ

<sup>517</sup> See Petition at 81.

<sup>&</sup>lt;sup>518</sup> *USEC*, CLI-06-10, 63 NRC at 472.

Petition at 83.

<sup>&</sup>lt;sup>520</sup> See generally 10 C.F.R. §§ 72.34, 51.61, 51.45.

issue in an adjudicatory proceeding.<sup>521</sup> Moreover, Petitioner's various criticisms of the ER are unsupported, immaterial, lack an appropriate basis, are outside the scope of this proceeding, and otherwise fail to dispute the Application. Accordingly, Proposed Contention 15 should be rejected on multiple grounds.

## 1. The ER Fully Complies with Applicable EJ Requirements

NEPA has long required federal agencies to consider the environmental impacts, including socioeconomic impacts, of their proposed actions. In 1994, President Clinton issued E.O. 12,898, directing each executive branch agency to identify and address—through its NEPA review process—"disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations." E.O. 12,898 did not add any new requirements to NEPA; and, by its own terms, did not create a right of judicial review for alleged noncompliance. Rather, its goal was to heighten agency focus on the topic of EJ within the existing NEPA framework. The NRC, an independent agency not otherwise bound by the E.O., voluntarily elected to "endeavor to carry out the measures set forth in the E.O.," but only to the "extent required by NEPA." S25

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Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions; Final Policy Statement, 69 Fed. Reg. 52,040, 52,041, 52,043 (Aug. 24, 2004) ("EJ Policy").

Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, Exec. Order No. 12,898 § 1-101, 59 Fed. Reg. 7629 (Feb. 16, 1994); see also Memorandum from President Clinton to the Heads of All Departments and Agencies, "Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (Feb. 11, 1994), available at https://www.epa.gov/sites/production/files/2015-02/documents/clinton memo 12898.pdf.

See generally Council on Environmental Quality, "Environmental Justice; Guidance under the National Environmental Policy Act" at 10 (Dec. 10, 1997), available at https://ceq.doe.gov/docs/ceq-regulations-and-guidance/regs/ej/justice.pdf.

<sup>&</sup>lt;sup>524</sup> E.O. 12,898 § 6-609.

<sup>&</sup>lt;sup>525</sup> EJ Policy, 69 Fed. Reg. at 52,041, 52,043.

Further to this endeavor, the NRC issued an EJ Policy Statement and associated guidance on NEPA reviews. These documents explain that an applicant's ER should identify demographic data for the relevant geographic area ("EJ Area"), and that the recommended EJ Area for a Part 72 facility located in a rural area, such as the WCS CISF, is a radius of approximately 4 miles. The NRC allows some flexibility in determining the appropriate radius but, as a matter of policy, has stated that the presumptive radius "should be sufficient in *most* cases." Applicants then must identify any potentially-affected low-income and minority communities ("EJ Communities") by comparing the percentage of such communities in the census block groups within the EJ Area against the percentages of EJ Communities in the corresponding County and State. If the EJ Communities comprise more than 50% of the population of the EJ Area, or exceed the State- or County-EJ Community percentages by more than 20% ("EJ Thresholds"), applicants then must evaluate EJ in further detail. If not, then nothing further is required from the applicant.

ISP's ER is fully compliant with the EJ Policy and associated NRC guidance, and therefore satisfies all attendant NEPA obligations. For example, the ER initially identifies minority populations and household income data for counties within a 30-mile radius of the proposed facility.<sup>532</sup> The ER then identifies the two census block groups within the 4-mile EJ

<sup>526</sup> See generally id.; NUREG-1748 §§ 5.4.11, 6.4.11, and App. C.

<sup>&</sup>lt;sup>527</sup> See NUREG-1748 at C-4; EJ Policy, 69 Fed. Reg. at 52,047.

See EJ Policy, 69 Fed. Reg. at 52,048 (emphasis added); see also NUREG-1748 at C-4 (noting the presumptive radius "is probably sufficient for evaluation purposes").

<sup>&</sup>lt;sup>529</sup> NUREG-1748 at C-5; EJ Policy, 69 Fed. Reg. at 52,048.

NUREG-1748 at C-5; EJ Policy, 69 Fed. Reg. at 52,048.

NUREG-1748 at C-5. The NRC Staff may continue to supplement the EJ analysis through its scoping activities; but, assuming this does not yield information that alters the conclusions from the demographic data, "[t]he environmental justice review is complete." *Id*.

ER at 2-25 to 2-26.

Area, and provides data demonstrating that the EJ Communities in those block groups are below the EJ Thresholds.<sup>533</sup> Accordingly, fully consistent with the NRC's EJ Policy and corresponding guidance, the ER concluded that "further environmental justice analysis is not necessary."<sup>534</sup>

As explained below, Proposed Contention 15 fails to demonstrate any material deficiency in the ER's EJ analysis, and therefore must be rejected.

# 2. <u>Petitioner Fails to Plead Any Deficiency Under NEPA and Therefore Has Not Raised a Litigable Issue</u>

Petitioner's discussion of Proposed Contention 15 fails to identify—much less demonstrate—any purported deficiency in the ISP EJ discussion under *NEPA*.<sup>535</sup> This facial defect is dispositive for contention admissibility purposes. As the Commission has explained, "EJ per se is not a litigable issue" in NRC proceedings.<sup>536</sup> "Because E.O. 12898 does not create any new rights, it cannot provide a legal basis for contentions to be litigated in NRC licensing proceedings."<sup>537</sup> Rather, "[c]ontentions must be made in the NEPA context, must focus on compliance with NEPA, and must be adequately supported as required by 10 CFR Part 2 to be admitted for litigation."<sup>538</sup> Because Proposed Contention 15 neither identifies nor demonstrates any purported non-compliance with any identified NEPA requirement, it: (1) fails to articulate a sufficient basis for a contention or a genuine dispute with the Application; (2) raises immaterial issues outside the scope of this proceeding; and (3) is entirely unsupported. Accordingly, it must

Id. at 2-26 to 2-27 (explaining that the minority populations for these block groups are 37.3% and 31.9%; the percentages of households below the poverty threshold in these block groups are below 50%; and the state and county percentages are higher in both cases); see also id., App. A. Petitioner has not challenged this census data.

<sup>&</sup>lt;sup>534</sup> ER at 2-26.

<sup>&</sup>lt;sup>535</sup> Petition at 83-91.

EJ Policy, 69 Fed. Reg. at 52,042.

<sup>537</sup> *Id.* at 52,044.

<sup>538</sup> *Id.* at 52.048.

be summarily rejected as a threshold matter for its failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(ii)-(vi).

3. <u>Petitioner's Critiques Regarding ISP's Site Selection Process, EJ Area, and Transportation Routes Are Inadmissible for Additional Independent Reasons</u>

Even assuming *arguendo* Proposed Contention 15 was appropriately pled "in the NEPA context," its various arguments still fail to satisfy the NRC's contention admissibility requirements. Thus, it still would be inadmissible on these additional independent grounds.

a. <u>Petitioner's Commentary on ISP's Site Selection Process Is Immaterial,</u> <u>Unsupported, and Fails to Identify a Genuine Dispute with the Application</u>

Petitioner offers various criticisms related to ISP's site selection process.<sup>539</sup> In essence, these assertions suggest that E.O. 12,898 imposes a nondiscrimination directive applicable to an applicant's siting process.<sup>540</sup> Petitioner quotes an ASLB decision, at length, for this proposition.<sup>541</sup> However, the Commission explicitly reversed the ASLB's decision on that exact point, and rejected its interpretation of E.O. 12,898 as containing a nondiscrimination directive.<sup>542</sup> The Commission ruled that a "free-ranging inquiry into the site selection process would go well beyond what . . . is required of an agency considering a license application."<sup>543</sup> Moreover, Petitioner's assertions fail to demonstrate any material deficiency in the ISP's ER, or identify any applicable requirement that purportedly has not been satisfied.

<sup>&</sup>lt;sup>539</sup> Petition at 86-89.

Id. at 84 (suggesting E.O. 12,898 specifies things an "applicant must do to ensure that the *site selection* process... does not have a disparate impact on," i.e., target, "a minority population" (emphasis added)).

See, e.g., Petition at 88 (quoting La. Energy Servs. (Claiborne Enrichment Ctr.), LBP-97-8, 45 NRC 367, 375 (1997) (asserting E.O. 12,898 requires the NRC to ensure its actions "do not have the effect of subjecting persons and populations to discrimination").

La. Energy Servs. (Claiborne Enrichment Ctr.), CLI-98-3, 47 NRC 77, 102 (1998) ("we reverse the Board's requirement of a further NRC Staff investigation into racial discrimination"); id. at 101-06 (explaining that racial discrimination in siting is beyond the scope of NEPA). ISP presumes Petitioner's citation to reversed law was unintentional.

<sup>&</sup>lt;sup>543</sup> *LES*, CLI-98-3, 47 NRC at 102.

For example, Petitioner derides the site selection process because "[o]nly two" of ISP's site selection criteria "are actually relevant to the issue of environmental justice." However, Petitioner fails to explain precisely how many site selection criteria related to EJ it believes would be legally sufficient or what other criterion was omitted; nor does it identify any NEPA-related legal requirement that purportedly has not been satisfied by this alleged deficiency. Petitioner also complains that the "environmental protection" criterion "gives short shrift to environmental justice." However, it does not offer its view, or provide any supporting authority regarding, how much is enough to satisfy some unidentified requirement (applicable to a Part 72 ER site-selection discussion). As explained in further detail in ISP's response to Proposed Contention 11,546 an ER's site selection discussion is materially deficient only if an alternative site is demonstrated to be "obviously superior." Petitioner neither acknowledges this standard nor even attempts to make the required demonstration. Thus, its complaints (even if supported, which they are not) simply do not amount to a material issue, and fail to demonstrate a genuine dispute with the application. 547

b. <u>Petitioner's Suggestion to Use a Different EJ Radius Fails to Demonstrate a Genuine Material Dispute</u>

As noted above, ISP performed its EJ screening review using a 4-mile EJ radius.

Petitioner concedes that this is the precise radius recommended in the NRC's guidance for Part

72 facilities proposed to be sited in rural areas. Petitioner quotes further language from NRC

545 *Id.* at 87.

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<sup>544</sup> *Id.* at 86.

<sup>546</sup> See supra § IV.L.

Merely stating "a conclusion (*e.g.*, the application is 'deficient,' 'inadequate,' or 'wrong') without providing a reasoned basis or explanation for that conclusion is inadequate" to demonstrate an admissible contention. *USEC*, CLI-06-10, 63 NRC at 472.

Petition at 89.

guidance explaining that "the area of interest in evaluating environmental justice impacts is flexible and depends on individual circumstances," and then suggests that a 30-mile EJ radius would be a "reasonable area for purposes of environmental justice considerations." Petitioner thus implies (but does not directly claim) that the radius used by ISP is somehow deficient. However, Petitioner does not directly advance any specific argument, or offer any reasoned explanation, in support of some implied deficiency in the EJ radius used by ISP. Nor does it describe any "individual circumstances" that would warrant an expanded area other than to note that there are EJ communities outside the 4-mile EJ radius. As explained below, Petitioner's implied-deficiency-without-explanation falls short of demonstrating an admissible contention. SE2

In support of its recommendation, Petitioner claims that "[m]uch of Lea County, New Mexico . . . is within the 30-mile zone [sic] of influence [sic] designated in the ER," and that two cities in that county have minority populations above 50%. Petitioner further suggests that 30 miles "is a reasonable area for purposes of environmental justice considerations, given that the EIS for Yucca Mountain designated a 50-mile radius as the relevant area to be considered for health and safety." However, Petitioner does not explain how—or even assert that—these references demonstrate some deficiency in the NRC-recommended 4-mile EJ radius used by ISP. Indeed, Petitioner even fails to explain how either reference is somehow relevant to EJ, generally. Thus, they fail to support the identification of a litigable issue.

<sup>&</sup>lt;sup>549</sup> *Id.* (quoting NUREG-1748, App. C at C-4).

<sup>550</sup> *Id.* at 90.

<sup>551</sup> *Id.* at 89-90.

USEC, CLI-06-10, 63 NRC at 472.

Petition at 90.

<sup>554</sup> *Id.* (emphasis added).

In fact, neither is relevant to EJ. DOE's "region of influence" corresponds to a generic 50-mile radius "routinely used by DOE for all calculations for DOE facilities." *MOX*, LBP-07-14, 66 NRC at 190. And

Furthermore, even taken at face value, these (questionably-relevant) assertions do not demonstrate any *deficiency* in the NRC-recommended radius used by ISP. Simply recommending an alternative approach is not enough; to demonstrate an admissible contention, a petitioner "must provide factual or expert support that proposed alternatives are warranted" because the approach used by the applicant is deficient in some material respect.<sup>556</sup> "[O]therwise there is no genuine material dispute" with the application.<sup>557</sup> Petitioner has not done so here. In fact, Petitioner does not even directly claim ISP's approach is deficient, much less demonstrate (with citation to adequate supporting evidence) some unspecified deficiency; and does not otherwise attempt to explain why the presumptive radius from NRC guidance, which the NRC views as "sufficient in *most* cases,"<sup>558</sup> somehow does not apply to *this* case. Accordingly, this line of argument also fails to raise an admissible issue.

c. <u>Petitioner's EJ Argument Related to Transportation Routes Is Outside the</u>
<u>Scope of This Proceeding, Immaterial, Unsupported, and Fails to Raise a</u>
Genuine Dispute with the Application on a Material Issue of Law or Fact

At the end of its discussion of Proposed Contention 15, Petitioner offers a brief, parting assertion that the ER suffers from a further deficiency in that "[t]here is absolutely no discussion of the environmental justice impacts from the transportation of the waste through" "the cities of Hobbs, Eunice, and Jal." Petitioner cites no requirement that purportedly would compel such

the "region of interest" identified in the ISP ER (not the "zone of influence," as improperly quoted by Petitioner) is simply a term used to describe an area with "the basic characteristics appropriate for a CISF site," which ISP used in its site selection process. ER at 2-9 to 2-10. Neither has any apparent connection to EJ.

<sup>&</sup>lt;sup>556</sup> Seabrook, CLI-12-5, 75 NRC at 337.

<sup>557</sup> *Id.* at 323.

See EJ Policy, 69 Fed. Reg. at 52,048 (emphasis added); see also NUREG-1748 at C-4 (noting the presumptive radius "is probably sufficient for evaluation purposes").

Petition at 90.

discussion; and offers no explanation of the basis for this challenge. Nor is there any.<sup>560</sup>

Transportation routes will be proposed and approved by other entities (not ISP), through separate application and approval processes, several years or decades in future.<sup>561</sup> Thus, Petitioner's bare assertion raises an issue outside the scope of this proceeding. More importantly, Petitioner's failure to marshal any argument or identify any legal basis for its challenge is dispositive.<sup>562</sup>

Petitioner's baseless, unsupported, immaterial, out-of-scope claim simply fails to raise a genuine material dispute with the Application. Thus, it must be rejected for this additional reason.

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Accordingly, Proposed Contention 15 should be rejected for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(ii)-(vi).

### Q. Proposed Contention 16 (High Burnup Fuel) Is Inadmissible

Proposed Contention 16 states:

Since the 1990's almost all spent nuclear fuel being generated is high burnup fuel (HBF). HBF causes the cladding to become thinner, creating a higher risk of release of radioactive material. The cladding also becomes more brittle, with additional cracks. This situation causes risks for short-term and long-term dry storage. The SAR, 1.2.4, claims that the cask system to be used for the transportation and storage for the ISP CIS facility will not contain HBF. But the prevalence of HBF requires that the cask systems will need to contain HBF at some point. The SAR and ER must evaluate the risks of HBF. <sup>563</sup>

As further explained in ISP's Answer to Joint Petitioners' Proposed Contention 1, which ISP incorporates by reference as if republished here in full, the ER is not subject to any requirement to perform a detailed EJ analysis for potential transportation routes. *See* ISP Answer to DWM Hearing Request § IV.C.

<sup>&</sup>lt;sup>561</sup> See id.

USEC, CLI-06-10, 63 NRC at 472.

Petition at 91.

In short, Petitioner identifies statements from a few documents about HBF and cladding performance issues, and concludes that the SAR and ER must evaluate the risks of HBF.<sup>564</sup>

As demonstrated below, the proposed contention is inadmissible for multiple reasons. From the safety perspective, challenges to the transportation of SNF are outside the scope of this proceeding. Additionally, the Application explains that HBF would not be stored under the requested licensing action unless canned (within the canister), and HBF safety issues are addressed in other approvals, separate from the Application. Challenges to HBF that are not part of the requested action are outside the scope of this proceeding. Additionally, from an environmental perspective, Petitioner ignores information in the ER that addresses the impacts of potential storage of HBF. Nonetheless, the arguments raised in the proposed contention do not challenge any conclusion in the SAR or ER, nor do they adequately support any legitimate challenge. For these reasons, Proposed Contention 16 should be rejected as contrary to 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

## The Safety Portion of the Proposed Contention Is Not Admissible

Petitioner misreads the SAR in claiming that it states that "HBF will not be transported or stored in the cask systems used for the ISP CIS facility."565 Rather, SAR Section 1.2.4 explains that only canisters that have been approved by the NRC will be received at the WCS CISF and those approved systems are listed in Section 2.1 of the Technical Specifications, which includes "an additional limitation on uncanned high burnup fuel." Section 2.1 of the Technical Specifications refers to the limitation in Condition 9 of the proposed license, 566 which states that

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<sup>564</sup> Id. at 91-95.

Id. at 92; see also id. at 91 ("The SAR, 1.2.4, claims that the cask system to be used for the transportation and storage for the ISP CIS facility will not contain HBF.").

<sup>566</sup> See Application, Attach. A, App. A, at 2-1.

"all fuel with assembly average burnup greater than 45 GWd/MTHM shall be *canned inside the* canister." In other words, the Application seeks to store only HBF that is "canned inside the canister" a configuration which Petitioner has not addressed in any manner. Petitioner's imprecise reading of the Application simply cannot be the basis for a litigable contention. <sup>569</sup>

Petitioner raises various concerns regarding the transportation and storage of HBF due to cladding. As noted above, the use of HBF that would be permitted by the Application is limited to that canned inside a canister. Nonetheless, whether HBF is canned or not, the safety of HBF is addressed through the NRC's separate prior approval of the cask systems, not in this CISF Application. For example, the Technical Specification Bases, provided in SAR Chapter 14, explains that the "canister designs authorized for storage at the WCS CISF requires certain limits on spent fuel parameters, including . . . maximum burnup." Similarly, the SAR states that "Fuel Cladding, including burnup and cladding temperature limits" remains unchanged from what has been previously reviewed and approved by the NRC. 572

Because the Application permits only those cask systems that have been approved by the NRC and are incorporated into the Application (SAR Section 1.6), challenges to the information in those prior approvals fall outside the scope of this proceeding. 10 C.F.R. § 72.46(e) states: "If

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<sup>567</sup> *Id.*, Attach. A, Proposed License Condition 9 (Emphasis added).

NRC guidance identifies requirements for determining whether a fuel assembly is "undamaged" and can be stored as such. *See* NUREG-1536, Rev. 1, Standard Review Plan for Spent Fuel Dry Storage Systems at a General License Facility § 8.4.17.2 (July 2010). Rather than perform this assessment, an applicant can conservatively use a default definition of "damaged" SNF, and treat the SNF accordingly. *Id.* Some vendors have taken this conservative approach with some systems such that HBF is conservatively "canned" (*i.e.*, a spent fuel assembly is placed into an individual metal enclosure) and then inserted into canisters for early storage of HBF. Canning the HBF ensures that the geometry of any damaged fuel would not result in criticality and allows for determination of source term location within that geometry.

<sup>&</sup>lt;sup>569</sup> See Ga. Inst. of Tech. (Ga. Tech Research Reactor), LBP-95-6, 41 NRC 281, 300 (1995).

<sup>&</sup>lt;sup>570</sup> *See* Petition at 91-95.

<sup>571</sup> SAR at 14-1.

<sup>572</sup> *Id.* at 15-3.

an application for . . . a specific license issued under this part incorporates by reference information on the design of a spent fuel storage cask for which NRC approval pursuant to subpart L of this part has been issued or is being sought, the scope of any public hearing held to consider the application will *not* include any cask design issues."<sup>573</sup> Therefore, all of Petitioner's challenges to the safety of HBF storage (or transportation) are immaterial, outside the scope of this proceeding, and cannot support an admissible contention.

Moreover, the safety of transportation is outside of the scope of this proceeding from any perspective. As discussed above, ISP's Application seeks a specific-license for an ISFSI under 10 C.F.R. Part 72; it does not request approval of a new transportation package design or approval of any specific transportation route. The safety and security of SNF transportation is governed by the standards in 10 C.F.R. Parts 71 and 73 and through regulations issued by the DOT and subject to separate approval processes.<sup>574</sup>

Additionally, the proposed contention identifies neither any portion of the Application it challenges, nor any requirement that has not been satisfied. Other than a single reference to SAR Section 1.2.4 regarding limited HBF storage options, the proposed contention fails to identify or discuss any part of the Application (whether SAR or ER). To demonstrate a genuine dispute on a material issue of law or fact, 10 C.F.R. § 2.309(f)(1)(vi) requires that a contention "include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute." Petitioner has not done so here. To the extent Petitioner is claiming that the Application fails to

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Emphasis added.

See PFS, LBP-99-34, 50 NRC at 176-77 (stating that "shipment of spent nuclear fuel [is] governed by Part 71 and do[es] not require a specific license under Part 72"); State of New Jersey (Dep't of Law & Public Safety's Requests Dated October 8, 1993), CLI-93-25, 38 NRC 289, 294 (1993); Trustees of Columbia University in the City of New York, ALAB-50, 4 AEC 849, 863 (1972) (stating that DOT regulations govern the safety of radioactive material transportation).

address a topic as required by law, then Section 2.309(f)(1)(vi) requires that a contention include "the identification of each failure and the supporting reasons for the petitioner's belief." Petitioner has not done this either, as it fails to identify any regulatory requirement whatsoever. An allegation that some aspect of a license application is "inadequate" or unacceptable does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect.<sup>575</sup>

Finally, although the proposed contention refers to a number of documents related to HBF, Petitioner does not explain how these references actually support a challenge to the Application. Petitioner provides a chart showing an increased use of HBF, <sup>576</sup> but that is undisputed and not inconsistent with the Application. Petitioner also refers to a June 2013 DOE report, a Nuclear Waste Technical Review Board document, an NRC rulemaking notation vote, and an International Atomic Energy Agency document. <sup>577</sup> But that information simply addresses the impact of HBF on cladding. Petitioner does not tie any of this information to the safety of storage at any ISFSI, current or proposed, much less this Application. Petitioner's failure to provide a reasoned basis or explanation for its conclusion that the Application somehow is inadequate is dispositive to the admissibility of the proposed contention. <sup>578</sup>

#### 2. The Environmental Portion of the Proposed Contention Is Not Admissible

As noted above, Petitioner makes some generalized claims about HBF and cladding, and then asserts that the ER must evaluate the risks of HBF. Similar to the deficiencies noted above for the safety portion of the proposed contention, Petitioner does not identify any portion of the

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See Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-90-16, 31 NRC 509, 521 & n.12 (1990).

<sup>576</sup> See Petition at 92.

<sup>577</sup> *Id.* at 93-95.

<sup>&</sup>lt;sup>578</sup> *USEC*, CLI-06-10, 63 NRC at 472.

ER it challenges, does not identify any additional environmental impacts from HBF, and does not provide any support that would challenge information in the ER. Indeed, except for the one area noted below, there is no reason to treat HBF any different than other forms of SNF. For these reasons, the issues raised in the proposed contention are immaterial, unsupported, and do not demonstrate a genuine dispute on a material issue of fact or law with the Application.

Additionally, the ER already considers HBF transportation in its evaluation of dose rates. Specifically, ER Section 4.2.6 addresses the radiological impacts of transportation. The methodology for incident-free transportation doses used a "maximum dose rate allowed for exclusive use shipments under NRC regulations (10 CFR 71.47(b)(3))," and stated that this "assures that the doses calculated by RADTRAN bound those of the proposed SNF shipments to and from the WCS CISF." Petitioner fails to dispute this approach. Moreover, ER Section 4.12.2.2 states the following regarding the source terms for evaluation of offsite doses:

The source terms assumed in the calculations are based on the Design Basis Source terms for the bounding Storage Overpack (HSM or VCC). The Design Basis Source terms are taken directly from the reactor licensing basis documents for each system under which the canisters were originally loaded. Therefore, the source terms do not account for the decay required to allow transport to the WCS CISF or the fact that most of the fuel to be stored has been sitting in storage for many decades at the reactor site prior to being transported to The CISF. These factors would result in significantly lower source terms at the WCS CISF.

These Design Basis source terms bound the HBF for the systems that authorize storage of HBF. In other words, these source terms cover all of the fuel currently licensed to be stored in the systems in their existing reference licenses, including HBF when permitted by the license.

Therefore, the source terms used to perform the dose calculations for the ER bound all of the

<sup>579</sup> ER at 4-13.

HBF that could be stored at the WCS CISF. Thus, Petitioner's assertion fails to identify a material issue or a genuine dispute with the Application.

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Accordingly, Proposed Contention 16 should be rejected for failure to satisfy 10 C.F.R. 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

### R. Proposed Contention 17 (Adoption of Other Proposed Contentions) Is Inadmissible

Proposed Contention 17 states:

Sierra Club adopts all contentions presented by Don't Waste Michigan, Citizens for Alternatives to Chemical Contamination, Public Citizen, Inc., San Luis Obispo Mothers for Peace, Nuclear Energy Information Service, Citizens' Environmental Coalition, Sustainable Energy and Economic Development (SEED) Coalition, and Leona Morgan, Individually, in their Petition to Intervene in this proceeding. <sup>580</sup>

Although styled as a "contention," Petitioner's request to adopt the proposed contentions of other parties fails to satisfy any criteria in 10 C.F.R. § 2.309(f)(1), and therefore is inadmissible as a contention in this proceeding. For example, Proposed Contention 17 is immaterial to any finding the Staff must make to grant the Application, contrary to Section 2.309(f)(1)(iv), and fails to dispute any information in the Application, contrary to Section 2.309(f)(1)(vi). Viewed as a contention, it must be rejected.

Rather, Petitioner's request is more appropriately viewed as a motion under 10 C.F.R. § 2.309(f)(3) to either co-sponsor or adopt the contentions proposed by Don't Waste Michigan *et al.* ("Joint Petitioners"). The "Co-sponsorship Clause" in Section 2.309(f)(3) states:

If two or more requestors/petitioners seek to **co-sponsor** a contention, the requestors/petitioners shall jointly designate a

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representative who shall have the authority to act for the requestors/petitioners with respect to that contention.<sup>581</sup>

And the "Adoption Clause" in Section 2.309(f)(3) states:

If a requestor/petitioner seeks to **adopt** the contention of another sponsoring requestor/petitioner, the requestor/petitioner who seeks to adopt the contention must either agree that the sponsoring requestor/petitioner shall act as the representative with respect to that contention, or jointly designate with the sponsoring requestor/petitioner a representative who shall have the authority to act for the requestors/petitioners with respect to that contention.<sup>582</sup>

To invoke the Adoption Clause, a requestor/petitioner first must establish that it has been granted standing in the proceeding, and that it sponsors at least one contention admitted in the proceeding, in its own right.<sup>583</sup> Because the Petition does not affirmatively establish satisfaction of either of these conditions precedent,<sup>584</sup> Petitioner's request must be rejected.

Furthermore, the Petition contains conflicting assertions that cast doubt on Petitioner's satisfaction of the explicit requirements in 10 C.F.R. § 2.309(f)(3) and, indeed, which requirements even apply. For example, Petitioner appears to request permission to "adopt" Joint Petitioners' contentions; however, it also purports to "re-allege them as [its] own as if written [in the Petition]," which suggests it seeks to co-sponsor, rather than adopt, those contentions. It also purports to designate Joint Petitioners "as the primary representative" for Joint Petitioners' contentions (although failing to identify a single person, or even a single entity authorized to conduct the representation), but makes a second assertion that it "reserves the matter of

Emphasis added.

Emphasis added.

<sup>&</sup>lt;sup>583</sup> Consol. Edison Co. (Indian Point, Units 1 & 2), CLI-01-19, 54 NRC 109, 131-133 (2001).

See supra §§ III (Petitioner has not demonstrated standing); IV (none of Petitioner's proposed contentions are admissible).

Petition at 96.

requesting co-sponsorship or joint designation for a later time."586 The Petition then makes a third claim that it "designates Terry J. Lodge as Sierra Club's representative with respect to" Joint Petitioners' contentions. 587 These ambiguous and competing assertions make Petitioner's intent unclear.

Moreover, given Petitioner's request to "argue and present evidence on" Joint Petitioners' contentions, <sup>588</sup> coupled with its assertion that Joint Petitioners are merely the "primary" representative, it is unclear which designation controls. And Petitioner is apparently attempting to establish itself as a joint, "secondary" representative for such contentions, which is impermissible under 10 C.F.R. § 2.309(f)(3). Ultimately, Petitioner's assertions simply are too vague and contradictory to evaluate, and its request therefore should be denied for this additional reason.

Proposed Contention 17—which is not a "contention" at all—fails to satisfy any criteria in 10 C.F.R. § 2.309(f)(1), and therefore is inadmissible as a contention in this proceeding. Furthermore, having failed to clearly establish that the conditions precedent to invocation of 10 C.F.R. § 2.309(f)(3), or the explicit requirements therein, have been satisfied, Petitioner's request should be denied.

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Id. at 96.

*Id.* at 97.

<sup>587</sup> Id.

## V. <u>CONCLUSION</u>

The Board should deny the Petition because Petitioner has failed to satisfy its affirmative burden to demonstrate standing, and also for the additional reason that it has failed to submit an admissible contention.

# Respectfully submitted,

## Executed in Accord with 10 C.F.R. § 2.304(d)

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#### Signed (electronically) by Ryan K. Lighty

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Dated in Washington, D.C. this 10th day of December 2018

# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	) Docket No. 72-1050
INTERIM STORAGE PARTNERS LLC	) )
(Consolidated Interim Storage Facility)	December 10, 2018

## **CERTIFICATE OF SERVICE**

I hereby certify that, on this date, a copy of "Interim Storage Partners LLC's Answer Opposing Hearing Request and Petition to Intervene Filed by Sierra Club" was filed through the E-Filing system.

Signed (electronically) by Ryan K. Lighty Ryan K. Lighty, Esq. Morgan, Lewis & Bockius LLP 1111 Pennsylvania Avenue, N.W. Washington, D.C. 20004

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