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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

LBP-02-02

DOCKETED 01/14/02

SERVED 01/14/02

Before Administrative Judges:

Michael C. Farrar, Chairman
Dr. Jerry R. Kline
Dr. Peter S. Lam

In the Matter of

PRIVATE FUEL STORAGE, L.L.C.

(Independent Spent Fuel Storage Installation)

Docket No. 72-22-ISFSI

ASLBP No. 97-732-02-ISFSI

January 14, 2002

MEMORANDUM AND ORDER

(Ruling on Applicant's Motion for Summary Disposition
of "Contention Utah W, Other Impacts Not Considered" [Flooding])

We are presented here with questions concerning the analysis performed -- under the National Environmental Policy Act of 1969 (NEPA) -- of the impact of potential flooding of Utah's Great Salt Lake on a facility that would support the operation of the independent spent fuel storage installation (ISFSI) that applicant Private Fuel Storage, L.L.C., (PFS) proposes to build on the Skull Valley, Utah reservation of the Skull Valley Band of Goshute Indians. The ISFSI off-site support facility said to be subject to the potential flooding is the proposed intermodal transfer point (ITP) (or, as it has been referred to more recently, the intermodal transfer facility (ITF)), to be located just west of Rowley Junction, at a range of 3½ or more miles from the Lake's varying shoreline. The NEPA issue comes to us by way of a challenge -- Contention Utah W, "Other Impacts Not Considered" -- presented by intervenor State of Utah.

By motion dated July 27, 2001, PFS requested that summary disposition be entered in its favor rejecting the State's view of the flooding issue. In responses filed August 16, 2001, the NRC Staff supported the PFS summary disposition request, while the State opposed it. For the reasons set forth below, we grant PFS summary disposition regarding Contention Utah W.

I. BACKGROUND

Contention Utah W was originally framed to posit a number of different challenges to the adequacy of the PFS environmental report (ER) regarding its proposed Skull Valley ISFSI. As admitted, however, the contention has a very limited scope. See LBP-98-7, 47 NRC 142, 201-02, reconsideration denied, LBP-98-10, 47 NRC 288, 293-94, aff'd on other grounds, CLI-98-13, 48 NRC 26 (1998). In this regard, the admitted contention asserts:

The [ER] does not adequately consider the adverse impacts of the proposed ISFSI and thus does not comply with NEPA or 10 C.F.R. § 51.45(b) in that the Applicant has not considered the impact of flooding on the [ITF].

Id. at 256 (emphasis added).

We described the ITF that is the focus of this contention in some detail previously in LBP-98-29, 48 NRC 286, 289 (1998). To recap briefly, it is planned to be a facility at which transportation casks containing spent nuclear fuel canisters would be transferred from rail cars arriving on the Union Pacific rail mainline to heavy haul trucks for transport to the PFS facility.

At the time Contention Utah W was being admitted, the ITF was to be located at Rowley Junction, Utah, the highway interchange at the intersection of Interstate 80 (I-80) and Skull Valley Road (which is the main improved roadway providing access to the Skull Valley Band reservation, and the proposed PFS facility, some twenty-four miles to the south). Although as originally proposed, use of the ITF seemingly was the preferred PFS transportation option, PFS amended its application in August 1998 to indicate that its preferred option for moving the transportation casks from the Union Pacific mainline was to build a rail line spur that would start near the I-80 Low Junction, Utah interchange, some seventeen miles west of Rowley Junction. At the same time, it relocated the proposed ITF for its rail to truck transportation option to a site a little less than two miles to the west of the original Rowley Junction location.

The Board subsequently granted summary disposition in connection with a State issue statement, Contention Utah B, License Needed for Intermodal Transfer Point, thereby rejecting the State's view that the 10 C.F.R. Part 72 licensing procedures covering the ISFSI itself were also applicable to the ITF. Nonetheless, we declined to dismiss ITF-related Contention Utah W, finding that the ITF was subject to NEPA consideration because it was proposed to be constructed as part of the PFS license application. See LBP-99-39, 50 NRC 232, 236 (1999).

Thereafter, in April 2000, PFS again revised its application to address the potential for flooding at the relocated ITF.¹ That matter was also discussed in the staff's June 2000 Draft Environmental Impact Statement [hereinafter DEIS].²

Following discovery among the interested parties, PFS filed its pending dispositive motion seeking summary disposition of Contention Utah W. That motion is accompanied by a statement of material facts not in dispute and is supported by four affidavits, from: (1) Donald W. Lewis, Stone & Webster, Inc. (S&W) PFS facility Lead Mechanical Engineer; (2) Kevin Coppersmith, former Geomatrix Consultants, Inc. principal, now Coopersmith Consulting, Inc. independent consultant; (3) George H.C. Liang, S&W Senior Principal Environmental Engineer; and (4) Dr. Krishna P. Singh, Holtec International President and Chief Executive Officer.³

¹ See PFS, Environmental Report [for Private Fuel Storage Facility] at 4.3.9 (rev. 7 Apr. 14, 2000).

² Draft Environmental Impact Statement for the Construction and Operation of an [ISFSI] on the Reservation of the Skull Valley Band of Goshute Indians and the Related Transportation Facility in Tooele County, Utah, NUREG-1714, at 3-11, 5-7, 5-10 (June 2000) .

³ See [PFS] Motion for Summary Disposition of Utah Contention W (July 27, 2001) [hereinafter PFS Motion]; id. Statement of Material Facts on Which No Genuine Dispute Exists (July 27, 2001) [hereinafter PFS Undisputed Material Facts]; id. exh. A (Declaration of Donald Wayne Lewis) [hereinafter Lewis Declaration]; id. exh. B (Declaration of Kevin Coppersmith) [hereinafter Coppersmith Declaration]; id. exh. C (Declaration of George H.C. Liang) [hereinafter Liang Declaration]; id. exh. D, Declaration of Krishna P. Singh [hereinafter Singh Declaration].

In its August 16, 2001 response, the NRC staff declared its support for the PFS motion and, with modifications, the accompanying statement of material facts not in dispute. See NRC Staff's Response to [PFS] Motion for Summary Disposition of Utah Contention W (Aug. 16, 2001) at 10 [hereinafter Staff Response]. In support of its response, the staff provided the joint affidavit of seven individuals: (1) Terence J. Blasing, research staff member in the Oak Ridge National Laboratory (ORNL) Environmental Sciences Division; (2) Richard H. Ketelle, Bechtel-Jacobs Corporation subsurface contamination specialist; (3) Henry W. Lee, NRC Office of Nuclear Materials Safety and Safeguards Spent Fuel Project Office (NMSS/SFPO) Senior Structural Engineer; (4) Makuteswara Srinivasan, NMSS/SFPO Metallurgical Engineer/Scientist; (5) John Stamatakis, Southwest Research Institute Center for Nuclear Waste Regulatory Analysis Senior Research Scientist; (6) Michael D. Waters, NMSS/SFPO Project Engineer ; and (7) Gregory P. Zimmerman, ORNL Center for Energy and Environmental Analysis Environmental Impact Analysis Program Leader. See id. unnumbered exh. (Joint Affidavit of NRC Staff Concerning Utah W) [hereinafter Staff Joint Affidavit].

For its part, the State opposed the PFS motion, providing in its mid-August response a statement of disputed material facts and two supporting affidavits, from Dr. Marvin Resnikoff, Radioactive Waste Management Associates Senior Associate, and Michael V. Lowe, Geologic Program Manager for the Utah Department of Natural Resources Utah Geological Survey Division.⁴ Additionally, the State filed a late-August reply to the staff's response, asserting that the response had failed to raise any novel arguments that would support the entry of summary

⁴ See [State] Response to [PFS] Motion for Summary Disposition of Utah Contention W (Aug. 16, 2001) [hereinafter State Response]; id. [State] Statement of Disputed and Relevant Material Facts with Respect to Contention Utah W (Aug. 16, 2001) [hereinafter State Disputed Material Facts]; id. exh. 1 (Declaration of Dr. Marvin Resnikoff Regarding Material Facts in Dispute with Respect to Contention Utah W) [hereinafter Resnikoff Declaration]; id. exh. 2 (Declaration of Michael V. Lowe) [hereinafter Lowe Declaration].

disposition in favor of PFS. See [State] Reply to NRC Staff's Response to [PFS] Motion for Summary Disposition of Utah Contention W (Aug. 27, 2001) [hereinafter State Reply].

II. ANALYSIS

A. Standard for Summary Disposition

The standard governing motions for summary disposition is well established and has been used repeatedly by this Board in ruling on previous PFS dispositive motions:

Under 10 C.F.R. § 2.749(a), (d), summary disposition may be entered with respect to any matter (or all of the matters) in a proceeding if the motion, along with any appropriate supporting material, shows that there is "no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law." The movant bears the initial burden of making the requisite showing that there is no genuine issue as to any material fact, which it attempts to do by means of a required statement of material facts not at issue and any supporting materials (including affidavits, discovery responses, and documents) that accompany its dispositive motion. An opposing party must counter each adequately supported fact with its own statement of material facts in dispute and supporting materials, or the movant's facts will be deemed admitted. See Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102-03 (1993).

LBP-99-23, 49 NRC 485, 491 (1999).

With this standard in mind, the Board addresses below the PFS summary disposition motion regarding Contention Utah W. We provide, first, the parties' positions on the matter, and then explain the reasoning which leads us to grant the motion.⁵

⁵ In LBP-02-01, issued last week, we pointed out that rulings granting summary disposition, representing "our last word on an issue," might be expected to provide more exposition of our reasoning than rulings declining to rule summarily, which do no more than send an issue to hearing for later resolution and explication. 55 NRC ___, ___ n. 2 (slip op. at 6 n. 2)(Jan. 9, 2002).

B. Parties' Positions on Contention Utah W

1. PFS Position

In support of its summary disposition request, PFS initially presents two essentially legal arguments that it declares are dispositive of Contention Utah W. PFS first declares that the effects of flooding on the spent fuel transportation casks that would be associated with transporting them through the ITF have already been considered in the Commission's generic evaluation of the environmental impacts of transporting spent fuel, which is found in Table S-4 of 10 C.F.R. § 51.52. In light of that generic consideration, PFS declares, the State is barred from litigating these impacts under this contention. See PFS Motion at 4. PFS's second legal argument is that the contention as framed is now moot, because the State was simply contesting the lack of any discussion of flooding in the ER, a purported deficiency that has been remedied by the amended ER and by staff analysis of that issue in the DEIS. See id. at 4-5.

PFS goes on to urge that it should prevail not only on the strength of the foregoing legal arguments but also on the basis of the undisputed facts. In that regard, PFS proffers sixty-nine items that it asserts are material facts not in dispute regarding possible environmental impacts from potential flooding at the ITF; those undisputed facts, PFS says, warrant summary disposition in its favor relative to the State's Contention Utah W claims.

According to PFS, those facts establish the following. The ITF will be built at an elevation of 4221 feet, above the historic high water mark of 4212 feet by at least nine feet, even before taking into account the additional four-foot height of the railway cars or heavy haul trucks on which the transportation cask will always be situated and the eight-foot height of the cask in its horizontal shipping position. Moreover, PFS maintains, even putting aside this lack of a credible threat of flooding at the elevations involved, any threatened inundation could occur only slowly, over a period of years. That lead time, goes the argument, would provide ample

opportunity for taking protective measures, such as redirecting shipments or moving shipments already on site, building dikes, or restarting the existing Great Salt Lake pumping station to remove water. See id. at 6; see also PFS Undisputed Material Facts at 4, 5.

Nor, PFS asserts, is there any credible concern relative to cask submersion caused by wind-generated waves and seiches, which are vertical oscillatory lake water motions. In support of this claim, PFS cites what it describes as mid-1980s State-financed studies of the potential need for diking along the Lake's shores to protect against wind-induced seiches and waves. Those studies, it is said, establish a maximum water level of 4216 feet in unprotected areas near the shore, a figure that is still five feet below the elevation at which the ITF will be built. See PFS Motion at 6-7; see also PFS Undisputed Material Facts at 5-6.

The same is true with respect to potential seismically-induced flooding or seiches, according to PFS. PFS discounts State reliance on a 1959 twenty-two foot seismic subsidence at Hebgen Lake in southwestern Montana, which it asserts fails to reflect any analysis of ITF area seismic conditions, declaring instead that a seismically-induced subsidence at the ITF is unlikely to exceed seven feet, thereby leaving the ITF above flood level even at the highest 4212 foot stage. Further, PFS declares that the State concern about inundation from a twelve-foot seismically-induced seiche is unfounded. According to PFS, this claim is deficient in two respects: (1) it is suspect for being based solely on unconfirmed reports about the level of a 1909 earthquake-induced seiche at another location; and (2) it fails to account both for the total height of the casks as they rest upon a railcar or truck trailer and for the fact that the elevation of a seiche decreases significantly as it moves on to land. See PFS Motion at 7-8; see also PFS Undisputed Material Facts at 6-7.

Finally, in support of its motion PFS seeks to establish that, even if any casks on-site at the ITF were to be inundated, there would be no adverse radiological or nonradiological

consequences from such flooding. Relative to radiological consequences, PFS bases its conclusion on four hypothetical scenarios that might theoretically affect cask integrity in the event they became submerged: (1) casks falling to the ground and sustaining damage from an earthquake that also caused ITF flooding; (2) submerged cask failure due to confining floodwater external pressure; (3) cask overheating failure caused by a submersion-induced loss of heat dissipation capability; and (4) cask corrosion failure induced by chemical attack from prolonged submersion in the saline Lake waters.

Each concern, PFS asserts, is within the casks' design envelope. A cask breach would not result from an earthquake-induced drop off a railcar because such a drop, being no more than four feet, falls well within the thirty-foot drop design basis required under 10 C.F.R. § 71.73(c)(1). So too, the casks are designed to withstand an external pressure of 300 pounds per square inch (psi), equivalent to being submerged at a depth of over 200 meters (656 feet). Further, PFS declares, negative thermal effects are of no moment because heat transfer in water would actually be improved by 200 times in relation to air. Salt water corrosion would not be a concern either, in that centuries would be required to eat through the "carboline 890" protective coating on the transportation casks and the six inches of steel covering the separate storage canister that contains the spent fuel.

Finally, PFS asserts, there would be no nonradiological contamination concerns. Only bottled drinking water and portable toilets or a small sanitary waste disposal septic tank/leach field would be involved, and these could not cause any significant environmental impacts in the event of ITF flooding. See PFS Motion at 9-10; see also PFS Undisputed Material Facts at 7-10.

Thus, on the basis of these showings, PFS asserts that summary disposition in its favor is appropriate relative to Contention Utah W. As we discuss next, the NRC Staff agrees.

2. Staff Position

In its response to the PFS dispositive motion, the staff indicates that it agrees there are no disputed material facts at issue and that all issues pertaining to Contention Utah W should be resolved in favor of the applicant. As to the two threshold legal issues asserted by PFS to be dispositive of the contention, the staff notes that subsequent to the admission of Contention Utah W, the applicant in its ER and the staff in the DEIS specifically considered the potential for flooding at the revised site; the staff concurs that these discussions have indeed rendered the PFS contention moot by addressing its central concern that such a discussion had not been provided in the original ER. Additionally, the staff indicates that, although it does not rely upon generic Table S-4 as being dispositive of this contention, it nonetheless believes the PFS facility-specific transportation impacts analysis in the DEIS would compel the same result. See Staff Response at 7-9 & n.11.

On the facts relative to the PFS claims of summary disposition entitlement regarding the possible environmental impacts that might arise from State-postulated phenomena such as a rise in the Great Salt Lake's water level, wind-generated seiches and waves, and earthquake-generated seiches and subsidence, the staff likewise agrees that there are no material facts in dispute preventing grant of the PFS request. In this regard, based on its review of the PFS statement of undisputed material facts, the staff accepts those statements as generally correct, subject to certain modifications that the staff asserts do not impact its overall conclusion that there are no material factual disputes extant.⁶ See id. at 9-10.

⁶ For example, the staff does not go so far as to agree with PFS that heat transfer in water is 200 times greater than in air, choosing instead to say simply that it is "substantially greater." Staff Joint Affidavit at 7. The difference is not material, since the question is only whether heat transfer would suffer because of flooding. Similarly, the staff's willingness to agree only that corrosion would not occur for "decades," rather than PFS's "centuries" (ibid.), does not alter the result.

3. State Position

In its mid-August response and late-August reply, the State challenges the PFS and staff positions regarding summary disposition for Contention Utah W. Initially, in addressing the two legal grounds proffered by PFS in support of its motion, the State declares that Table S-4 clearly is not applicable to this contention, citing the Board's earlier ruling in LBP-99-39, 50 NRC 232, 236 (1999). See State Response at 3-4. The State adds that potential ITF flooding-related environmental impacts are not within the bounds of cask testing performed under 10 C.F.R. § 71.73(c)(1) or covered by the existing ER/DEIS evaluations as they relate to earthquake-induced cask-drop accidents, derailments caused by track instability, septic tank/leach field contamination, and facility foundation/roadbed stability. See id. at 4-6; State Disputed Material Facts at 3-4, 6.

As to mootness, according to the State, the ER and DEIS discussions of flooding have not mooted Contention Utah W, which it asserts was not solely an "omission" contention, but has footing in the failure both to identify and to evaluate the environmental significance of potential flooding events for the proposed ITF. In that regard, the State further claims both the ER and "scant" DEIS flooding-related discussions are still deficient because those documents (1) ignore a State nuclear waste transfer facility siting law that would require a facility like the PFS ITF to be sited at least two miles farther from the Great Salt Lake, and (2) seek to establish the elevations of the ITF site and the Lake's flood plain by relying on an inapplicable 1999 State draft planning document relating to recreational and extractive industries around the Lake's edge. See State Response at 6-7.

With respect to PFS's purported undisputed material facts regarding the State's Contention Utah W claims about possible ITF flooding environmental impacts, the State declares that the motion lacks adequate support in three respects. First, according to the

State, PFS has failed to provide any reliable evidence of the final grade elevation of the ITF. In this regard, the State asserts that PFS has attempted to establish its 4221-foot elevation figure based on the declarations of its witnesses Lewis and Liang, which seek to support that figure using either unreliable hearsay (i.e., an unauthenticated document that was not introduced into the proceeding) or opinions based on a lack of personal knowledge. See State Response at 7-9; see also State Disputed Material Facts at 2.

Also in dispute, the State asserts, is the PFS position that we need not consider for the ITF a seismically-induced twelve-foot seiche. The State says a “naked assertion” in PFS’s Liang declaration -- namely, that the 1909 reports of a twelve-foot seiche overtopping a railroad trestle in the Lake as a result of the Hansel Valley earthquake are unreliable -- cannot stand, being foresworn by the scientific report of State witness Lowe, who was given this information by a long-time Southern Pacific Transportation Company employee, who had gathered it from company records. State Response at 9-10; see also State Disputed Material Facts at 5-6.

Finally, the State complains that the PFS motion is “replete” with unsupported assertions. State Response at 10. In addition to those relating to site elevation, cask testing, future studies on site foundation stability, and septic tank/leach field contamination referenced earlier, the State also identifies PFS declarations relating to its ability to prioritize Union Pacific shipments or to move shipments to another location, build dikes, or rely on the restart of the Great Salt Lake pumps. See State Response at 10 and n. 11; see also State Disputed Material Facts at 3, 4. Moreover, says the State, the PFS reference to the State-sponsored diking study to claim a maximum flooding elevation of 4216 feet ignores other evidence of higher Lake levels, including 1980’s studies showing storm-induced debris lines of between 4212 and 4218 feet on the Lake’s Antelope Island, located about twenty-six miles from the proposed ITF site,

and archeological studies putting Lake levels at 4217 feet within the past 400 years and 4221 feet within the past 2000 years. See State Response at 10; State Disputed Material Facts at 5.

C. Licensing Board Determination

1. The Law. Relative to the two “legal” matters raised by the parties regarding PFS’s motion, the first can be resolved in the State’s favor in short order. As previous rulings relative to this contention suggest (see LBP-99-39, 50 NRC at 236), we do not consider the generic analysis in Table S-4 of transportation-related impacts as preempting or precluding a discussion of the relevant site-specific environmental impacts regarding the construction and operation of the ITF, which will be erected as a direct consequence of PFS’s proposed Skull Valley ISFSI.⁷

The second matter, however, carries the day for PFS. Consistent with the Board’s other contention rulings, see, e.g., LBP-01-26, 54 NRC 199, 207-08 (2001), the “has not considered” language of the contention as quoted above,⁸ as well as the original basis statement that also declared PFS “has not considered the impact of flooding on the [ITF]”,⁹ put this issue statement at the outset into the “omission” rather than the “analysis” category, as we have previously defined them, see LBP-01-23, 54 NRC 163, 171 (2001). To be sure, there is a mention in the basis statement for the contention, as it incorporates by reference Contention Utah N, Flooding, that PFS has failed to “identify, document, and evaluate the significance of potential flooding

⁷ At the same time, we do not accept the State’s attempt, see State Response at 3, to expand the scope of this contention regarding the impacts of flooding on the ITF to include the matter of track washout impacts, which is a generic, transportation-related subject.

⁸ See supra p. 2 (quoting contention that the PFS ER “does not adequately consider the adverse impacts of the proposed ISFSI . . . in that the Applicant has not considered the impact of flooding”).

⁹ [State] Contentions on the Construction and Operating License Application by [PFS] for an [ISFSI] (Nov. 23, 1997) at 163 [hereinafter State Contentions].

events to the design of the intermodal transfer site,” State Contentions at 98. And that same document makes specific mention of the PFS failure “to investigate information regarding floods and water waves along the lake shore that may have been generated by earthquake or landslide events,” id. at 99. Nonetheless, it is clear that the central problem the State was bringing to the fore at the outset was the lack of any discussion of ITF-related flooding.

That this “total omission” is the purported deficiency is borne out by a review of the original ER, which indeed had no discussion at all of ITF-related flooding, and the subsequent PFS attempt to address that criticism by adding a section to the ER discussing ITF-related flooding, a matter that then became the subject of analysis in the DEIS. As we noted previously, such “a significant change in the nature of the purported NEPA imperfection, from one focusing on a comprehensive information omission to one centered on a deficient analysis of subsequently supplied information,” warrants issue modification by the complaining party. LBP-01-26, 54 NRC at 208. Otherwise, absent any new pleading, the other parties would be left to speculate whether the concerns first expressed had been satisfied by the new information. Having failed to take the required step within the time frame established for interposing such matters into this proceeding, see id. at 209, the State’s arguments regarding the validity of the PFS (and staff) analysis cannot now provide the basis for a material factual dispute that would preclude the entry of summary disposition in favor of PFS.

2. The Facts. Having said all this, we also observe that even if we were to find in favor of the State on its argument regarding this contention’s scope, we nonetheless would not reach a different result relative to the PFS motion. While the State seeks to rely upon a number of different factual disputes concerning ITF flooding, a close review of its main points is sufficient to establish that they do not establish genuine issues as to material facts and that summary disposition in favor of PFS in connection with Contention Utah W is therefore appropriate.

With regard to the central question of the ITF final grade elevation, we look to the general admonition that a party seeking to establish a material factual dispute must rely upon more than suspicions or bald assertions.¹⁰ Notwithstanding that principle and the fact that the facility will be located physically within its borders, the State -- in contesting the reliability of the 4221-foot elevation figure proffered by PFS and the staff -- demurred from taking the obvious step of advancing a materially different ITF elevation figure and asserting it to be correct, a step that we think was well within its power to take (compare 10 C.F.R. § 2.749(c)).

Instead, relying principally on the Licensing Board's decision in Commonwealth Edison Co. (Braidwood Nuclear Power Station, Units 1 and 2), LBP-86-12, 23 NRC 414, 419 (1986), the State interposed concerns only about the derivation of the PFS/staff elevation figure, noting in particular the "hearsay" nature of the information in the Lewis declaration. Given the State's burden to counter the PFS showing, and the direct step it could have taken, we find the path it took unavailing, especially given "our authority as an administrative tribunal and under the Commission's rules to consider hearsay as competent evidence, taking into account [the State's] failure to contradict directly the assertions in judging their reliability."¹¹ Id. at 419-20.

As was noted before, the State also seeks to interpose other flooding-related factual disputes concerning such matters as the ability of PFS to prioritize Union Pacific shipments, to move shipments to another location, to build dikes, or to rely on the restart of the Great Salt

¹⁰ See Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 306-07 (1994), aff'd, Advanced Medical Systems v. NRC, 61 F.3d 903 (6th Cir. 1995) (table).

¹¹ In this regard, the State raises particular concerns about the "unauthenticated" nature of the document referenced by Mr. Lewis as authority for his statements concerning ITF elevation in that it has not been provided to the Board in support of the PFS Motion. State Response at 8-9; see also State Disputed Material Facts at 2. Given Mr. Lewis' sworn reliance on that document (see Lewis Decl. at 4), what is germane in connection with the PFS motion is that the State has not asserted that the document (1) is incorrect; or (2) was unavailable through the discovery process, thereby precluding the State from assessing its validity.

Lake pumps in the event of a multi-year water level rise resulting in a flood above the 4221-foot level. Yet, all these matters lack materiality in the face of a key series of uncontested PFS assertions, namely, that even if flooding were to occur and to cover any transportation casks at the ITF to a depth of some 600 feet, there will be no significant environmental impacts because there would be no radiological releases from the casks, which are already rated to withstand submersion at that depth and would be impervious to corrosion damage from the Lake waters for very long periods. See PFS Undisputed Material Facts at 7-9; see also n. 6, supra.

Nor does the State fare any better in its attempts to interpose a NEPA deficiency relative to purported unanalyzed flooding-related radiological impacts in connection with the only cask breach event it proffers, an earthquake-induced rail car or transfer crane cask drop.¹² For that attempt even to move forward, we would first have to be willing (1) to assume such a cask drop/breach incident would be possible in connection with the transportation casks as they will be utilized at the ITF,¹³ and (2) to put aside the serious question whether there is any need for a

¹² PFS declarant Lewis described the arrangement whereby the spent fuel shipping casks are secured to a shipping cradle with heavy steel tie-down straps that are bolted to the shipping cradle that, in turn, is to be bolted to the rail or truck transport vehicle with heavy steel pins that allow the shipping assembly, i.e., the cask and the cradle, to be removed from the transport vehicle. See Lewis Declaration at 4. In doing so, Mr. Lewis notes that the straps and the pins will be designed to exceed the dynamic loads imposed by the vehicle during transport and that, considering the shipping assembly weight (142 tons) and the securing measures, rising lake water is not likely to dislodge the cask. Ibid. Although the State challenges this sworn statement regarding the dynamic load design of the securing measures as “unsupported,” State Disputed Material Facts 3, the State itself provides nothing to indicate it is incorrect, thereby relegating its claim to the sort of unsupported assertion that is inadequate to create a material factual dispute. In fact, the only cask drop scenario for which the State provides any supporting discussion is that involving an earthquake. See Resnikoff Declaration at 4.

¹³ In his declaration, Dr. Resnikoff makes a number of assertions about the degree to which the cask drop accident testing requirements in 10 C.F.R. § 71.73(c) bound a cask drop that he declares could occur to a cask while awaiting transfer, or being transferred from rail to truck, at the ITF. See Resnikoff Declaration at 3-5. Although his claims are based essentially on the failure of PFS to demonstrate to his satisfaction that these regulatory testing requirements are bounding, rather than reflecting his own independent analysis that demonstrates they are not, for present purposes we will assume he is correct in this regard.

NEPA analysis of impacts that arise only from the contemporaneous presence of two independent, low probability events,¹⁴ i.e., a flood at or near the 4212-foot level of the 1986 historic Great Salt Lake flood in conjunction with an earthquake of a magnitude sufficient to cause a cask drop/breach accident.¹⁵

Even if we put aside those two problems, we would still have to conclude, for each of the two State-posed scenarios that could involving flooding and an earthquake-induced cask drop/breach accident, that the State has failed to establish a material factual dispute regarding possible ITF inundation at its 4221-foot elevation. Relative to seiche-related flooding, although referencing historical data regarding a twelve-foot, earthquake-induced seiche, the State fails to make any specific response controverting the PFS showing that the ITF's inland position would significantly decrease the size of such a seiche so that it would not exceed the 4220-foot level.¹⁶

¹⁴ In this regard, the State's proffer regarding other historic floods levels going back several centuries or more arguably reinforces the notion that the flooding levels about which it expresses concern relative to the ITF are very low probability events.

¹⁵ See Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-90-4, 31 NRC 333, 334-35 (1990) (events considered sufficiently unlikely that they are remote and speculative do not require NEPA consideration as a matter of law). Cf. San Luis Obispo Mothers for Peace v. NRC, 789 F.2d 26, 38-42 (D.C. Cir.) (en banc) (NRC not required to consider simultaneous occurrence of earthquake and independently caused radiological emergency relative to nuclear facility emergency planning response), cert. denied, 479 U.S. 923 (1986); Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 798-99 (1979) (plant need not be designed to reflect the remote possibility of a tornado coincident with an explosion of a fertilizer barge on a river adjacent to the facility).

¹⁶ In this regard, although the State does not directly question PFS's reliance on a 1995 land-use planning document as establishing this floodplain figure (compare Liang Decl. at 7 with State Disputed Material Facts at 6), it does challenge the efficacy of PFS and staff DEIS references to a 1999 draft State planning document that designates the floodplain at 4212 feet for planning purposes and 4217 feet as the extent of that floodplain. See State Response at 6-7; State Reply at 5. As we noted previously, the State asserts that this use of a report prepared to address recreational activities and extractive industries around the Lake, improperly ignores a specific Utah statute governing the siting of nuclear waste transfer facilities that would require the ITF to be at least two miles farther from the Lake than is planned. In the NEPA context, this argument seems to have at its heart, however, a matter that has already been resolved in the context of this litigation. See LBP-01-40, 54 NRC __, __ n.7 (slip op. at 17 n.7) (Dec. 28, 2001).

Compare PFS Undisputed Material Facts at 6 with State Disputed Material Facts at 6. By the same token, other than reiterating its opposition to the ITF 4221-foot elevation figure, the State does not dispute the PFS showing that an earthquake-induced subsidence at the ITF would not exceed seven feet, so as not to cause ITF inundation even if the Lake were at its 4212-foot historic flood level. Compare PFS Undisputed Material Facts at 7 with State Disputed Material Facts at 5.

In sum, the State's failure to interpose a material factual dispute relative to the PFS dispositive motion regarding Contention Utah W provides us reason, independent of the legal grounds discussed in Section II.C.1 above, to grant summary disposition in favor of PFS.¹⁷

III. CONCLUSION

Whether because (1) Contention Utah W, Other Impacts, as presented is moot as having been addressed by the discussion in the PFS ER and the staff DEIS that analyzes the possible environmental impacts of flooding at the ITF; or (2) PFS has established there are no material factual disputes in connection with the sufficiency of those discussions' conclusions

¹⁷ Relative to this contention, the State also seeks to interpose several additional material factual disputes regarding impacts relating to site foundation stability, post-flood access, and septic tank/leach field contamination. Each, however, is unavailing. In the first instance, the State does not here address the PFS showing regarding the use of admixtures to prevent concrete from being susceptible to salty soil/water corrosion. Compare PFS Undisputed Material Facts at 9-10 with State Disputed Material Facts at 6. With regard to post-flood access, the State does not take issue with the PFS showing that the ability of the transportation casks to remain underwater for long intervals means that there would be no impacts as they remained in place for extended periods. Compare PFS Undisputed Material Facts at 10 with State Disputed Material Facts at 6. Finally, concerning septic tank/leach field contamination, the State's challenge is misdirected in that it questions the efficacy of the proposed use of a septic tank/leach field rather than the PFS conclusion that flood-related environmental impacts relative to that arrangement would be negligible. Compare PFS Undisputed Material Facts at 9 with State Disputed Material Facts at 6.

that there would be no significant environmental impacts from such flooding, PFS is entitled to summary disposition and a judgment in its favor regarding this State issue statement.¹⁸

For the foregoing reasons, it is this 14th day of January 2002, ORDERED, that the July 27, 2001, PFS motion for summary disposition of Contention Utah W is GRANTED and, for the reasons set forth in Section II.C of this Memorandum and Order, a decision regarding Contention Utah W is rendered in favor of PFS.

THE ATOMIC SAFETY
AND LICENSING BOARD

/RA/

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ADMINISTRATIVE JUDGE

/RA/

Dr. Jerry R. Kline
ADMINISTRATIVE JUDGE

/RA/

Dr. Peter S. Lam
ADMINISTRATIVE JUDGE

Rockville, Maryland
January 14, 2002

Copies of this memorandum and order were sent this date by Internet e-mail transmission to counsel for (1) applicant PFS; (2) intervenors Skull Valley Band, Ohngo Gaudadeh Devia, Confederated Tribes of the Goshute Reservation, Southern Utah Wilderness Alliance, and the State; and (3) the staff.

¹⁸ We need add only what should be obvious, *i.e.*, that as far as seismic events are concerned, our decision herein deals only with whether flooding would add any environmental impacts to the consequences of postulated earthquakes. In determining that there is no legitimate dispute in the Contention Utah W record that flooding would not have such an effect, we of course intimate no view on the entirely different issues involved in Contention Utah L, Geotechnical, about which we have recently written in LBP-01-39, 54 NRC ____ (Dec. 26, 2001) and LBP-02-01, supra (Jan. 9, 2002).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	
PRIVATE FUEL STORAGE, L.L.C.)	Docket No. 72-22-ISFSI
)	
(Independent Spent Fuel Storage)	
Installation))	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON APPLICANT'S MOTION FOR SUMMARY DISPOSITION OF "CONTENTION UTAH W, OTHER IMPACTS NOT CONSIDERED" [FLOODING]) (LBP-02-02) have been served upon the following persons by deposit in the U.S. mail, first class, or through NRC internal distribution.

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Docket No. 72-22-ISFSI
LB MEMORANDUM AND ORDER (RULING ON
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DISPOSITION OF "CONTENTION UTAH W,
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[FLOODING] (LBP-02-02)

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[Original signed by Evangeline S. Ngbea]

Office of the Secretary of the Commission

Dated at Rockville, Maryland,
this 14th day of January 2002