

**RAS 2688**

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

LBP-01-03

ATOMIC SAFETY AND LICENSING BOARD

**DOCKETED 01/31/01**

**SERVED 01/31/01**

Before Administrative Judges:

G. Paul Bollwerk, III, 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 31, 2001

MEMORANDUM AND ORDER

(Rulings on Admissibility of Late-Filed Modification of  
Contention Utah L, Geotechnical, Basis 2;  
Referring Rulings and Certifying Question Regarding Admissibility)

With its pending November 9, 2000 request, intervenor State of Utah (State) seeks the late-filed modification of basis two to contention Utah L, Geotechnical, so as to permit it "to address the NRC Staff's position that [applicant Private Fuel Storage, L.L.C., (PFS)] should be granted the exemption it requested from [10 C.F.R.] Part 72 to allow the use of a [probabilistic seismic hazards analysis (PSHA)] methodology with a 2,000 year return period instead of a [deterministic seismic hazards analysis (DSHA)] required by Part 72." [State] Request for Admission of Late-Filed Modification to Basis 2 of Contention Utah L (Nov. 9, 2000) at 1 [hereinafter November 2000 State Request]. Both PFS and the staff oppose this request, declaring that the Board should dismiss it because the State has failed to comply with the late-filing and/or substantive admissibility requirements of 10 C.F.R. § 2.714(a)(1), (b), (d), or, alternatively, certify to the Commission the question whether State challenges to the PFS exemption should be considered in this adjudicatory proceeding.

Although we find certain portions of the State's proposed revisions are sufficient under the late-filing and contention admission criteria of section 2.714 to provide the State with further litigable issues relative to contention Utah L, pursuant to 10 C.F.R. §§ 2.718(i), 2.730(f), we refer our rulings regarding the admissibility of the State's contention Utah L additions and certify to the Commission the question whether the State challenges should be cognizable in this proceeding. We take this action because this matter involves an applicant request for an exemption from a regulatory requirement, specifically a request that the seismic suitability of the PFS proposed independent spent fuel storage installation (ISFSI) site on the Skull Valley, Utah reservation of the Skull Valley Band of Goshute Indians be assessed probabilistically rather than with the deterministic methodology now required by Part 72.

## I. BACKGROUND

Among the contentions the Licensing Board admitted in this proceeding is contention Utah L, Geotechnical, which declares:

The Applicant has not demonstrated the suitability of the proposed ISFSI site because the License Application and the [Safety Analysis Report] do not adequately address site and subsurface investigations necessary to determine geologic conditions, potential seismicity, ground motion, soil stability and foundation loading.

LBP-98-7, 47 NRC 142, 253, reconsideration granted in part and denied in part on other grounds, LBP-98-10, 47 NRC 288, aff'd on other grounds, CLI-98-13, 48 NRC 26 (1998).

Further, as set forth in the November 1997 PFS supplemental intervention petition, basis two to contention Utah L provides:

2. **Ground motion.** The site may also be subject to ground motions greater than those anticipated by the Applicant due to spatial variations in ground motion amplitude and duration because of near surface traces of potentially capable faults (the

Stansbury and Cedar Mountain faults). Sommerville, P.G., Smith, N.F., Graves, R.W., and Abrahamson, N.A., Modification of empirical strong ground motion attenuation relations to include the amplitude and duration effects of rupture directivity, *in* 68 Seismological Research Letters (No. 1) 199 (1997). Failure to adequately assess ground motion places undue risk on the public and the environment and fails to comply with 10 C.F.R. § 72.102(c).

[State] Contentions on the Construction and Operating License Application by [PFS] for an [ISFSI] (Nov. 23, 1997) at 82-83.

The State's current concern relative to this contention and basis first manifested itself in late April 1999 when the State filed a request with the Board to (1) require PFS to submit an early April 1999 exemption request it had filed with the NRC staff as a rule waiver petition under 10 C.F.R. § 2.758(b), thereby permitting Board consideration of that request; or (2) permit the State to amend contention Utah L to allow the State to litigate the adequacy of the PFS exemption request in this proceeding. See [State] Motion Requiring Applicant to Apply for Rule Waiver Under 10 CFR § 2.758(b) or in the Alternative Amendment to Utah Contention L (Apr. 30, 1999) at 1-2. In our May 1999 ruling on this State request, we described the exemption in question as follows:

Under the current provisions of 10 C.F.R. Part 72 relating to ISFSI seismic analysis, a facility like that proposed by PFS must meet the same standards applicable to a nuclear power plant under 10 C.F.R. Part 100, Appendix A. See 10 C.F.R. § 72.102(f)(1). The Part 100 standard for calculating a safe shutdown or design-basis earthquake uses a deterministic approach. In an April 2, 1999 request directed to the staff, invoking 10 C.F.R. § 72.7, PFS asked for an exemption from this Part 72 standard to permit the use of a probabilistic seismic hazard analysis along with a consideration of the risk involved to establish the design-basis earthquake at the PFS facility. According to PFS, such a change would have some significance because its own probabilistic analysis indicates that the relative risk at the PFS ISFSI warrants a design-basis earthquake with lower peak ground accelerations than that calculated using the Part 100, Appendix A deterministic methodology.

LBP-99-20, 49 NRC 429, 434 (1999) (citation and footnote omitted). Indeed, this exemption is important to PFS because there is a significant question as to whether PFS can comply with the existing Part 72 standards.

In our May 1999 ruling, noting that section 2.758(b) and the waiver/exemption provisions applicable to 10 C.F.R. Part 72 and other substantive Commission regulatory schemes offered alternative methods for seeking rule waivers or exemptions, we denied the State's request to require the PFS exemption request to be considered under section 2.758(b), finding that vehicle inappropriate under existing agency caselaw given that the PFS "request to use a probabilistic methodology in lieu of the deterministic approach of Part 100 does not raise any questions about regulatory interpretation or application relative to the facts at issue in this proceeding as expressed in contention Utah L." Id. at 436 (footnote omitted). Further, noting that "there is a considerable question whether the State has really framed what could be considered a 'contention' relative to the PFS request," id. at 437, we denied the State's request to amend contention Utah L, declaring:

the exemption material provided by PFS to the Staff and the State seems to be sufficiently well-defined to provide the information needed to formulate a contention. Considerably less certain, however, is the question of its ripeness. By its nature, an exemption request is atypical. The rules promulgated by the Commission reflect a considered judgment about the requirements necessary to protect the public health and safety and the environment. In contrast to a license application that generally seeks to demonstrate the requester's compliance with agency requirements, an exemption request attempts to show why those regulatory requirements should not be applied to the requester. The latter thus is more problematic in terms of its likely impact on the administrative process. Indeed, the uncertain nature of an exemption request (i.e., that the request may not be granted) counsels that consideration of an exemption-related contention should await Staff action on the exemption. Accordingly, the timeliness of a contention based on an applicant's exemption request is more properly judged from the time of Staff action on the exemption rather than when the exemption request is filed.

Id. at 437-38 (footnote omitted). Additionally, the Board observed that, in the event the question of the amended contention's admissibility became ripe, in order "to countenance an adjudicatory challenge to the PFS exemption petition, the Board would have to invoke its certified question or referred ruling authority under 10 C.F.R. §§ 2.718(i), 2.730(f) to determine whether the Commission wants the Board to consider the contention." Id. at 438 (footnote omitted).

The State again sought to have the PFS exemption become a litigable issue in this matter in January 2000, following the staff's December 15, 1999 issuance of its safety evaluation report (SER) (as revised on January 4, 2000) concerning its analysis of the non-cask storage systems at the PFS facility. See [State] Request for Admission of Late-Filed Modification to Basis 2 of Contention Utah L (Jan. 26, 2000) at 1 [hereinafter January 2000 State Request]. In our June 2000 decision regarding that State request, we explained by way of background:

Relative to the present State request, we note that while the Part 100, Appendix A, standard applicable under section 72.102(f) remains deterministic, in 1997 the agency amended section 100.23 to permit the optional use of a probabilistic seismic hazards analysis for new 10 C.F.R. Part 52 power reactor early site permit and combined construction permit/operating license applicants. See 10 C.F.R. § 100.23(a), (c)-(d); see also 61 Fed. Reg. 65,167 (1996). Thereafter, in a 1998 rulemaking plan, see SECY-98-126, Rulemaking Plan: Geological and Seismological Characteristics for Siting and Design of Cask [ISFSIs] (June 4, 1998), the Staff proposed and the Commission approved the institution of a rulemaking proceeding to conform the seismic evaluation standard of section 72.102 to the new section 100.23 probabilistic methodology rather than the Part 100, Appendix A deterministic analysis. Moreover, as part of the rulemaking plan, the Staff proposed requiring that ISFSI systems, structures, and components (SSCs) be designed to withstand either a Frequency Category 1 design basis ground motion, with a 1000-year recurrence interval, or a Frequency Category 2 design basis ground motion with a 10,000-year recurrence interval. In its original exemption request, PFS submitted its design basis

ground motion based on a 1000-year interval, but in August 1999 amended its request to substitute a 2000-year interval. Thereafter, in its December 15, 1999 SER, which was received by the State on December 27, 1999, the Staff noted relative to the pending PFS exemption request that it proposed to grant the exemption request using a 2000-year return period interval as requested by PFS. See [SER] of the Site-Related Aspects of the [PFS] Facility [ISFSI] at 2-45 (Dec. 15, 1999).

LBP-00-15, 51 NRC 313, 315 (2000). There, as here, the State asked that the Board permit it to modify basis two of contention Utah L so as to permit it to challenge the use of a probabilistic approach, in particular the 2000-year return period interval. We declined again, however, on ripeness grounds, noting that the staff SER continued to list the facility seismic design and the PFS exemption requests “as an ‘open item.’” Id. at 318.

The State’s current attempt to have issues relating to the PFS exemption request admitted into this proceeding came about following the staff’s September 29, 2000 action issuing its final SER for the proposed PFS facility. There, the staff noted that it had completed its review on the PFS seismic exemption request and had concluded that “the use of PSHA methodology is acceptable. A 2,000-year return period is acceptable for the seismic design of the PFS Facility.” [SER] Concerning the [PFS] Facility at 2-42 (Sept. 29, 2000). In the November 9, 2000 pleading that is now before the Board, the State declares it

seeks to modify Utah L Basis 2 to require either the use of a PSHA with a return period of 10,000 years, consistent with the NRC Rulemaking Plan, or compliance with the deterministic approach currently required by 10 CFR 72.102(f)(1). In the alternative, if the Board allows the use of a PSHA with a return period of less than 10,000 years, the State seeks to require the use of a return period significantly greater than 2,000 years to avoid placing undue risk on public safety and the environment.

November 2000 State Request at 5. Given the Board’s earlier ruling concerning certification or referral to the Commission, the State requests that if, the Board finds it does not have the authority to address the State’s contention amendment, the Board certify or refer the matter to

the Commission. See id. at 5-6. The State also asserts that a balancing of the late-filing factors of section 2.714(a)(1) support admission of its amended contention. See id. at 14-15. Further, relative to the admissibility of the contention under the standards in section 2.714(b)(2), (d)(2), relying for support on the accompanying declarations of University of Utah geology and geophysics research professor Dr. Walter J. Arabasz and Radioactive Waste Management Associates Senior Associate Dr. Marvin Resnikoff, the State maintains that the staff's position supporting the exemption is deficient in that (1) it fails to comply with the 1998 rulemaking plan, which provides only for 1000-year and 10,000-year design basis ground motion return periods, and fails to take into account (a) the radiological consequences of a failed design, or (b) the PFS failure to demonstrate that the PFS facility and its equipment will protect against exceeding the dose limitations of 10 C.F.R. § 72.104(a) or can withstand a 2000-year return period earthquake; (2) the reasons relied upon by the staff for permitting the 2000-year return period -- lower hazard compared to commercial power reactors, Department of Energy (DOE) category-3 facility performance characteristics, an exemption granted to DOE relative to ISFSI storage of Three Mile Island, Unit 2 fuel at DOE's Idaho National Engineering and Environmental Laboratory (INEEL) -- are flawed or not compelling; and (3) a 2000-year return interval does not provide an adequate level of conservatism given the higher Utah new building construction/highway bridge design levels and the thirty to forty-year facility operating period. See id. at 6-14.

In response, PFS opposes the State's late-filed contention admission request arguing that (1) the Board lacks jurisdiction over the PFS exemption request; (2) the State request constitutes an impermissible collateral attack on 10 C.F.R. § 72.7 and other NRC regulations that permit applicants and licensees to seek exemptions, regardless of the provisions included in a rule, or rulemaking plan; and (3) the State has failed to provide an admissible contention

supported by adequate bases. Moreover, according to PFS, because the State has failed to submit an admissible contention, there is no basis for certification or referral to the Commission. See [PFS] Response to [State] Request for Admission of Late-Filed Modification to Basis 2 of Utah Contention L (Nov. 29, 2000) at 5-15 [hereinafter PFS Response]. The staff, on the other hand, asserts that the Board should certify or refer the State's request to the Commission inasmuch as it seeks to invoke the agency's adjudicatory procedures relative to an exemption request or, alternatively, deny the request as failing to provide a litigable contention. As grounds for denying the State's request, the staff argues that it (1) seeks improperly to challenge the adequacy of staff review activities; (2) utilizes provisions of an unadopted rulemaking plan as the basis for challenges to the staff's technical determinations; and (3) seeks to introduce issue statements by reference to its January 2000 exemption filing, including the seismic qualifications of facility's Canister Transfer Building (CTB) equipment and assumptions about accident leak rates, "breach hole" and leak hole sizes, and the potential for sabotage events involving specified weapons, that are late-filed and do not meet the section 2.714(a)(1) standards for admission. See NRC Staff's Response to [State] Request for Admission of Late-Filed Modification to Basis 2 of Contention Utah L (Nov. 29, 2000) at 6-13 [hereinafter Staff Response].

## II. ANALYSIS

In evaluating the current State request, given our decisions regarding the State's attempts to have the PFS exemption request become the subject of litigation in this proceeding, we start with the premise that, at best, the only relief we can afford the State is a certification or referral to the Commission to ascertain to what degree, if any, the Commission wishes the Board to permit consideration of the exemption request in an adjudicatory context. See



LBP-99-21, 49 NRC at 438; LBP-00-15, 51 NRC at 318. We could do this by simply certifying a question regarding the State's motion, without further discussion. As PFS points out, however, unless the State has posited an issue statement regarding the exemption that otherwise would be admissible, such a certification could involve the Commission in dealing with essentially nonlitigable matters, arguably not an efficient or effective use of its time and resources. See PFS Response at 9 (citing Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), CLI-86-24, 24 NRC 769, 772 n.3, 774-75 (1986), aff'd, Edelman v. NRC, 825 F.2d 46 (4<sup>th</sup> Cir. 1987)); see also Staff Response at 5-6. Accordingly, we turn first to the matter of the admissibility of the State's issue statement relative to the PFS exemption.

A. Admissibility of State Concerns

As we suggested in our first decision on this matter, an initial consideration is to accurately parse from the State's pleading the focus of its concerns relative to the PFS exemption request. From our reading of its current pleading, as well as its prior attempts to have an exemption-related issue statement admitted, the matters in controversy now appear to be as follows:

Relative to the PFS seismic analysis supporting its application and the PFS April 9, 1999 request for an exemption from the requirements of 10 C.F.R. § 72.102(f) to allow PFS to employ a probabilistic rather than a deterministic seismic hazards analysis, PFS should be required either to use a probabilistic methodology with a 10,000-year return period or comply with the existing deterministic analysis requirement of section 72.102(f), or, alternatively, use a return period significantly greater than 2000 years, in that:

1. The requested exemption fails to conform to the SECY-98-126 rulemaking plan scheme, i.e., only 1000-year and 10,000-year return periods are specified for design earthquakes for safety-important SSCs -- SSC Category 1 and SSC Category 2, respectively -- and any failure of

an SSC that exceeds the radiological requirements of 10 C.F.R. § 72.104(a) must be designed for SSC Category 2, without any explanation regarding PFS SSC compliance with section 72.104(a).

2. PFS has failed to show that (a) its facility design will provide adequate protection against exceeding the section 72.104(a) dose limits; and (b) its facility and equipment, specifically the components within the CTB involved in the transfer of the spent fuel canister from a transportation cask to a storage cask, including the proposed single-failure transfer crane, are designed to withstand a 2000-year return period earthquake.
3. The PFS accident evaluation is inadequate because (a) it does not bound the design basis accident DE IV under American National Standards Institute (ANSI)/ANS-57.9-1999; (b) its leakage rate and breach hole assumptions are based on information in NUREG/CR-6487, "Containment Analysis for Type B Packages Used to Transport Various Contents" and NUREG-1617, "Standard Review Plan for Transportation Packages for Nuclear Spent Fuel," which in turn is derived from ANSI standard N14.5 for transportation casks, despite the fact that PFS cannot meet the leak-testing, repair, and maintenance assumptions upon which standard N14.5 is based; and (c) it does not account for beyond design basis accidents involving sabotage using anti-tank devices.
4. The staff's reliance on the reduced radiological hazard of stand-alone ISFSIs as compared to commercial power reactors as justification for granting the PFS exemption is based on incorrect factual and technical assumptions about the PFS facility's mean annual probability of exceeding a safe shutdown earthquake (SSE), and the relationship between the median and mean probabilities for exceeding an SSE for central and eastern United States commercial power reactors and the median and mean probabilities for exceeding an SSE for the PFS facility.
5. In supporting the grant of the exemption based on 2000-year return period, the staff relies upon the DOE standard, DOE-STD-1020-94, and specifically the category-3 facility SSC performance standard that has such a return period, notwithstanding the fact the staff categorically did not adopt the four-tiered DOE category scheme as part of the Part 72 rulemaking plan.
6. In supporting the grant of the exemption based on the 2000-year return period, the staff relies upon the 1998 exemption granted to DOE for the INEEL ISFSI for the TMI-2 facility fuel, which was discussed in SECY-98-071 (Apr. 8, 1998), even though that grant was based on circumstances not present with the PFS ISFSI, including (a) existing INEEL design standards for a higher risk facility at the ISFSI host site; (b) a settlement agreement with the State of Idaho that required ISFSI construction by the end of 1998; and (c) the use of a peak design basis

horizontal acceleration of 0.36 g that was higher than the 2000-year return period value of 0.30 g.

7. Because (a) design levels for new Utah building construction and highway bridges are more stringent; and (b) the PFS return period is based on the twenty-year initial licensing period rather than the proposed thirty to forty year operating period, the 2000-year return period for the PFS facility does not ensure an adequate level of conservatism.

See November 2000 State Request at 6-14; January 2000 State Request at 7-12. We consider each of these aspects of the State's concern relative to the late-filing and admission standards of section 2.714.

1. Balancing Under Section 2.714(a)(1) Late-Filing Standards

Recently, in dealing with the question of whether a late-filed contention should be admitted, we characterized the basic analytical process as follows:

To justify a presiding officer's consideration of the "merits" of a late-filed contention, i.e., whether the contention fulfills the admissibility standards specified in 10 C.F.R. § 2.714, a party must demonstrate that a balancing of the five factors set forth in section 2.714(a)(1)(i)-(v) supports acceptance of the petition. The first and foremost factor in this appraisal is whether good cause exists that will excuse the late-filing of the contention. See Commonwealth Edison Co. (Braidwood Nuclear Power Station, Units 1 and 2), CLI-86-8, 23 NRC 241, 244 (1986). And relevant to our evaluation of that factor here, as we have noted previously (albeit in a somewhat different context), the good cause element has two components that impact on our assessment of the timeliness of a contention's filing: (1) when was sufficient information reasonably available to support the submission of the late-filed contention; and (2) once the information was available, how long did it take for the contention admission request to be prepared and filed. See LBP-99-3, 49 NRC 40, 46-48 (assessing late-filing factors relative to petition to intervene), aff'd, CLI-99-10, 49 NRC 318 (1999). Moreover, relative to the other four factors, in the absence of good cause there must be a compelling showing on the four remaining elements, of which factors two and four -- availability of other means to protect the petitioner's interest and extent of representation of petitioner's interest by other parties -- are to be given less weight than factors three and five -- assistance in developing a strong record and broadening the issues/delaying the proceeding. See Braidwood, CLI-86-8, 23 NRC at 244-45.

LBP-00-27, 52 NRC 216, 220-21 (2000). Although the matters the State now seeks to introduce into this proceeding relate generally to the PFS exemption request, they are not all of the same stripe when it comes to the section 2.714(a)(1) balancing analysis of the late-filing factors, particularly factor one.

With regard to factor one -- good cause for late filing -- because items four through six set forth above, which challenge the staff's rationale for supporting the exemption, were filed within the time allotted by the Board for submitting exemption-related late-filed contentions, see Licensing Board Order (Schedule for Filing New or Modified Contentions) (Nov. 1, 2000) at 2 (unpublished), they are timely and thus place the good cause factor on the admissibility side of the section 2.714(a)(1) balance. The same is true for items one and seven, which relate directly to the exemption request and the 2000-year return period endorsed by the staff relative to that request. In connection with items two and three, however, PFS and the staff takes the position that these matters, in fact, are not associated with the exemption, but rather are a State attempt to introduce issues into the proceeding that it should have contested as part of its initial contentions filing in November 1997 or at some other point significantly before its current filing. See PFS Response at 9 n.13; Staff Response at 9-11. We agree with their argument that, although couched in terms of the exemption request, item three raises matters that could have been raised much earlier, regardless of the PSHA return period under consideration or, indeed, whether a deterministic or probabilistic analysis is used. The same cannot be said for item two, which is grounded in the assertion that the CTB "is a Category 1 SSC," January 2000 State Request at 10, thus tying it, for the purpose of this late-filing analysis, directly to the return period that is at issue relative to the exemption.

Relative to factors two and four -- availability of other means and protection of interests by other parties -- these two factors support admission of all seven items. In connection with

factor three -- contribution to a sound record -- item one appears to be an argument of counsel, while items two and three are supported by State affiant Resnikoff, and items four through seven are supported by State affiant Arabasz. In connection with the first item, it is not the type that necessarily requires technical support to put factor three in the "admissibility" column, given that it is essentially an assertion that no explanation has been given as to why the regulatory scheme proposed in the rulemaking plan was not appropriate relative to the exemption. See LBP-99-7, 49 NRC 124, 128-29 (1999). As to the other six items, one or the other of these possible witnesses has put forth some information, albeit not extensive, in support of each of these concerns.<sup>1</sup> We conclude as to these items that this factor, at best, provides moderate support for contention admissibility. See LBP-00-28, 52 NRC 226, 238-39, reconsideration denied on other grounds, LBP-00-31, 52 NRC 340 (2000), petition for interlocutory review denied on other grounds, CLI-01-01, 53 NRC \_\_ (Jan. 10, 2001). And relative to factor five -- broadening the issues/delaying the proceeding -- given the current status of this proceeding in which all safety-related issue discovery is concluded and evidentiary sessions for all remaining admitted safety and environmental contentions are scheduled for July 2001,<sup>2</sup> including admitted contention Utah L regarding seismic matters not directly related to the exemption controversy,

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<sup>1</sup> At this juncture, neither PFS nor the staff has seriously challenged the qualifications of Drs. Arabasz or Resnikoff relative to the seismic and radiological dose items their declarations support.

<sup>2</sup> Recently, the staff has brought to the Board's attention certain matters that may lead to a delay regarding some of the issues scheduled to be heard in July 2001. See Jan. 21, 2001 Letter from Sherwin E. Turk, NRC Staff Counsel, to the Licensing Board at 2-3. The Board, however, has not yet made any schedule revisions. Nor does the Board currently contemplate that its consideration of the pending December 30, 2000 PFS dispositive motion regarding admitted contention Utah L will be impacted by the pendency of this certification/referral determination with the Commission.

addition of these issues at this point would certainly broaden the matters in controversy and in all likelihood delay the completion of this proceeding to some degree.<sup>3</sup>

Finally, weighing the support provided for admission by factors one through four, in particular factors one and three, against that afforded by factor five on the inadmissibility side of the balance, we conclude that in this instance, relative to items one, two, and four through seven, the State has met its burden of establishing the admissibility of these late-filed issues. On the other hand, the State has not sustained its burden in connection with item three, which we thus find would not be admissible.

2. Admissibility Under Section 2.714(b), (d) Standards

In LBP-98-7, 47 NRC at 178-81, the Board discussed the various pleading requirements for contentions set forth generally in 10 C.F.R. § 2.714(b), (d), which are applicable to both timely and late-filed issue statements. As they reflect the substantive challenges to the PFS-requested and staff-endorsed exemption request from compliance with the DSHA requirement of section 72.102(f), below we outline our views regarding the admissibility of items one, two, and four through seven set forth above, relative to those standards.<sup>4</sup>

a. Item One. For this State concern, a central question posed by both PFS and the staff is the degree to which the 1998 staff rulemaking plan, SECY-98-126, and its purported

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<sup>3</sup> We note in this regard that, under the existing schedule for this proceeding, section 2.714(a) factor five is likely to become increasingly significant in relation to the other three non-good cause factors.

<sup>4</sup> Our ruling on the late-filing criteria means we would not need to reach the matter of item three's admissibility under the section 2.714(b), (d) criteria. We note, however, that we would not admit subitem a because it lacks materiality, see LBP-98-7, 47 NRC at 179-80, or subitem c because it impermissibly challenges the Commission's regulations or rulemaking-associated generic determinations, id. at 179. We would admit subitem b as raising a genuine material dispute adequate to warrant further inquiry. See [PFS], [SAR for] Private Fuel Storage Facility at 8.2-37 (rev. 17) (leak rate calculation results, performed using ANSI N14.5-1977 equations, are included in HI-STORM storage cask SAR).

section 72.104(a) dose-limit related, two-return period category scheme can be used as the basis for a contention contesting the PFS exemption request that does not fall into either of those return period categories. Both PFS and the staff maintain that the rulemaking scheme is essentially irrelevant, given it does not in any way bind the staff relative to the exemption, thus making this State concern inadmissible as an impermissible challenge to 10 C.F.R. § 72.7, the provision that permits applicants and licensees to seek exemptions from the Part 72 requirements. See PFS Response at 10-12; Staff Response at 8. We agree with PFS and the staff that the rulemaking plan and the regulatory scheme it outlines does not preclude the staff from allowing PFS to use another return period, such as 2000 years, in connection with the proposed PFS facility. We do not agree, however, that this rulemaking plan has no role to play as the basis for an admissible contention relative to the PFS exemption request. Certainly, its existence creates the reasonable expectation that, as part of the rationale provided in support of the exemption, an explanation will be provided about why the scheme, as set forth in the plan, is not appropriate relative to the exemption. That explanation is, in turn, subject to scrutiny in a properly pled contention. In this instance, because it fulfills the pleading requirements and reflects a genuine material dispute adequate to warrant further inquiry, we would not preclude consideration of item one, as it frames a challenge to the rationale for the 2000-year return period, in connection with any further litigation on the State's exemption challenge.

b. Item Two. In its two subparts, this item reflects somewhat different approaches to challenging the adequacy of the PFS facility design in relation to the exemption. Subitem a is an adjunct to the item one concern that, in light of the explanation given in the staff rulemaking plan, the technical basis for a 2000-year return period has not been adequately established. As with item one, we would permit it to be part of any further litigation regarding the State's

challenge to the exemption. Regarding subitem b, we find it inadmissible as failing properly to challenge the application. Whatever the PFS application may have provided when this concern was first posed in January 2000, the PFS Safety Analysis Report (SAR) has, since at least August 2000, provided that “[t]he overhead bridge crane and the semi-gantry crane are designed to withstand the [PFS facility] design basis ground motion (determined by the PSHA with a 2,000-yr return period, as is the Canister Transfer Building that provides the structural support for the cranes.” [PFS], [SAR for] Private Fuel Storage Facility at 8.2-15 (rev. 17) [hereinafter SAR].

c. Item Four. As worded, this item challenges one of the bases given in the staff’s SER analysis of the PFS exemption request. In addition to objecting to any further consideration of item four as irrelevant based on the purported State failure to demonstrate that the selected 2000-year return period earthquake will exceed regulatory limits, see PFS Response at 13 & n.20, an argument we deal with below, in concert with the staff, PFS objects to the admissibility of this item, as well as similarly worded items five and six, as an impermissible attempt to challenge the staff’s review activities, id. at 12-13; Staff Response at 7-8.

i. Validity of Staff-Review-Based Contention. It is a well-established principal relative to safety-related matters, such as are implicated here, that the adequacy of the application, not the adequacy of the staff’s review or evaluation, e.g., its SER, is the focus for a proper contention. 54 Fed. Reg. 33,168, 33,171 (1989). And in this instance, for items four through six, the focus as outlined by the State is the staff’s September 2000 SER discussion of the exemption. While this fact alone normally would render these items inadmissible, the circumstances here require additional consideration.



A significant concern underlying this presumption against challenges to staff review efforts was expressed by the Commission in The Curators of the University of Missouri, CLI-95-1, 41 NRC 71, 121-22 (1995), when it observed:

[E]ven assuming arguendo that Staff did conduct an insufficient review, a denial of a meritorious application on that ground would be grossly unfair -- punishing the applicant for an error by Staff. The subject of the litigation in this proceeding is the [applicant's] entitlement to the license amendments, not the adequacy of the Staff's review of those amendments.

Thus, this "staff review" principal seems intended to ensure that, as general matter, so long as the applicant provides appropriate justification for its request, notwithstanding any staff actions, the sufficiency of the licensing request will not be impaired.

This assumes, however, that the appropriate justification for the applicant's request is in its licensing submission. In this instance, however, a review of the relevant materials suggests there is some question as to the source of the justification for the 2000-year return period. The PFS SAR now declares that "[i]t was determined that an appropriate design probability for the [PFS facility (PFSF)] is  $5 \times 10^{-4}$  per year or a 2,000-yr return period (PFS letters of April and August 1999)." SAR at 2.6-92 (rev. 9). The citations in support of that statement are, in turn, to letters dated April 2, 1999, and August 24, 1999, from PFS to the staff. See id. at 2.8-7 (rev. 12), 2.8-8 (rev. 16). The April 1999 letter includes an attachment entitled "Request for Exemption to 72.102(f)(1) Seismic Design Requirement for the [PFSF]" that provides support for a 1000-year return period in which, among other things, there is a discussion of SECY-98-126, the staff rulemaking plan referenced in item one, and SECY-98-071, the TMI exemption request referenced in item five. See Apr. 2, 1999 Letter from John D. Parkyn, PFS Chairman, to Mark Delligatti, NRC Spent Fuel Project Office, attach. at 4-5. Thereafter, in the August 24, 1999 letter, PFS declares "[b]ased on recent discussions with the NRC, PFS has decided to use a 2,000 year recurrence interval to calculate the PFSF design basis ground

motion (Reference 2). This will provide a greater margin of safety than the 1,000 year recurrence interval specified in [the April 1999 exemption request]." Aug. 24, 1999 Letter from John D. Parkyn, PFS Chairman, to NRC Document Control Desk at 1. The "Reference 2" referred to in this letter is, in turn, an August 6, 1999 letter from PFS to the staff in which PFS recounts that among the items raised by the staff in an August 4, 1999 phone call was the following:

NRC Comments

1. PFS should consider using a design earthquake that is based on a [PSHA] with a return frequency of 2000 years. Alternatively, PFS could submit additional regulatory and technical basis information to justify the use of a 1000-year period.

\* \* \* \* \*

PFS Response

1. In order to include additional conservatism in the [PFSF] design, PFS will revise the design earthquake to utilize the PSHA approach with a return frequency of 2000 years. A license amendment reflecting this change will be submitted by August 20, 1999. Additionally, the seismic exemption request submitted in [the April 1999 letter] will be revised to state that for additional conservatism PFS has chosen to use a return frequency of 2000 years. A revised seismic exemption request will also be submitted by August 20, 1999.

Aug. 6, 1999 Letter from John L. Donnell, PFS Project Director, to NRC Document Control Desk at 1-2.

As is apparent from the relevant portions of the August 24, 1999 letter quoted above, the PFS justification for adopting the 2000-year return period was a recognition that it was an "additional conservatism." There is no detailed discussion of reasons, such as accompanied the April 1999 PFS exemption request, thus leaving the staff's SER explanation as the only

specific enumeration of reasons for adopting the 2000-year return period.<sup>5</sup> To be sure, in providing that explanation, the staff relies on two of the elements that are referenced by PFS relative to the 1000-year return period request: the 1998 rulemaking plan and the TMI spent fuel exemption. But these are supplemented to a significant degree by other matters that were not proffered by PFS in seeking the exemption for either return period, including existing commercial reactor seismic analyses and the DOE categorization scheme for its facilities, items four and five, respectively.

Bearing in mind the general admonition that technical perfection is not an essential element of contention pleading, see Houston Lighting & Power Co. (South Texas Project, Units 1 and 2), ALAB-549, 9 NRC 644, 649 (1979), in the context of this exemption request, we would not reject items four and five based solely on the State's reference to the staff. Moreover, notwithstanding the PFS reference to the TMI ISFSI exemption in its April 1999 1000-year return period exemption request, we would not reject item six based on the State's failure to recite that PFS endorsed this rationale as supporting the 2000-year return period as well. We thus would not consider the State's "staff review" references as grounds in this instance for rejecting items four through six.

ii. Admissibility of Item Four. As noted above, PFS also objects to the admission of this concern as lacking an adequate basis because of the State's purported failure to demonstrate that the selected 2000-year return period earthquake will exceed regulatory limits. We find, however, that the staff's explanation in the rulemaking plan regarding the section 72.104(a)-based rationale for the choice between Frequency Categories 1 and 2, as

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<sup>5</sup> Also provided by PFS with the April 1999 letter was a March 1999 report from Geomatrix Consultants, Inc., entitled "Development of Design Ground Motions for the [PFSF]" that sets forth the calculations establishing the design ground motion response spectra for both 1000-year and 2000-year return period earthquakes. That technical report, however, does not set forth any conclusions about which return period should be used.

referenced in the State's request, see State November 2000 Request at 3 & n.3, is sufficient in this regard. This item thus would be admissible as reflecting a genuine material dispute adequate to warrant further inquiry.

d. Item Five. This concern is inadmissible, PFS declares, because it is footed in the staff's rulemaking plan, which is not controlling as a standard for judging its exemption request. See PFS Response at 13-14. As we indicated in section II.A.2.a above, although we agree that the rulemaking plan does not compel any particular result relative to the PFS exemption request, we disagree that it lacks any relevance as a supporting basis for the State's issue statements. We thus would find this item admissible as reflecting a genuine material dispute adequate to warrant further inquiry.

e. Item Six. PFS contests the admissibility of this State concern as both speculative and irrelevant because the issue, it asserts, is not why DOE asked for the exemption but whether the staff granted it, thereby providing an important precedent for use of a 2000-year return period. See PFS Response at 14. We agree that subitem b regarding settlement negotiations lacks an adequate factual basis so as to be inadmissible, see LBP-98-7, 47 NRC at 180, but find that subitems a and c are admissible as reflecting a genuine material dispute adequate to warrant further inquiry.

f. Item Seven. This concern about conservatism relative to new building construction/highway bridge design levels and the PFS facility operating period should not be admitted, according to PFS, because it lacks adequate factual support and fails to recognize the level of conservatism that is inherent in 10 C.F.R. Part 72 and NRC Standard Review Plan guidance based on those regulations. See PFS Response at 14-15. In light of the State's detailed exposition of the new building construction/highway bridge seismic design standards, State affiant Arabasz's declaration that these standards "are more stringent" as well as his

statements regarding the facility's operating period, State November 2000 Request at 12-13, exh. 1, at 3 (Nov. 9, 2000 Declaration of Dr. Arabasz), and the fact that PFS is seeking an exemption from the existing provisions of Part 72 (and whatever conservatism they embody), we find this item admissible as reflecting a genuine material dispute adequate to warrant further inquiry.

B. Certification to the Commission

Having concluded in section II.A. above that certain of the matters the State seeks to raise relative to the PFS exemption request would constitute admissible late-filed issue statements under section 2.714, the question remains as to whether these exemption-related matters should be considered in the context of this adjudicatory proceeding. As we have made clear in our previous rulings, we consider this a matter that can only be resolved by the Commission, leading us to consider certifying to the Commission the question whether the April 1999 PFS exemption request, as modified in August 1999, is an appropriate subject for litigation in the proceeding.

We find certification is warranted in this instance. Seismic qualification is a matter that, under the agency's regulatory program, has a significant role in affording adequate protection of the public health and safety and the environment. Moreover, as the staff has noted, the PFS facility apparently cannot meet the deterministic seismic qualification standards of the existing 10 C.F.R. § 72.102(f)(1). See Staff Response at 2 (PFS analyses indicate that seismic event peak horizontal and vertical acceleration values would exceed proposed PFS facility design values); see also November 2000 State Request at 11. It thus seems apparent that resolution of this seismic uncertainty is central to a determination of the technical sufficiency of the PFS application. This alone likely is not sufficient to warrant certification. Nonetheless, the fact that the technical resolution of this issue is being sought by a request to excuse the applicant from

the agency's current regulatory requirements governing seismic qualification suggests that whether to permit a properly pled challenge to that exemption in this proceeding is a matter the Commission may wish to give early consideration. Cf. 10 C.F.R. § 2.758(d). Accordingly, pursuant to 10 C.F.R. § 2.718(i), we certify to the Commission the question whether the State's contention Utah L challenge to the April 1999 PFS seismic exemption request should be litigated in this proceeding, along with a referral of our rulings in section II.A on the admissibility of the items the State has framed in support of its challenge.

### III. CONCLUSION

In connection with the April 1999 PFS request for an exemption from the requirements of 10 C.F.R. § 72.102(f)(1) to permit it to use a probabilistic rather than a deterministic seismic hazards analysis for its proposed Skull Valley, Utah ISFSI, as revised in August 1999 to incorporate a 2000-year return period, relative to the State's contention Utah L challenges to that exemption as set forth in section II.A. above, the Board finds that item three is not admissible under a balancing of the section 2.714(a)(1) late-filing criteria; item two, subitem b, and item six, subitem b, are inadmissible as failing to meet the section 2.714(b) admissibility criteria; and item one, item two subitem a, item four, item five, item six, subitems a and c, and item seven are admissible as establishing a genuine material dispute adequate to warrant further inquiry. Additionally, in accordance with 10 C.F.R. §§ 2.718(i), 2.730(f), we refer our rulings in section II.A above on the admissibility of the items the State has framed in support of its challenge and certify to the Commission the question whether the State's contention Utah L challenge to the April 1999 PFS seismic exemption request should be litigated in this proceeding.

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For the foregoing reasons, it is this thirty-first day of January 2001, ORDERED, that:

1. In accordance with 10 C.F.R. § 2.730(f), the Licensing Board's rulings in section II.A above regarding the admissibility of the State's revised November 9, 2000 contention Utah L challenge to the April 1999 PFS request from the requirements of 10 C.F.R. § 72.102(f)(1), as amended in August 1999 to incorporate a 2000-year return period, are referred to the Commission for its consideration and further action, as appropriate; and

2. In accordance with 10 C.F.R. § 2.718(i), the Board certifies to the Commission the question whether the State's November 9, 2000 contention Utah L challenge to the April 1999

PFS request from the requirements of 10 C.F.R. § 72.102(f)(1), as amended in August 1999 to incorporate a 2000-year return period, should be subject to further litigation in this adjudicatory proceeding.

THE ATOMIC SAFETY  
AND LICENSING BOARD<sup>6</sup>

*/RA/*

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G. Paul Bollwerk, III  
ADMINISTRATIVE JUDGE

*/RA/*

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Dr. Jerry R. Kline  
ADMINISTRATIVE JUDGE

*/RA/*

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Dr. Peter S. Lam  
ADMINISTRATIVE JUDGE

Rockville, Maryland

January 31, 2001

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<sup>6</sup> 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 of Goshute Indians, Ohngo Gaudadeh Devia, Confederated Tribes of the Goshute Reservation, Southern Utah Wilderness Alliance, and the State; and (3) the staff.



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 (RULINGS ON ADMISSIBILITY OF LATE-FILED MODIFICATION OF CONTENTION UTAH L, GEOTECHNICAL, BASIS 2; REFERRING RULINGS AND CERTIFYING QUESTION REGARDING ADMISSIBILITY) (LBP-01-03) 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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Adjudication  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

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Atomic Safety and Licensing Board Panel  
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Docket No. 72-22-ISFSI  
LB MEMORANDUM AND ORDER (RULINGS ON  
ADMISSIBILITY OF LATE-FILED MODIFICATION  
OF CONTENTION UTAH L, GEOTECHNICAL,  
BASIS 2; REFERRING RULINGS AND CERTYING  
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[Original signed by Evangeline S. Ngbea]

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Office of the Secretary of the Commission

Dated at Rockville, Maryland,  
this 31<sup>st</sup> day of January 2001