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February 14, 2000

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DOCKETED
FILED
ADJUTANT GENERAL

In the Matter of)
)
PRIVATE FUEL STORAGE, L.L.C.)
)
(Independent Spent)
Fuel Storage Installation))

Docket No. 72-22-ISFSI

NRC STAFF'S RESPONSE TO "STATE OF UTAH'S
REQUEST FOR ADMISSION OF LATE-FILED
MODIFICATION TO BASIS 2 OF UTAH CONTENTION L"

INTRODUCTION

Pursuant to 10 C.F.R. § 2.714(c), and the Atomic Safety and Licensing Board's "Order (General Schedule Revision and Other Matters)," dated February 2, 2000 at 3, NRC Staff ("Staff") hereby files its response to the "State of Utah's Request for Admission of Late-Filed Modification to Basis 2 of Utah Contention L" (Late-Filed Bases), filed on January 26, 2000. For the reasons set forth below, the Staff submits that the State's Late-Filed Bases should be rejected.

BACKGROUND

The State of Utah's original Contention L ("Geotechnical"), as admitted by the Board, asserted that:

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

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Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 191, 253 (1998).¹ Basis 2 for Contention Utah L, as filed by the State of Utah and admitted by the Board, asserted as follows:

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). [Citation omitted.] Failure to adequately assess ground motion places undue risk on the public and the environment and fails to comply with 10 CFR § 72.102(c).²

Following the admission of this contention, various analyses were submitted by Private Fuel Storage, L.L.C. ("PFS" or "Applicant"), which indicated that the peak horizontal acceleration and peak vertical acceleration values from a seismic event would exceed the proposed facility's design values. To resolve the issue of seismic design, on April 2, 1999, PFS submitted a request for an exemption from the requirements of 10 C.F.R. § 72.102(f)(1) and 10 C.F.R. Part 100 Appendix A, in order to allow it to utilize a probabilistic seismic hazard analysis ("PSHA") and considerations of risk to establish the design earthquake ground motion levels at the facility, in lieu of the deterministic approach which PFS was required to utilize under Appendix A; in addition, the

¹ In admitting this contention, the Licensing Board noted that "the State agreed that its contention should not be construed as asking for evaluation of faults other than 'capable faults' as they are defined in 10 C.F.R. Part 100, App A. . . ." LBP-98-7, 47 NRC at 191 n.14.

² "State of Utah's Contentions on the Construction and Operating License Application by Private Fuel Storage, LLC for an Independent Spent Fuel Storage Facility," dated November 23, 1997, at 82-83.

exemption request proposed to design the facility to the ground motions produced by 1,000-year return period earthquakes.³

In response to the Applicant's exemption request, on April 30, 1999, the State filed a "Motion Requiring Applicant to Apply for Rule Waiver Under 10 CFR § 2.758(b) or in the Alternative Amendment to Utah Contention L." On May 26, 1999, the Licensing Board denied the State's request to require PFS to file a rule waiver petition, and it denied the State's request to amend Contention L on grounds of ripeness. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-99-21, 49 NRC 431, 438 (1999). Finding that the Staff had not yet acted on the exemption request and the possibility that the Staff could deny the request rendered its status uncertain, the Licensing Board concluded, "the question of admitting or amending contentions relative to the PFS exemption request must await favorable staff action on that request." *Id.* at 439.⁴

On December 15, 1999 (as corrected and reissued on January 4, 2000), the Staff issued its Safety Evaluation Report (SER) for the proposed Private Fuel Storage, L.L.C. (PFS) facility, with respect to systems not directly associated with the dry storage casks proposed for use at the facility. Chapter 2 of the SER, evaluated the site characteristics for the proposed facility including, *inter alia*, geology and seismology (SER, § 2.1.6). The SER summarized the Staff's review of the Applicant's submittals, and presented the Staff's views with respect to a number of seismic and geological issues

³ On August 24, 1999, the Applicant revised its exemption request to substitute a 2,000-year recurrence period in place of the 1,000-year period that it had proposed in its initial exemption request.

⁴ The Licensing Board further observed that "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." LBP-99-21, 49 NRC at 438 (footnote omitted).

-- including, as pertinent here, ground vibration and the Applicant's request for exemption. (SER, § 2.1.6.2, at 2-35 - 2-45).⁵

On January 26, 2000, following its receipt of the SER, the State filed the instant request to amend Contention L, based, in part, on its assertions that "[a]pparently, the Staff has granted the Applicant's exemption request to use a probabilistic analysis ("PSHA") based on a 2,000 year return period," and "[t]he Staff has now granted the Applicant an exemption from 10 CFR § 72.102(c) which will allow the use of probabilistic methodology with a return period of 2,000 years" (Late Filed Bases, at 5 and 7). Accordingly, the State proposes to modify Basis 2 for Contention Utah L (a) "to account for the Staff's proposal" to use a PSHA rather than a deterministic seismic hazard analysis ("DSHA"), and (b) to challenge "the use of a 2,000 year return period instead of a 10,000 year return period." *Id.* at 1. The State describes this proposed revision as follows:

[T]he State seeks to modify Basis 2 of Contention L to require either the use of a probabilistic methodology with a return period of 10,000 years or compliance with the deterministic analysis as currently required by 10 CFR § 72.012(c) [sic]. Thus, in basis 2, the State now alleges that the Applicant has not complied with either 10 CFR § 72.102(c) or Frequency Category 2 events (10,000 year return period) in the NRC Rulemaking Plan in its assessment of ground motion, thereby placing undue risk on the public and the environment.

Id. at 7.

For the reasons set forth below, the Staff submits that the State's request to amend the bases for Contention Utah L should be rejected at this time.

⁵ Other issues addressed in the SER included basic geologic and seismic information (SER § 2.1.6.1); surface faulting (§ 2.1.6.3); stability of subsurface materials (§ 2.1.6.4); slope stability (§ 2.1.6.5); and volcanism (§ 2.1.6.6).

DISCUSSION

A. The State's Request to Amend the Basis for Contention L Is Not Yet Ripe.

As set forth above, the Licensing Board has previously instructed the parties in this proceeding that "the question of admitting or amending contentions relative to the PFS exemption request must await favorable staff action on that request." LBP-99-21, 49 NRC at 439. As the Board has recognized, the possibility that the Staff could deny the exemption request renders the status of that request uncertain and insufficiently ripe for the Board to refer a question to the Commission as to whether the contention should be considered in the proceeding. *Id.* at 438. These considerations continue to apply at this time.

Despite the State's apparent belief to the contrary, the Staff has not yet granted, or determined to grant, the Applicant's seismic exemption request; nor has Staff's review of the exemption request been concluded. While the State focuses upon certain language in the Staff's SER, in which the Staff indicated that it found the probabilistic methodology to be acceptable (SER at 2-44),⁶ the Staff has not determined that the exemption should be granted. On the contrary, in the very paragraph quoted by the State, the SER explicitly states that "additional analyses are needed to assess ground vibrations of the Facility and to approve the applicant's request for an exemption

⁶ The State recites the following language contained in the SER:

"[T]he staff concludes that additional analyses are needed to assess ground vibrations of the Facility and to approve the applicant's request for an exemption to 10 CFR 72.102(f)(1). The staff agrees that the use of the PSHA methodology is acceptable, however, the SAR analyses need to be revised to consider a 2,000-year return period, rather than a 1,000-year return period."

Motion at 5 n.3, quoting SER at 2-45.

to 10 CFR 72.102(f)(1),” and that “[t]hese analyses are required to verify compliance with the applicable requirements of 10 CFR Part 72, Subpart E” (*Id.* at 2-45; emphasis added). In addition, Chapter 2 of the SER lists the seismic design and exemption request as an “open item” (*Id.* at 2-52). Accordingly, there is no basis for the State’s assertion that the Staff has granted the Applicant’s seismic exemption request, and this matter is therefore not yet ripe for inclusion in a contention.⁷

B. The State’s Assertion that the Staff’s Grant of the Exemption Request Fails to Satisfy the Commission’s Rulemaking Plan Should Be Rejected as Failing to State a Legally Cognizable Basis.

In support of its request to modify Basis 2 for Contention Utah L, the State asserts that “the Staff’s grant of the exemption request does not comport with the conceptual change proposed by NRC to amend Part 72 in NRC’s Rulemaking Plan,” and “fails to comply with the NRC rulemaking plan”; and that “the rationale for the Staff’s grant of the exemption request is arbitrary, capricious and not in accordance with law.” Late Filed Bases at 7; *see id.* at 8-9.⁸

Wholly apart from the question of ripeness, discussed above, these assertions fail to state a legally cognizable basis. First, challenges to the adequacy of the Staff’s review or evaluation do not

⁷ While the Staff addresses the issues of regulatory basis and timeliness in the following sections, the Staff believes that the issue of ripeness is dispositive of the State’s request.

⁸ SECY-98-126, “Rulemaking Plan: Geological and Seismological Characteristics for Siting and Design of Dry Cask Independent Spent Fuel Storage Installations, 10 CFR Part 72,” dated June 4, 1998. The rulemaking generally would revise 10 C.F.R. § 72.102 to allow new applicants for dry cask ISFSIs west of the Rocky Mountain Front to utilize the (probabilistic) techniques of 10 C.F.R. Part 100, as amended in 1997 (see § 100.23) instead of the deterministic approach in 10 C.F.R. Part 100 Appendix A. *See* SECY-98-126 at 2.

establish a proper contention.⁹ Second, an NRC rulemaking plan, which is relied upon here by the State, constitutes a proposal for rulemaking and does not establish a binding regulatory requirement -- or even a proposed rule. There is no reason why an exemption request must be formulated by an Applicant or approved by the Staff based upon a proposed rule or regulatory approach. Accordingly, the State's assertion that the exemption request fails to comport with the proposed rulemaking fails to state a cognizable legal basis.¹⁰

In this regard, the Staff notes that in the midst of its proposed modification of Basis 2 of Contention Utah L, intended to challenge the pending seismic exemption request, the State presents a different set of issues pertaining to the design of the facility, its ability to satisfy NRC dose limits, and the Applicant's accident analysis. In this regard, the State identifies (a) concerns pertaining to Canister Transfer Building equipment, such as the HI-TRAC overpack and the potential failure of the single failure-proof crane in the event of a 2,000-year return earthquake, and (b) concerns pertaining to assumptions for the accident leak rate, "breach hole" size, leak hole size, and the potential for a sabotage event involving certain specified weapons. Late Filed Bases at 9-12.

The State has shown no basis for the inclusion of these issues within this contention, as these issues are unrelated to the Applicant's seismic exemption request. The effect of the Applicant's

⁹ See "Rules of Practice for Domestic Licensing Proceedings -- Procedural Changes in the Hearing Process," 54 Fed. Reg. 33168, 33171 (1989); *Curators of the University of Missouri* (TRUMP-S Project), CLI-95-8, 41 NRC 386, 395-96 (1995); *Louisiana Power and Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-812, 22 NRC 5, 55-56 (1985).

¹⁰ In addition, contrary to the State's assertion, the Staff has not "accepted" a 2,000 year return period, nor has it stated any "justification for accepting a 2,000 year return period." There is thus no basis for the State's assertion that "the Staff's justification for accepting a 2,000 year return period does not address the radiological consequences of a failed design." (Motion at 9).

exemption request would be to allow the use of a PSHA to establish the maximum ground motion to be considered in the design of the facility. This issue is unrelated to the design and accident analysis concerns presented by the State, which are essentially based on the SAR and the State's argument that an exemption request should be based on these considerations.¹¹ There is no legal basis to require an exemption request to include such considerations, other than the State's reliance upon an inchoate rulemaking plan. Regardless of whether these concerns would be admissible under a final regulation developed in line with the rulemaking plan, there is no existing regulatory basis to require consideration of these issues in connection with PFS' pending exemption request.

C. The State's Challenge to the Facility's Equipment and Accident Analysis Should Be Rejected as Untimely Filed.

Finally, the State has not shown good cause why it could not have presented its concerns pertaining to the Applicant's accident analysis (*e.g.*, the weapons or hole size issues) previously, with respect with respect to the adequacy of the Applicant's SAR.¹² These concerns are not based on new information contained in the SER or the Applicant's seismic exemption request, but upon the Applicant's SAR and information which PFS provided on the docket long ago.

¹¹ Significantly, these concerns are not supported by the affidavit of the State's seismic expert (Dr. Arabasz), who supports other portions of the proposed amendment -- but are based upon citations to the Applicant's Safety Analysis Report ("SAR") and the views of the State's accident analysis expert, Dr. Resnikoff -- further indicating that these issues are not based upon the seismic exemption request but upon other matters contained in the SAR. *See* Late Filed Bases at 9-12.

¹² The legal standards governing the admission of late-filed contentions or additional bases are set forth in the "NRC Staff's Response to 'State of Utah's Request for Admission of Late-Filed Bases for Utah Contention E,'" filed February 4, 2000, at 4-5. The Staff hereby incorporates that discussion by reference herein.

With respect to the other factors specified in 10 C.F.R. § 2.714(a)(1), the State has not made a compelling showing that those factors support the admission of these concerns. Regarding factors two and four, other means do not appear to be available to protect the State's interest with respect to the issues raised in the Late-Filed Bases, and the State's interest would not be represented by existing parties with respect to these issues; these factors, however, carry less weight than the three other factors specified in the regulation. *PFS*, LBP-98-7, 47 NRC at 208. With respect to factor three, the State's participation on these equipment design and accident analysis issues (as distinct from the seismic issues presented in these basis statements) is not likely to assist in developing a sound record, in that these issues are wholly unrelated to the issue of whether the Applicant's seismic exemption request should be approved; the admission of these issues as part of this contention would only confuse the record and would not assist the Commission in evaluating the Applicant's ground motion analysis and exemption request.

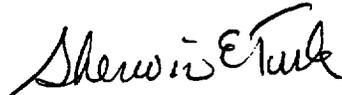
Finally, the fifth factor weighs against the admission of these equipment and accident analysis concerns, in that they would broaden the issues and cause delay in the proceeding. The State has had ample time and opportunity to raise these concerns previously; discovery on safety matters other than the seismic issues in Contention L (and aircraft issues in Contention K) has now closed; the admission of these additional equipment and accident analysis issues would likely require additional discovery and the filing of summary disposition motions, and would require additional time to address in developing and presenting testimony in the proceeding. In sum, the State has not made a "compelling" showing that these four factors outweigh the State's lack of good cause for its late filing of these equipment and accident analysis concerns. Accordingly, if the Licensing Board

determines to grant the State's request to amend Basis 2 for Contention Utah L, these concerns should be excluded from the amended contention.

CONCLUSION

For the reasons set forth above, the Staff submits that the State's late-filed request to modify the bases for Contention Utah L should be rejected.

Respectfully submitted,

A handwritten signature in black ink that reads "Sherwin E. Turk". The signature is written in a cursive style with a large, prominent "S" and "T".

Sherwin E. Turk
Counsel for NRC Staff

Dated at Rockville, Maryland
this 14th day of February 2000

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD '00 FEB 15 A11 :49

In the Matter of)
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PRIVATE FUEL STORAGE LLC)
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(Independent Spent)
Fuel Storage Installation))

Docket No. 72-22-ISFSI

CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF'S RESPONSE TO 'STATE OF UTAH'S REQUEST FOR ADMISSION OF LATE-FILED MODIFICATION TO BASIS 2 OF UTAH CONTENTION L'" in the above captioned proceeding have been served on the following through deposit in the Nuclear Regulatory Commission's internal mail system, or by deposit in the Nuclear Regulatory Commission's internal mail system, with copies by electronic mail, as indicated by an asterisk, or by deposit in the United States mail, first class, as indicated by double asterisk, with copies by electronic mail as indicated, this 14th day of February, 2000.

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