

RAS 2815

DOCKETED 03/05/01

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

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

NRC STAFF'S BRIEF CONCERNING THE LICENSING BOARD'S  
REFERRED RULINGS AND CERTIFIED QUESTION IN LBP-01-03  
(STATE OF UTAH'S REQUEST TO AMEND CONTENTION UTAH L  
TO CHALLENGE THE APPLICANT'S SEISMIC EXEMPTION REQUEST)

Sherwin E. Turk  
Counsel for NRC Staff

March 2, 2001

**TABLE OF CONTENTS**

TABLE OF AUTHORITIES ..... ii

INTRODUCTION ..... 1

BACKGROUND ..... 2

DISCUSSION ..... 5

I. Applicable Regulatory Framework. .... 5

II. The Referred Rulings and Certified Question Set Forth in LBP-01-03 ..... 6

    A. The Licensing Board Erred in Finding that Many of the Issues  
    Raised by the State Are Admissible ..... 7

    B. A Formal Hearing Should Not Be Held on the Seismic  
    Exemption Request ..... 14

CONCLUSION ..... 19

**TABLE OF AUTHORITIES**

**JUDICIAL DECISIONS**

*Eddleman v. NRC*, 825 F.2d 46 (4th Cir. 1987) . . . . . 15

*Kelley v. Selin*, 42 F.3d 1501 (6th Cir.), *cert denied*,  
515 U.S. 1159 (1995) . . . . . 14

**ADMINISTRATIVE DECISIONS**

Commission:

*Carolina Power and Light Co.* (Shearon Harris Nuclear Power Plant,  
Units 1, 2, 3 and 4), CLI-74-9, 7 AEC 197 (1974) . . . . . 18

*Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2),  
CLI-00-05, 51 NRC 90 (2000) . . . . . 14

*Curators of the University of Missouri* (TRUMP-S Project),  
CLI-95-8, 41 NRC 386 (1995) . . . . . 13

*Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3),  
CLI-99-11, 49 NRC 328 (1999) . . . . . 13, 15

*Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1),  
CLI-84-8, 19 NRC 1154 (1984) . . . . . 14, 18

*Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2),  
CLI-85-11, 21 NRC 1585 (1985) . . . . . 18

*Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage  
Installation), CLI-01-06, 53 NRC \_\_ (Feb. 14, 2001) . . . . . 1, 5, 6

*United States Department of Energy* (Clinch River Breeder Reactor  
Plant), CLI-81-35, 14 NRC 1100 (1981) . . . . . 14, 16, 17, 18

Atomic Safety and Licensing Appeal Board:

*Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2),  
ALAB-813, 22 NRC 59 (1985) . . . . . 13

*Louisiana Power and Light Co.* (Waterford Steam Electric Station,  
Unit 3), ALAB-812, 22 NRC 5 (1985) . . . . . 13

*Sacramento Municipal Utility District (Rancho Seco Nuclear  
Generating Station), ALAB-655, 14 NRC 799 (1981)* . . . . . 13

Atomic Safety and Licensing Board:

*Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant,  
Units 1 and 2), LBP-85-33, 22 NRC 442 (1985)* . . . . . 14, 18

*Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation),  
“Memorandum and Order (General Schedule Revision)” (Feb. 22, 2001)* . . . . . 4

*Private Fuel Storage, L.L.C. (Independent spent Fuel Storage Installation),  
LBP-01-03, 53 NRC \_\_ (Jan. 31, 2001) (slip opinion)* . . . . . *passim*

*Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation),  
LBP-00-15, 51 NRC 313 (1999)* . . . . . 4

*Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation),  
LBP-99-43, 50 NRC 306 (1999)* . . . . . 11

*Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation),  
LBP-99-21, 49 NRC 431 (1999)* . . . . . 3, 4, 14

*Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation),  
LBP-98-10, 47 NRC 288 (1998)* . . . . . 11

*Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation),  
LBP-98-7, 47 NRC 142 (1998)* . . . . . 2, 11

STATUTES:

*Atomic Energy Act of 1954, as amended,  
Section 189a(1), 42 U.S.C. § 2239(a)* . . . . . 14

REGULATIONS:

*10 C.F.R. § 2.714* . . . . . 5, 9

*10 C.F.R. § 2.714(a)* . . . . . 7

*10 C.F.R. § 2.714(b)(2)* . . . . . 4

*10 C.F.R. § 2.718(i)* . . . . . 4

*10 C.F.R. § 2.730(f)* . . . . . 4

10 C.F.R. § 2.758	14
10 C.F.R. § 50.12	3
10 C.F.R. Part 50	3
10 C.F.R. Part 50, Appendix S	5
10 C.F.R. § 72.7	3
10 C.F.R. § 72.102	3, 6, 15
10 C.F.R. § 72.102(f)	8
10 C.F.R. § 72.102(f)(1)	2, 5, 14
10 C.F.R. § 72.104(a)	8, 11, 12
10 C.F.R. § 72.106(b)	12
10 C.F.R. Part 72	3
10 C.F.R. § 100.3	5
10 C.F.R. § 100.11(a)	12
10 C.F.R. § 100.23	5, 6
10 C.F.R. Part 100, Appendix A	2, 3, 5, 6
10 C.F.R. Part 100, Appendix A, § III(c)(3)	12

MISCELLANEOUS:

Regulatory Guide 1.165, "Identification and Characterization of Seismic Sources and Determination of Safe Shutdown Earthquake Ground Motion" (March 1997)	5
Safety Evaluation Report of the Site-Related Aspects of the Private Fuel Storage Facility Independent Spent Fuel Storage Installation (Dec. 15, 1999, corrected and reissued Jan. 4, 2000)	3
Safety Evaluation Report Concerning the Private Fuel Storage Facility (Sept. 29, 2000)	4

SECY-98-071, "Exemption to 10 CFR 72.102(f)(1) Seismic Design Requirement for Three Mile Island Unit 2 [(TMI-2)] Independent Spent Fuel Storage Installation" (April 8, 1998) . . . . . 6, 9

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" (June 4, 1998) . . . . . *passim*

Staff Requirements Memorandum (SECY-98-071) (May 20, 1998) . . . . . 6

Staff Requirements Memorandum (SECY 98-126) (June 24, 1998) . . . . . 6

Statement of Consideration, "Reactor Site Criteria Including Seismic and Earthquake Engineering Criteria for Nuclear Power Plants," 61 Fed. Reg. 65,167 (1996) . . . . . 5

Statement of Consideration, "Rules of Practice for Domestic Licensing Proceedings -- Procedural Changes in the Hearing Process," 54 Fed. Reg. 33168 (1989) . . . . . 13

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

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

NRC STAFF'S BRIEF CONCERNING THE LICENSING BOARD'S  
REFERRED RULINGS AND CERTIFIED QUESTION IN LBP-01-03  
(STATE OF UTAH'S REQUEST TO AMEND CONTENTION UTAH L  
TO CHALLENGE THE APPLICANT'S SEISMIC EXEMPTION REQUEST)

INTRODUCTION

In accordance with the Commission's Order of February 14, 2001,<sup>1</sup> the NRC Staff ("Staff") hereby presents its views concerning the referred rulings and certified question set forth in LBP-01-03,<sup>2</sup> in which the Licensing Board addressed the "State of Utah's Request for Admission of Late-Filed Modification to Basis 2 of Contention Utah L," dated November 9, 2000 ("State Request"). For the reasons discussed below, the Staff submits that (a) the Licensing Board erred in finding various issues raised by the State of Utah ("State") constitute admissible contention bases concerning the seismic exemption request filed by Private Fuel Storage, L.L.C. ("PFS" or "Applicant"); and (b) a hearing need not be held to consider the State's request to amend Basis 2 of Contention Utah L to challenge the Applicant's seismic exemption request, but if the Commission

---

<sup>1</sup> *Private Fuel Storage, L.L.C. (Independent spent Fuel Storage Installation)*, CLI-01-06, 53 NRC \_\_ (Feb. 14, 2001) (establishing a schedule for briefing and directing that "briefs should address both the exemption and the admissibility questions." *Id.*, slip op. at 2.

<sup>2</sup> *Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation)*, LBP-01-03, 53 NRC \_\_ (Jan. 31, 2001) ("Memorandum and Order (Rulings on Admissibility of Late-Filed Modification of Contention Utah L, Geotechnical, Basis 2; Referred Rulings and Certifying Question Regarding Admissibility)") (slip opinion).

determines to afford a hearing on the exemption request, it should establish informal, written procedures for consideration of that matter.

### BACKGROUND

Contention Utah 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 [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.<sup>3</sup>

Basis 2 to contention Utah L raised the issue of ground motion, limited to the following question:

**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 CFR § 72.102(c).<sup>4</sup>

Following the admission of this contention, various geotechnical analyses were submitted by PFS. These analyses 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), in order to allow it to utilize a probabilistic seismic hazard analysis (“PSHA”) and considerations of risk to establish the design earthquake

---

<sup>3</sup> *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 191, 253 (1998). 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. . .” *Id.* at 191 n.14.

<sup>4</sup> “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.

ground motion levels at the facility, in lieu of the deterministic approach which PFS was required to utilize under 10 C.F.R. § 72.102 and 10 C.F.R. Part 100, Appendix A.<sup>5</sup> The exemption request initially proposed to design the facility to the ground motions produced by 1,000-year return period earthquakes; however, on August 24, 1999, PFS revised its exemption request to utilize a 2,000-year recurrence period.<sup>6</sup>

On April 30, 1999, the State filed its first challenge to PFS' exemption request;<sup>7</sup> this request was denied as premature on May 26, 1999, because the Staff had not yet acted on the exemption request.<sup>8</sup> On January 26, 2000, after the Staff published its initial SER (related to non-cask systems at the facility),<sup>9</sup> the State filed a second request to amend Basis 2 of Utah Contention L to challenge the Applicant's seismic exemption request, (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, 5 and 7.<sup>10</sup> On

---

<sup>5</sup> An applicant may request an exemption from a particular rule or regulation under the Commission's exemption procedures. Exemptions from the requirements in 10 C.F.R. Part 72 may be granted where the Commission determines that the exemptions "are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest." 10 C.F.R. § 72.7. A showing of "special circumstances" is not required for an exemption from Part 72 requirements -- in contrast to the showing required under 10 C.F.R. § 50.12 for exemptions from 10 C.F.R. Part 50 requirements.

<sup>6</sup> See letter from John D. Parkyn to NRC Document Control Desk, dated August 24, 2000.

<sup>7</sup> "Motion Requiring Applicant to Apply for Rule Waiver Under 10 CFR § 2.758(b) or in the Alternative Amendment to Utah Contention L," dated April 30, 1999.

<sup>8</sup> *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-99-21, 49 NRC 431, 439 (1999).

<sup>9</sup> "Safety Evaluation Report of the Site-Related Aspects of the Private Fuel Storage Facility Independent Spent Fuel Storage Installation," dated December 15, 1999 (corrected and reissued January 4, 2000). Seismic and geological issues, including ground vibration and the Applicant's request for exemption, were discussed in § 2.1.6.2.

<sup>10</sup> See "State of Utah's Request for Admission of Late-Filed Modification to Basis 2 of Utah Contention L" ("Second Modification Request"), dated January 26, 2000.

June 1, 2000, the Licensing Board denied this request on grounds of ripeness, since the Staff had not yet granted the exemption request.<sup>11</sup>

On September 29, 2000, the Staff issued its final Safety Evaluation Report (“SER”) for the proposed PFS facility.<sup>12</sup> Therein, the Staff concluded its review of the Applicant’s seismic exemption request, finding that “the use of PSHA methodology is acceptable,” and “[a] 2,000-year return period is acceptable for the seismic design of the PFS Facility.” SER § 2.1.6.2, at 2-42.<sup>13</sup>

On November 9, 2000, the State filed the instant request to modify Contention Utah L to challenge the PFS exemption request. According to the State, the Staff’s determination to grant the Applicant’s seismic exemption request to allow use of a PSHA methodology with a 2,000 year return period (a) fails to comply with a 1998 NRC Rulemaking Plan in SECY-98-126 (Request at 6-7); (b) is based upon flawed or *ad hoc* reasoning (*Id.* at 7-12); and (c) does not ensure an adequate level of conservatism (*Id.* at 12-14).

---

<sup>11</sup> *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-00-15, 51 NRC 313, 318 (1999). The Licensing Board further noted, as it had noted previously, that it 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.*, citing LBP-99-21, 49 NRC at 438.

<sup>12</sup> See Letter from Mark S. Delligatti to John D. Parkyn, dated September 29, 2000, enclosing “Safety Evaluation Report Concerning the Private Fuel Storage Facility.”

<sup>13</sup> The Applicant recently informed the Licensing Board and parties that it plans to submit new geotechnical information and revisions to its design basis ground motion analyses in March 2001. See letters from Jay E. Silberg to the Licensing Board, dated December 14 and 28, 2000. This has resulted, *inter alia*, in the Staff’s determination that a Supplement to the SER may be required, and a delay in the hearing schedule. See “Memorandum and Order (General Schedule Revision),” dated February 22, 2001; and letter from Sherwin E. Turk to the Licensing Board, dated January 21, 2001. It is presently unclear whether the new information and analyses will affect the Applicant’s seismic exemption request or the Staff’s evaluation thereof.

Responses to the State's Request were filed by PFS and the Staff,<sup>14</sup> and on January 31, 2001, the Licensing Board issued its decision in LBP-01-03. Therein, the Board (a) found that "certain portions of the State's proposed revisions are sufficient under the late-filing criteria of section 2.714 to provide the State with further litigable issues relative to Contention Utah L," and (b) certified to the Commission "the question whether the State challenges should be cognizable in this proceeding," inasmuch as they involve an exemption request. LBP-01-03, slip op. at 2.

## DISCUSSION

### I. Applicable Regulatory Framework.

An ISFSI applicant located west of the Rocky Mountain Front (like the PFS facility) "is required to meet the standards applicable to nuclear power facilities found in 10 C.F.R. Part 100, Appendix A," which "calls for the use of a deterministic seismic hazard analysis." *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-06, 53 NRC \_\_ (Feb. 14, 2001), slip op. at 2 n.1.<sup>15</sup> The Commission, however, has recently moved toward the acceptance of probabilistic seismic hazard analyses. Thus, in 1997, the Commission amended 10 C.F.R. § 100.23 to allow nuclear power reactor applicants to use a probabilistic seismic hazard analysis;<sup>16</sup> further, in 1998, the Commission approved a Staff Rulemaking Plan in SECY-98-126, pursuant to

---

<sup>14</sup> See "NRC Staff's Response to State of Utah's Request for Admission of Late-Filed Modification to Basis 2 of Contention Utah L," dated November 29, 2000; and "Applicant's Response to State of Utah's Request for Admission of Late-Filed Modification to Basis 2 of Contention Utah L," dated November 29, 2000.

<sup>15</sup> Pursuant to 10 C.F.R. § 72.102(f)(1), for sites evaluated under the criteria in 10 C.F.R. Part 100, Appendix A, the design earthquake (DE) "must be equivalent to the safe shutdown earthquake (SSE) for a nuclear power plant." The SSE ground motion is defined as the ground motion for which certain structures, systems and components must be designed (under 10 C.F.R. Part 50, Appendix S) to remain functional. See 10 C.F.R. § 100.3.

<sup>16</sup> See Statement of Consideration, "Reactor Site Criteria Including Seismic and Earthquake Engineering Criteria for Nuclear Power Plants," 61 Fed. Reg. 65,167 (1996). Guidance concerning the use of a PSHA was issued in Regulatory Guide 1.165, "Identification and Characterization of Seismic Sources and Determination of Safe Shutdown Earthquake Ground Motion" (March 1997).

which the Staff is “revising Part 72 to conform to this change in § 100.23 and allow new ISFSI licensees the option to use a probabilistic analysis.”<sup>17</sup> *PFS*, CLI-01-06, slip op. at 2 n.1.<sup>18</sup> Accordingly, while an ISFSI applicant like *PFS* is currently required to conduct a deterministic seismic hazard analysis, this requirement could change as a result of planned rulemaking, to permit the use of a probabilistic analysis.<sup>19</sup>

II. The Referred Rulings and Certified Question Set Forth in LBP-01-03.

The Staff’s views concerning the Licensing Board’s referred rulings on admissibility, and the certified question concerning the State’s request to modify Contention Utah L to consider the Applicant’s exemption request, are set forth below.

---

<sup>17</sup> 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” (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 permitted by 10 C.F.R. § 100.23 (as amended in 1997), instead of the deterministic approach specified in 10 C.F.R. Part 100 Appendix A. See SECY-98-126 at 2. 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. *Id.* at 6-7. The Commission has not objected to the Staff’s Rulemaking Plan. See Staff Requirements Memorandum (“SRM”) dated June 24, 1998.

<sup>18</sup> In addition, the Commission has approved an exemption for another ISFSI located west of the Rocky Mountain Front, permitting the use of a PSHA with a 2,000-year return period by the U.S. Department of Energy, Idaho Operations Office (DOE-ID), for storage of the Three Mile Island Unit 2 (“TMI-2”) fuel debris. See SECY-98-071, “Exemption to 10 CFR 72.102(f)(1) Seismic Design Requirement for Three Mile Island Unit 2 (TMI-2) Independent Spent Fuel Storage Installation” (April 8, 1998), and SRM dated May 20, 1998.

<sup>19</sup> While the Staff has concluded that *PFS* does not meet the current deterministic seismic qualification standards in 10 C.F.R. § 72.102(f)(1) and Part 100, Appendix A (see LBP-01-03, slip op. at 21), it has approved *PFS*’s request for an exemption from these deterministic requirements, based on its PSHA and a 2,000-year return period.

A. The Licensing Board Erred in Finding That Many of the Issues Raised by the State Are Admissible.

In LBP-01-03, the Licensing Board found that the State had raised seven issues in its request to modify Contention Utah L, determined that most of those issues were admissible, and referred this ruling to the Commission. LBP-01-03, slip op. at 2, 9-21. The Staff respectfully submits that this ruling is incorrect, in that the Licensing Board (a) improperly admitted contention bases asserting that the exemption request must be judged in terms of an incomplete and non-binding 1998 Rulemaking Plan, (b) improperly allowed the State to incorporate dose issues into this contention which were untimely raised and unrelated to the Applicant's exemption request, (c) improperly permitted the State to challenge the adequacy of the Staff's evaluation, as distinct from the Applicant's exemption request itself, and (d) improperly would admit issues for litigation that are, or are about to become, the subject of rulemaking.

In its request to modify Contention Utah L, the State set forth a description of its reasons for challenging the Applicant's seismic exemption request, which it presented in three categories:

1. The grant of the exemption request fails to comply with the NRC Rulemaking Plan (Request at 6-7);
2. The Staff's reasons for allowing the Applicant to use a PSHA with a 2,000-year return period are *ad hoc* and either flawed or not compelling (*Id.* at 7-12);<sup>20</sup> and
3. The use of a PSHA with a 2,000-year return period does not ensure an adequate level of conservatism (*Id.* at 12-14).

In addition, the State incorporated by reference pages 9-12 and 21-22 of its Second Modification Request, dated January 26, 2000 (Request at 6, 14).

---

<sup>20</sup> In support of this assertion, the State challenged the Staff's evaluation insofar as the Staff found that (1) the mean annual probability of exceedance for the PFS facility may be less than 10-4 per year (Request at 8-10); (2) the potential accident consequences of an ISFSI are similar to those of Department of Energy (DOE) Category 3 facilities (*Id.* at 10-11); and (3) the Staff has granted a similar exemption for DOE's TMI-2 ISFSI facility (*Id.* at 11-12).

The Licensing Board reformulated the State's description of issues in its current and prior requests, distilling its concerns into seven issues, 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.

LBP-01-03, slip op. at 9-11. The Board then found that most of these issues were admissible and satisfied the late-filing criteria in § 2.714. *Id.* at 12-21.<sup>21</sup> The Staff respectfully submits that the Licensing Board erred in finding that items 1, 2(a), and 4-6 are admissible.

---

<sup>21</sup> The Licensing Board found that items 2(b), 3 and 6(b) were inadmissible and/or failed to satisfy the late-filing criteria in 10 C.F.R. § 2.714. LBP-01-03, slip op. at 12, 16, 20, and 22.

First, the Licensing Board erred in admitting **items 1 and 5**, which allege that PFS's exemption request (or the Staff's evaluation thereof) fails to comply with the Rulemaking Plan in SECY-98-126. See LBP-01-03, slip op. at 14-15 and 20. In this regard, the Licensing Board correctly found that the Rulemaking Plan does not establish a binding regulatory requirement, and that the Staff could approve an exemption request utilizing some return period other than the return periods specified in the Rulemaking Plan (such as 2,000 years). *Id.* at 15. However, the Board went on to determine that the Rulemaking Plan may be cited as the basis for an admissible contention relative to the PFS exemption request, on the stated grounds that:

[I]ts 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.

*Id.* This determination is in error, in that it effectively establishes the Rulemaking Plan as a baseline regulatory standard that must be addressed in any exemption request. Contrary to the Board's suggestion, the Rulemaking Plan is merely a proposed rulemaking approach -- which could (and may well) be revised before any proposed rule is developed and published for comment, thus rendering the current rulemaking plan and any contention based thereon obsolete.<sup>22</sup>

In sum, there is no reason why an exemption request must be formulated by an applicant or approved by the Staff based upon the proposed regulatory approach set forth in SECY-98-126. Accordingly, the Staff respectfully submits that the Licensing Board erred in finding contention bases, which assert that the exemption request fails to comport with SECY-98-126, are admissible.

---

<sup>22</sup> Following the issuance of SECY-98-126, the Staff has continued to work on development of the technical bases for this rulemaking activity. As a result of this further effort, the Staff plans to submit a proposed revision to the Rulemaking Plan for Commission consideration shortly, which may recommend the use of a 2,000-year return period rather than the 1,000-year/10,000-year return periods proposed in SECY-98-126.

Second, with respect to **item 2(a)**, alleging that PFS failed to show that “its facility design will provide adequate protection against exceeding the section 72.104(a) dose limits,” the Board admitted an issue that is beyond the scope of the Applicant’s seismic exemption request. This issue (raised in the State’s Second Modification Request of January 26, 2000 and incorporated by reference in its current Request, at 6-7) pertains to the Applicant’s assumptions for the accident leak rate, “breach hole” size, leak hole size, and the potential for a sabotage event involving certain specified weapons. See Second Modification Request, at 9-12. These issues should have been rejected as untimely and unrelated to the Applicant’s seismic exemption request, in that they could have been raised by the State even if the Applicant had never filed its exemption request<sup>23</sup> -- and, indeed, the State has previously raised similar dose issues (including doses in the event of sabotage or terrorism) in this proceeding.<sup>24</sup> Moreover, PFS’ exemption request seeks to allow the use of a PSHA to establish the maximum ground motion to be considered in the design of the facility (equivalent to a safe shutdown earthquake for a nuclear power plant); this issue is unrelated to the dose analysis concerns which the State seeks to raise here.<sup>25</sup>

In finding the dose issue presented in item 2(a) to be admissible, the Licensing Board relied solely on its view that this item “is an adjunct to the item one concern that, in light of the explanation

---

<sup>23</sup> In contrast, the Licensing Board correctly rejected Item 3 of the State’s proposed modification as untimely. See LBP-01-03, slip op. at 12 and 14 (finding that although Item 3 was “couched in terms of the exemption request,” it “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”).

<sup>24</sup> See, e.g., *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-99-43, 50 NRC 306, 311 (1999) (amended Contention Utah C); *Id.*, LBP-98-10, 47 NRC 288, 296 (1998) (Contention Utah Z); *Id.*, LBP-98-7, 47 NRC 142, 185-86, 199-201 (1997) (Contentions Utah C, Utah U, and Utah V).

<sup>25</sup> These concerns were not supported by 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 based upon matters other than PFS’ seismic exemption request. See Second Modification Request at 9-12; LBP-01-03, slip op. at 13.

given in the staff rulemaking plan, the technical basis for a 2000-year return period has not been adequately established.” LBP-01-03, slip op. at 15. However, as discussed above, there is no legal basis to require an exemption request to include such dose considerations, other than the State’s assertion that those concerns would be considered under the Staff’s 1998 Rulemaking Plan. The Rulemaking Plan, however, does not establish a regulatory requirement. While an applicant could submit an exemption request based upon such an analysis, there is no legally binding requirement that it must do so -- and, as the Board found, the Commission could approve an exemption request that is inconsistent with the Rulemaking Plan (LBP-01-03, slip op. at 15). Accordingly, the Staff submits that the Licensing Board erred in finding that the State’s reference to the Rulemaking Plan established the requisite support for item 2(a) to be admissible (*Id.* at 12 and 15-16).<sup>26</sup>

Third, the Licensing Board’s admission of **items 4, 5 and 6** erroneously admits contention bases that focus upon the Staff’s evaluation of the PFS seismic exemption request rather than the Applicant’s exemption request. See LBP-01-03, slip op. at 16-19; Request at 6, 7, 8, 10, 11, 12, and 14. To be sure, the Board recognized 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” and that “this fact alone normally would render these items inadmissible” (LBP-01-03, slip op. at 16) -- but it nonetheless found that these issues were admissible here, in that the Applicant’s choice of a 2,000-year return period was based upon Staff communications suggesting that return period, the

---

<sup>26</sup> In addition, the Licensing Board erred in finding admissible the State’s claim in item 2(a) that the exemption request fails to satisfy the dose limits for operational occurrences set forth in 10 C.F.R. § 72.104(a). The State’s reference to this regulation, and the Licensing Board’s incorporation of that reference in its ruling, is incorrect. The dose guidelines for an ISFSI design earthquake are set forth in 10 C.F.R. § 72.106(b), pertaining to design basis accidents. *Cf.* 10 C.F.R. Part 100, Appendix A, § III(c)(3) and 10 C.F.R. § 100.11(a) (establishing exclusion area and low population zone dose guidelines for nuclear power plant safe shutdown earthquakes).

Staff's 1998 Rulemaking Plan, and the Staff's reference to its grant of an exemption to DOE for the TMI-2 ISFSI, utilizing a 2000-year return period (*Id.* at 16-20).

This determination was in error. It is axiomatic that challenges to the adequacy of the Staff's review or evaluation do not establish a proper contention in a licensing proceeding. See *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); Statement of Consideration, "Rules of Practice for Domestic Licensing Proceedings -- Procedural Changes in the Hearing Process," 54 Fed. Reg. 33,168, 33,171 (1989). Accordingly, it was incumbent upon the State to formulate a proposed contention basis that challenged the Applicant's seismic exemption request, rather than challenging the Staff's evaluation and reasons for finding the exemption request to be acceptable. The State failed to do so, focusing instead upon the Staff's reasons for approving the exemption request; accordingly, these items fail to state an admissible basis to modify Contention Utah L.<sup>27</sup>

---

<sup>27</sup> As discussed above, the issues of whether an ISFSI west of the Rocky Mountain Front may utilize a PSHA, and the appropriate return period to be used in such an analysis, are expected to become the subject of a generic rulemaking proceeding. See SECY-98-126. The commencement of that rulemaking activity could render these issues inappropriate for consideration in a specific licensing proceeding. See, e.g., *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-813, 22 NRC 59, 86 (1985); *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), ALAB-655, 14 NRC 799, 816 (1981) (contentions should not be admitted in an individual licensing proceeding if they involve matters that are or are about to become the subject of general rulemaking). The Commission has recently reiterated the appropriateness of using generic rulemaking proceedings to resolve issues that apply to facilities with common characteristics, thereby avoiding having "continually to relitigate issues that may be established fairly and efficiently in a single rulemaking proceeding." *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 343 (1999).

B. A Formal Hearing Should Not Be Held on the Seismic Exemption Request.

In its decision, the Licensing Board certified to the Commission the following question:

[W]hether 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.

LBP-01-03, slip op. at 23-24. The Staff submits that this question should be answered in the negative.

First, as the Licensing Board has recognized, in the absence of a Commission directive to the contrary, "exemption requests falling outside the ambit of section 2.758 are not subject to challenge in an adjudicatory proceeding." *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-99-21, 49 NRC 431, 438 (1999).<sup>28</sup>

Second, while the Commission has previously afforded a hearing on an exemption request that relates to a contention in the proceeding,<sup>29</sup> the State's request to modify Contention Utah L to consider PFS's seismic exemption request would introduce an issue that is not related to the issues currently raised in Contention Utah L. The only ground motion issue before the Licensing Board currently was raised in Basis 2 of this contention; Basis 2 asserts that the site may "be subject to

---

<sup>28</sup> See *Kelley v. Selin*, 42 F.3d 1501, 1517 (6th Cir.), *cert denied*, 515 U.S. 1159 (1995) ("the grant of an exemption from a generic requirement does not constitute an amendment to the reactor's license that would trigger hearing rights"); *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-00-05, 51 NRC 90, 98 (2000); *United States Department of Energy* (Clinch River Breeder Reactor Plant), CLI-81-35, 14 NRC 1100, 1104 n.2 (1981) (reviewing Commission practice and concluding that adjudicatory proceedings have not been required uniformly on exemption requests); see *generally*, Atomic Energy Act of 1954, as amended, § 189a, 42 U.S.C. § 2239(a) (providing for hearings "[i]n any proceeding under this Act, for the granting, suspending, revoking, or amending of any license or construction permit").

<sup>29</sup> See, e.g., *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-84-8, 19 NRC 1154, 1155 (1984) (directing a license application to be modified to include a request for exemption from General Design Criterion 17 for low power operation, and authorizing the Licensing Board to consider the request in the related proceeding); *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), LBP-85-33, 22 NRC 442, 445-46 (1985) (noting that the exemption request in *Shoreham* was directly related to a contention in the proceeding).

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)" -- which, according to the State, "places undue risk on the public and the environment and fails to comply with 10 CFR § 72.102." This narrow issue is unrelated to the adequacy of the Applicant's PSHA or its exemption request. Accordingly, in the absence of an admitted contention that relates to the Applicant's exemption request, no reason appears why the exemption request should be considered in the current adjudicatory proceeding on Contention Utah L.<sup>30</sup>

The Staff recognizes that here, unlike the situation in *Oconee*, the generic rulemaking proceeding (contemplated in SECY-98-126) has not yet commenced and may not be concluded prior to completion of the PFS license proceeding.<sup>31</sup> As a result, although a generic proceeding<sup>32</sup> might obviate any need for further litigation of these matters,<sup>33</sup> the issues raised by the State concerning the use of a PSHA and a 2,000-year return period may not be resolved on a generic

---

<sup>30</sup> See also, *Eddleman v. NRC*, 825 F.2d 46, 50 (4th Cir. 1987) (finding no error in the Commission's decision not to send a request for hearing on an exemption to the Licensing Board, in that the Board "did not have this issue, or any related issue, before it, and thus no advantage could have been gained by such a referral").

<sup>31</sup> In *Oconee*, the Commission found, *inter alia*, that one issue raised by the intervenor, concerning the impacts of transporting spent fuel to a high-level waste repository, was not covered by an existing rule but, instead, was the subject of a pending rulemaking proceeding; the Commission declined to admit that issue for litigation, however, because the rulemaking proceeding was expected to conclude prior to the individual license renewal proceeding. *Oconee*, CLI-99-11, 49 NRC at 345).

<sup>32</sup> The commencement of a generic rulemaking proceeding will allow the Commission to consider written comments by all interested persons, including the State of Utah and its experts. Accordingly, the State will have an opportunity to raise the same issues in the rulemaking proceeding as it has raised here, concerning the proper use of a PSHA and the appropriate return period to be used in such an analysis.

<sup>33</sup> See SECY-98-126, at 4 (noting that one application had been received, for DOE's TMI-2 ISFSI, and that "these types of exemption requests are expected to continue in the future from other ISFSI applicants in the Western U. S. unless rulemaking precludes this").

basis within the time required for a licensing decision here. For this reason, the Commission could determine that the State's concerns should be addressed in this individual license proceeding in order to assure that they are considered on a timely basis for this facility.

In this regard, the Commission has the discretion to determine the nature of any hearing that is established. *See, e.g., United States Department of Energy (Clinch River Breeder Reactor Plant), CLI-81-35, 14 NRC 1100, 1103-04 and n.2 (1981)* (establishing an informal proceeding, declining to assign an exemption request to a Licensing Board despite the existence of factual issues, and indicating that a decision to conduct hearings on an exemption request is discretionary and should be based on the facts in a proceeding).

The Staff submits that if the Commission determines that a hearing should be conducted on PFS's seismic exemption request, any such hearing should be informal in nature, given the circumstances present here. Specifically, the Applicant's exemption request involves complex issues involving generic questions such as the proper use of a PSHA and the appropriate return period to be utilized in such an analysis. These questions are likely to involve the consideration of substantive policy issues that would be more efficiently addressed in an informal proceeding involving written submissions, rather than a formal proceeding involving discovery, testimony and cross-examination. Further, as indicated in SECY-98-126 (on which the State relies in framing the issues it seeks to raise here), a generic rulemaking proceeding has already been planned, which would consider the same issues that the State has raised concerning the PFS exemption request -- and, like other rulemaking proceedings, that proceeding would utilize established notice and comment procedures. The use of comparable written procedures in connection with the PFS exemption request would therefore appear to be an appropriate means to resolve the State's concerns, without the use of a formal adjudication.

Further, the institution of informal proceedings would be consistent with the procedures adopted by the Commission in *Clinch River*. There, the Commission determined that “neither the Atomic Energy Act nor NEPA dictate the form of proceedings on exemption requests,” that the *Clinch River* exemption request “presents several major and novel policy and legal issues that are best resolved by the Commission itself as the highest policy-making entity within the agency,” and that an informal proceeding conducted by the Commission, involving the submission of written comments and oral presentations by the parties, constituted the best means of resolving challenges to the applicants’ exemption request. *United States Department of Energy* (Clinch River Breeder Reactor Plant), CLI-81-35, 14 NRC 1100, 1103-05 (1981).<sup>34</sup> The adoption of similar procedures here would likewise ensure that the Commission could fully consider the issues raised

---

<sup>34</sup> In *Clinch River*, the Commission stated, in pertinent part, as follows:

[T]he exemption request may present issues of fact relating to matters such as the environmental impact of the proposed work and the cost-savings from granting of the exemption. However, we cannot agree that a formal adjudicatory hearing will prove to be the only way for adequate ventilation and resolution of these issues, or that formal adjudicatory hearings are dictated by past Commission practice. It is quite common for such issues to be resolved by informal procedures falling short of formal examination and cross-examination of sworn witnesses. Even within the Commission itself, such issues are routinely and adequately dealt with in the informal Staff and ACRS review processes. There is no reason to believe that the informal procedures which follow will not prove adequate to the task. Moreover, we believe that the estimates . . . of the time required for the conduct of formal hearings by a Licensing Board are extremely optimistic. . . . It is not at all clear that few factual issues will be presented here. We conclude that formal hearings will likely produce little additional benefit to the process and yet will likely cost a great deal, both in elapsed time and resources of the Commission and the parties.

CLI-81-35, 14 NRC at 1103-05 (footnotes omitted). The Commission then directed that “[t]he request will be considered in an informal proceeding involving written comments and oral presentations to the Commission itself. This informal proceeding will be kept separate from the suspended construction permit proceedings.” *Id.* at 1105.

by the Applicant's exemption request, while avoiding unnecessary delays that may be associated with discovery, testimony and cross-examination.

Finally, the Staff notes that while the Commission has the discretion to conduct any hearing on PFS's exemption request itself, it could also direct the Licensing Board to consider the exemption request.<sup>35</sup> The Staff believes that consideration of this matter by the Commission is appropriate and would result in greater efficiency, in that (a) the exemption request here, like the exemption request in *Clinch River*, "presents several major and novel policy and legal issues that are best resolved by the Commission itself as the highest policy-making entity within the agency" (*Clinch River*, CLI-81-35, 14 NRC at 1103), and (b) the Commission could consider the parties' submissions and reach a determination on the exemption request immediately, without having to await the conclusion of proceedings before the Licensing Board.<sup>36</sup>

---

<sup>35</sup> To be sure, exemptions have been considered by the Licensing Boards in related adjudicatory proceedings, subject to Commission review. *See, e.g., Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), CLI-85-11, 21 NRC 1585 (1985) (directing the Appeal Board to consider the need for a hearing on an applicant's exemption request); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-84-8, 19 NRC 1154, 1155 (1984) (directing a license application to be modified to include a request for exemption from General Design Criterion 17 for low power operation, and authorizing the Licensing Board to consider the request in the related proceeding); *Carolina Power and Light Co.* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3 and 4), CLI-74-9, 7 AEC 197, 198 (1974) (directing the Licensing Board in a construction permit proceeding to conduct a hearing and render a decision on the merits of a previously granted exemption, within 30 days); *cf. Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), LBP-85-33, 22 NRC 442, 445-46 (1985) (noting that the exemption request in *Shoreham* was directly related to a contention in the proceeding).

<sup>36</sup> Nonetheless, if the Commission determines to afford a hearing on the exemption request, the Staff would not oppose the assignment of this matter to the Licensing Board for resolution in an informal proceeding -- subject to the Commission's delineation of the specific issues to be considered, in order to avoid the introduction of unrelated issues.

CONCLUSION

For the reasons set forth above, the Staff submits that the Licensing Board erred in finding that items 1-2(a) and 4-6 of the State's late-filed request to modify the bases for Contention Utah L raised admissible issues. Further, the Staff submits that a hearing should not be established to consider the exemption request -- but that if a hearing is convened, it should be conducted by the Commission utilizing informal, written procedures.

Respectfully submitted,

Sherwin E. Turk **/RA/**  
Counsel for NRC Staff

Dated at Rockville, Maryland  
this 2nd day of March 2001

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE 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 "NRC STAFF'S BRIEF CONCERNING THE LICENSING BOARD'S REFERRED RULINGS AND CERTIFIED QUESTION IN LBP-01-03 (STATE OF UTAH'S REQUEST TO AMEND CONTENTION UTAH L TO CHALLENGE THE APPLICANT'S SEISMIC EXEMPTION REQUEST)" in the above captioned proceeding have been served on the following through deposit in the NRC's internal mail system, with copies by electronic mail, as indicated by an asterisk, or by deposit in the U.S. Postal Service, as indicated by double asterisk, with copies by electronic mail this 2nd day of March, 2001:

G. Paul Bollwerk, III, Chairman\*  
Administrative Judge  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
(E-mail copy to [GPB@NRC.GOV](mailto:GPB@NRC.GOV))

Office of the Secretary\*  
ATTN: Rulemakings and Adjudications  
Staff  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
(E-mail copy to  
[HEARINGDOCKET@NRC.GOV](mailto:HEARINGDOCKET@NRC.GOV))

Dr. Jerry R. Kline\*  
Administrative Judge  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
(E-mail copy to [JRK2@NRC.GOV](mailto:JRK2@NRC.GOV))

Office of the Commission Appellate  
Adjudication  
Mail Stop: 16-C-1 OWFN  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dr. Peter S. Lam\*  
Administrative Judge  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
(E-mail copy to [PSL@NRC.GOV](mailto:PSL@NRC.GOV))

James M. Cutchin, V\*  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
(E-mail to [JMC3@NRC.GOV](mailto:JMC3@NRC.GOV))

Atomic Safety and Licensing Board  
Panel  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Jay E. Silberg, Esq.\*\*  
Ernest Blake, Esq.  
Paul A. Gaukler, Esq.  
Sean Barnett, Esq.  
Shaw Pittman  
2300 N Street, N.W  
Washington, DC 20037-8007  
(E-mail copy to [jay\\_silberg,  
paul\\_gaukler, sean\\_barnett, and  
ernest\\_blake@shawpittman.com](mailto:jay_silberg,paul_gaukler,sean_barnett,ernest_blake@shawpittman.com))

Danny Quintana, Esq.\*\*  
Danny Quintana & Associates, P.C.  
68 South Main Street, Suite 600  
Salt Lake City, UT 84101  
(E-mail copy to [quintana  
@Xmission.com](mailto:quintana@Xmission.com))

Denise Chancellor, Esq.\*\*  
Fred G Nelson, Esq.  
Laura Lockhart, Esq.  
Utah Attorney General's Office  
160 East 300 South, 5th Floor  
P.O. Box 140873  
Salt Lake City, UT 84114-0873 (E-mail  
copy to [dchancel@State.UT.US](mailto:dchancel@State.UT.US)), and  
[jbraxton@email.usertrust.com](mailto:jbraxton@email.usertrust.com))

Connie Nakahara, Esq.\*\*  
Utah Dep't of Environmental Quality  
168 North 1950 West  
P. O. Box 144810  
Salt Lake City, UT 84114-4810  
(E-mail copy to [cnakahar@state.UT.US](mailto:cnakahar@state.UT.US))

Diane Curran, Esq.\*\*  
Harmon, Curran, Spielberg & Eisenberg  
1726 M Street, N.W., Suite 600  
Washington, D.C. 20036  
(E-mail copy to  
[dcurran@harmoncurran.com](mailto:dcurran@harmoncurran.com))

John Paul Kennedy, Sr., Esq.\*\*  
1385 Yale Ave.  
Salt Lake City, UT 84105  
(E-mail copy to [john@kennedys.org](mailto:john@kennedys.org))

Joro Walker, Esq.\*\*  
Land and Water Fund of the Rockies  
1473 South 1100 East, Suite F  
Salt Lake City, UT 84105  
(E-mail copy to [lawfund@inconnect.com](mailto:lawfund@inconnect.com))

Land and Water Fund of the Rockies\*\*  
2260 Baseline Road, Suite 200  
Boulder, CO 80302