

RELATED CORRESPONDENCE

DOCKETED  
USNRC

December 13, 2001 (10:49AM)

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

---

In the Matter of:	)	Docket No. 72-22-ISFSI
	)	
PRIVATE FUEL STORAGE, LLC	)	ASLBP No. 97-732-02-ISFSI
(Independent Spent Fuel	)	
Storage Installation)	)	November 5, 2001

---

STATE OF UTAH'S FOURTEENTH SET OF DISCOVERY REQUESTS  
DIRECTED TO THE NRC STAFF

Pursuant to the Board's Orders dated April 22, 1998 (LBP-98-7), June 29, 1998, August 20, 1998, and September 20, 2001 and accompanying revised schedule, and 10 CFR §§ 2.720, 2.740, 2.742, and 2.744, Intervenor State of Utah, hereby requests that the Staff of the Nuclear Regulatory Commission ("Staff") answer the following Requests for Admissions, Interrogatories separately, fully, in writing, and under oath within 10 days. All of these Requests for Admissions, Interrogatories are necessary to a proper decision in this proceeding for Contention Utah L, Part B.

As required by 10 CFR § 2.744(a), this discovery request is being served on the NRC Executive Director for Operations.

I. INSTRUCTIONS

A. Scope of Discovery. These interrogatories and requests for admissions are directed to NRC Staff and any of the Staff's contractors or agents (collectively "NRC" or "Staff"). The interrogatories cover all information in the possession, custody and control of NRC Staff, including information in the possession of officers, employees, agents, servants,

representatives, attorneys, or other persons directly or indirectly employed or retained by NRC Staff, or anyone else acting on their behalf or otherwise subject to NRC Staff's control.

B. Supplemental Responses. Each of the following requests is a continuing one pursuant to 10 CFR § 2.740(e) and the State hereby demands that, in the event that at any later date NRC Staff obtains or discovers any additional information which is responsive to these interrogatories and request for admissions, NRC Staff shall supplement its responses to this request promptly and sufficiently in advance of the adjudicatory hearing.

Such supplementation shall include, but not be limited to:

1. The identity and location of persons having knowledge of discoverable matters;
2. The identity of each person expected to be called as an expert witness at any hearing, the subject matter on which she/he is expected to testify, and the substance of her/his testimony; and
3. New information which makes any response hereto incorrect.

C. Objections. If you object to or refuse to answer any interrogatory or admission request under a claim of privilege, immunity, or for any other reason, please indicate the basis for asserting the objection, privilege, immunity or other reason, the person on whose behalf the objection, privilege, immunity, or other reason is asserted, and describe the factual basis for asserting the objection, privilege, immunity, or other reason in sufficient detail so as to permit the administrative judges in this matter to ascertain the validity of such assertion.

## II. DEFINITIONS

Each of the following definitions, unless otherwise indicated, applies to and shall be a part of each interrogatory and request for admission which follows:

A. "NRC," "Staff," "you" and "your" refers to the officers, employees, agents, servants, representatives, attorneys, or other persons directly or indirectly employed or retained by the Staff of the U.S. Nuclear Regulatory Commission, or anyone else acting on its behalf or otherwise subject to the Staff's control.

B. "PFS," or "Applicant," refers to Private Fuel Storage, LLC and the PFS members and their officers, employees, agents, servants, representatives, attorneys, or other persons directly or indirectly employed or retained by them, or anyone else acting on their behalf or otherwise subject to their control.

C. The term "documents" means the originals as well as copies of all written, printed, typed, recorded, graphic, photographic, and sound reproduction matter however produced or reproduced and wherever located, over which you have custody or control or over which you have the ultimate right to custody or control. By way of illustration, but not limited thereto, said term includes: records, correspondence, diaries, notes, interoffice and intraoffice communications, minutes of meetings, instructions, reports, demands, memoranda, data, schedules, notices, recordings, analyses, sketches, manuals, brochures, telephone minutes, calendars, accounting ledgers, invoices, charts, spreadsheets, working papers, computer tapes, computer printout sheets, information stored in computers or other data storage or processing equipment, electronic mail, microfilm, microfiche, corporate minutes, blueprints, drawings, contracts and any other agreements, rough drafts, and all

other writings and papers similar to any of the foregoing, however designated by you. If the document has been prepared and several copies or additional copies have been made that are not identical (or are no longer identical by reason of the subsequent addition of notations or other modifications), each non-identical copy is to be construed as a separate document.

D. "All documents referring or relating to" means all documents that in whole or in part constitute, contain, embody, reflect, identify, state, interpret, discuss, describe, explain, apply to, deal with, evidence, or are in any way pertinent to a given subject.

E. The words "describe" or "identify" shall have the following meanings:

1. In connection with a person, the words "describe" or "identify" mean to state the name, last known home and business address, last known home and business telephone number, and last known place of employment and job title;

2. In connection with a document, the words "describe" or "identify" mean to give a description of each document sufficient to uniquely identify it among all of the documents related to this matter, including, but not limited to, the name of the author of the document, the date, title, caption, or other style by which the document is headed, the name of each person and entity which is a signatory to the document, the date on which the document was prepared, signed, and/or executed, any relevant bates numbers on the document, the person or persons having possession and/or copies thereof, the person or persons to whom the document was sent, all persons who reviewed the document, the substance and nature of the document, the present custodian of the document, and any other information necessary to adequately identify the document;

3. In connection with an entity other than a natural person (*eg*, corporation,

partnership, limited partnership, association, institution, etc.), the words "describe" or "identify" mean to state the full name, address and telephone number of the principal place of business of such entity.

4. In connection with any activity, occurrence, or communication, the words "describe" or "identify" mean to describe the activity, occurrence, or communication, the date of its occurrence, the identify of each person alleged to have had any involvement with or knowledge of the activity, occurrence, or communication, and the identity of any document recording or documenting such activity, occurrence, or communication.

F. "Date" shall mean the exact day, month, and year, if ascertainable, or if not, the best approximation thereof (including by relationship to other events), and the basis for such approximation.

G. "ISFSI" shall mean the PFS proposed Independent Spent Fuel Storage Installation located in the northwest corner of the Skull Valley Goshute Indian reservation, Utah.

H. The word "discussion" shall mean communication of any kind, including but not limited to, any spoken, written, or signed form of communication.

I. The word "person" shall include any individual, association, corporation, partnership, joint venture, or any other business or legal entity.

J. Words herein of any gender include all other genders, and the singular form of words encompasses the plural.

K. The words "and" and "or" include the conjunctive "and" as well as the disjunctive "or" and the words "and/or."

L. The discovery sought by this request encompasses material contained in, or which might be derived or ascertained from, the personal files of NRC Staff employees, representatives, investigators, and agents.

### III. DISCOVERY REQUESTS

#### CONTENTION UTAH L, PART B - Geotechnical

##### A. Requests for Admissions - Contention Utah L, Part B.

REQUEST FOR ADMISSION NO. 1. Do you admit that, in the case of the INEEL ISFSI exemption (SECY-98-071), what the Staff approved for a design-basis earthquake was not a 2,000-year return-period ground motion (0.30 g peak ground acceleration on soil from the PSHA) but rather a ground motion with a higher return period (0.36 g ground acceleration with an appropriate response spectrum).

REQUEST FOR ADMISSION NO. 2. Do you admit that you are aware that the U.S. Department of Energy ("DOE") revised DOE Standard 1020-2001, released on August 22, 2001, for review and comment.

REQUEST FOR ADMISSION NO. 3. Do you admit that in Revised DOE Standard 1020-2001, the standard for earthquake input excitation for Performance Category 3 in terms of a Mean Seismic Hazard Exceedance Level has been changed to a value of  $4 \times 10^{-4}$  (2,500-year return period), thus raising the Mean Seismic Hazard Exceedance Level standard originally established by DOE.

REQUEST FOR ADMISSION NO. 4. Do you admit that the design approach to seismic design standards for Performance Category 3 in DOE Standard DOE-STD-1020-94

specifies both a "Seismic Hazard Exceedance Probability" of  $5 \times 10^{-4}$ /year (for sites not near tectonic plate boundaries) and a "Target Seismic Performance Goal" of  $1 \times 10^{-4}$ /year, where "Performance Goal" is defined by the DOE as "the annual probability of exceedance of acceptable behavior limits" (DOE-STD1020-94 at A-2).

REQUEST FOR ADMISSION NO. 5. Do you admit in the absence of an established target seismic performance goal, or similar risk reduction considerations, there will be no documented conservatism in selected design basis ground motion recurrence interval at the PFS site.

REQUEST FOR ADMISSION NO. 6. Do you admit that the Staff's asserted equivalence between design earthquake ground motions having a median annual probability of exceedance of  $1 \times 10^{-5}$  and a mean annual probability of exceedance of  $1 \times 10^{-4}$  validly applies only to the Central and Eastern United States and not necessarily to sites in the Western United States. See PFS Safety Evaluation Report ("SER") September 2000, at 2-42.

REQUEST FOR ADMISSION NO. 7. Do you admit that the Staff has taken the position that an acceptable metric or quantitative measure for a design basis ground motion at a dry-cask ISFSI is a total probability of exceedance of  $1 \times 10^{-2}$  (i.e., the total probability of exceeding the design basis ground motion) over the design life of the facility. See Modified Rulemaking Plan, September 26, 2001, at 7.

REQUEST FOR ADMISSION NO. 8. Do you admit that for an ISFSI with a planned operational period of approximately 40 years, a design-basis ground motion whose total probability of exceedance =  $1 \times 10^{-2}$  would be one with a return period roughly double 2,000 years ( $40 \text{ years} \times 2.5\text{E-}04 = 1.0\text{E-}02$ ). See Modified Rulemaking Plan, September 26,

2001, at 7.

REQUEST FOR ADMISSION NO. 9 - UTAHL. Do you admit that the occurrence of vibratory ground motions exceeding design basis ground motions with an estimated average return period of 2,000 years should be considered a credible event?

REQUEST FOR ADMISSION NO. 10 - UTAHL. Do you admit that the occurrence of vibratory ground motions exceeding design basis ground motions with an estimated average return period of 10,000 years should be considered a credible event?

REQUEST FOR ADMISSION NO. 11 - UTAHL. Do you admit that tipover of spent fuel storage casks at the proposed PFS ISFSI should be considered a credible event?

**B. Interrogatories<sup>1</sup> - Contention Utah L, Part B**

INTERROGATORY NO. 9. Fully describe any differences, and the basis thereof, between the Staff justification in its Safety Evaluation Report (September 2000) that a "2,000-year return period is acceptable for the seismic design of the PFS Facility" (SER at 2-42) and the Staff justification for recommending Option 4 in its Modified Rule Making Plan: 10 CFR Part 72 - "Geological and Seismological Characteristics for Siting and Design of Dry Cask Independent Spent Fuel Storage Installations," SECY-01-0178 (September 26, 2001).

INTERROGATORY NO. 10. If you admit Request for Admission No. 1, fully explain the basis for the Staff assertion, in its Safety Evaluation Report dated September

---

<sup>1</sup> Numbering for these interrogatories is continued from the last interrogatory relating to Contention Utah L previously submitted to the NRC Staff. The State and the Staff have agreed that an additional 5 interrogatories may be propounded for Contention Utah L.

2000 at 2-42, that “[a] 2,000-year return period is acceptable for the seismic design of the PFS Facility” because [among other reasons]: “[t]he NRC has accepted a design seismic value that envelopes the 2,000-yr return period probabilistic ground motion value for the TMI-2 ISFSI license . . .” SER at 2-42.

INTERROGATORY NO. 11. If you admit Requests for Admission Nos. 2 and 3, explain whether DOE approval of Revised DOE Standard 1020-2001 would affect the Staff's reliance on the old DOE Standard DOE-STD-1020-94 to justify accepting a 2,000-year return period probabilistic ground motion for the PFS ISFSI, deemed to be similar to DOE Performance-Category-3 facilities. See SER, September 2000, at 2-42. If there would be no effect, explain why.

INTERROGATORY NO. 12. If you admit Request for Admission No. 4, explain fully why the Staff considers it correct to use DOE's seismic hazard exceedance probability of  $5 \times 10^{-4}$  in order to justify the acceptability of using a 2,000-year return period probabilistic ground motion for the PFS ISFSI (SER, September 2000, at 2-42) without also requiring the target seismic performance goal of  $1 \times 10^{-4}$ /year for SSC performance. See DOE Standard 1020-94 at C-4 to -7.

INTERROGATORY NO. 13. If you deny Request for Admission No. 6, explain fully the basis and justification for the following two statements made by the Staff:

1. From SER, December 15, 1999, at 2-45:

Considering the radiological safety aspects of a dry spent fuel storage facility, conservative peak ground motion values that have a 99 percent likelihood of not being exceeded [equivalent to a probability of exceedance of  $1 \times 10^{-2}$ ] in the 20-year licensing period of the Facility are considered adequate for its design. This exceedance probability corresponds to a return period of 2,000

years.

2. From Modified Rulemaking Plan, September 26, 2001, at 7:

The rationale for the proposed mean annual probability of exceedance of  $5.0E-04$  (return period of 2,000 years) for a design earthquake is based on several points . . . [including]: The total probability of exceedance for a design earthquake at an ISFSI facility with an operational period of 20 years ( $20 \text{ years} \times 5.0E-04 = 1.0E-02$ ) is the same as the total probability of exceedance for an earthquake event at the proposed pre-closure facility at Yucca Mountain with an operational period of 100 years ( $100 \text{ years} \times 1.0E-04 = 1.0E-02$ ).

INTERROGATORY NO. 14. If Request for Admission No. 11 is admitted, please describe what the Staff would consider to be acceptable ways to mitigate the hazard of cask tipover.

INTERROGATORY NO. 15. Fully describe the participation of PFS' witness, Dr. C. Allin Cornell as a member of an expert panel for NRC's contractor ICF retained to develop, review, and comment on the technical basis of allowing applicants to conduct probabilistic seismic hazard analyses at ISFSI sites, including the dates, times, and locations of meetings, conference calls, or other contacts, a summary of the discussion that occurred, what documents or information were distributed, and what information was conveyed to Allin Cornell as a member of the panel. See Deposition of Allin Cornell (October 31 to November 1, 2001).

DATED this 5<sup>th</sup> day of November, 2001.

Respectfully submitted,

  
\_\_\_\_\_  
Denise Chancellor, Assistant Attorney General

Fred G Nelson, Assistant Attorney General  
Connie Nakahara, Special Assistant Attorney General  
Diane Curran, Special Assistant Attorney General  
Laura Lockhart, Assistant Attorney General  
Attorneys for State of Utah  
Utah Attorney General's Office  
160 East 300 South, 5th Floor, P.O. Box 140873  
Salt Lake City, UT 84114-0873  
Telephone: (801) 366-0286, Fax: (801) 366-0292

CERTIFICATE OF SERVICE

I hereby certify that a copy of STATE OF UTAH'S FOURTEENTH SET OF DISCOVERY REQUESTS DIRECTED TO THE NRC STAFF was served on the persons listed below by electronic mail (unless otherwise noted) with conforming copies by United States mail first class, this 5<sup>th</sup> day of November, 2001:

Rulemaking & Adjudication Staff  
Secretary of the Commission  
U. S. Nuclear Regulatory Commission  
Washington D.C. 20555  
E-mail: [hearingdocket@nrc.gov](mailto:hearingdocket@nrc.gov)  
*(original and two copies)*

G. Paul Bollwerk, III, Chairman  
Administrative Judge  
Atomic Safety and Licensing Board  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555  
E-Mail: [gpb@nrc.gov](mailto:gpb@nrc.gov)

Dr. Jerry R. Kline  
Administrative Judge  
Atomic Safety and Licensing Board  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555  
E-Mail: [jrk2@nrc.gov](mailto:jrk2@nrc.gov)  
E-Mail: [kjerry@erols.com](mailto:kjerry@erols.com)

Dr. Peter S. Lam  
Administrative Judge  
Atomic Safety and Licensing Board  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555  
E-Mail: [psl@nrc.gov](mailto:psl@nrc.gov)

Sherwin E. Turk, Esq.  
Catherine L. Marco, Esq.  
Office of the General Counsel  
Mail Stop - 0-15 B18  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
E-Mail: [set@nrc.gov](mailto:set@nrc.gov)  
E-Mail: [clm@nrc.gov](mailto:clm@nrc.gov)  
E-Mail: [pfscase@nrc.gov](mailto:pfscase@nrc.gov)

Jay E. Silberg, Esq.  
Ernest L. Blake, Jr., Esq.  
Paul A. Gaukler, Esq.  
Shaw Pittman, LLP  
2300 N Street, N. W.  
Washington, DC 20037-8007  
E-Mail: [Jay\\_Silberg@shawpittman.com](mailto:Jay_Silberg@shawpittman.com)  
E-Mail: [ernest\\_blake@shawpittman.com](mailto:ernest_blake@shawpittman.com)  
E-Mail: [paul\\_gaukler@shawpittman.com](mailto:paul_gaukler@shawpittman.com)

John Paul Kennedy, Sr., Esq.  
David W. Tufts  
Durham Jones & Pinegar  
111 East Broadway, Suite 900  
Salt Lake City, Utah 84111  
E-Mail: [dtufts@djplaw.com](mailto:dtufts@djplaw.com)

Joro Walker, Esq.  
Land and Water Fund of the Rockies  
1473 South 1100 East, Suite F  
Salt Lake City, Utah 84105  
E-Mail: [utah@lawfund.org](mailto:utah@lawfund.org)

Larry EchoHawk  
Paul C. EchoHawk  
Mark A. EchoHawk  
EchoHawk PLLC  
140 North 4<sup>th</sup> Street, Suite 1  
P.O. Box 6119  
Pocatello, Idaho 83205-6119  
E-mail: paul@echohawk.com

Tim Vollmann  
3301-R Coors Road N.W. # 302  
Albuquerque, NM 87120  
E-mail: tvollmann@hotmail.com

James M. Cutchin  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
E-Mail: jmc3@nrc.gov  
(*electronic copy only*)

Office of the Commission Appellate  
Adjudication  
Mail Stop: O14-G-15  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555



---

Connie Nakahara  
Special Assistant Attorney General  
State of Utah

STATE OF UTAH  
OFFICE OF THE ATTORNEY GENERAL

DOCKETED  
USNRC

December 13, 2001 (10:49AM)



OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

MARK L. SHURTLEFF  
ATTORNEY GENERAL

RAY HINTZE  
Chief Deputy - Civil

RYAN MECHAM  
Chief of Staff

KIRK TORGENSEN  
Chief Deputy - Criminal

November 5, 2001

William D. Travers  
Executive Director for Operations  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Re: In the Matter of Private Fuel Storage, LLC, Docket 72-22

Dear Mr. Travers;

Pursuant to 10 CFR § 2.744(a), enclosed is the State of Utah's Fourteenth Set of Discovery Requests Directed to the NRC Staff, dated November 5, 2001.

Please contact me with any questions at (801) 366-0286. Thank you.

Sincerely,

A handwritten signature in cursive script, appearing to read "Connie Nakahara".

Connie Nakahara  
Special Assistant Attorney General

Enclosure: as stated  
cc: PFS Docket 72-22-ISFSI Service List