

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of:	)	Docket No. 72-22-ISFSI
	)	
PRIVATE FUEL STORAGE, LLC	)	ASLBP No. 97-732-02-ISFSI
(Independent Spent Fuel	)	
Storage Installation)	)	December 20, 1999

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**STATE OF UTAH'S SIXTH SET OF DISCOVERY  
REQUESTS DIRECTED TO THE APPLICANT AND  
SKULL VALLEY BAND OF GOSHUTES**

Pursuant to the Board's Orders dated April 22, 1998 (LBP-98-7), and Orders dated June 29, 1998, August 20, 1998, September 20, 1999, and 10 CFR §§ 2.740, 2.741, and 2.742, Intervenor, State of Utah, hereby requests that Private Fuel Storage, LLC ("PFS") answer the following Requests for Admissions and Documents separately, fully, in writing, and under oath within 10 days<sup>1</sup> after service of this discovery request and produce documents requested below within 15 days after service of this request. This discovery request relates to the discovery request that was sent to the Applicant on December 1, 1999. In an attempt to resolve PFS's refusal to answer discovery relating to Utah Contention GG, the State agreed to resubmit part of the discovery under Utah Contention L, Geotechnical. The remainder of the December 1 discovery

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<sup>1</sup> Counsel for the State and PFS have agreed that the party responding to Interrogatories and Requests for Admissions during the formal discovery period may timely file a response within eight (8) working days after receipt of the Discovery Request.

is the subject of a Motion to Compel, filed today.

## I. INSTRUCTIONS

1. Scope of Discovery. These interrogatories and requests for admissions and production of documents are directed to Private Fuel Storage, LLC and any of the utility companies that own or comprise the members of PFS (collectively “PFS” or “Applicant”). The interrogatories cover all information in the possession, custody and control of PFS and/or its owner members, including information in the possession of 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.

2. Lack of Information. If you currently lack information to answer any Interrogatory completely, please state:

3. The responsive information currently available;
- a. The responsive information currently unavailable;
  - b. Efforts which you intend to make to secure the information currently unavailable; and
  - c. When you anticipate receiving the information currently unavailable.

4. Supplemental Responses. Each of the following requests is a continuing one pursuant to 10 C.F.R. § 2.740(e) and the State hereby demands that, in the event

that at any later date PFS obtains or discovers any additional information which is responsive to these interrogatories and request for admissions and production of documents, PFS 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:

- a. the identity and location of persons having knowledge of discoverable matters;
- b. 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
- c. new information which makes any response hereto incorrect.

5. Objections. If you object to or refuse to answer any interrogatory 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.

If you withhold any document covered by this request under a claim of privilege, immunity, or for any other reason, please furnish a list identifying each

document for which the privilege, immunity, or other reason is asserted, together with the following information: date, author and affiliation, recipient and affiliation, persons to whom copies were furnished and the job title and affiliation of any such persons, the subject matter of the documents, the basis for asserting the privilege, immunity, or other reason, and the name of the person on whose behalf the privilege, immunity, or other reason is asserted.

6. Estimates. Interrogatories calling for numerical or chronological information shall be deemed, to the extent that precise figures or dates are not known, to call for estimates. In each instance that an estimate is given, it should be identified as such together with the source of information underlying the estimate.

## II. DEFINITIONS

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

1. "PFS," "Applicant," "you," and "your" 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.

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

3. 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, telegrams, telexes, wiring instructions, 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, working papers, computer tapes, computer printout sheets, information stored in computers or other data storage or processing equipment, 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.

4. "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.

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

a. 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;

b. 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;

c. In connection with an entity other than a natural person (e.g., 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.

d. 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.

6. "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.

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

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

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

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

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

#### IV. UTAH CONTENTION L (Geotechnical)

These discovery requests relate to a report prepared on behalf of Private Fuel Storage, LLC, entitled "Transtor Dynamic Response to 2000 Year Return Seismic Event," Holtec Report No. HI-992295 (September 1999) [Proprietary] (hereafter "Holtec Report on TranStor Dynamic Response").<sup>2</sup>

##### A. REQUESTS FOR ADMISSIONS – Utah Contention L

###### 1. Input Motion

REQUEST FOR ADMISSION NO. 1. Do you admit that the upper soil layer at the PFS site is a soft thin layer over a competent soil layer? See, e. g., Geomatrix Calculation: Soil and Foundation Parameters for Dynamic Soil Structure Interaction Analyses [05996.02-G(PO18)-1 (Rev. 1)], at § 2 (Subsurface Conditions).

REQUEST FOR ADMISSION NO. 2. Do you admit that for dynamic analysis NUREG 0800, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants, SRP No. 3.7.2, *Seismic System Analysis*, requires that when a thin soft soil layer is present at the site, the input motion should be specified at the top of the competent soil layer?

REQUEST FOR ADMISSION NO. 3. Do you admit that in the Holtec Report on TranStor Dynamic Response, the input motion used for dynamic analysis

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<sup>2</sup> PFS's December 13, 1999 discovery response stated that the information contained in the State's December 1 discovery (which the State filed as a proprietary pleading) is not considered to contain proprietary information. Therefore, this pleading is not being submitted as a proprietary document.



represents the motion of the ground at the ground surface level at the top of the soft soil layer?

REQUEST FOR ADMISSION NO. 4. Do you admit that for nonlinear analysis, in order to consider the effect of phasing in ground motion, it is a conservative approach, and common industry practice, to use multiple time histories?

REQUEST FOR ADMISSION NO. 5. Do you admit that PFS relies on only one set of time histories for its non-linear analysis?

REQUEST FOR ADMISSION NO. 6. Do you admit that (a) impinging seismic waves will approach the foundation in an angle because of the proximity of the site to a major active fault; (b) such wave motion would result in an unbalanced rocking and torsional motion of the pad contributing to the displacement results; and (c) PFS has not considered the effects of such wave motion in its overall design?

REQUEST FOR ADMISSION NO. 7. Do you admit that PFS has not described how fault-normal and fault-parallel components of the motion are aligned with the pad orientation?

## 2. Foundation Modeling

REQUEST FOR ADMISSION NO. 8. Do you admit that in a layered system the foundation springs and damping coefficients are highly frequency dependent?

REQUEST FOR ADMISSION NO. 9. Do you admit that PFS has selected foundation lumped properties (e.g., representation of the soil-foundation system by a

set of constant soil springs and the stiffness of a rigid foundation resting on a uniform elastic halfspace) without examining the soil-structure interaction frequency and frequency dependency of the spring and damping coefficients?

REQUEST FOR ADMISSION NO. 10. Do you admit that PFS has inappropriately applied the damping coefficients for a rigid foundation to a flexible foundation?

REQUEST FOR ADMISSION No. 11. Do you admit that PFS has presented no data to quantify the effect of the soil-structure interaction on the cask responses, including pad-to-pad interaction on the displacement results?

REQUEST FOR ADMISSION No. 12. Do you admit that in the nonlinear calculation PFS has provided no data to justify its representation of linear elements in the foundation and the supporting soil medium?

**3. Cask Modeling**

REQUEST FOR ADMISSION No. 13. Do you admit that PFS has not described how the equations of motion for the basic formulation of the cask system are solved?

**B. DOCUMENT REQUESTS - Utah Contention I**

DOCUMENT REQUEST NO. 1. Please provide all documents relating to the assumptions, calculations and conclusions used by PFS in its foundation modeling.

DOCUMENT REQUEST NO. 2. Please provide all documents relating to the

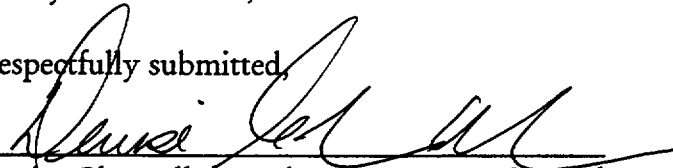
assumptions, calculations and conclusions used by PFS in its cash modeling.

DOCUMENT REQUEST NO. 3. To the extent that PFS denies Requests for Admissions No. 1 through 13, in whole or in part, please provide all documents that relate to those denials.

DOCUMENT REQUEST NO. 4. To the extent that PFS admits Requests for Admissions No. 1 through 13, in whole or in part, please provide all documents that relate to those admissions.

DATED this 20<sup>th</sup> day of December, 1999.

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that a copy of STATE OF UTAH'S SIXTH SET OF DISCOVERY REQUESTS DIRECTED TO THE APPLICANT AND SKULL VALLEY BAND OF GOSHUTES was served on the persons listed below by electronic mail with conforming copies by United States mail first class, this 20<sup>th</sup> day of December, 1999:

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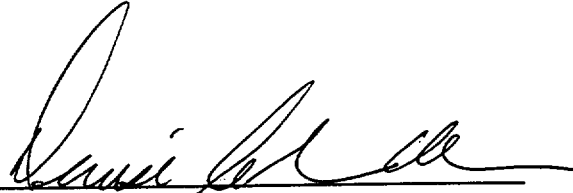
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A handwritten signature in black ink, appearing to read "Denise Chancellor", written over a horizontal line.

Denise Chancellor  
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