

May 13, 1999

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	
PRIVATE FUEL STORAGE L.L.C.	)	Docket No. 72-22
	)	
(Private Fuel Storage Facility)	)	ASLBP No. 97-732-02-ISFSI

**APPLICANT'S SECOND SET OF FORMAL DISCOVERY REQUESTS  
TO INTERVENORS STATE OF UTAH AND CONFEDERATED TRIBES**

Applicant Private Fuel Storage L.L.C. ("Applicant" or "PFS") hereby makes the following formal discovery requests of the State of Utah and the Confederated Tribes.

General Definitions and Instructions

1. The term "document" means the complete original or a true, correct, and complete copy and any non-identical copies, whether different by reason of any notation or otherwise, of any written or graphic matter of any kind, no matter how produced, recorded, stored, or reproduced (including electronic, mechanical or electrical records or representation of any kind) including, but not limited to, any writing, letter, telegram, meeting minute or note, memorandum, statement, book, record, survey, map, study, handwritten note, working paper, chart, tabulation, graph, tape, data sheet, data processing card, printout, microfilm or microfiche, index, diary entry, note of interview

or communication, or any data compilation including all drafts of all such documents. The phrase "data compilation" includes, but is not limited to, any material stored on or accessible through a computer or other information storage or retrieval system, including videotapes and tape recordings.

2. The "State of Utah" means any branch, department, agency, division or other organized entity, of the State of Utah, as well as any of its officials, directors, agents, employees, representatives, and its attorneys.

3. "Confederated Tribes" means the Confederated Tribes of the Goshute Reservation, any of its officials, directors, agents, employees, representatives, and its attorneys.

4. "Consultant" means any person who provides professional, scientific, or technical input, advice and/or opinion to the State or Confederated Tribes whether that person is employed specifically for this case or is a regular State or Confederated Tribes employee or official.

5. "PFSF" and "PFS ISFSI" means the Private Fuel Storage Facility.

## I. GENERAL INTERROGATORIES

GENERAL INTERROGATORY NO. 1. State the name, business address, and job title of each person who was consulted and/or who supplied information for responding to interrogatories, requests for admissions and requests for the production of

documents. Specifically note for which interrogatories, requests for admissions and requests for production each such person was consulted and/or supplied information.

If the information or opinions of anyone who was consulted in connection with your response to an interrogatory or request for admission differs from your written answer to the discovery request, please describe in detail the differing information or opinions, and indicate why such differing information or opinions are not your official position as expressed in your written answer to the request.

## **II. GENERAL DOCUMENT REQUESTS**

The Applicant requests the State of Utah and/or the Confederated Tribes to produce the following documents directly or indirectly within their possession, custody or control to the extent not previously produced during informal discovery:

GENERAL REQUEST NO. 1. All documents in your possession, custody or control identified, referred to, relied on, or used in any way in (a) responding to the interrogatories and requests for admissions set forth in Applicant's First Set of Formal Discovery Requests to Intervenors State of Utah and Confederated Tribes, (b) responding to the following interrogatories and requests for admissions in this document, or (c) responding to the any subsequent interrogatories and requests for admissions filed with respect to the State's and/or Confederated Tribes Contentions as admitted by the Board.

## **III. BOARD CONTENTION 3 (UTAH E/CONFEDERATED TRIBES F) FINANCIAL ASSURANCE**

These requests are directed to both the State and Confederated Tribes as appropriate. The responses should take into account (i) the information contained in the

License Application, as submitted and amended, (ii) the information contained in PFS's answers to the NRC Staff's Requests for Additional Information, and (iii) the information contained in PFS's Business Plan, which has been provided to the State.

**A. Requests for Admissions – Utah E/Confederated Tribes F**

1. Do you admit that PFS has expressly identified the owners of the company?
2. Do you admit that PFS has submitted its LLC agreement, including the obligations of PFS's members to each other?
3. Do you admit that the LLC agreement includes the form of the subscription agreement for PFS members?
4. Do you admit that PFS has discussed the legal relationship between PFS and its owners?
5. Do you admit that PFS members are contractually liable for their equity contributions?
6. Do you admit that the information PFS has submitted about the legal and financial relationships among the owners of the limited liability company is sufficient under the NRC's regulations?
7. Do you admit that customer commitments to store 10,000 MTU would be sufficient to fund the construction of an ISFSI with a capacity of at least 10,000 MTU (assuming the payment per KGU set forth in PFS's response to RAI 1-4)?

**B. Interrogatories – Utah E/Confederated Tribes F**

1. Identify and fully explain each respect in which the State and/or Confederated Tribes contend that the information submitted by PFS (in its License Application as supplemented by the RAI responses) regarding its legal and financial relationships with its owners is deficient, and the bases therefor.
2. Identify and fully explain each respect in which the State and/or Confederated Tribes contend that PFS has not shown that it has a sufficient financial base to assume all obligations incident to ownership and operation of the PFSF, and the bases therefor.

3. Identify and fully explain each respect in which the State and/or Confederated Tribes contend that the PFS Limited Liability Company may be subject to termination prior to the expiration of its license, and the bases therefor and the asserted consequences thereof.
4. Identify and fully explain each respect in which the State and/or Confederated Tribes contend that PFS has not provided sufficient information to assess its financial strength, and the bases therefor.
5. Identify and fully explain each respect in which the State and/or Confederated Tribes contend that PFS has not accounted for any difficulty of allocating responsibility and liability among the owners of the spent fuel casks and has not addressed PFS's financial responsibilities as "possessor" of the spent fuel casks, and the bases therefor.
6. Identify and fully explain each respect in which the State and/or Confederated Tribes contend that PFS's construction, operation, and maintenance cost estimates set forth in PFS's response to the RAIs and the PFS business plan are understated or incorrect, provide what the State claims the correct cost estimates should be, and the bases therefor.
7. Identify and fully explain each respect in which the State and/or Confederated Tribes contend that PFS does not address funding contingencies to cover on-going operations and maintenance costs in the event an entity storing spent fuel at the proposed ISFSI breaches the service agreement, becomes insolvent, or otherwise does not continue making payments to PFS, including the rationale for and likelihood of PFS's customers ceasing to make any payments that would be owed to PFS.
8. Identify and fully specify the "worst case-accident," as well all other accidents, at the PFSF, at the mechanisms by which such accidents would occur, the consequences and costs thereof, and the scientific and technical bases therefor (including the bases for claiming such accidents are credible) for which the State and/or Confederated Tribes contend that PFS has not provided assurance that it will have sufficient resources to cover.
9. Identify and fully specify each and every other non-routine expense, including the bases for claiming such expenses will be incurred and the costs thereof, for which the State and/or Confederated Tribes contend that PFS has not provided assurance that it will have sufficient resources to cover.

**C. Document Requests – Utah E/Confederated Tribes F**

The Applicant requests the State of Utah and/or the Confederated Tribes to produce the following documents directly or indirectly within their possession, custody or control to the extent not previously produced during informal discovery:

1. All documents related to the claims raised by the State and/or the Confederated Tribes, as admitted by the Board, in Utah Contention E and Confederated Tribes F (including those claims raised in Castle Rock Contention 7, as incorporated by Confederated Tribes).
2. All documents, data or other information generated, reviewed, considered or relied upon by Michael Sheehan, or any other expert or consultant assisting the State and/or the Confederated Tribes, in connection with respect to Utah Contention E and Confederated Tribes F (including those claims raised in Castle Rock Contention 7, as incorporated by Confederated Tribes).

**IV. BOARD CONTENTION 6 (UTAH H) INADEQUATE THERMAL DESIGN**

**A. Requests for Admission – Utah H**

1. Do you admit that the long-term thermal design limit for the HI-STORM 100 storage cask is an annual average ambient temperature of 80 °F.?
2. Do you admit that the long-term thermal design limit for the TranStor storage cask is an annual average ambient temperature of 75 °F.?
3. Do you admit that the short-term thermal design limits for both the HI-STORM 100 and TranStor storage casks is a 24-hour average ambient temperature of 100 °F.?
4. Do you admit that an annual average ambient temperature of 75 °F. or more has never been recorded for any location in Skull Valley?
5. Do you admit that an average ambient temperature over a period of 24 hours of 100 °F. or more has never been recorded for any location in Skull Valley?
6. Do you admit that an annual average ambient temperature of 75 °F. or more has never been recorded for any location in Utah?

7. Do you admit that an average ambient temperature over a period of 24 hours of 100 °F. or more has never been recorded for any location in Utah?

8. Do you admit that the short-term design temperature limit for the concrete used in the PFSF spent fuel storage casks is 350 °F.?

9. Do you admit that the long-term design temperature limit for the concrete used in the PFSF spent fuel storage casks is 300 °F.?

**B. Interrogatories – Utah H**

1. Identify, and set forth fully the supporting data and bases for, the maximum annual average ambient temperature and the maximum average ambient temperature over a 24-hour period that the State claims has been recorded for any location in Skull Valley.

2. To the extent that the State does not admit Request No 6, what does the State contend is the maximum annual average ambient temperature recorded in Utah? Identify and set forth fully the data and bases supporting the State's contentions.

3. To the extent that the State does not admit Request No 7, what does the State contend is the maximum average ambient temperature over a 24-hour period recorded in Utah? Identify and set forth fully the data and bases supporting the State's contentions.

4. Identify, and set forth fully the supporting data and bases, the maximum annual average ambient temperature and the maximum average ambient temperature over a 24-hour period that the State claims could reasonably be expected to occur at the PFSF site.

5. To the extent that the State does not admit Request Nos. 8 and 9, what does the State contend are the maximum short-term and long-term temperature limits for the concrete used in the TranStor and HI-STORM spent fuel storage casks? Identify and set forth fully the data and bases supporting the State's contentions.

**C. Document Requests – Utah H**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Contention H.
2. All documents, data and information generated, reviewed, considered or relied upon by Marvin Resnikoff, or any other expert or consultant assisting the State, in connection with respect to Utah Contention H.
3. All documents, other than U.S. Weather Bureau data, containing temperature measurements that indicate or tend to indicate what the maximum annual average ambient temperature anywhere in Skull Valley has been or would be.
4. All documents, other than U.S. Weather Bureau data, containing temperature measurements that indicate or tend to indicate what that the maximum average ambient temperature over a 24-hour period anywhere in Skull Valley has been or would be.
5. All documents containing temperature data and other data that support the State's contentions in Interrogatory Nos. 1-5.

**V. BOARD CONTENTION 7 (UTAH K/CONFEDERATED TRIBES B) CREDIBLE ACCIDENTS**

**A. Requests for Admissions – Utah K/Confederated Tribes**

1. Do you admit that the distance from the military targets on the Utah Test and Training Range at which live ammunition is fired are over 20 miles from the PFS ISFSI site?
2. Do you admit that aircraft and missile run-ins and drop and launch approaches on the Utah Test and Training Range, South Area are all oriented either south to north or east to west and hence away from the PFS ISFSI site?
3. Do you admit that all missiles fired on the Utah Test and Training Range with the capability of flying off the range possess flight termination systems?
4. Do you admit that Air Force aircraft flying over Skull Valley do not engage in threat reaction or tactical maneuvering.
5. Do you admit that military aircraft flying over Skull Valley with live ordnance do not arm the ordnance while over the valley?



6. Do you admit that aircraft carrying "hung bombs" that seek to land at Michael Army Airfield (on Dugway Proving Ground) do not fly over the PFS ISFSI site?

**B. Document Requests – Utah K/Confederated Tribes B**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within their possession, custody or control to the extent not previously produced during informal discovery:

1. All versions of the Chemical Accident/Incident Response and Assistance Plans for Dugway Proving Ground or any installations on Dugway Proving Ground.
2. All documents related to training exercises of the Utah National Guard on Dugway proving ground, including, but not limited to, the location of the training exercises, the equipment, weapons and munitions used during the exercises, the directions of any firing ranges used during the exercises, and procedures used to protect against accidents and mishaps in the firing of weapons.
3. Any maps or other documents showing the location and/or use of the weapon firing ranges on Dugway Proving Ground, including any documents depicting "range fans," the nature and type of weapons and munitions fired, and the procedures used to protect against accidents and mishaps in firing.
4. All documents related to the types, quantities, location, testing, storage and disposal of chemical agents and munitions at Dugway Proving Ground.
5. All documents related to the types, quantities, location, testing, storage and disposal of biological agents at Dugway Proving Ground.
6. All documents related to unexploded ordnance (conventional, chemical or biological) on or in the vicinity of Dugway Proving Ground, including any studies or analyses of the hazards posed by unexploded ordnance.
7. All documents related to the transportation of chemical or biological agent to or from federal facilities in Utah.
8. All documents related to safety procedures and requirements for the handling, testing, storage, and disposal of chemical agents and/or munitions, biological agents and/or munitions, and any other hazardous material at or in the vicinity of Dugway Proving Ground.

9. All documents concerning emergency procedures for responding to hazardous waste spills.

10. Any and all RCRA permits and/or applications, and related documents for Dugway Proving Ground, including, but not limited to, the permit modifications related to Igloo G.

11. The RCRA permits for Laidlaw Grassy Mountain Hazardous Waste Landfill, Envirocare Low-Level and Mixed Waste Landfill, Laidlaw Aptus Hazardous Waste Incinerator, and Laidlaw Clive Hazardous Waste Incinerator and all documents related to the specific type and quantity of hazardous materials transported to or from these facilities which the State contends would pose a threat to the ITP.

12. All documents requested during the depositions of State personnel the week of May 10, 1999.

#### **VI. BOARD CONTENTION 8 (UTAH L) GEOTECHNICAL**

The responses should take into account (i) the information contained in the License Application, as filed and amended, (ii) the information contained in PFS's answers to the NRC Staff's Requests for Additional Information, (iii) the Bay Geophysical seismic surveys and (iv) the Geomatrix' February 1999 "Fault Evaluation Study and Seismic Hazard Assessment," ("Geomatrix study"), which have been provided to the State.

##### **A. Requests for Admission – Utah L**

1. Do you admit that the Geomatrix study identifies the faults in the vicinity of the PFS facility that could result in the greatest vibratory ground motion at the PFS site?

2. Do you admit that the Geomatrix study identifies the faults in the vicinity of the PFS facility that could result in the greatest ground displacement at the PFS site?

3. Do you admit that the estimated peak horizontal ground acceleration of 0.40g for the 1000-year return period, using a probabilistic seismic hazards approach, is accurate? (PFS Request for Exemption to 10 CFR 72.102(f)(1), April 2, 1999)

4. Do you admit that the estimated displacement due to faulting of <0.1 cm for the 2000-year return period, using a probabilistic seismic hazards approach, is accurate? (Geomatrix study, pg. 109 )

**B. Interrogatories – Utah L**

1. To the extent that the State denies Request for Admission No. 1, identify each fault that the State contends could result in greater ground motion at the PFS site than those identified in the Geomatrix study, and the bases therefor.

2. To the extent that the State denies Request for Admission No. 2, identify each fault that the State contends could result in greater ground displacement at the PFS site than those identified in the Geomatrix study, and the bases therefor.

3. Identify and fully explain any deficiencies claimed by the State in the probabilistic seismic hazards assessment for both vibratory ground motion and surface displacement conducted for the PFS facility, as detailed in the Geomatrix study and the April 2, 1999 PFS Request for Exemption to 10 CFR 72.102(f)(1), and the bases therefor.

4. Identify and fully explain each and every respect in which the State claims that the Applicant's seismic analysis is insufficient to satisfy the requirements of the NRC regulations, and the bases therefor.

5. Identify and fully explain each and every respect in which the State claims that the Applicant's subsurface investigations are deficient, and the bases therefor.

6. Identify and fully explain each and every respect in which the State claims that Applicant's sampling program is inadequate to "show that soil conditions are adequate for the proposed foundation loading," and the bases therefor.

7. Identify and fully explain each and every respect for the State's claim that the Applicant has inadequately addressed the potential for collapsible soils, and the bases therefor. Your answer should specifically take into account the Applicant's response to RAI No. 1, Question 2.8.

8. Identify and fully explain any other deficiencies, not set forth in response to Interrogatory Nos. 1-7 above, claimed by the State in the geological, geotechnical or seismic analysis of the PFS site conditions, and the bases therefor.

**C. Document Requests – Utah L**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Contention L.
2. All documents, data or other information generated, reviewed, considered or relied upon by the Utah Geological Survey, Walter Arabasz, James Pechmann, or any other expert or consultant assisting the State, in connection with respect to Utah Contention L.
3. All documents prepared by the Utah Geological Survey, Walter Arabasz, James Pechmann, or any other expert or consultant assisting the state with respect to Utah Contention L, reviewing, analyzing, evaluating or otherwise relating to PFS's application and the geological, geotechnical and seismic studies and analysis done on behalf of PFS.
4. All documents, data or other information describing, reviewing, analyzing, evaluating or otherwise relating the physical properties of the soils in the vicinity of the PFS facility, including any documents related to the presence or absence of collapsible soils, cemented soils or soils subject to liquefaction.
5. All documents describing, reviewing, analyzing, evaluating or otherwise relating to geological or geotechnical conditions of the PFS site or to geological or geotechnical conditions which the State claims may impact the PFS ISFSI.
6. All documents relating to the methodologies and standards required by the Utah Geological Survey or any other Utah agency, including the Utah Department of Transportation, for conducting probabilistic seismic hazard analysis.
7. All documents, including any studies or reports, employing a probabilistic seismic hazard approach performed by the Utah Geological Survey or any other Utah State agency, or prepared for the Utah Geological Survey or any other Utah State agency.
8. All documents, including any studies or reports, related to probabilistic seismic hazard assessments performed, reviewed or evaluated by Walter Arabasz,

James Pechmann or any other expert or consultant assisting the State with respect to Utah Contention L.

9. All documents relating to the proper methodologies and standards, as claimed by the State and its experts and consultants, for conducting probabilistic seismic hazard analysis.

## **VII. BOARD CONTENTION 11 (UTAH O) HYDROLOGY**

The responses should take into account (i) the information contained in the License Application, as submitted and amended, and (ii) the information contained in PFS's answers to the NRC Staff's Requests for Additional Information.

### **A. Requests for Admission – Utah O**

1. Do you admit that PFS's water usage during construction would have no measurable or adverse impact on other well users and on the aquifer? (EIS RAI 8-1, 9-4)
2. Do you admit that PFS's water usage during operations would have no measurable or adverse impact on other well users and on the aquifer? (EIS RAI 8-1, 9-4)
3. Do you admit that the depth to groundwater beneath the PFSF site is at least 100 ft.? (EIS RAI 8-1)
4. Do you admit that construction, operation, and maintenance of the PFSF would have no measurable or adverse impact due to groundwater contamination on hydrological resources downgradient from the facility?

### **B. Interrogatories – Utah O**

1. Identify each of the specific pathways from PFS's sewer/wastewater system, the "retention pond" (hereinafter "detention basin"), ISFSI operations, and ISFSI construction activities through which the State contends that surface water and groundwater in Skull Valley could become contaminated, and the technical and scientific bases therefor.
2. For each pathway identified in response to Interrogatory No. 1, identify each of the specific contaminants from PFS's sewer/wastewater system, the detention

basin, ISFSI operations, and ISFSI construction activities that the State contends could enter the surface water and groundwater in Skull Valley, the means or mechanism by which each contaminant would enter each pathway, and the technical and scientific bases for the State's contentions.

3. Identify the likelihood that, in the State's belief, each of the contaminants identified in response to Interrogatory No. 2 would enter the surface water or groundwater in Skull Valley through each of the pathways identified in response to interrogatory No. 1, and the technical and scientific bases therefor, including, but not limited to, the scientific and technical basis for any radiological releases that the State asserts are likely to result in groundwater or surface water contamination.

4. Identify each specific body of surface water – perennial and intermittent – that the State contends would be contaminated by the construction, operation, or decommissioning of the PFS ISFSI, and the technical and scientific bases therefor.

5. Identify and fully explain the specific respects in which the State contends that PFS has inadequately characterized the groundwater beneath the ISFSI site, including the respects in which the State contends PFS has inadequately characterized the groundwater depth (to the extent the State does not admit Request No. 2 above), the ground permeability, and the groundwater velocity, and the technical and scientific bases therefor.

6. Identify and fully explain any measurable or adverse impacts on downgradient hydrological resources, and the mechanisms by which the State asserts such impacts would occur, that the State contends would result from the asserted contaminants and pathways identified in response to Interrogatories 1 and 2 above, and the technical and scientific bases therefor.

7. To the extent the State does not admit Request No. 1-4 above, identify and fully explain the specific adverse effects the State contends PFS's water usage would have on specific well users and the aquifer, and the technical and scientific bases therefor.

**C. Document Requests – Utah O**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Contention O.
2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State with respect to Utah Contention O.
3. All documents supporting the State's assertion that under Utah law the PFSF detention basin must be designed to withstand the probable maximum flood.
4. All documents which the State agreed to produce during informal discovery but has yet to produce, including documents discussing the characteristics of groundwater in Skull Valley, the impacts from the PFSF, as well as applicable Utah standards.

#### **VIII. BOARD CONTENTION 13 (UTAH S) DECOMMISSIONING**

These requests are directed to both the State and Confederated Tribes (which incorporated by reference those claims raised in Castle Rock Contention 7) as appropriate. The responses should take into account (i) the information contained in the License Application, as submitted and amended, and (ii) the information contained in PFS's answers to the NRC Staff's Requests for Additional Information.

##### **A. Requests for Admissions – Utah S**

1. Do you admit that PFS has a commitment (documented in RAI Response 1-7) from a bank to provide a letter of credit to cover PFSF decommissioning costs in the amount of \$1.7 million?
2. Do you admit that PFS has provided the wording for the letter of credit referred to in Request No. 1?
3. Do you admit that the letter of credit referred to in Request No. 1 would be irrevocable?

**B. Interrogatories – Utah S**

1. To the extent that the State does not admit Requests Nos. 1-3, identify and fully explain the specific respects in which the State contends that the commitment PFS has obtained from a bank to provide a letter of credit to cover the decommissioning costs of the PFSF is inadequate to satisfy NRC requirements, and the bases therefor.
2. Taking into account PFS's decommissioning cost breakdown provided in RAI Response 1-6 and PFS's plan to monitor and provide for future changes in decommissioning costs provided in RAI Response 1-8, identify and fully explain each specific respect in which the State and/or Confederated Tribes contend that PFS's decommissioning cost estimates for the PFS ISFSI are inadequate, and the bases therefor.
3. If the State and/or Confederated Tribes contend that any of PFS's cost estimates for the individual decommissioning tasks identified in RAI Response 1-6 are incorrect, provide the asserted correct costs of those tasks, and the bases therefor.
4. If the State and/or Confederated Tribes contend that PFS has omitted to estimate the cost for any decommissioning tasks that the State and/or Confederated Tribes contend that PFS will be required to perform, identify and fully explain why each such task will need to be performed and the claimed cost for performing each such task and the bases therefor.
5. Identify and fully describe the "large accidents and associated release or contamination" that the State and/or Confederated Tribes claim could occur at the PFSF which would impose decommissioning costs not accounted for in PFS's decommissioning cost estimate, including the mechanism(s) by which the State and/or Confederated Tribes claim such large accidents or release could occur, the specific physical consequences of the accident or release, and the scientific and technical bases therefor (including the bases for claiming such accidents or release are credible).
6. Identify and fully specify the response that the State and/or Confederated Tribes contend would be required of PFS if the accident or release alleged in response to Interrogatory No. 5 were to occur, including the immediate cost of such response and the specific impact the accident or release would have on PFSF decommissioning costs, and the bases therefor.
7. Identify and fully specify each and every other non-routine expense which the State and/or Confederated Tribes contend that PFS has not included in its



decommissioning cost estimate, including the bases for claiming such expenses will be incurred and the costs thereof.

8. Describe in detail the site survey, including the cost of such a survey, which the State contends that PFS must perform upon decommissioning the PFSF and provide the bases therefor.

**C. Document Requests – Utah S**

The Applicant requests the State of Utah and Confederated Tribes to produce the following documents directly or indirectly within their possession, custody or control to the extent not previously produced during informal discovery:

1. All documents related to the claims raised by the State and/or Confederated Tribes, as admitted by the Board, in Contention S (including those claims raised in Castle Rock Contention 7, as incorporated by Confederated Tribes).
2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State and/or Confederated Tribes with respect to Utah Contention S (including those claims raised in Castle Rock Contention 7, as incorporated by Confederated Tribes).
3. All documents describing or otherwise relating to the decommissioning tasks that the State and/or Confederated Tribes contend that PFS must perform to decommission the PFSF.
4. All documents relating to the costs or cost estimates of the decommissioning tasks that the State and/or Confederated Tribes contend PFS must perform to decommission the PFSF.
5. All documents describing or otherwise relating to the site survey or components of the site survey that the State contends PFS must perform to decommission the PFSF.
6. All documents relating to the costs or cost estimates of the site survey or components of the site survey that the State contends PFS must perform to decommission the PFSF.
7. All documents supporting or otherwise relating to the State's and/or Confederated Tribes' assertion that an accident or radioactive release could occur

at the PFSF, the cost of responding to which PFS has allegedly not included in its decommissioning cost estimate.

8. All documents relating to the cost of responding to and the impact on PFSF decommissioning costs that would be imposed by the accident or release referred to in Document Request No. 7.

**IX. BOARD CONTENTION 15 (UTAH U) IMPACTS OF ONSITE STORAGE NOT CONSIDERED**

**A. Document Requests – Utah U**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Contention U.

2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State with respect to Utah Contention U.

**X. BOARD CONTENTION 16 (UTAH V) TRANSPORTATION**

**A. Requests for Admission – Utah V**

1. Do you admit that a dedicated train exclusively transporting heavy loads (such as spent fuel transportation casks) is less likely to have a derailling incident than a mixed-use train with both heavy and light loads?

**B. Interrogatories – Utah V**

1. Identify and fully explain each specific respect in which the State claims that exceeding the threshold condition of Table S-4 of 100 tons per cask per rail car or 73,000 pounds per truck increases the environmental impact of transporting spent nuclear fuel, and provide the scientific and technical bases therefor.

**C. Document Requests – Utah V**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents, data or other information related to the claims raised by the State, as admitted by the Board, in Contention V.
2. All documents, data or other information generated, reviewed, considered, or relied upon by any expert or consultant in connection with assisting the State with respect to Contention V .
3. All documents, data or other information supporting the State's assertions in Utah V, as admitted by the Board, including but not limited to:
  - a. relevant documents, data or other information supporting the State's claimed "fact that heavier trains are more likely to lose braking on downgrades." State Petition at 147.
  - b. relevant documents, data or other information that support the State's claim that "transportation casks, taken together with rail carriages, will weigh over 200 tons." Id.
  - c. relevant documents, data or other information that support the State's claim that "[t]he heavier a cask is, the more difficult it will be to retrieve if it falls from a train, thus raising the risk of accidents." Id. at 148.
  - d. relevant documents, data or other information that support the State's claim that "once an accident occurs, the higher inventory of spent fuel inside the larger cask raises the consequences of a radiological release." Id.
4. All records of conversation or any documentation (including data) produced due to the conversation between Marvin Resnikoff, RWMA, and Robert Fronczak, American Association of Railroads ("AAR") on November 20, 1997 and any other conversations on any date by the State of Utah or any of its consultants or experts with the AAR on the subject of shipment by rail. Id.

5. All relevant documents, data or other information provided by the AAR regarding shipment of hazardous materials, including radioactive material, by rail.

6. All documents, data or other information received from the NRC in the FOIA mentioned by Diane Curran at the Pre-hearing Conference when discussing Utah Contention V, including but not limited to the Paperiello/Morrison Memorandum dated February 20, 1996. January 29, 1998 Prehearing Conference Transcript at 556.

**XI. BOARD CONTENTION 17 (UTAH W) OTHER IMPACTS NOT CONSIDERED**

**A. Document Requests – Utah W**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Contention W.

2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State with respect to Utah Contention W.

**XII. BOARD CONTENTION 18 (UTAH Z) NO ACTION ALTERNATIVE**

The responses should take into account (i) the information contained in the License Application, as submitted and amended, (ii) the information contained in PFS's answers to the NRC Staff's Requests for Additional Information, and (iii) documents provided to the State during informal discovery.

**A. Interrogatories – Utah Z**

1. Identify and fully explain each environmental advantage that the State claims results from the no-action alternative and describe fully the scientific, technical or other bases for each such claimed advantage.
2. Identify and fully explain each deficiency that the State claims exists with respect to the report prepared by Energy Resources International, Inc. (“ERI”) for PFS entitled “Utility At-Reactor Spent Fuel Storage Costs for the Private Fuel Storage Facility Cost-Benefit Analysis,” and describe fully the scientific, technical or other bases for each such claimed deficiency.
3. Identify and fully explain each deficiency that the State claims exists with respect to the analysis for a 40,000 MTU facility provided in response to EIS RAI 5-2(b), and describe fully the scientific, technical or other bases for each such claimed deficiency.

**B. Document Requests – Utah Z**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents, data or other information related to the claims raised by the State, as admitted by the Board, in Contention Z.
2. All documents, data or other information generated, reviewed, considered, or relied upon by any expert or consultant in connection with assisting the State with respect to Contention Z.
3. All documents, data or other information – including any documents, data or other information generated by any expert or consultant assisting the State – developed from the State’s review and evaluation of (i) the ERI report “Utility At-Reactor Spent Fuel Storage Costs for the Private Fuel Storage Facility Cost-Benefit Analysis,” (ii) PFS’s response to EIS RAI 5-2(b), and (iii) any supporting data or calculations provided to the State as a result of discovery.
4. All documents, data or other information supporting or otherwise relating to the State’s assertion in Utah Z that the following are environmental advantages for the no-action alternative:

- a. "not transporting 4,000 casks of spent fuel rods thousands of miles across the county." State Petition at 169.
- b. "not increasing the risk of accidents from additional cask handling." Id.

5. All documents, data or other information supporting or otherwise relating to the State's assertions in its responses to Interrogatory Nos. 1 - 3 above.

### **XIII. BOARD CONTENTION 19 (UTAH AA) RANGE OF ALTERNATIVES**

The responses should take into account (i) the information contained in the License Application, as submitted and amended, (ii) the information contained in PFS's answers to the NRC Staff's Requests for Additional Information, and (iii) documents concerning the evaluation of alternative sites provided during discovery.

#### **A. Requests for Admissions**

1. Do you admit that the Applicant considered 38 alternative sites in its site selection process?
2. Do you admit that the Applicant sent a questionnaire to at least three candidate sites requesting detailed information on the suitability of locating an ISFSI at each site?
3. Do you admit that the Applicant received responses from at least three candidate sites to the questionnaire requesting detailed information on the suitability of locating an ISFSI at the sites?
4. Do you admit that the Applicant visited at least three of the candidate sites to review the suitability of locating an ISFSI at the sites?
5. Do you admit that the Applicant conducted a comparative field investigation and evaluation of the Skull Valley site and the Fremont County site near Shoshoni Wyoming.

**B. Interrogatories – Utah AA**

1. Identify and fully explain each respect in which the State claims that the Applicant's analysis of alternative sites was deficient and describe fully the scientific, technical, regulatory or other bases for each such claimed deficiency.
2. Identify and fully explain each respect in which the State claims that the detailed questionnaire requesting information (at Table 8.1-2 of the Environmental Report) that the Applicant sent to the remaining candidate sites in the third phase of the site selection process was deficient and describe fully the scientific, technical, regulatory or other bases for each such claimed deficiency.
3. Identify and fully explain each respect in which the State claims that the Applicant's comparative field investigation and evaluation of the Skull Valley site and the Fremont County site near Shoshoni Wyoming was deficient and describe fully the scientific, technical, regulatory or other bases for each such claimed deficiency.

**C. Document Requests – Utah AA**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents, data or other information related to the claims raised by the State, as admitted by the Board, in Contention AA.
2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State with respect to Utah Contention AA.
3. All documents, data or other information – including any documents, data or other information generated by any expert or consultant assisting the State – developed from the State's review and evaluation of the Applicant's site selection process.
4. All documents, data or other information supporting or otherwise relating to the State's assertions in its responses to Interrogatory Nos. 1 - 3 above.

## **XIV. BOARD CONTENTION 20 (UTAH DD) ECOLOGY AND SPECIES**

### **A. Interrogatories – Utah DD**

1. Identify each possible impact that State claims that the Applicant has not addressed or evaluated with respect to peregrine falcons nesting on the Timpie Springs Waterfowl Management Area and describe fully the State's scientific, technical, or other bases for each such claimed impact.
2. Identify fully the information on pocket gopher mounds that the State claims must be included in the License Application and describe fully the State's scientific, technical, regulatory or other bases for why such information must be included in the Application.
3. Identify fully the characteristics that differentiate the Skull Valley pocket gopher from the other pocket gophers in Skull Valley and the surrounding region.
4. Identify each respect in which the State contends that the Applicant has not "adequately assessed the impact" on Pohl's milkvetch and small spring parsley and describe fully the State's scientific, technical, or other bases for each respect in which the State claims such inadequate assessment.
5. Identify and describe fully the private domestic animal (livestock) and the domestic plant (farm produce) species in the area which the State claims that the Applicant has not identified nor assessed adverse impacts.
6. Identify each adverse impact that the State claims that the Applicant has not assessed with respect to the private domestic animal (livestock) or the domestic plant (farm produce) species in the area and describe fully the State's scientific, technical, or other bases for each such claimed impact.

### **B. Document Requests – Utah DD**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Contention DD.



2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State with respect to Utah Contention DD.

3. All documents, data or other information supporting or otherwise relating to the State's assertions in its responses to Interrogatory Nos. 1 - 5 above.

**XV. BOARD CONTENTION 21 (UTAH GG) FAILURE TO DEMONSTRATE CASK-PAD STABILITY**

**A. Interrogatories – Utah GG**

1. Identify and fully explain each and every basis for the State's claim that "the coefficient of friction may vary over the surface of the pad" and what effect this assertion, if correct, would have on the stability of the TranStor storage casks and the pads during a seismic event.

2. Identify and fully explain each and every basis for the State's claim that the casks will "shift from the static case to the kinetic case" during seismic activity and what effect this assertion, if correct, would have on the stability of the TranStor storage casks and the pads during a seismic event.

**B. Document Requests – Utah GG**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Contention GG.

2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State with respect to Utah Contention GG.

## **XVI. UTAH CONTENTION SECURITY A**

### **A. Document Requests – Utah Security A**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Utah Security A.
2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State with respect to Utah Security A.

## **XVII. UTAH CONTENTION SECURITY B**

### **A. Document Requests – Utah Security B**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Utah Security B.
2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State with respect to Utah Security B.

## **XVIII. UTAH CONTENTION SECURITY C**

### **A. Interrogatories – Utah Security C**

1. Identify and fully explain each respect that the State claims that PFS “has not met the requirements of 10 C.F.R. Part 73” or 10 C.F.R. 73.51(d)(6), and describe fully the State’s bases therefor.

2. Identify and fully explain any and all State policies and procedures for assisting or supplementing local law enforcement agencies responding to unusual or emergency situations that might impact public health and safety.

3. Identify knowledgeable State personnel qualified to discuss and answer questions regarding the State's policies and procedures for assisting Local Law Enforcement Agencies ("LLEAs") responding to unusual or emergency situations.

4. Identify any determined or established Utah law enforcement response times for State or LLEA response to unusual or emergency situations at any State, governmental, industrial, commercial or other facility.

**B. Documents Requests – Utah Security C**

The Applicant requests the State of Utah to produce the following documents directly or indirectly within its possession, custody or control to the extent not previously produced by the State during informal discovery:

1. All documents related to the claims raised by the State, as admitted by the Board, in Contention Security C.

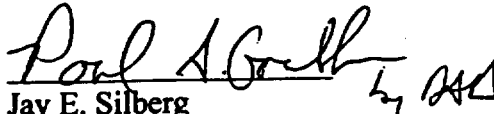
2. All documents, data or other information generated, reviewed, considered or relied upon by any expert or consultant in connection with assisting the State with respect to Utah Contention Security C.

3. All documents referring or relating to any agreement between any facility not owned by the State of Utah, Utah state agency or local Utah government unit, in which the government unit agrees to provide assistance for the security of the facility.

4. All plans, policies, and procedures and all documents referring or relating to the State's plans, policies and procedures for responding to, or assisting LLEAs in their response to, unusual or emergency situations that may threaten public health or safety.

5. All documents referring or relating to any determined or established Utah law enforcement response times for State or LLEA response to unusual or emergency situations at any State, governmental, industrial, commercial or other facility.

Respectfully submitted,

  
Jay E. Silberg

Ernest L. Blake, Jr.

Paul A. Gaukler

SHAW, PITTMAN, POTTS & TROWBRIDGE

2300 N Street, N.W.

Washington, DC 20037

(202) 663-8000

Counsel for Private Fuel Storage L.L.C.

Dated: May 13, 1999

**UNITED STATES OF AMERICA**  
**NUCLEAR REGULATORY COMMISSION**

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	
PRIVATE FUEL STORAGE L.L.C.	)	Docket No. 72-22
	)	
(Private Fuel Storage Facility)	)	ASLBP No. 97-732-02-ISFSI

**CERTIFICATE OF SERVICE**

I hereby certify that copies of the "Applicant's Second Set of Formal Document Requests to Intervenor State of Utah and Confederated Tribes were served on the persons listed below (unless otherwise noted) by e-mail with conforming copies by U.S. mail, first class, postage prepaid, this 13th day of May 1999.

G. Paul Bollwerk III, Esq., Chairman  
Administrative Judge  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
e-mail: GPB@nrc.gov

Dr. Jerry R. Kline  
Administrative Judge  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
e-mail: JRK2@nrc.gov

Dr. Peter S. Lam  
Administrative Judge  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
e-mail: PSL@nrc.gov

\* Susan F. Shankman  
Deputy Director, Licensing & Inspection  
Directorate, Spent Fuel Project Office  
Office of Nuclear Material Safety &  
Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Office of the Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
Attention: Rulemakings and Adjudications  
Staff  
e-mail: [hearingdocket@nrc.gov](mailto:hearingdocket@nrc.gov)  
(Original and two copies)

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

John Paul Kennedy, Sr., Esq.  
Confederated Tribes of the Goshute  
Reservation and David Pete  
1385 Yale Avenue  
Salt Lake City, Utah 84105  
e-mail: [john@kennedys.org](mailto:john@kennedys.org)

Diane Curran, Esq.  
Harmon, Curran, Spielberg &  
Eisenberg, L.L.P.  
2001 S Street, N.W.  
Washington, D.C. 20009  
e-mail: [DCurran.HCSE@zzapp.org](mailto:DCurran.HCSE@zzapp.org)


\* By U.S. mail only.

\* Adjudicatory File  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Denise Chancellor, Esq.  
Assistant Attorney General  
Utah Attorney General's Office  
160 East 300 South, 5<sup>th</sup> Floor  
P.O. Box 140873  
Salt Lake City, Utah 84114-0873  
e-mail: [dchancel@state.UT.US](mailto:dchancel@state.UT.US)

Joro Walker, Esq.  
Land and Water Fund of the Rockies  
165 South Main, Suite 1  
Salt Lake City, UT 84111  
e-mail: [joro61@inconnect.com](mailto:joro61@inconnect.com)

Danny Quintana, Esq.  
Skull Valley Band of Goshute Indians  
Danny Quintana & Associates, P.C.  
50 West Broadway, Fourth Floor  
Salt Lake City, Utah 84101  
e-mail: [quintana@xmission.com](mailto:quintana@xmission.com)

  
Paul A. Gaukler 