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~~ATTACHED CORRESPONDENCE~~

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:

PRIVATE FUEL STORAGE, LLC  
(Independent Spent Fuel  
Storage Installation)

) Docket No. 72-22-ISFSI

) ASLBP No. 97-732-02-ISFSI

) November 1, 2000

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

Pursuant to the Board's Orders dated April 22, 1998 (LBP-98-7), August 20, 1998, February 2, 2000, September 5, 2000 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 Interrogatories and Requests for Admissions separately, fully, in writing, and under oath within 10 days after service of this discovery request, and answer the following Document Requests within 15 days after service of this discovery request.

As required by 10 CFR § 2.744(a), this discovery request is being served on the NRC Executive Director for Operations. In addition, pursuant to § 2.720(h), the State submits that this discovery is necessary to a proper decision in this proceeding and that requested documents are not reasonably obtainable through any other sources.

**I. INSTRUCTIONS**

A. Scope of Discovery. These interrogatories and requests for admissions and documents are directed to NRC Staff and any of the Staff's contractors or agents

Template = SECY-035

SECY-02

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

1. The responsive information currently available;
2. The responsive information currently unavailable;
3. Efforts which you intend to make to secure the information currently unavailable; and
4. When you anticipate receiving the information currently unavailable.

C. 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.

D. 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.

E. 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 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 (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.

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

This set of discovery against the Staff relates to specific representations made by the

Staff in its recently issued Safety Evaluation Report ("SER").<sup>1</sup> Specifically, these discovery requests relate to Contention Utah K and are based on NRC's aircraft hazard analysis and cruise missile hazards as described in the SER for the PFS facility. *See* SER section 15, Accident Analysis. The State is unaware of some of the Staff's basis or rationale for the representations in the SER. Moreover, the State is unaware of what documents support the Staff's representations. All of these Requests for Admissions and Documents, and Interrogatories are necessary to a proper decision in this proceeding. Accordingly, the documents requested are unavailable from another source. Instead of producing the actual document, the Staff may list documents by title and date if they are publicly available.

#### **CONTENTION UTAH K - Credible accidents**

##### **A. Requests for Admissions - Contention Utah K.**

REQUEST FOR ADMISSION NO. 1 - UTAH K. Admit that the term "team of experts" used in the SER was originated by NRC Staff. *See eg*, SER at 15-53.

REQUEST FOR ADMISSION NO. 2 - UTAH K. Admit that the term "PFS expert panel" used in the SER was originated by NRC Staff. *See eg*, SER at 15-53.

REQUEST FOR ADMISSION NO. 3 - UTAH K. Admit that the Staff found PFS's use of a ten-year average F-16 crash rate acceptable because "given the trend toward lower crash rate [sic], use of the lifetime (1975-1998) average crash rate would be overly conservative." SER at 15-50.

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<sup>1</sup> Safety Evaluation Report Concerning the Private Fuel Storage Facility, provided to the parties under Staff's counsel's letter of October 6, 2000, received by the State October 10, 2000.

REQUEST FOR ADMISSION NO. 4 - UTAH K. Admit an average of two F-16s per year crash while flying training missions to, from, or over the Utah Test and Training Range.

REQUEST FOR ADMISSION NO. 5 - UTAH K. Admit that the ten-year F-16 crash rate (FY89-FY98) used by PFS and accepted by the Staff is less than the most recent ten-year F-16 crash rate (FY90-FY99). See SER at 15-50.

REQUEST FOR ADMISSION NO. 6 - UTAH K. Admit that the 1999 F-16 crash rate is higher than the lifetime F-16 crash rate.

REQUEST FOR ADMISSION NO. 7 - UTAH K. Admit that the F-16 crash rate increased between 1997 and 1998, and between 1998 and 1999.

REQUEST FOR ADMISSION NO. 8 - UTAH K. Admit that the Staff accepted PFS's use of 3,871 military aircraft flights as the estimated number of aircraft flying near the PFS site in a year in its crash probability calculations. SER at 15-56.

REQUEST FOR ADMISSION NO. 9 - UTAH K. Admit that the use of 3,871 military aircraft flights as the estimated number of aircraft flying near the PFS site in a year is based on the number of military aircraft that transited Skull Valley in fiscal year 1998. See SER at 15-49.

REQUEST FOR ADMISSION NO. 10 - UTAH K. Admit that the use of the number of military aircraft that transited Skull Valley in fiscal year 1998 to estimate the number of military aircraft flights near the proposed PFS site does not consider any future increase in military aircraft flights in Skull Valley. See SER at 15-56.

REQUEST FOR ADMISSION NO. 11 - UTAH K. Admit that the use of the



number of military aircraft that transited Skull Valley in fiscal year 1998 does not represent an estimated number of military aircraft flights near the PFS site during the planned 40 year life of the proposed PFS facility. See SER at 15-56.

REQUEST FOR ADMISSION NO. 12 - UTAH K. Admit that the F-16 crash rate was higher during the beginning years of its use by the Air Force. See, *Aircraft Crash Impact Hazard at the Private Fuel Storage Facility*, Rev. 4, August 10, 2000, Table 1.

REQUEST FOR ADMISSION NO. 13 - UTAH K. Admit that military aircraft accident rates are higher during the beginning years of the life span of a particular aircraft.

REQUEST FOR ADMISSION NO. 14 - UTAH K. Admit that the estimated number of military aircraft flights near the PFS site used by PFS to calculate crash probability does not take into account the projected increase of military aircraft flights near the proposed PFS site due to the recent addition of F-16 squadrons recently stationed at Hill Air Force Base.

REQUEST FOR ADMISSION NO. 15 - UTAH K. Admit that the site of the proposed PFS facility is located under the Sevier B military operating area ("MOA"). See, e.g. SER at 15-49.

REQUEST FOR ADMISSION NO. 16 - UTAH K. Admit that F-16s may fly over or near the proposed PFS facility site in a tactical formation spanning two to three miles wide. See, *Aircraft Crash Impact Hazard at the Private Fuel Storage Facility*, Rev. 4, August 10, 2000, Tab E.

REQUEST FOR ADMISSION NO. 17 - UTAH K. Admit that an authorized activity in the Sevier B MOA includes tactical maneuvering.

REQUEST FOR ADMISSION NO. 18 - UTAH K. Admit that an authorized activity in the Sevier B MOA includes threat maneuvering.

REQUEST FOR ADMISSION NO. 19 - UTAH K. Admit that military aircraft may fly over or near the proposed PFS site more than once during a single training mission.

REQUEST FOR ADMISSION NO. 20 - UTAH K. Admit that air-to-air combat training is authorized in the Sevier B MOA.

REQUEST FOR ADMISSION NO. 21 - UTAH K. Admit that low altitude training is authorized in the Sevier B MOA.

REQUEST FOR ADMISSION NO. 22 - UTAH K. Admit that major military air exercises are authorized in the Sevier B MOA.

REQUEST FOR ADMISSION NO. 23 - UTAH K. Admit that cruise missile testing is authorized in the Sevier B MOA.

REQUEST FOR ADMISSION NO. 24 - UTAH K. Admit that cruise missiles have flown over the proposed PFS site in the Sevier B MOA in accordance with the planned test flight path.

REQUEST FOR ADMISSION NO. 25 - UTAH K. Admit that advance cruise missiles have flown in the Sevier B MOA in accordance with the planned test flight path.

REQUEST FOR ADMISSION NO. 26 - UTAH K. Beyond the information provided by the Applicant, admit that NRC Staff has not independently identified the types of large footprint weapons testing conducted at the UTTR.

REQUEST FOR ADMISSION NO. 27 - UTAH K. Admit that the published altitude of the Sevier B MOA begins at 100 feet above ground level.

REQUEST FOR ADMISSION NO. 28 - UTAH K. Admit that the published altitude of the Sevier B MOA extends to 9,500 feet above mean sea level.

REQUEST FOR ADMISSION NO. 29 - UTAH K. Admit that the calculated probability of an F-16 pilot being able to avoid the PFS facility in the event of an accident is based in part on flying under “typically visual meteorological conditions clear of clouds and visibility at least 5 miles.” SER at 15-52.

REQUEST FOR ADMISSION NO. 30 - UTAH K. Admit that the Applicant, as accepted by the NRC Staff, estimated the probability of avoiding the PFS facility at 89 percent. SER at 15-55.

REQUEST FOR ADMISSION NO. 31 - UTAH K. Admit that the Applicant, as accepted by the NRC Staff, used 90 percent probability of avoiding the PFS facility in calculating the crash probability. SER at 15-55, 56.

REQUEST FOR ADMISSION NO. 32 - UTAH K. Admit that there are no provisions in the U.S. Air Force Flight Manual, F-16 D/C, T.O. 1F-16C-1, instructing pilots to avoid structures when jettisoning ordnance.

REQUEST FOR ADMISSION NO. 33- UTAH K. Admit that NRC Staff has not independently reviewed any of the 126 F-16 aircraft accident investigation reports, referenced in the SER at 15-51, which forms the basis of PFS’s assertion that pilots transiting Skull Valley will be able to avoid the facility in at least 90% of accidents. SER at 15-55.

REQUEST FOR ADMISSION NO. 34 - UTAH K. Admit that an F-16 aircraft is designed to carry more than one MK-84 bomb.

REQUEST FOR ADMISSION NO. 35 - UTAH K. Admit that an F-16 aircraft is designed carry more than one MK-82 bomb.

REQUEST FOR ADMISSION NO. 36 - UTAH K. Admit that the Staff has not evaluated the probability of an unarmed warhead exploding in a fire at the PFS site.

REQUEST FOR ADMISSION NO. 37 - UTAH K. Admit that the NRC Staff has not quantitatively evaluated the probability of a cruise missile impacting the proposed PFS facility.

REQUEST FOR ADMISSION NO. 38 - UTAH K. Admit that the NRC Staff has not quantitatively evaluated the probability of an advanced cruise missile impacting the proposed PFS facility.

REQUEST FOR ADMISSION NO. 39 - UTAH K. Admit that a cruise missile impacting the side of a HI-STORM cask can damage the internal canister.

REQUEST FOR ADMISSION NO. 40 - UTAH K. Admit that an advanced cruise missile impacting the side of a HI-STORM cask can damage the internal canister.

REQUEST FOR ADMISSION NO. 41 - UTAH K. Admit that the NRC Staff has not evaluated the consequence of a cruise missile impacting the side of a HI-STORM cask.

REQUEST FOR ADMISSION NO. 42 - UTAH K. Admit that the NRC Staff has not evaluated the consequence of an advanced cruise missile impacting the side of a HI-STORM cask.

## **B. Interrogatories<sup>2</sup> - Contention Utah K**

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<sup>2</sup> The State is consecutively numbering its interrogatories to the Staff from one discovery request to the next for each particular contention.

INTERROGATORY NO. 3 - UTAH K. To the extent that NRC Staff denies any or all of Admission Requests 10, 11, 24, 25, and 31 above, please explain the reasoning behind each denial, providing any documents, calculations, or correspondence used to justify this reasoning.

INTERROGATORY NO. 4 - UTAH K. To the extent that NRC Staff admits Admission Request No. 33 above, please provide all documents, calculations and correspondence used to endorse PFS's conclusion that F-16 pilots transiting Skull Valley will be able to avoid the facility in at least 90% of accidents.

### **C. Document Requests - Contention Utah K**

To the extent that responsive documents are publicly available, instead of producing the documents to the State, the Staff may describe such documents by title and date.

DOCUMENT REQUEST NO. 1 - UTAH K: Provide all documents, including but not limited to all memoranda, notes, correspondence, e-mails, facsimiles, calculations, assessments, evaluations, Technical Evaluation Reports and other contractor reports supporting the Staff's conclusions in SER Section 15.1.2.11 – Aircraft Crash Hazards, and SER Section 15.1.2.18 – Cruise Missile Testing at the UTTR.

DOCUMENT REQUEST NO. 2 - UTAH K: Provide all documents, including but not limited to all memoranda, notes, correspondence, e-mails, facsimiles, calculations, assessments, evaluations, prepared by NRC Staff, or its contractors, to support SER Section 15.1.2.11 – Aircraft Crash Hazards, and SER Section 15.1.2.18 – Cruise Missile Testing at the UTTR, particularly all probability calculations and all consequence calculations.

DOCUMENT REQUEST NO. 3 - UTAH K: Provide all documents, including but

not limited to all calculations, correspondence, technical reports, and other analyses prepared by NRC Staff or its contractors to support its endorsement of PFS's conclusion that "there were 11 mishaps [out of 121 mishaps analyzed], caused by reasons other than engine failure, which would have allowed the pilot sufficient time and capability to avoid a fixed surface Facility." SER at 15-54.

DOCUMENT REQUEST NO. 4 - UTAH K: Provide all documents, calculations, correspondence, etc. which form the basis for NRC Staff's conclusion that "[i]t is also likely that a pilot would take steps to avoid striking a populated site with jettisoned ordnance." SER at 15-68.

DOCUMENT REQUEST NO. 5 - UTAH K: Provide all documents, correspondence, or notes which quantify the military activities conducted at the Utah Test and Training Range, including the Sevier B Military Operating Area.

DOCUMENT REQUEST NO. 6 - UTAH K: Provide all documents, correspondence, notes or communication between the NRC Staff or its contractors and employees or members of the U.S. Air Force with respect to military activities at the Utah Test and Training Range, including the Sevier B Military Operating Area.

DOCUMENT REQUEST NO. 7 - UTAH K: Provide all documents, correspondence, notes or communication between NRC Staff or its contractors and employees or members of the U.S. Air Force with respect to any potential flight restriction over or near the proposed PFS site.

DOCUMENT REQUEST NO. 8 - UTAH K: Provide all documents, correspondence, notes or communication between NRC Staff or its contractors and

employees or members of the U.S. Army with respect to military activities at the Utah Test and Training Range, including the Sevier B Military Operating Area.

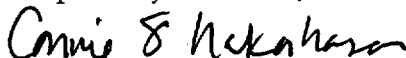
DOCUMENT REQUEST NO. 9 - UTAH K: Provide all documents, correspondence, notes or communication between NRC Staff or its contractors and employees or members of the U.S. Army with respect to any potential flight restriction over or near the proposed PFS site.

DOCUMENT REQUEST NO. 10 - UTAH K: Provide all documents, correspondence, notes or communication between NRC Staff or its contractors and employees or members of the Utah National Guard with respect to military activities at the Utah Test and Training Range, including the Sevier B Military Operating Area.

DOCUMENT REQUEST NO. 11 - UTAH K: Provide all documents, correspondence, notes or communication between NRC Staff or its contractors and employees or members of the Utah National Guard with respect to any potential flight restriction over or near the proposed PFS site.

DATED this 1<sup>st</sup> day of November, 2000.

Respectfully submitted,



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## CERTIFICATE OF SERVICE

I hereby certify that a copy of STATE OF UTAH'S NINTH 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 1<sup>st</sup> day of November, 2000:

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