EXCERPTS FROM STATE OF UTAH'S SECOND AMENDED RESPONSES AND SUPPLEMENTAL RESPONSES TO APPLICANT'S FIRST SET OF FORMAL DISCOVERY REQUESTS

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)	Docket No. 72-22-ISFSI
PRIVATE FUEL STORAGE, LLC (Independent Spent Fuel Storage Installation)	)	ASLBP No. 97-732-02-ISFSI
	)	May 12, 1999

STATE OF UTAH'S SECOND AMENDED RESPONSES AND SUPPLEMENTAL RESPONSES TO APPLICANT'S FIRST SET OF FORMAL DISCOVERY REQUESTS

The State of Utah amends and supplements its April 14, 1999 and April 29, 1999 response to the Applicant's First Set of Formal Discovery Requests ("Applicant's Discovery Requests"). This response supplements the State's responses to General Interrogatories Nos. 3 and 4, and Document Requests for Utah Contention K (Inadequate Consideration of Credible Accidents) and Utah Contention M (Probable Maximum Flood); and amends Request for Admissions Nos. 14, 15, and 16 for Utah K; Request for Admissions Nos. 1 and 4 and Interrogatories 1-6 for Utah M; and corrects pages 37 and 53 in the State's April 14, 1999 Response to Applicant's Discovery Requests.

I. STATE'S SUPPLEMENTAL RESPONSES TO GENERAL INTERROGATORIES

GENERAL INTERROGATORY NO. 1. State the name, business address, and job title of each person who was consulted and/or who supplied

were originally scheduled to be completed by mid-1999. However, it is almost mid-1999 and no space plan flights have occurred to date.

B. Amended Responses to Requests for Admissions for Utah Contention M - Probable Maximum Flood

REQUEST FOR ADMISSION NO. 1 - UTAH M. Do you admit that the 270 square mile drainage area used to calculate flooding in PFS's response to RAI Question 2-3 is an appropriate drainage area for calculating the potential for flooding at the PFS ISFSI?

STATE'S AMENDED RESPONSE TO REQUEST FOR ADMISSION NO. 1 - UTAH M:

The State admits that the 270 square mile drainage area is an appropriate drainage area for calculating the potential for flooding at the PFS ISFSI.

REQUEST FOR ADMISSION NO. 4 - UTAH M. Do you admit that the lowest elevation of the PFS site as identified in the PFS Environmental Report at 2.5-3 and Response to RAI Question 2-3 at 3 is 4460 ft.?

STATE'S AMENDED RESPONSE TO REQUEST FOR ADMISSION NO. 4 - UTAH M:

Admit in part and deny in part. Admit that the PFS Environmental Report at 2.5-3 and Response to RAI Question 2-3 at 3 identify an "approximate" ISFSI site elevation low of 4460 feet. Deny that 4460 feet is the lowest elevation at the PFS site. Other RAI responses by the Applicant use different lowest site elevation figures for the ISFSI site. *See e.g.*, Enclosure to Commitment Resolution Information, PFS Response to RAI 2-3 (second round), Flooding Analysis, at 1 ("[t]he lowest corner of the PFSF site (elevation 4462 ft)"), submitted by PFS to NRC under cover letter dated March 25,

1999. Further, the State does not have access to the ISFSI site and, thus, has not conducted a ground survey to verify PFS's claim that 4460 ft. is in fact the lowest elevation at the PFS site. In addition, the ER and the RAI responses do not contain the basis for PFS's estimation that the lowest elevation at the PFS site is 4460 ft.

C. Amended Responses to Interrogatories - Utah Contention M

INTERROGATORY NO. 1 - UTAH M. Identify and fully explain each respect in which the State claims that PFS failed "to accurately estimate the Probable Maximum Flood (PMF) as required by 10 CFR § 72.98" or the 100 Year Flood for the PFS ISFSI, taking into account PFS's response to RAI Question 2-3 as supplemented.

STATE'S AMENDED RESPONSE TO INTERROGATORY NO. 1 - UTAH M:

The State has reviewed PFS's responses to RAI Question 2-3, as last supplemented on March 25, 1999[1], and has now re-calculated the Probable Maximum Flood based on the following parameters and a computer program developed by the State based on Soil Conservation Service (now called Natural Resources Conservation Service) methods to generate a storm hydrograph, including peak flow rate. The inputs into this program include drainage area: 270 square miles area (see Admission No. 1 above); time of concentration (T_c) (based on the Army Corps of Engineers formula): 8.1 hours; infiltration rate (curve number): 0.15 inch per hour (State's

[1] PFS's Interrogatory asks that the State take into account PFS's response to RAI Question 2-3 as supplemented. Since PFS's supplementation of this RAI question was sent to NRC under cover letter dated March 25, 1999, it is inappropriate for PFS to complain that the State has had the supplemented answer "since mid-February." *See* Applicant's Motion to Compel dated April 22, 1999 at 7.

original parameter based on the soil and vegetation in the drainage area). The storm hydrograph generated a peak flow rate of 64,500 cfs. After the State generated the storm hydrograph, it used the Corps of Engineers HEC-RAS program and the cross sections describing the geometry of the flood channel from PFS recent calculations[2] (p. 17) to compute the probable maximum flood elevation at and near the PFS site.

INTERROGATORY NO. 2 - UTAH M. Identify and fully explain each respect in which the State claims that the facility's design does not adequately protect the access road or the site against adverse consequences from potential flooding as calculated by the State.

STATE'S AMENDED RESPONSE TO INTERROGATORY NO. 2 - UTAH M:

In PFS's cross sections describing the geometry of the access road, PFS appears to assume that a vertical berm is in place to prevent the PMF flood discharge from spreading west along the access road and possibly flooding the site. There is not enough information shown to describe the geometry of the berm[3] and how the access road gets past the berm. It appears that without this berm or with an inadequate berm the PFS site would be flooded by water backed up by the access road during the PMF

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[2] Zeng, V.N. and Liang, G.H.C. (Stone & Webster Engineering Corp.), March 22, 1999, *PFSF Flood Analysis with Larger Drainage Basin*, Calculation No. 0599602G(B)-12, Rev. 1, submitted by PFS to NRC under cover letter dated March 25, 1999, from John L. Donnell to Mark Delligatti, NRC.

[3] *See e.g.*, Figure 1, Hydraulic Model at Access Road Crossing (p. 6), Zeng, V.N. and Liang, G.H.C. (Stone & Webster Engineering Corp.), March 10, 1999, *PFSF Flood Analysis with Proposed Access Road and Rail Road*, Calculation No. 0599602G(B)-17, Rev. 0, submitted by PFS to NRC under cover letter dated March 25, 1999, from John L. Donnell to Mark Delligatti, NRC.

flood. Additionally, the access road may be flooded or washed out, preventing necessary operations, personnel or emergency service providers access to the site. Hence the Applicant would not be able to cope with emergencies as required by 10 CFR 72.24(k).

INTERROGATORY NO. 3 – UTAH M. Identify and fully explain each respect in which the State claims that the access road may be adversely impacted by potential flooding as calculated by the State and any resulting adverse safety consequences to the PFS ISFSI.

STATE'S AMENDED RESPONSE TO INTERROGATORY NO. 3 - UTAH M:

See State's amended response to Interrogatory 2 - Utah M. Additionally, the State's present calculation shows that flooding would be approximately 3.5 feet deep where it crosses the access road. As stated in Response to Interrogatory No. 2, this would result in preventing necessary operations, personnel or emergency service providers access to the site.

INTERROGATORY NO. 4 – UTAH M. Identify and fully explain each respect in which the State claims that "consequences important to safety may occur because of flooding or an inadequate berm construction and location," based on potential flooding as calculated by the State.

STATE'S AMENDED RESPONSE TO INTERROGATORY NO. 4 - UTAH M:

See State's amended response to Interrogatory 2 - Utah M.

INTERROGATORY NO. 5 – UTAH M. Identify and fully explain each other respect in which the State claims that the PFS ISFSI site may be adversely impacted by potential flooding as calculated by the State and the resulting adverse safety

consequences of such impacts.

STATE'S AMENDED RESPONSE TO INTERROGATORY NO. 5 - UTAH M:

See State's amended response to Interrogatory 2 - Utah M.

INTERROGATORY NO. 6 – UTAH M. If the State continues to claim an adverse impact from potential flooding as calculated by the State on the "operation, maintenance of the ISFSI," the "washing out" of the access road, the "translation motion of the storage pad and building foundations," and the "transport [of] onsite chemical and radiological contaminants to offsite soils and ground and surface waters," identify and fully explain the scientific, technical, engineering and/or other bases on which the State bases these claims and any other claims of adverse impact and/or safety consequences identified in response to interrogatories 3 through 5 above.

STATE'S AMENDED RESPONSE TO INTERROGATORY NO. 6 - UTAH M:

See State's amended response to Interrogatory 2 - Utah M. Furthermore, until the State can accurately ascertain the lowest elevation at the ISFSI site, it cannot fully respond to this interrogatory.

IV. CORRECTIONS TO STATE'S RESPONSES DATED APRIL 14, 1999, TO UTAH CONTENTIONS K AND N.

A. State's Correction to Contention K, Response to Interrogatory No. 2:

Correction to page 37, fourth line of the response: Change the word "confine" to "confound."

B. State's Correction to Contention N, Response to Request for Admission No. 1:

Correction to the property description on page 53, ¶ (b), which has three

references, instead of two, to "the SE 1/4 of" and should read as follows: "within the N1/2 of the SE1/4 of the SE1/4 of Section 12, Township T1S, Range R8W."

DATED this 12th day of May, 1999.

Respectfully submitted,
STATE OF UTAH

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