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May 21, 1999

Mr. Scott Flanders, Sr.
NRC, Environmental Project Manager
11555 Rockville Pike
Rockville, Maryland 20855

Barry Welch, Acting Area Director
Bureau of Indian Affairs, Phoenix Area Office
P.O. Box 10
Phoenix, Arizona 85001

Re: EIS for Skull Valley Nuclear Waste Storage Site

Gentlemen:

As counsel for the Confederated Tribes of the Goshute Reservation (Ibapah, Utah), I a writing to provide comments regarding the scoping meetings relating to the above matter which were held in Utah at the end of April 1999. Please take the following into account:

1. You should consider the following with respect to the statements being prepared relating to federal action by the Bureau of Indian Affairs and the Bureau of Land Management.

2. I first wish to express our further objections to the lack of adequate notice for the scoping meetings. Notice of the time and date of the meetings was sent out only two weeks prior to the actual meeting. I objected to that inadequate notice in a timely manner, but the meetings were held as scheduled anyway. Even given the additional time for submitting these comments, the time for preparation of comments has been inadequate. Moreover, because of unavoidable conflicts, given the short notice, I was unable to attend the meeting and therefore was unable to hear or confer with any of the other participants. This lack of notice and participation defeats the very purpose of the scoping meeting and the ultimate purpose of the preparation of an EIS.

3. The Confederated Tribes of the Goshute Reservation (herein, "the Goshute Tribe") is a sovereign, federally recognized Indian Tribe, with a responsibility

to promote and protect the health and welfare of its members.

4. The Goshute Tribe is located on the west side of Utah's Tooele County, along Utah's western border with Nevada, approximately 50 miles south of Wendover. Tooele County is geographically large, but is sparsely inhabited. Most of the area is a part of the "Western High Desert Region" and is characterized by wide vistas, towering mountains, and salt flats.

5. Approximately 450 individuals comprise the current membership of the Goshute Tribe, about half of whom reside on the Reservation. Most of the remainder of the Tribe's members reside in surrounding communities. The Tribe's Reservation consists of approximately 150,000 acres, half in Utah and half in Nevada. The Tribe is federally recognized and is therefore a sovereign entity subject to the plenary control of Congress. The lands of the Goshute Tribe are held in trust for the benefit of the Goshute Tribe by the United States.

6. The Skull Valley Band of Goshute Indians is a separate, federally-recognized Indian Tribe, located in Skull Valley, Tooele County, approximately 65 miles east of the Goshute Tribe. The Skull Valley Band has approximately 135 members, of whom only about 30 actually reside on the Skull Valley reservation. As is the case with the Goshute Tribe, the Skull Valley Band's reservation lands are held in trust by the United States. The members of the Goshute Tribe and the Skull Valley Band are in many cases literal first-cousins, with many individuals in the separate Tribes sharing the same grandparents. Tribal members often intermarry. As a result of their close historical and current relationships, the members of the Goshute Tribe frequent and even reside on the reservation of the Skull Valley Band (and vise versa). Some deceased members of the Goshute Tribe are buried in the cemetery at Skull Valley; members of the Goshute Tribe attend religious ceremonies at Skull Valley; and visit relatives there.

7. The Goshute Tribe is on record as opposing the nuclear waste storage facility now planned for the Skull Valley Reservation for a number of reasons including: a) the hazardous nature of the material; b) the fact that containers holding the material will be transported, handled, and stored for an extended period, all of which activities involves the potential of accidents and intentional acts which could lead to radiation leakage and contamination; c) while the lease is for a limited time and the site is designated as only a "temporary" site, the status of any permanent repository site is uncertain and faces strong legal

and political opposition; d) the relatively close proximity of the site to the Goshute Reservation and the residences of other Tribal members; and e) the close proximity of the site to locations on the Skull Valley Reservation which have been and continue to be used and visited by members of the Goshute Tribe.

8. All of the Skull Valley Reservation lies within the boundaries of the State of Utah.

9. Confederated Tribes has an economy as a tribe, and are involved with business ventures that can be significantly impacted by the purported PFS lease approval and use of BLM land for a rail line. Confederated tribal members, especially those who are members of families which also include Skull Valley Band members, will be directly impacted by these proposed agency actions. Of primary importance is direct health and safety impacts on the potentially affected populations and direct physical, chemical, and radiological impacts on the environment. Further direct impacts include economic impacts on land owned especially near transportation routes or proposed facility sites, on the general tribal, state, and local economies, and impacts from this on other businesses with which the tribe and members are involved. There are also direct social, cultural, and religious impacts. These concerns are based on risks of damage due to the PFS project.

10. Additionally, Confederated Tribes is concerned with:
    a. Socioeconomic effects of social amplification of the actual risks;
    b. Socioeconomic effects of perceived risks where no actual risks exist;
    c. Socioeconomic effects of perceived managerial incompetence, heightened when local leaders have no oversight power.
    d. Direct and indirect stigma damages and stigma related abuse.

11. Confederated Tribes is particularly concerned with the actual and perception based damages of transportation and facility accidents, or damage from terrorist attacks, especially at a time when military scale explosives and delivery systems, such as portable anti-tank weapons, are available to terrorists, and such issues are the focus of media attention. While the current Reservation of the Goshute Reservation lies 65 miles distant from Skull Valley, the Goshute Tribe has been actively engaged in discussions aimed at acquiring other lands in the Skull Valley area for purposes of economic development and benefit to its Tribal members. The impacts of the proposed waste site on such efforts are many. For example, sellers are concerned about selling to Indian Tribes, and if

the project were completed, customers may be fearful of dealing with the Tribe.

12. Further issues include (without limitation): the availability of a permanent repository to receive the nuclear waste to be stored at Skull Valley at the termination of that lease, including effects if the storage duration far exceeds the terms of the purported lease agreement; costs associated with decommissioning the site and removal of the waste, especially after accidents or terrorist destruction, or if PFS defaults; the relationship of such potential costs to the benefits derived under the lease; and the effectiveness of the participation of tribal members and affected entities in the lease approval and rail line designation processes.

13. The members and forbearers of the Goshute Tribe and Skull Valley Band have shared the same aboriginal lands. Their respective interests in all of those lands, including the Skull Valley Reservation and the lease location, heightens the impact and strengthens their interest in the above concerns.

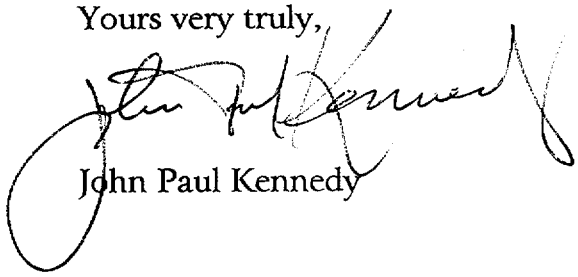
14. The Bureau of Indian Affairs has a trust responsibility over the land, but also a trust responsibility with respect to the rights of every Goshute who has an interest in those lands. The members of the Goshute Tribe (as well as all Native Americans) want to be assured that the federal government is doing all within its power to make certain that in approving leases on Indian land, the rights of those entitled to share in the benefits from such leases are fully protected under the terms of the federal law, including the Indian Civil Rights Act.

15. Moreover, we are concerned that the standards currently guiding the NRC fail to take into account issues which should be weighed by the BIA and BLM. As already noted, the standards involving reviewing a lease by the BIA are quite different from those involved in reviewing a license application. For instance, a cost-benefit analysis under BIA standards would necessarily involve a careful consideration of the costs of terminating and decommissioning the lease area. This, in turn, would involve a consideration of the costs of relocating the waste stored on the site. To determine those costs, it would be necessary to know where the waste would be relocated. Such information is not now available and there is no way to predict when it will become available. Hence, it is impossible to make an accurate forecast of such costs at the present time. Other obvious consequences follow from such a situation. All of these should be taken into account by the BIA.

16. Finally, we are concerned about the independence of a BIA review. As Trustee in this case on behalf of the federal government for the benefit of those who stand as beneficiaries of that Trust responsibility, the BIA has separate, different, and independent concerns which have the potential to be tainted by too close an involvement with those who are in control of the NRC EIS process, which appears to be sponsored and coordinated by persons who are committed to the issuance of the license.

If you need further information, we would be please to provide it to you.

Yours very truly,



John Paul Kennedy

cc: Goshute Tribe

72-22


# State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF THE EXECUTIVE DIRECTOR

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May 27, 1999

Scott C. Flanders
Sr. Environmental Project Manager
Licensing and Inspection Directorate
Spent Fuel Project Office
Office of Nuclear Material Safety & Safeguards
U.S. Nuclear Regulatory Commission
Washington DC 20555

Dear Mr. Flanders:

Re: U.S. Nuclear Regulatory Commission, Department of the Interior, Bureau of Indian Affairs, Bureau of Land Management, Docket No. 72-22; and Department of the Interior, Bureau of Land Management, Pony Express Resource Management Plan, Environmental Impact Statement Scoping Comments and BLM Resource Management Plan Amendment Scoping Comments.

Enclosed are the written comments for the state of Utah in response to the EIS Scoping regarding the above matter.

If you have any questions, please contact me.

Best regards,

Dianne R. Nielson, Ph.D.
Executive Director

enclosure

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U. S. NUCLEAR REGULATORY COMMISSION
DEPARTMENT OF THE INTERIOR
Bureau of Indian Affairs
Bureau of Land Management
DOCKET NO. 72-22
And
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
PONY EXPRESS RESOURCE MANAGEMENT PLAN

ENVIRONMENTAL IMPACT STATEMENT
SCOPING COMMENTS
And
BLM RESOURCE MANAGEMENT PLAN AMENDMENT
SCOPING COMMENTS

SUBMITTED BY THE STATE OF UTAH
MAY 27, 1999

The following comments are provided by the State of Utah (State) in response to the March 31, 1999 Notice of Intent to Prepare Environmental Impact Statement (EIS) and Notice of Public Scoping Meeting issued by the U. S. Nuclear Regulatory Commission (NRC) and by the U.S. Department of Interior for the Bureau of Indian Affairs (BIA) and the Bureau of Land Management (BLM). These comments are also being provided in response to the BLM's separate Notice of Intent to Prepare a Plan Amendment to the Pony Express Resource Management Plan (RMP).

Because there are two agencies involved in this environmental decisionmaking process that were not involved at the time of the NRC's 1998 scoping process, it is important that these comments address matters that have already been considered by the NRC. For that reason, the EIS Scoping Comments submitted by the State of Utah on June 19, 1998 are hereby incorporated by reference. A copy of the Comments (not including the incorporated attachments) is included as Attachment A to this document.

The State's Contentions Relating to the Low Rail Spur Transportation License Amendment dated Sept. 29, 1998, developed in PFS's licensing proceeding before the NRC (NRC Docket No. 72-22) is also incorporated by reference and included as Attachment B to this document.

Comments are organized under topic headings for ease of consideration. However, issues are interrelated and commonly impact or encompass other issues under other topic headings. Issues should not be narrowly construed or evaluated, based on topic headings. If additional information or clarification is needed, please contact:

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## A. THE PROPOSED ACTION

The NRC is considering Private Fuel Storage's (PFS's) license application for an Independent Spent Fuel Storage Installation (ISFSI) at the Skull Valley Reservation (NRC Docket No. 72-22). PFS is proposing to store up to 40,000 Metric Tons of Uranium at a storage facility on the Skull Valley Goshute Reservation. In addition, PFS has requested of BLM both a right-of-way to build a rail spur from the Union Pacific mainline paralleling I-80 south to the Reservation across BLM land and a right-of-way to use BLM land near Rowley Junction for an intermodal transfer station (ITS) to transfer the spent fuel to heavy haul trucks.

Thus, PFS is asking to transport potentially more than 80,000 Metric Tons of Uranium of high level nuclear waste on or across public lands, forty thousand metric tons to the storage area and, presumably, forty thousand metric tons from the storage area once a permanent repository is prepared. Forty thousand metric tons, the current total accumulation of the nation's commercial high-level nuclear waste, is an enormous amount. By comparison, Northern State's Power, one of the member utilities of PFS, only stores 7,000 metric tons in dry cask storage.

In addition , the proposed action includes the BIA's consideration of a proposed lease agreement between the Skull Valley Band of Goshute Indians and PFS. As a related but separate matter, the BLM is considering an amendment to its Resource Management Plan that would allow it to grant PFS's proposed right of way.

## B. SCOPING IS PREMATURE

This issue is discussed in the State's June 19, 1998 Scoping Comments, included as Attachment A, at 1. Although additional information has been submitted since the time of those comments, there are still substantial gaps in the information available and necessary to complete an EIS. For example, PFS has still not provided any information about the frequency of truck or rail shipments through Skull Valley.

## C. PURPOSE AND NEED FOR THE PROPOSED FACILITY

This issue is discussed in the State's June 19, 1998 Scoping Comments, included as Attachment A, at 2, and (separately by the Utah Trust Lands Administration) at 22. In addition, there are new developments in federal spent waste policy that necessitate a critical evaluation of the need for this facility must be carefully analyzed. See Part D.2 below.

## D. ALTERNATIVE ACTIONS THAT MUST BE CONSIDERED IN THE EIS

An adequate EIS must consider all reasonable alternatives, including the "no action" alternative. 40 C.F.R. § 1502.14; and NRC regulations, 10 C.F.R. Part 51, Subpt A, App. A, Section 5 (incorporated through 10 C.F.R. 51.70(b)). See State's June 19, 1998 Scoping Comments, included as Attachment A, at 3 and (separately for the Utah Trust Lands Administration) at 23 for further discussion of the need for and range of alternatives that must be considered. The State also offers the following additional comments.

### 1. No Action Alternative

The EIS must address the no-action alternative, storing high level nuclear waste as it is currently being stored, under the control of the generator or operator, until a permanent repository is available. The license application amendment and the right of way application do not address the overall social costs or benefits that may occur from granting the right-of-way to build the rail spur and the intermodal transfer station. The no action alternative should evaluate the impacts and risks that could be avoided if the spent fuel continued to be stored at the existing reactor sites.

A no action alternative must be evaluated pursuant to the requirements of 40 C.F.R. § 1502.14(d).

### 2. DOE Proposed Interim Management Policy Must Be Considered as Alternative

No analysis of the environmental impacts of spent fuel storage can be complete without considering the management program preferred by the U.S. Department of Energy (DOE). Under that management program, DOE will take title to spent fuel while that fuel remains in on-site facilities associated with the reactors where the fuel was generated. On a case-by-case basis according to the preference of the utility, DOE would either undertake responsibility for managing these on-site storage facilities or would reimburse the utility for its management costs. See, e.g., March 12, 1999 testimony of Bill Richardson, Secretary of Energy, before the United

States House Subcommittee on Energy and Power of the Committee on Commerce, which is included as Attachment C.

DOE prefers this on-site storage option to a centralized DOE interim storage facility because it will postpone the costs and potential hazards of waste transport until a permanent repository site has been selected, thus avoiding any unnecessary transport in the event a site other than the proposed Yucca Mountain site is finally approved. *Id.* at 4. DOE also prefers this option because it avoids the additional costs associated with building a new, temporary DOE repository. *Id.* Both of these reasons apply to a privately-owned temporary repository as well. *Id.* See also the discussion of cost/benefit analysis below.

Federal regulations require consideration of reasonable alternatives even if they are not within the jurisdiction of the lead agency (Council on Environmental Quality (CEQ) regulations at 40 C.F.R. § 1502.14(c); and NRC regulations, 10 C.F.R. Part 51, Subpt A, App. A, Section 5 (incorporated through 10 C.F.R. 51.70(b)). It is also important to note that this is a new alternative, developed by DOE since the NRC's previous scoping process.

### 3. Alternatives for BLM Rights of Way

PFS has before the BLM requests for two rights of way, one for an ITS and one for the "Low Rail Spur" originating at Low, Utah. The BLM must therefore consider at least three alternatives: granting one or the other of the two proposed rights-of-way or granting both rights-of-way, or some other hybrid. Obviously, granting both rights-of-way would have significantly greater environmental impacts and other costs than granting just one. Further, since both rights-of-way serve identical functions, the benefit of granting both would be no greater than the benefit of granting just one right-of-way.

## E. ANALYSIS OF PROPOSED ACTION AND ALTERNATIVES

The comparative analysis of the impacts of the proposed action and of alternatives to the proposed action is the "heart of the environmental impact statement." 40 C.F.R. § 1502.14, and 10 C.F.R. Part 51, Subpt A, App. A, Section 5. The completed EIS must present the environmental and other impacts of the proposed action and all reasonable alternatives, including the no action alternative, in a comparative form. *Id.* Other impacts that must be considered include economic and technical costs and benefits. 10 C.F.R. 51.45(c). The point of view of the State – which unequivocally opposes the proposed actions – must also be considered in this analysis. 10 C.F.R. 51.71(b).

The EIS must include a discussion of direct and indirect costs and impacts, including cumulative impacts associated with the construction and operation of the rail line. 40 C.F.R. § 1502.16, and 10 C.F.R. Part 51, Subpt A, App. A, Section 7.

Because the complete lease agreement between the Skull Valley Band of Goshutes and PFS is not available, the impacts of financial commitments governing the lease cannot be known. Without this information in the license, and absent additional financial information from the lease agreement, there is insufficient information for an adequate analysis of the costs and benefits of the proposal.

In addition, neither the license application nor the right-of-away application provide sufficient detail concerning the costs associated with constructing, operating, and closing the rail spur or the intermodal transfer station. For example, there is no performance or design specification information, such as whether the quality of the rail meets the minimum Class 2 track rating established by AAR Circular OT-55 for hazardous materials shipments, switching needs at interline connection and facilities, signaling capabilities, and travel grades. This lists only a few of the many missing details necessary for an adequate analysis of costs and benefits.

NEPA requires federal agencies to develop methods "which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making." Several of the impacts cited in Part F below are not quantifiable, e.g., many of the impacts on flora and fauna, but they must nevertheless be fairly considered in this process.

Finally, any complete EIS must also consider and compare the costs of alternatives to the proposed actions. The Department of Energy has concluded that the costs of a centralized DOE interim facility would be greater than the costs of on-site management of spent waste by $1.5 billion. March 12, 1999 testimony of Secretary of Energy Bill Richardson, at 4. It is reasonable to assume that construction and use of an adequate private facility will cost a similar amount. The NRC, BLM, and BIA must also recognize as they conduct this analysis that monies expended by the private utilities will almost certainly have to be reimbursed by the federal government given recent case law that has given utilities the right to pursue contractual damages for DOE's failure to take title to the spent waste in January 1998. See Attachment E.

## F. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES THAT MUST BE CONSIDERED IN THE EIS

An EIS must accurately describe the existing environment of the area(s) that would be affected by a proposed action, and must assess the potential impacts of the proposed action, and all

reasonable alternatives, on that environment. 40 C.F.R. §§ 1502.15 and 1502.16, and 10 C.F.R. Part 51, Subpt A, App. A, Sections 6 and 7. Although these are separate requirements, they are obviously related. For example, the EIS must consider the potential for seismic activity in the area, and must evaluate the impacts on the environment that may result from seismic activity if the proposed action is taken.

**1. Cumulative Impacts Must be Considered**

CEQ regulations require that an EIS consider cumulative impacts. 40 CFR 1508.25(c). "Cumulative impact" is defined in 40 CFR 1508.7 as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other action. Some of the existing facilities that must be considered in this context are described in the State's June 19, 1998 Scoping Comments, included as Attachment A, at 7 and (separately for the Utah Trust Lands Administration) at 24.

The Low Rail Corridor is being constructed solely to move spent nuclear fuel casks from the Union Pacific mainline at the junction of Interstate 80 and Low across public lands to the Skull Valley Reservation. The rail corridor has no other independent utility other than to serve the PFSs ISFSI. Thus, the Low Rail Corridor is inextricably part of the PFSs ISFSI project and as such must be evaluated under the criteria in 10 CFR 72.100(b) and 51.54(c) and CEQ regulations.

**2. Indirect Impacts Must be Considered**

In addition to analyzing direct impacts of the proposed actions, the EIS must analyze indirect actions. 40 C.F.R. § 1502.16, and 10 C.F.R. Part 51, Subpt A, App. A, Section 7. The proposed facility would store 40,000 metric tons of the nation's commercial spent fuel. Since approval of the proposed actions would mean that almost all the spent fuel shipments to the PFS facility would pass through Salt Lake City, the environmental impacts of transporting spent fuel through Salt Lake City and Salt Lake County must also be considered. Many of the impacts discussed in Part F are equally predictable indirect impacts of approval of the proposed actions, and must therefore be analyzed in the EIS.

**3. Impacts Should Not be Assumed to be Temporary**

Although the ISFSI is proposed to be temporary, there is no guarantee that it will ever be removed. See State's June 19, 1998 Scoping Comments, included as Attachment A, at 5 and

(separately for the Utah Trust Lands Administration) at 22.

**3. Risk Assessments Required for Analysis**

Risk assessments are critical for an accurate evaluation of this facility. See State's June 19, 1998 Scoping Comments, included as Attachment A, at 6.

**4. Transportation Impacts**

Transportation impacts were discussed at length in previous Scoping comments submitted by the State. See State's June 19, 1998 Scoping Comments, included as Attachment A, at 8 and (separately for the Utah Trust Lands Administration) at 24. The EIS must address the cumulative transportation impacts to the proposed storage facility, similar to the cumulative transportation impacts considered for Clark County, Nevada in NUREG-1437. The EIS must evaluate the design and operational details of the proposed rail line. The EIS must spell out the State of Utah permits and requirements. The EIS must investigate the probability and consequences of sabotage to a fully-loaded transportation cask, particularly in an urban location like Salt Lake City. Finally, the EIS must address the economic impact of transportation accidents.

**State Approval**
Under Item 9 in the BLM application, PFS states that no State government approval is required. The PFS application is incorrect. PFS needs to obtain permission from Utah Department of Transportation (UDOT) and Utah Department of Environmental Qaulity regarding a number of design, construction, and operational requirements of their transportation proposal and approvals where vehicles exceed size and weight restrictions.

**Intermodal Transfer Station (ITS)**
PFS requested a right-of-way to build an ITS on BLM land 1.8 miles west of Rowley Junction. The new proposed ITS would still be located next to the Union Pacific mainline and in close proximity to Interstate 80, the industrial salt plant, and Timpie Springs Wildlife Management Area. Concerns identified during the initial scoping comments also apply to this new site.

**Skull Valley Road**
The proposed use of 24 miles of a public road (Skull Valley Road) for such movements appears to be rather unrealistic, given the operational burdens that would be placed on the road by 100 to 200 (per Section 1.4 of the SAR) annual round trip heavy haul movements (200 to 400 total one-way movements through Utah including return trips by empty casks). This could amount to more than one heavy haul movement per day. The movements would likely involve daily

disruptions of local traffic for significant periods of time (probably hours, given travel at the slow rate of speed usually associated with the weight and nature of the load), and excessive wear and tear on the road (given the greater than 200-ton weight of the loaded packages). Use of the road by oversize/overweight loads may require upgrading the road, which would require UDOT approval. Widening the road would require additional right-of-way, which would be the company's responsibility. The EIS should evaluate these operational considerations.

With regard to anticipated weight loads and clearance limits, the EIS should provide the specification of the existing "22 to 24-foot wide asphalt highway" (Environmental Report Section 2.1.2) beginning at Timpie and continuing south to the PFS access road. What are the weight tolerances for the anticipated 225-ton loaded heavy haul truck? What specifications has the road been built to? Will the road need to be rebuilt to carry the anticipated loads? Also Figures 2.1-2 (2 figures) are "silent" on the elevation, grade, and performance specifications of the PFS access road. The related discussions in Section 3.2.1.4 of the Environmental Report, although providing more information on the Skull Valley Road improvements, is silent on the improved road and performance specifications. Also it appears from the discussion that it is not yet certain whether improvements will be within existing road right-of-ways. If not, acquisition of right-of-ways may pose significant challenges.

**Road crossings**
UDOT approval is required for all public road crossings by a rail line.

The PFS 26-mile long north-south railroad along Skull Valley will impede recreational users and ranchers from their established ability to cross Skull Valley going east or west. While the Environmental Report (ER) mentions that the proposed rail line will cross several roads, it is unclear whether plans include constructed rail crossings for all roads, including dirt roads and trails. Moreover, the presence of the railroad disrupts recreational activities such as off-road vehicle use and hunting and it will also disrupt ranching activities. ER Rev. 1 at 4.4-8. Once again, the ER fails to quantify the costs or evaluate the cumulative impacts associated with the railroad -- this time as they relate to recreational users and ranchers.

**Trailer Design**
The design of the trailer, including carrying load of the axles, must similarly be approved by Utah DOT. Wheel loading, wheel spacing, time of movement, speed, escorts, gross weight, and other issues must also be addressed by heavy haulers in meeting State/local governmental requirements relevant to heavy haul movements. These problems are reflected in the cost of a move, since they impact on both the choice of equipment, as well as the actual operations. The EIS should address these issues.

**Rail Line and Highway Design and Operation**

The discussion of the rail alternative (described in Section 3.2.1.5) is deficient in that it provides no performance or design specification information, such as whether the quality of the rail meets the minimum Class 2 track rating established by AAR Circular OT-55 for hazardous materials shipments, switching needs at interline connection and facilities, signaling capabilities, and travel grades. UDOT has specific authority on approval of rail line as well as roadway design.

In addition, the EIS should address the rail line and highway weight limits and highway heavy haul requirements associated with the heavy rail casks. These include the bridges, trestles, switching, and secondary lines (rail), as well as the State bridges and arterial roads in the vicinity of the proposed site, and the feeder lines (rail) throughout the Salt Lake City, Ogden, and Provo interchanges.

The EIS should address the physical clearance limits (height, weight) of the package. The License Application is silent on whether the proposed spent fuel shipments will meet the "special train guidelines" established by Union Pacific for hazardous materials (or heavy loads) shipments (e.g., would the combined center of gravity [rail car and load] exceed the AAR interchange rules, thus warranting special train consideration, such as speed limits and train delays). Although the License Application (SAR Section 4.5.4.2) describes the proposed use of a six axle rail car carrying a 142-ton loaded rail cask, not all rail line segments can accommodate these weight loads (greater than 400,000 lbs.), nor the six axle flat car dimensional clearances.
Operational considerations. With increasing consolidation and abandonments of rail lines due to mergers, there have been increasing densities of traffic on the remaining lines. Key east-west and north-south interchanges have been experiencing severe traffic delays and congestion. This in turn directly affects the throughput of proposed spent fuel rail shipments. It also increases the statistical probability and severity of potential accidents (traffic density has been growing; traffic composition has been getting heavier; train lengths and speed on congested line segments have been increasing). For example, Union Pacific estimates significantly increased traffic densities on its east-west mainlines (200 trains/day by 2010), with increasing mainline speeds (60 mph for bulk shipments; 70 mph for heavy-haul intermodal shipments). This may lead to conflicts in dispatch as high speed, high density, high volume traffic competes for traffic space with low speed, relatively low volume, spent fuel traffic on the same corridors, generating bottlenecks at interchange points such as Ogden and Salt Lake City. The poor experience of Union Pacific in meeting (and mitigating) congestive bottlenecks suggests the need to significantly improve line haul capacity and supporting infrastructure in the corridor and destination travel lines, and institution of expensive operational improvements (such as in-transit rail welding and "maintenance on the fly"). These costs have generally been included directly through

contributions to transport infrastructure from shippers or have been included in higher rates. The License Application is silent on the proposed project's contribution to reducing such potential bottlenecks in the Salt Lake City metropolitan area, but this should be considered in the EIS. Historically, most heavy haul movements of commercial spent fuel have been either on the site of a commercial nuclear power plant, or off-site a relatively short distance to a nearby rail or barge facility. On-site heavy haul movements of spent fuel at licensed nuclear power plant facilities have generally not had to address the heavy-haul constraints recited above, including those associated with transporter design. Wheel spacing and load distribution requirements for a single-purpose, on-site and/or near-site road can be quite different from those for public highways and roads.

For off-site movements of spent fuel, as a general rule, the longer the heavy-hauling distance, the more difficult it is to implement such movements on a routine basis. Most heavy-haul movements of spent fuel have been over relatively short distances. Movements of up to 10 miles have been arranged without major issues arising, but beyond that, the impediments seem to mount exponentially. Given the associated logistical problems, some heavy haulers have stated categorically that hundreds or even dozens of repetitive movements of large spent fuel casks (the current proposal anticipates hundreds per year) over public roads would simply not be tolerated by most public highway officials.

**5. <u>Impacts from Sabotage and Accidents</u>**

Attention to the vulnerability of the shipping cask to intentional sabotage is merited and should be considered in the EIS. Recent experience with domestic terrorism mandates attention to this matter. The standard argument against considering such an analysis is 1) that better sabotage targets are possible, and 2) the likelihood of a sabotage event is unknown. In our opinion, nuclear targets are highly visible and have a very high publicity value. The NRC needs to address this issue and the impacts should be considered in the EIS. Prior NRC/DOE analyses of the impacts of explosive charges on spent fuel shipping casks are deficient and flawed, leaving open the question of just how serious an attack on a spent fuel shipment could be. NUREG-0170 does not address this issue, nor have any subsequent NRC or DOE analyses been instructive as to magnitude or probability. The shipping routes for many of the shipments to the proposed site will pass through many environmentally sensitive and urban areas, and especially when rail shipments are involved, many of which pass directly through highly populated areas.

Since the early 1980s, the NRC has relied on an outdated and poorly interpreted set of experiments carried out by Sandia and Battelle Columbus Laboratories. In one of the Sandia experiments, a GE IF-200 truck cask containing one unirradiated fuel assembly was attacked

with a M3A1, a military "shaped charge". Although the results "demonstrated that casks could indeed be breached by military explosives and that a considerable fraction of spent fuel could be released by such an attack,"[1] the NRC concluded that since only 2/1,000,000 of the total fuel weight was released in inhalable form, the "average radiological consequences of a release in a heavily populated urban area such as New York City would be no early fatalities and less than one (0.4) latent cancer fatality."[2] Halstead and Ballard recommend a 1% release because that is the percentage of unirradiated fuel released in the Sandia sabotage tests.[3] We maintain that a design basis accident should not be the release of $2 \times 10^{-5}$ of the cesium inventory, but 1%, based on the sabotage tests.

The EIS should consider the following sabotage scenarios:

The reference weapon should be portable anti-tank missiles for their ability to permeate the strong cask materials, their range and availability. Either the TOW-2 or MILAN anti-tank weapon could be considered.
A 10-year-cooled, medium burn-up, Westinghouse PWR assembly should be the reference spent fuel. "A NAC-TSC rail cask loaded with 26 assemblies of the reference fuel would represent a total radioactivity of about 5.5 million curies...a terrorist incident resulting in a one-percent release would have radiological consequences far greater than those assumed in the outdated DOE and NRC consequence assessments."[4]

The new assessment must employ "credible worst case assumptions about the timing and location of a potential attack, and weather conditions during and after the attack which are important for determining the fate of any releases.".[5]

The following two scenarios, at a minimum should be considered: "an attack in which the cask is captured, penetrated by one or more explosive devices, and releases a significant amount (at least one percent) of its radioactive contents; and an attack in which the cask is perforated by one or more armor-piercing rockets or missiles and releases a significant amount (at least one

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[1] Halstead, Robert J, and James David Ballard, "Nuclear Waste Transportation Security and Safety Issues; The Risk of Terrorism and Sabotage Against Repository Shipments," prepared for the Nevada Agency for Nuclear Projects, Carson City, Nevada, October, 1997, p.25.
[2] *Ibid.*, p. 26.
[3] Sandoval, RP *et al*, An Assessment of the Safety of Spent Fuel Transportation in Urban Environs, SAND82-2365, prepared for DOE by Sandia Labs, June 1983.
[4] *Ibid.*, p.*xvii*.
[5] *Ibid.*, p. *xv*.

percent) of its radioactive contents."[6]

To bound the transportation impacts of the proposed storage facility, the EIS should estimate occupational and public exposures and economic costs under likely transportation scenarios.

Accident consequences, both generically and in the specific case of Salt Lake City, are understated by RADTRAN; the program needs to be critically examined.

The following RADTRAN issues need to be critically examined:
Accident severity fraction Under RADTRAN, the most severe accidents lead to a release of radioactivity. These severe accidents are also the least probable. In order to weight the likelihood of accidents by severity, RADTRAN employs accident severity fractions. These were developed from a very thin accident database, about 30 years old. Since many accident parameters have changed over the past 30 years, this database needs to be updated. For example, RADTRAN makes a large number of unrealistic assumptions about how long fuel could burn, the temperature of a fire, and how rapidly a fire department could extinguish a fire.
Locations of severe accidents The location of severe accidents needs to be more critically examined. Using "engineering judgment," the Commission assumed in NUREG-0170 (1977) that more severe accidents occurred in rural areas. Our review of 40 severe rail and highway accidents shows that more severe accidents occur in urban and suburban areas[7] The table details 40 severe accidents we considered and their locations. This error understates accident consequences by a factor of 10.
Unrealistic accident scenarios RADTRAN assumes a host of unrealistic scenarios on how a radiological accident would play out. RADTRAN makes assumptions about how long a person may remain at an accident scene, how rapidly an area may be evacuated, whether the food supply may be interdicted and the time required to decontaminate an area. RADTRAN does not assume a long-term direct gamma dose, assuming the area would be evacuated and decontaminated.
Rail accident rates must be studied The newer model casks, holding 24 PWR or 68 BWR fuel assemblies, weigh more than 125 tons and require special rail cars. The Maxson-type flatbed, with two three-axle trolleys, have a higher accident rate, about double the standard rail-car accident rate. This accident rate for rail cars must be incorporated into the RADTRAN analysis.
All radionuclides not included In the calculations conducted by RADTRAN, radionuclides important to a thyroid dose, iodine-129 and chlorine-36, are generally not been included. Cobalt-

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[6] *Ibid.*, p. *xiv.*

[7] Resnikoff, M, "Unresolved Safety Issues," paper presented at conference, Nuclear Waste Transportation and the Role of the Public, Las Vegas, Nevada, February 1, 1995.

60 crud, usually accounting for the greatest direct gamma dose, must also be included in the RADTRAN calculations.

Sabotage not evaluated The likelihood and consequences of a sabotage event have also not been evaluated. Anti-tank weapons, such as the TOW-2 and MILAN weapons, could easily penetrate a cask.[8] These devices can penetrate one meter of steel, and therefore could easily penetrate 9 to 10 inches of a transportation cask. Studies undertaken by the NRC[9] in 1981 demonstrates that at least 1% of the cask radioactive inventory could be released in an accident. This is far higher than the one part in 100,000 for particulates assumed by RADTRAN. The NRC should evaluate the consequences of a 1% release in a major city like Salt Lake City. The NRC could start this hard look by examining the consequences of a sabotage event in a city like Salt Lake City. If the consequences are high, the NRC should then proceed to estimate or bound the probability of a sabotage event.

Economic costs of accidents The economic impact of transportation accidents must be included in the EIS. The dollar figures fall directly out of the RADTRAN results. Realistic dollar figures for Salt Lake City must be incorporated, including the loss of income local businesses and the State due to an evacuation of the city. The long-term financial implications must also be evaluated. The further cost to the railroad of tying up the rail lines while restoration of the accident scene and decontamination takes place, must also be considered. The lost revenues alone are estimated by the American Association of Railroads at $1 million an hour. The cost to decontaminate a major urban area such as Salt Lake City must also be evaluated, including decontamination of streets and buildings.

## 6. Impacts from Fire

The Environmental Report and the right-of-way application fail to give adequate consideration to the potential for fire hazards and the impediment to response to wild fires associated with constructing and operating the Applicant's proposed rail line. PFS's proposed movement of casks by locomotive in the Low rail line corridor presents a new wildfire ignition source. Construction, operation and activities associated with the rail line will introduce a new incidence fire source into an area that already has a high incidence for wildfires. Moreover, PFS's proposed rail line will create an impediment to fighting wild fires. Typically in this area responders use four-wheel drive vehicles and drive cross country to fight wild land fires. Hand crews may also

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[8] Halstead, RJ and JD Ballard, "Nuclear Waste Transportation Security and Safety Issues; The Risk of Terrorism and Sabotage Against Repository Shipments," prepared for the Nevada Agency for Nuclear Projects, October, 1997.

[9] Schmidt, EW et al, *Shipping Cask Sabotage Source Term Investigation*, Battelle Columbus Laboratories, NUREG/CR-2472, December 1981.

be used but generally, heavy equipment is not used because of the damage it may cause to the fragile ecosystem. The four-wheel drive vehicles carry a water tank containing 200-300 gallons of water. The vehicles will have difficulty directly crossing the rail line. The presence of hazardous material such as spent nuclear fuel may further endanger responders as well as impede their fire fighting activities around such hazardous material because firefighters will be reluctant to pursue a wildfire in the vicinity of a train load of spent nuclear fuel casks.

**7. Impacts on Flora and Fauna**

There is the potential that endangered, threatened and candidate endangered species may be found in the Low Corridor, *e.g.*, Ute Ladies-Tresses, Least Chub, Spotted Frog, Peregrine Falcon, Bald Eagle and Mountain Plover. ER Rev. 1, Table 2.3-2. These species, other sensitive species, and their food base may be impacted by construction activities, noise levels and operation of the railroad.

The EIS must not only address impacts to endangered and threatened species, but candidate, sensitive, and high value species. Threatened species include bald eagles which are known to frequent Skull Valley and peregrine falcons which nest at Timpie Springs Wildlife Management Area, near the proposed intermodal transfer station. Furthermore, the RMP proposed to fully cooperate with the reintroduction of peregrine falcon into the Timpie Springs area and indicated that "surface disturbing activities on public lands adjacent to these areas would not be permitted to disturb birds or destroy important habitat."[10]

State listed sensitive bird species and other "high-interest" bird species in the area include the bobolink, burrowing owl, Caspian tern, common yellow throat, ferruginous hawk, long-billed curlew, short-eared owl, and Swainson's hawk. Moreover, the RMP indicates it will protect candidate species such as the ferruginous hawk and Swainson's hawk during critical nesting periods.[11]

Furthermore, the EIS must address impacts from the proposed intermodal transfer facility and impacts from the transportation of high level nuclear waste to the storage site on the BLM Timpie Springs Wildlife Management Area and the Horseshoe Springs wetland areas. The State has great concern regarding damage to these wetlands, their associated species, and the Great

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[10]Record of Decision for the Pony Express Resource Management Plan and Rangeland Program Summary for Utah County. Salt Lake District, Bureau of Land Management, U.S. Department of Interior. January 1990. At 37.

[11]Id. at 36.

Salt Lake, into which these wetlands flow. Any resultant damage to the Great Salt Lake ecosystem could lead to the deaths of countless thousands of migratory birds.

In addition, the RMP designates Horseshoe Springs as an Area of Critical Environmental Concern and prescribes that transportation and utility corridors avoid the Horseshoe Springs area.[12] Skull Valley Road traverses through the Horseshoe Springs area. Although Skull Valley Road is an existing transportation and utility corridor, activities such as the intermodal transfer station, that would significantly increase the use of Skull Valley Road and substantially impact Horseshoe Springs should not be allowed.

The RMP designated specific lands as important wildlife habitat which must be managed in a manner that protects, improves and maintains the habitat. Some wildlife species will be permanently driven out of the area either because of destruction of habitat or from noise and other activities associated with construction, operation, and maintenance of the railroad. Noise levels from construction and operation of the railroad may also disrupt mating and breeding activities. The proposed rail spur will traverse the Cedar Mountains Wildlife Habitat Area and near the Horseshoe Springs Wildlife Habitat Area.[13] Furthermore, the proposed rail spur area is the habitat for one of the only two wild horse herds in the Pony Express Resource Management Plan area. The railroad may act as an artificial barrier to the traditional range of some wildlife. For example, the railroad will probably cut off winter feeding range for wild horses and it may disrupt other established wildlife migration patterns for mule deer and pronghorn antelope.

The rail spur should not be allowed to disturb these areas that have already been designated as important wildlife habitat. At a minimum, BLM must ensure that the rail spur and transportation of high level nuclear waste is consistent with each of the specific Habitat Management Plans or the Pony Express RMP, Wildlife and Fisheries Program Decision must be amended.

In the event the right-of-ways are granted, construction and operation of the rail spur and the intermodal transfer facility should not occur within the wildlife sensitive seasonal periods identified in the current RMP[14].

Clearing and grubbing activities prior to railroad construction will destroy as much as 776 acres of acres of vegetation. ER Rev. 1 at 4.4-3. This vegetation provides habitat for a variety of

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[12]Id. at 51, 52.
[13]Id. at 34.
[14]Id. at 37.

wildlife species. Id. PFS claims it will be able to revegetate a significant amount (621 acres) of vegetation destroyed during construction, with a permanent loss of 155 acres of vegetation. Id. The area of habitat destruction is located in a sensitive, slow growing, xeric environment. Such areas, notoriously sensitive to environmental impacts, are difficult to restore. The ER is inadequate because it fails to demonstrate how the PFS plans to carry out revegetation of 621 acres in such an sensitive and slow growing environment. Any discussion of revegetation efforts must also show where and how the PFS will obtain access to needed water.

This matter was also addressed in the State's June 19, 1998 Scoping Comments, included as Attachment A, at 28.

**8. Visual Impact on Proposed Wilderness Area**

As has been raised by the Southern Utah Wilderness Alliance, no account has been taken of the visual impact the railroad will have on the nearby BLM Cedar Mountains Wilderness Study Area (WSA) or other locations in Skull Valley. The Cedar Mountains WSA is located parallel to and to the west of the PFS rail line. In some places, the WSA boundary is less than two miles from the railroad. Moreover, PFS has not quantified the costs associated with noise levels from construction activities and operation of the railroad on wilderness and recreational areas. The railroad will be visible from the WSA and other recreation areas in Skull Valley and noise from the operation of the rail line will be heard, thus destroying the solitary values associates with wilderness areas.

**9. Groundwater and Surface Water Impacts**

The EIS must address the nature and character of the watercourses present at the proposed intermodal transfer point and along the proposed rail spur route. A stream alteration permit must be obtained for any alteration of natural streams.

The EIS must also address the flood potential and method for managing any floods from the greater watershed along the proposed rail route and the intermodal transfer station. In the event a flood control impoundment is necessary, it may require plan approval by the State Engineer.

The EIS must address any water needs for the intermodal transfer facility and operation of the rail spur. The water needs assessment must also include water requirements for fighting wild fires created by the operation of the rail spur or industrial fires at the intermodal transfer station. Once the water needs are determined, the water rights and method for obtaining those rights must be disclosed. The EIS must identify points of diversion, interference with, or impairment of

existing water rights, and how will those water rights be made whole.

This matter was also addressed in the State's June 19, 1998 Scoping Comments, included as Attachment A, at 26-28, and 33.

**10. Institutional Trust Land Impacts**

The State submitted comments on the impact of NRC's proposed approval in the State's June 19, 1998 Scoping Comments, included as Attachment A, at 20. The State also submits the following additional comments.

**Background**
Through the Utah Enabling Act of 1894, Congress granted approximately 1/9th of the lands in Utah to the State for the support of public education ("trust lands"). The United States Supreme Court has referred to this Enabling Act land grant as a "solemn compact" between the United States and the State of Utah. The grant has also been held to constitute a perpetual trust to which standard trust principles apply, and thereby imposing fiduciary duties upon the State of Utah.

However, of significant importance is that this "solemn compact" imposes reciprocal duties upon the United States, as grantor of the trust. Consequently, the United States is bound to act "for the support of common schools" that were the beneficiaries of this trust.

**Railroad Spur**
It is critical that the Nuclear Regulatory Commission ("NRC"), the Bureau of Land Management ("BLM"), and the Bureau of Indian Affairs ("BIA") take into account the purpose of trust lands in the drafting of an environmental impact statement ("EIS") for, and ultimately in its consideration of whether to approve, the construction and operation of an independent spent fuel storage installation ("ISFSI") by Private Fuel Storage, L.L.C. ("PFS") on the Skull Valley Goshute Indian Reservation in Tooele County, Utah (the "Proposal"). The problem of addressing the handling of high level radioactive waste is fraught with uncertainties as a result of the complexity of technical issues, its novelty, its extraordinary time horizon, and the extreme difficulty in predicting with any confidence the numerous unknowns associated with high level radioactive waste. This has resulted in the American people being deeply apprehensive of high level radioactive waste.

The effect of the public's apprehension on the market value and revenue generating potential of trust lands surrounding the proposed transportation routes, including the railroad spur, are especially concerning to the Trust Lands Administration. It is has been documented that property

values of lands near proposals involving high level radioactive waste have been diminished as a result of this apprehension. See City of Santa Fe v. Komis, 845 P.2d 753 (NM 1992) (plaintiff entitled to compensation for the loss of market value of its property as a result of the Waste Isolation Pilot Project, even if the loss is based on fears not founded on objective standards).

The proposed railroad spur has the potential of dramatically impacting trust lands, as the Trust Lands Administration administers approximately 31,500 acres of fee surface and mineral, and 25,000 acres of fee mineral near the proposed railroad spur. Without a doubt, the market value and revenue generating potential of these trust lands will be adversely affected if NRC accepts the amendment to PFS's application to allow for the proposed railroad spur.

Pursuant to the applicable rules and regulations implementing the National Environmental Policy Act ("NEPA") and NRC regulations, the EIS must evaluate both direct and indirect effects that are "caused by" the Proposal. Under 40 C.F.R. § 1508.8 and 10 C.F.R. § 51, Subpt. A, App. A, this evaluation requires an analysis of the present and future economic effects of the Proposal on surrounding trust lands. Furthermore, this economic analysis must account for all diminution in value to trust lands, including any impact to trust lands "caused by" the public's attitude towards the Proposal and its involvement with the handling, transportation and storage of high level radioactive waste.

Furthermore, NRC regulation 10 C.F.R. § 51, Subpt. A, App. A, provides that the EIS must identify possible conflicts between the Proposal and its alternatives and the objectives of federal and state policies. The fiduciary duties imposed upon the Trust Lands Administration constitute the basis for its policies outlining the management of trust lands. In upholding its fiduciary duties the Trust Lands Administration must manage the trust lands in the most prudent and profitable manner possible, and not for any purpose inconsistent with the best interest of the trust beneficiaries. Accordingly, the Trust Lands Administration must maximize the economic gain from trust land uses consistent with long-term support of the trust beneficiaries.

As previously indicated, the "solemn compact" creating trust lands imposes reciprocal duties upon the United States as grantor of the trust. Accordingly, the United States is bound to act "for the support of common schools" that were the beneficiaries of this trust. To the extent the Proposal hinders the ability of the Trust Lands Administration to effectively manage trust lands, or diminishes the market value or revenue generating potential of trust land, the Proposal is in conflict with the objectives of both the State and federal policies for trust lands. Accordingly, the EIS must identify and fully discuss the presence of this conflict.

## 11. Geologic Hazards

Potential for significant geological hazards should be analyzed to determine their nature and extent as they are crucial to the safe and responsible siting of a rail line carrying spent nuclear fuel rods. To date, these issues have not been satisfactorily addressed by Private Fuel Storage.

This matter was addressed in the State's June 19, 1998 Scoping Comments, included as Attachment A, at 26. In addition, the State provides the following comments.

**Earthquake hazards**

New data collected by Private Fuel Storage and provided to the State of Utah indicates that the railway may be subject to fault rupture of the surface during large earthquakes and subject to stronger ground shaking than expected. Either surface rupture or strong ground shaking could be sufficient to cause derailment of a train carrying nuclear materials.

The railway would cross at least two branches of the 'East' and 'West' capable faults, recently identified by PFS's consultants while investigating hazards at the proposed storage site. PFS's consultant's also identified at least 2 dozen other young faults under or adjacent to the storage site, the size and extent of which are as yet undetermined. The Utah Geological Survey is currently evaluating the PFS data and it appears that there are more faults present than those recognized by PFS's consultants.

The railway would cross the western extension of the Pass Canyon fault, labeled the 'Pass Canyon structure' by PFS. This geologic feature needs to be evaluated to determine if it is a capable fault.

Just south of Interstate highway 80, the proposed railway parallels segments of the Cedar Mountain fault. The size, extent, location, and nature of this fault is poorly known. We do not at present know how much of a hazard the Cedar Mountain fault presents to the railway.

We believe that a large earthquake on the nearby Stansbury Fault could trigger significant earthquakes on the shallow buried faults in the valley. Scientific studies have found that nearly two-thirds of all the historical earthquakes that ruptured the surface in the Basin and Range province (between Salt Lake City and Reno) occurred on faults that had no evidence of surface rupturing in the last 10,000 years.

Fault zones similar to that underlying the storage site exist in many areas of the world, including parts of the Wasatch Fault. In similar zones of multiple faults, history demonstrates that surface

fault rupture can occur on any of the fault strands or in rare cases may cause a new fault branch to be propagated and rupture the surface in a new location.

Therefore, we strongly encourage the EIS to consider the impacts of greater ground shaking than expected, and the possibility of a surface rupturing earthquake that might occur anywhere, at any time along the railway.

**Expansive and collapsible soils**
The railway crosses the piedmont slope on the eastern edge of the Cedar Mountains. The slope is underlain by Lake Bonneville and alluvial-fan deposits. These deposits may contain expansive and collapsible soils which may subject the rail bed to instability because of volumetric change.

**Debris flows and floods**
The alluvial fans were formed as sediment and debris were deposited by streams flowing from mountain canyons. Debris flows, debris floods, and stream floods emanate from canyon mouths and flow down the fans during periods of intense rainfall or rapid snowmelt. These processes are expected to continue and pose a hazard to the operation of a rail spur in their path.

## 12. Impacts on Mineral Resources

Mineral potential exists in southern Skull Valley for several types of ore deposits: skarn/porphyry copper deposits, vein/replacement lead-zinc-silver deposits, and disseminated gold-silver deposits. Potential exists on both BLM land and Skull Valley Reservation land. The better potential is on the west side of the valley near the proposed railway corridor.

Exploration for deposits buried beneath shallow valley fill has become increasingly important in recent years and has resulted in a number of sizable discoveries in Nevada, Arizona, and internationally.

Skarn/porphyry copper and disseminated gold-silver deposits are typically mined by open pit methods. Most open pits require relatively large areas for both the pits and waste dumps, often several square miles or more. Surface facilities such as railroads, warehouses, and transmission lines could encroach on the area required for development of the deposit and create access or development problems. If a deposit is found, building of the railway or other surface facilities over or near the deposit could negatively impact the mineral development of the resource. The EIS needs to consider the potential economic loss to the State and to the Skull Valley Band.

**13. Impacts on Archeological Resources**

Archeological artifacts have been encountered along the proposed railway, and more are likely to be found. The U.S. Bureau of Land Management studied artifacts from one Early/Mid-Fremont time period site near the railway, estimated to be from around 600-870 AD (Utah Archeology, vol.7, No.1, p.51-68). Additional archeological artifacts, of this age and more recent, are expected in the vicinity of the railway. A thorough inventory needs to be made of archeological resources that might be affected by the railway.

The ER states that the rail line will cross the Hastings Trail and Donner-Reed Trail. ER Rev. 1 at 2.9-3. Thus, two significant historical resources may be lost where the rail line crosses these two pioneer trails. The ER does not quantify or otherwise evaluate this loss as a cost of obtaining a license to store spent nuclear fuel on the Skull Valley reservation. Such an evaluation is required under NEPA.

**14. Impacts on Emergency Management**

Public safety and emergency response were discussed in the State's June 19, 1998 Scoping Comments, included as Attachment A, at 15. In addition, the Utah Department of Public Safety, Division of Comprehensive Emergency Management has submitted a letter directly to the Nuclear Regulatory Commission, voicing their scoping comments and concerns. A copy of that letter, dated May 4, 1999, is included as Attachment D and made a part of these comments from the State of Utah.

**15. Socio-Economic Impacts**

This matter was addressed in the State's June 19, 1998 Scoping Comments, included as Attachment A, at 30, 34 (Applicant's Financial and Corporate Structure), and 35 (Environmental Justice).

During the 1999 Session, the Utah Legislature and the Governor enacted law which revokes the statutory and common law grants of limited liability for any entity that arranges for or engages in the transportation, transfer or storage of high level nuclear waste in Utah. UCA 19-3-318et seq. Each officer, director and equity holder of Private Fuel Storage (PFS) and its parent organizations are now held individually, strictly, and jointly and severally liable for obligations incurred in Utah regarding PFS' actions and operations. The EIS should include consideration of this liability condition as part of the evaluation.

**16. The effects of the proposal on the Utah Test and Training Range must be considered**

The proposal to store high level nuclear waste in Skull Valley, and either method to get it there - rail/truck or rail spur - both constitute a threat to the vitality and mission of the Utah Test and Training Range, operated out of Hill Air Force Base. Hill Air Force Base is a major economic engine for the economy of the state of Utah. The Test Range is a key component of the vitality of the Base, and its ability to remain open in times of reductions in military force. The Test Range offers outstanding and unique opportunities for low level topographic flying, low-level helicopter training, and one of the only places where unmanned missiles can be flown. It is flown at all times of the year, in all types of weather, in order to train the pilots for all types of combat conditions. The need for this type of facility will only increase as the new generation of planes, missiles and helicopters is developed. Skull Valley is both within the restricted flight zone Military Operating Area, and an ingress route to the MOA. Ingress routes are limited both by nearby civilian commercial flight requirements, and the need for realistic tactical operational training of the military pilots.

The proposal threatens the operations of the Test Range in two ways. First, the threat of the accidental release of live ordnance or crash of aircraft with or without ordnance, the chance of which happening can never be realistically placed at zero. Secondly, the perception that the military may not be sensitive to this deadly material below their operations may cause restrictions on flight operations which reduce or eliminate the effectiveness of the training. These types of restrictions have happened at other flight ranges around the country for reasons related to recreational or other public uses. While the military may have accommodated those restrictions elsewhere, the reason for those restrictions was not concern about a material that has the potential to cause a catastrophic disaster in a large metropolitan area. The NRC and BLM cannot ignore or minimize the effects that movement and storage of high level, deadly, nuclear waste in the Skull Valley may have on the current and future uses of the Utah Test and Training Range and therefore on the viability of Hill Air Force Base.

## G. ADDITIONAL COMMENTS ON BLM'S PROPOSAL TO AMEND THE RMP

In addition to the above comments on Docket No. 72-22 and the Pony Express RMP, when amending the Pony Express RMP, BLM is required to conform its planning process to the NEPA EIS planning process. 43 C.F.R. § 1610.2(a). For example, it is required to conform its planning process to the NEPA EIS planning process. 43 C.F.R. § 1610.2(a). For example, it is required to completely develop and consider all alternatives, including a no action alternative. In developing and considering such alternatives, consideration of each alternative's impact on local economies and uses of adjacent or nearby non-federal lands is required. Such consideration must include a

detailed estimate of the economic effects of implementing each alternative. See 43 C.F.R. §§ 1610.4-5 and 1610.4-6. In addition, 43 C.F.R. § 1610.4-7 provides that a preferred alternative shall be developed based upon an evaluation of the alternatives and the estimation of their effects, including their economic effects.

Because the analysis that must be done by BLM to comply with these requirements is very similar to the analysis that must be done for the EIS, the State's Scoping Comments, including all attachments, are also pertinent to this analysis and are hereby incorporated by reference.

**1. <u>Impacts on the Utah Trust Lands Administration</u>**

BLM regulation 43 C.F.R. § 1601.1-8 provides that any amendment to an RMP shall consider the impact on uses of adjacent or nearby non-federal lands. Accordingly, any plan amendment to the Pony Express RMP must take into account the impact of PFS's proposed railroad spur (the "ROW") on adjacent and nearby Utah Trust Lands.

In applying 43 C.F.R. §§ 1610.4-5 and 1610.4-6, the BLM must consider and include a detailed estimate of the economic effects of implementing each alternative. Accordingly, every alternative considered by BLM, including the proposed plan amendment for the railroad spur right-of-way, must estimate its economic impact upon the economic potential of trust lands.

In applying 43 C.F.R. § 1610.4-7, BLM should consider not only the adverse economic impacts the ROW will have on nearby trust lands, but also consider the fact that, pursuant to the BLM/State of Utah Memorandum of Understanding FOCUS LIST, the Trust Lands Administration has nominated BLM lands surrounding Timpie, Utah, for exchange of existing trust lands inholdings (see Attachment E, letter dated April 14, 1999). Currently, a significant amount of trust lands are contained within areas BLM has designated for protection (e.g., Desert Tortoise Habitat Conservation Plan). Certainly, BLM's priority, from both a practical standpoint and as grantor of the trust, should be focused on exchanging the trust lands inholding out of these protected areas rather than issuing the ROW to PFS.

As indicated in this agency's earlier scoping comment, notwithstanding the fact that no high level radioactive waste is generated as a result of the operation of nuclear power plants within the State of Utah, the school children of Utah should not be forced to suffer an economic loss as a result of the storage of high level radioactive waste pursuant to the Proposal. It is the hope of the Trust Lands Administration that NRC, BLM, and BIA fully consider the purpose of trust lands and the issues submitted above in the drafting of the EIS. And if the EIS determines that the Proposal will hinder the ability of the Trust Lands Administration to effectively manage trust

lands or adversely impact the economic value or revenue generating potential of trust lands, the United States, through NRC, BLM, and BIA, should honor its duty as grantor of the trust and either compensate the Trust Lands Administration fully or deny the licensing of the Proposal.

**2. Improper Use of Federal Land**

The RMP states "public land will not be made available for inappropriate uses such as storage or use of hazardous materials (munition, fuel, chemicals, etc.) and live artillery firing." this is an appropriate requirement that should not be changed by amending the RMP. The right-of-way requests to build and operate the rail spur and the intermodal transfer facility to transfer high level nuclear waste on BLM lands are inconsistent with this requirement and should therefore be rejected.

**3. The Pony Express Resource Management Plan needs overall review**

The Pony Express Resource Management Plan was adopted in 1988 - eleven years ago. Many changes are proposed for the area, especially the Skull Valley portion. A coordinated resource management plan is underway, studies of vegetation are being conducted, the I-80 corridor is a target of developmental interest, land values might increase in the area. The EIS review of the rail line cannot be limited to only a rail spur, but must consider all of these issues in a coordinated plan. Any proposed amendments to the RMP should be written as a coordinated amendment for all issues in the Skull Valley area.

**4. The effects of the proposal on the Utah Test and Training Range must be considered**

The proposal to store high level nuclear waste in Skull Valley, and either method to get it there - rail/truck or rail spur - both constitute a threat to the vitality and mission of the Utah Test and Training Range, operated out of Hill Air Force Base. Hill Air Force Base is a major economic engine for the economy of the state of Utah. The Test Range is a key component of the vitality of the Base, and its ability to remain open in times of reductions in military force. The Test Range offers outstanding and unique opportunities for low level topographic flying, low-level helicopter training, and one of the only places where unmanned missiles can be flown. It is flown at all times of the year, in all types of weather, in order to train the pilots for all types of combat conditions. The need for this type of facility will only increase as the new generation of planes, missiles and helicopters is developed. Skull Valley is both within the restricted flight zone Military Operating Area, and an ingress route to the MOA. Ingress routes are limited both by nearby civilian commercial flight requirements, and the need for realistic tactical operational training of the military pilots.

The proposal threatens the operations of the Test Range in two ways. First, the threat of the accidental release of live ordnance or crash of aircraft with or without ordnance, the chance of which happening can never be realistically placed at zero. Secondly, the perception that the military may not be sensitive to this deadly material below their operations may cause restrictions on flight operations which reduce or eliminate the effectiveness of the training. These types of restrictions have happened at other flight ranges around the country for reasons related to recreational or other public uses. While the military may have accommodated those restrictions elsewhere, the reason for those restrictions was not concern about a material that has the potential to cause a catastrophic disaster in a large metropolitan area. The BLM cannot ignore or minimize the effects that movement and storage of high level, deadly, nuclear waste in the Skull Valley may have on the current and future uses of the Utah Test and Training Range and therefore on the viability of Hill Air Force Base. These considerations must be made as part of the review of both proposed rights-of-way, as the considerations are directly related to the existence of both rights-of-way.

**5. Coordination and Consistency Requirements**

Under 43 C.F.R. 1610.3-1 (applicable through 43 C.F.R. 1610.5-5), the BLM is required to coordinate its proposed actions with the State, in part to determine whether the proposed actions are consistent with State purposes, plans, policies, and programs. In this case, the proposed action is fundamentally inconsistent with State purposes, plans, policies, and programs. See Part G.1, above. See also, e..g, House Concurrent Resolution 6, passed during the 1998 General Session of the Utah Legislature.

**ATTACHMENT A**

EIS Scoping Comments submitted by the State of Utah
on June 19, 1998

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**ATTACHMENT B**

The State's Contention HH, developed in PFS's licensing proceeding
before the NRC (NRC Docket No. 72-22)

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**ATTACHMENT C**

March 12, 1999 Testimony of Bill Richardson, Secretary of Energy,
before the United States House Subcommittee on Energy and Power
of the Committee on Commerce

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**ATTACHMENT D**

May 4, 1999 letter from the Utah Department of Public Safety, Division of
Comprehensive Emergency Management to the Nuclear Regulatory Commission,
which includes scoping comments and other concerns.

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**ATTACHMENT E**

April 14, 1999 letter from the Utah Trust Lands Administration to BLM

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ATTACHMENT A

# U. S. NUCLEAR REGULATORY COMMISSION
# DOCKET NO.72-22
# PRIVATE FUEL STORAGE LLC
# PROPOSAL TO STORE HIGH LEVEL NUCLEAR WASTE ON THE SKULL VALLEY RESERVATION

## ENVIRONMENTAL IMPACT STATEMENT
## SCOPING COMMENTS
## SUBMITTED BY THE STATE OF UTAH
## JUNE 19, 1998

The following comments are provided by the State of Utah (State) in response to the U.S. Nuclear Regulatory Commission (NRC) Docket No. 72-22, Private Fuel Storage LLC (PFS), Independent Spent Fuel Storage Installation (ISFSI), Skull Valley Reservation, Notice of Intent to Prepare an Environmental Impact Statement (EIS) and conduct a scoping process in accordance with the National Environmental Policy Act (NEPA). Comments are organized under topic headings for ease of consideration. However, issues are interrelated, and commonly impact or encompass other issues under other topic headings. Issues should not be narrowly construed or evaluated, based on topic headings. If additional information or clarification is needed, please contact:


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## EIS SCOPING IS PREMATURE

As defined by the NRC,[1] the purpose of the EIS scoping is to, in part:

- Define the scope of the proposed action which is to be the subject of the EIS,

[1] U. S. Nuclear Regulatory Commission, April 24, 1998, Notice of Intent to Prepare an Environmental Impact Statement and Conduct Scoping Process, Docket No. 72-22.

- Determine the scope of the EIS and identify the significant issues to be analyzed in depth, and
- Identify and eliminate from detailed study issues which are peripheral or are not significant.

However, because of substantial and significant omissions and inadequacies in the license application of PFS, the information necessary for defining the scope of the EIS, much less conducting evaluations for the EIS under NEPA, is not available. Some of those omissions and inadequacies in the application are apparent from the recent Request for Additional Information (RAI) relating to the Safety Evaluation Report that the NRC Staff addressed to the Applicant. The Applicant responded to some of the requests in May 1998, however, the Applicant will not respond to significant portions of the RAI until September and December, 1998. Some of these responses, especially with respect to seismicity, directly impact the scope of the EIS. Furthermore, the NRC Staff is yet to send the Applicant an RAI relating to the deficiencies in the Applicant's Environmental Report.

The Staff's RAIs and the Applicant's responses thereto are integral to the scope of the EIS. If scoping proceeds and public comment on the scoping is concluded on June 19, 1998, there will be information relevant to the licensing of the facility, and therefore preparation of the EIS, which will not be available for consideration in the EIS scoping or preparation.

NRC should consider:

- Is the license application complete, such that additional information will not need to be analyzed or evaluated at a later time as part of the EIS process?
- If more information will be provided later, how will it be included in the EIS scoping and evaluation?
- How will new data and information be made available to the public, and how will the public be provided an opportunity to submit additional comments and scoping questions during the EIS process?

If NRC cannot define a process which provides for scoping, analysis, and evaluation of all issues associated with a complete and technically adequate license application, then it should delay the EIS scoping and analysis until such time as the license application is complete and technically adequate and an environmental impact evaluation can be made as required under NEPA.

## PURPOSE AND NEED FOR THE PROPOSED FACILITY

As part of the EIS, the NRC must determine if there is a need for the proposed facility. The Environmental Report isolates the need for the facility to a particular group -- operators of

nuclear power reactors -- and does not discuss any overall social costs or benefits that may be derived from this facility. The EIS must analyze the need for this facility in terms of overall societal costs and benefits. Furthermore, the NRC must look to federal statutes and policies when evaluating the need for this facility.

Under 10 CFR § 51.71(d) "draft environmental impact statements should also include consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives and indicate what other interests and considerations of Federal policy, including factors not related to environmental quality if applicable, are relevant to the consideration of environmental effects of the proposed action identified pursuant to paragraph (a) of this section." Furthermore, NRC must comply with federal statutes and policies contained therein in drafting its EIS. In particular, the EIS must consider whether the need for a centralized national private ISFSI is a violation of the intent and the policies contained in the Nuclear Waste Policy Act, 42 USC §§ 10,101 to 10,270 (NWPA). Under the NWPA, the State in which a federally-owned interim disposal facility is located is guaranteed involvement in "all stages of planning, development, modification, expansion, operation, and closure of storage capacity at a site or facility within such State for the interim storage of spent fuel from civilian nuclear power reactors." 42 USC § 10,155(d)(2). The Governor and the State Legislature are involved in the site selection investigation. 42 USC § 10,155(d)(1). Cooperative agreements between the Department of Energy (DOE) and the State are available for State funding and involvement. 42 USC § 10,155(d)(3). Furthermore, equipment, funds and training are available to states along the transportation corridor routes as well as to the State in which the site is located.

The EIS must evaluate the environmental consequences that flow from PFS's proposal, which has none of the State participation and involvement contemplated by NWPA. In fact, the EIS must evaluate whether PFS's proposal is a deliberate effort to avoid the requirements of the NWPA.

The need for the facility and the "No Action" alternative are coextensive of each other. The No-Action alternative is discussed in the following section, Range of Alternatives.

## RANGE OF ALTERNATIVES FOR CONSIDERATION IN EIS

NEPA requires federal agencies to consider whether they can carry out the proposed federal action in a less environmentally damaging manner and whether alternatives exist that make the action unnecessary. A discussion of the range of alternatives is considered the "heart" of an EIS. 40 CFR § 1502.14. The purpose of a discussion of alternatives is to "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public." Id. Yet, the Applicant presents only one option: a centralized national storage facility on the Skull

Valley Reservation.

The discussion of alternatives sites in the Applicant's Environmental Report (ER) is woefully deficient. The Environmental Report lists 38 potential sites. However, there appears no reason, other than a willing host, to substantiate why the Skull Valley Reservation was the only siting alternative discussed in any detail. ER § 8.1. The EIS must rigorously explore and objectively evaluate all the 38 potential sites listed in the ER. The fact that the 38 sites are listed in the Applicant's ER demonstrates that these sites are all reasonable alternatives to a site on the Skull Valley Reservation.

As part of the EIS scoping, the NRC should also determine if the socio-economic nature of the alternative sites suggests that the site identification process was prejudiced, in violation of the requirements of policy and law governing Environmental Justice.[2] *See* Environmental Justice discussion below.

One option that the EIS is compelled to explore is the "No Action" alternative, which is the flip side of the need for the facility. A careful evaluation of the "No Action" alternative is an absolute priority in this case. Existing nuclear power plant sites already have more than sufficient capacity to continue to store spent fuel rods.[3] Before the NRC contemplates licensing the proposed PFS facility, it must carefully evaluate the unique risks and costs posed by transporting thousands of tons of high level nuclear waste across the country to a new, centralized facility, as compared to the risks and costs of maintaining the status quo, i.e., leaving the spent fuel at the sites of the nuclear power plants where it is generated and currently stored, pending the opening of a permanent, deep geologic repository.

The "No-Action" alternative should evaluate the impacts and risks that could be avoided if spent fuel were stored at existing nuclear power plant sites until a permanent repository becomes available. The PFS proposal doubles the number of times that fuel must be transferred from storage casks to shipping casks and from shipping casks to storage casks. It also increases the distance that the spent fuel must be shipped, and increases the time that spent fuel will be moving across the country, subject to accidents or sabotage. This consideration is particularly significant for two reasons:

- Some transportation corridors, including the I-80 - Union Pacific Railroad transportation corridor east-west through Tooele and Salt Lake Counties, are not designated

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[2] Federal Executive Order No. 12898, February 11, 1994.

[3] GAO Report to Congressional Requesters, September 1991, Nuclear Waste--Operation of Monitored Retrievable Storage Facility is Unlikely by 1998, GAO/RCED-91-194, p. 4.

transportation corridors for other shipments of high level nuclear waste; but for the pending proposal, these areas would not be subject to the risks of transportation of high level nuclear waste;

- This is particularly true for the shipments of high level nuclear waste from PFS member corporation Southern California Edison; if Yucca Mountain were the licensed permanent storage facility, there is no cost effective transportation route which would dictate transportation of high level nuclear waste from southern California, through northern Utah, and then back southwest to southern Nevada.

In fact, the Nuclear Waste Policy Act requires the federal government, when selecting interim storage sites, to "minimize the transportation of spent nuclear fuel." 42 USC § 10,155(a)(3). As part of the EIS, if the NRC determines that the proposed facility results in excess transportation of spent fuel rods, the EIS must recommend that the proposed ISFSI alternative is flawed and unacceptable under NEPA.

Another option the EIS must explore is how the proposed ISFSI fits into the overall federal scheme for disposing of high level nuclear waste. Recent proposed legislation to site a Monitored Retrievable Storage (MRS) facility is indicative that this alternative is within the range of reasonable alternatives the EIS must consider. Thus, the environmental effects, including transportation risks of Applicant's private centralized national storage facility must be evaluated against those same risks associated with an MRS. The effect that the Applicant's proposal will have on a comprehensive scheme to deal with the disposal of high level nuclear waste must also be addressed in the EIS.

Another reasonable proposal the EIS must explore is the development of private regional ISFSIs where the transportation distances and volume of fuel would be substantially less than those associated with the PFS proposal.

The EIS should also examine the alternative of providing a hot cell where damaged fuel can be retrieved, thereby avoiding the risks incurred in shipping the fuel back across the country to the originating nuclear power plant. The avoided risks that should be considered include the risk of accidents (which is enhanced by the loss of cladding effectiveness), and the risk of sabotage.

## GUARANTEE THAT FACILITY WILL BE "TEMPORARY"

The "temporary" designation of this proposed facility is also within the purview of this EIS. The facility is being proposed and evaluated as a temporary storage facility. However, there is no way to ensure that spent fuel rods will ever be removed after they are shipped to the facility.

- There is no permanent repository, and Yucca Mountain remains under study. There is no

permanent, deep geologic storage facility for the high level nuclear waste commercial spent fuel rods.

- Furthermore, the license application clearly states that one of the objectives for licensing this temporary facility is to enable fuel rods to be shipped off-site so the nuclear power plant can be decommissioned. Once all the fuel is transported from the power plant and the possession-only license (POL) is relinquished, fuel rods could not be returned to the power plant.
- Because the PFS facility is proposed to be designated a "start clean, stay clean" facility, if there is an accident or problem during transportation or storage and a cask leaks, there is no hot cell, which would be needed to repair or repackage the rods or cask. If the cask were leaking, regulatory requirements and opposition from transportation corridor states would likely make it impossible to remove the material from the proposed "temporary" PFS facility.

The NEPA process requires an evaluation of the facility as proposed for operation, a *temporary* facility. If the facility cannot be demonstrated to be temporary, then the facility would operate beyond the scope of the license and beyond the scope of the EIS, irrespective of NRC Waste Confidence Decision.

## QUANTITATIVE AND QUALITATIVE RISK ASSESSMENTS

Risk assessments, both quantitative and qualitative, are critical for the initial and ongoing evaluation of a facility for licensing, environmental impact analysis, and operations. The nuclear industry has conducted extensive work in these areas as part of the licensing of nuclear power plants. The techniques and information have evolved significantly, and regulatory agencies as well as the public and the industry have come to rely more heavily on these assessments, not only for initial evaluations of risk, but for quality, compliant, safe operations.

The Utah Department of Environmental Quality (DEQ) used both quantitative and qualitative (health/ecological) risk assessments as required components of the permit for the Tooele Chemical Agent Destruction Facility (TOCDF) at Deseret Chemical Depot in Tooele County. The health/ecological risk assessment is used to identify potential reasonable worse case contaminants, pathways, and impacts on public health and the environment. The original assessment is update as needed to reflect changes in operations. DEQ works closely with the U.S. Environmental Protection Agency (EPA) in selecting and revising the model and procedures. The quantitative risk assessment identifies all human or mechanical errors, the impacts of errors, accident scenarios, and the statistical probability for each step in a process or function. Then risks, including injuries and fatalities, of each individual step, combined risks of the process, and the overall activity are determined.

Quantitative and qualitative (health/ecological) risk assessments have not been provided as part of the existing information in the PFS license application. Nor is there any indication when such risk assessments would be completed. This is information which is essential, not only to the evaluation of the construction and operation of the storage facility, transportation operations, transfer station, and related operations and facilities, but also to the impacts of such operations on public health and the environment.

When an ISFSI is licensed in conjunction with and located at an existing nuclear power plant, some portion of the impacts are potentially already included in existing health/ecological and quantitative risk assessments. However, where an ISFSI is constructed away from a nuclear power plant, the entire site- and operation-specific risk assessments must be designed and conducted. This has not been provided in the license application for the PFS proposed facilities and operations, and until it has been done, and a sufficient opportunity for public review is provided, it is impossible to evaluate the cumulative impacts of facility and transportation options on the public and the environment. And without such evaluation, the EIS is incomplete and unacceptable.

## CUMULATIVE IMPACT ANALYSIS

The EIS must consider the cumulative impact of the proposed storage site and the numerous other facilities and activities in the West Desert. This area is already the storage site for 42 percent of the U. S. stockpile of chemical weapons. The malfunction and crash of a Cruise Missile on the adjacent Dugway Proving Grounds, as well as crashes of F-16s on maneuvers over the adjacent Utah Test and Training Range are well-documented. Within a 30 mile radius of the proposed site, there are two hazardous waste incinerators, one hazardous waste land disposal site, one NORM/Mixed waste/11(e)2 waste disposal facility, the single largest Toxic Release Inventory (TRI) air pollution source in the United States (Magnesium Corporation of America, Rowley, Utah facility), and operations for stockpile and destruction of conventional munitions. Dugway Proving Grounds is also the designated landing site for NASA's Stardust spacecraft and the MUSES-C Asteroid Mission, a Japanese mission with NASA participation.

These existing activities and operations must be considered in the EIS. The NRC has a responsibility under NEPA to know, to evaluate, and to mitigate the cumulative impacts of those activities, or to disapprove the proposed storage facility. Utah and the Skull Valley Reservation are not safe places to store radioactive waste fuel rods.

## COST-BENEFIT ANALYSIS

A statutory requirement under NEPA is that all agencies of the federal government develop methods "which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking." NEPA § 102(2)(B), 42 USC § 4332(2)(B). In addition, NRC regulations require a draft environmental impact statement "include consideration of the economic, technical and other benefits and costs of the proposed action and alternatives...." 10 CFR § 51.70(d). In Utah Contention CC, the State described the Applicant's inadequate balancing of costs and benefits in the Environmental Report. Contention CC, One-Sided Cost-Benefit Analysis, at 178-79, is incorporated by reference into these comments. Because the complete lease agreement between the Skull Valley Band of Goshutes and PFS is not available, the impacts of financial commitments governing the lease, which impact the total cost-benefit analysis, are also not available. Without this information in the license, and absent additional financial information from the lease agreement, there is insufficient information for a cost-benefit evaluation. The NRC secure that information and must objectively discuss, quantify and weigh the adverse socioeconomic and environmental consequences that flow from the Applicant's activities associated with the proposed ISFSI.

Decentralized at-reactor storage costs and benefits must be compared to PFS centralized storage and federal centralized storage at Yucca Mountain. For decentralized storage, the economic costs should include licensing a decentralized ISFSI, ISFSI construction, casks and staff (unless the federal government assumes the burden) until fuel is transported and the POL is relinquished. Under the PFS proposal, the economic costs should include the casks, staff, transportation, Rowley Junction facility costs, licensing and decommissioning the facility. Under federal interim storage, all transportation and storage costs would be paid out of the Federal Waste Management Fund. While the proposed ISFSI is only being considered for a twenty year license, a more reasonable projection is 60 years or more (if temporary).

The financial impacts on ratepayers of the member utilties of PFS should also be considered in the evaluation. Rate payers have already paid for the disposal of spent nuclear fuel by the federal government. By committing funds from public utilities to fund a second storage facility, the ratepayers are paying twice. This is particularly troublesome when existing capacity for temporary storage already exists at current nuclear power generating facility. See discussion under Range of Alternative for Consideration in EIS, above.

## TRANSPORTATION IMPACTS

Before preparing the Draft EIS, the NRC staff must obtain more information from PFS regarding

the nature of the proposed action as it relates to transportation of the spent fuel. As PFS has acknowledged, its study of transportation alternatives is "ongoing." Letter from Jay E. Silberg, Counsel to Applicant, to Licensing Board Panel (June 8, 1998). Because PFS's study has not concluded, PFS's license application still lacks crucial information that is necessary for the evaluation of the proper scope of the EIS. For instance, PFS's application has not identified the originating locations of the spent fuel, the means and routes by which it will be shipped, or the manner in which it will be transferred to shipping vehicles. In addition, as PFS has acknowledged, it has not yet settled on the means for transporting the spent fuel from the main railroad line to the Private Fuel Storage facility. Id. Thus, to a significant degree, the "proposed action" which must be evaluated in the Draft EIS remains undefined. Therefore, it is not possible to fully evaluate the necessary scope of the EIS. *See, e.g.,* Sierra Club v. Watkins, 808 F. Supp. 852 (D.C.D.C. 1991), in which an environmental assessment was remanded for failure to adequately identify and evaluate alternatives to the Port of Hampton Roads for receipt of fuel rod shipments. Here, it would be impossible to identify the scope of alternative shipping routes that should be considered, because there is no specific proposal with which to compare alternatives. Once the Applicant has made a more definite proposal, the NRC Staff should provide an additional opportunity for comments on the scope of the EIS. To the extent that it is possible to comment on the scope of the EIS based on information provided to date, the State does so below.

The EIS must address the impacts of all actions that are foreseeable as a result of the licensing of the activities proposed by PFS in its license application. Both impacts of normal operations and non-normal operations such as accidents and sabotage must be considered. The activities whose impacts must be evaluated include preparation of spent fuel for transportation to the ISFSI, actual transportation of spent fuel to the proposed ISFSI by rail and/or truck, transfer from rail to truck at the currently proposed Rowley Junction intermodal transfer site, transportation from Rowley Junction to the PFS facility by heavy-haul truck, and transfer from transportation casks to storage casks. The EIS must also consider transfer-related and transportation-related impacts incurred if and when spent fuel must be returned to the originating nuclear power plant site or another site if it is found to be improperly packaged or defective, and the impacts of transferring and transporting spent fuel to a final repository at the conclusion of the storage period at the PFS facility.

The EIS should take into account the following considerations relating to spent fuel transfer and transportation:

- *Transportation corridor impacts.* Major transportation corridors in the West are critical not only to the states and communities they connect, but to the economic viability of local, national, and international businesses and governments. Interstate 80 and the Union Pacific Railroad through Salt Lake and Tooele Counties comprise a critical east-west transportation corridor. This is the corridor PFS will use, whether it transports

nuclear fuel rods by truck or rail. Any accident resulting in the release of radioactive material would be devastating to public safety. But even an accident which blocks east-west transportation for hours or days could have significant impacts on commerce, business, and the public. There is no nearby, equivalent transportation corridor. When the Great Salt Lake threatened to flood this transportation corridor, the State of Utah spent more than $50 million dollars on pumps to lower the Great Salt Lake and protect this critical transportation corridor. The EIS should evaluate whether and how the owners/operators of the proposed facility will provide the financial and procedural guarantees necessary to assure an equivalent level of protection based on impacts from their facility and transportation operations.

- *Impacts of normal transportation.* The EIS should consider all environmental impacts associated with normal transportation of spent fuel, including occupational radiation exposures and exposures to the public along highways and rail lines. In evaluating radiation exposures, the NRC should utilize the RADTRAN computer code, which is significantly more accurate and generally shows much higher radiological doses to the general public than methods used in the past by the NRC. *See* State of Utah's Contentions on the Construction and Operating License Application by PFS, LLC for an ISFSI, dated November 23, 1997 (hereinafter "State's Contentions") at 159-60. RADTRAN is consistently used by the Department of Energy in its environmental analyses of radioactive waste transportation, and there is no reason it cannot be used by the NRC.

- *Impacts of accidents.* The EIS should identify and evaluate the impacts of the range of foreseeable accidents that could occur during fuel transfer, transportation and storage. Accidents evaluated should include, but not be limited to, cask drop, collision during transportation, collapse of or fall from railroad trestle (including impacts of burial in sediment and water intrusion into cask), and major fires. *See* State's Contentions at 146-59. The EIS should also evaluate the risks of flooding of transportation corridors by the Great Salt Lake. In addition, the EIS should evaluate the likelihood of fuel cladding degradation due to pre-shipment dry cask storage, and its effects on the risk of accidental radiation releases. *See* State's Contentions at 157-58. Previous NRC environmental studies, which assume pre-shipment storage in spent fuel pools, are inadequate to address this phenomenon.

- *Impacts of sabotage.* The EIS should thoroughly evaluate the risks and impacts of sabotage during transportation and storage of spent fuel. Since the time when WASH-1238 was prepared, the threat of sabotage has become more real and the technology more sophisticated. The bombings at the World Trade Center and the Murrah Federal Building in Oklahoma City have vividly demonstrated the credibility of sabotage as a

very real threat. *See* State's Contentions at 152-54. The NRC's previous environmental studies are inadequate to address the increased sophistication and availability of weapons for sabotage purposes. Nor do currently available NRC studies address the particular circumstances of the proposed PFS facility and transportation scheme (to the extent they are known) which render them especially vulnerable to sabotage, such as the shipment of large quantities of fuel at low speeds on rail lines that are easily accessible to saboteurs, the increased vulnerability of transportation casks to sabotage during long layovers in rail yards, and the close proximity of Rowley Junction to I-80.

- *Impacts caused by human error and maximum credible accidents.* The EIS should consider the risk of accidental radiation exposure caused by human error in the design and construction of casks. *See* State's Contentions at 154-55. The EIS should also identify and evaluate a bounding accident, taking into account the maximum hazards and demographic conditions of the environment.

- *Characteristics of fuel.* The EIS should take into account the characteristics of the fuel shipments, such as the burn-up level of the fuel, and the weight of fuel shipments. For the reasons stated in Utah Contention V, *see* State's Contentions at 146-49, it is inappropriate to rely on Table S-4 of 10 C.F.R. Part 51 to evaluate these factors.

- *Rail and highway conditions.* PFS projects shipment of spent fuel at a large volume and frequency -- 100-200 rail shipments per year, with 4,000 casks to be shipped altogether. SAR at 1.4-2, License Application at 3-1. This amounts to approximately 8-17 rail shipments per month. Some fuel may also be shipped by truck. The EIS should take into account the contribution to the risks and impacts of spent fuel transportation caused by current and anticipated conditions on interstate highways and rail corridors. For instance, traffic congestion and highway speeds on interstate highways have significantly increased since the 1970s, when WASH-1238 was prepared. The use of railroad lines for freight traffic has also greatly increased in recent years, causing delays and bottlenecks in shipping. *See, e.g.*, New York Times: Weary Hands at the Throttle (April 26, 1998), attached hereto as Exhibit A. Such congestion increases the potential for accidental collisions, and also increases the potential for sabotage against unprotected railroad cars that are either moving very slowly or sitting on railroad sidings for extended periods of time. The EIS should also examine the potential bottlenecking effect of focusing a large number of spent fuel shipments, originating all over the United States, on a single geographic area.

- *Impacts of extended storage at Rowley Junction.* The large volume and frequency of proposed rail shipments by PFS creates the significant potential for backup of trains and casks at Rowley Junction. In addition, Union Pacific Railroad has a stated policy of

shipping spent fuel in dedicated trains at 35 miles per hour. Thus, it can be reasonably anticipated that five or more casks will arrive at Rowley Junction at the same time. Furthermore, the amount of time required to move a cask out of Rowley Junction is contingent on many factors: there is only one crane to unload casks at Rowley Junction; the cask must be transported 24 miles by a slow moving heavy haul truck from Rowley Junction to the ISFSI; once at the ISFSI the cask must be inspected and removed from the truck and shipping container to a transfer container then to a storage container-- an operation that could take anywhere from 11 to 22 hours. *See* SAR Table 5.1-2. Potentially only one cask per day could be moved out of Rowley Junction. Consequently, if casks have to be stored at Rowley Junction, both the radiation doses to workers and the public and the risk of accidents will increase. These impacts are not anticipated in previous NRC environmental analyses, and must be considered in the EIS for the PFS facility.

- *Demographic characteristics of transportation corridors.* In assessing normal and accident-related radiation exposures and risks, the NRC should evaluate the demographics of transportation corridors proposed for use by PFS. The State is concerned, for example, that large quantities of spent fuel will pass through Salt Lake City, a major population center. WASH-1238 is inadequate for purposes of assessing the impacts of spent fuel transportation on large population centers such as Salt Lake City.

- *Shipment to PFS from nuclear power plants not serviced by rail lines.* The EIS should evaluate the environmental impacts of shipping spent fuel to the proposed ISFSI from nuclear power plants not serviced by any rail lines. Although PFS states that all fuel will be shipped to the ISFSI by rail, some of the plants it serves have no rail access. Those with sufficient crane capability may transfer the casks to heavy haul trucks, and from thence to rail cars. However, there are some plants, such as Indian Point, which do not have sufficient crane capability to handle heavy shipping casks. The impacts of these transfers have not been assessed by PFS, nor have they been assessed in previous NRC environmental impact statements.

- *Accident costs.* The EIS should address the costs of accidents, which are likely to be significant. *See* State's Contentions at 155-56. Cost analyses should take into account the vital role played by rail lines and interstate highway 80 in the economic health and well-being of the State of Utah and the entire region.

The EIS should also address the issue of who will pay the cleanup costs, as well as the level of assurance that the costs will be paid. If cleanup costs cannot be paid promptly by responsible parties, the economic and health costs to the public are likely to increase.

- *Radiological releases.* The EIS should re-evaluate previous assumptions and calculations regarding radiological releases during an accident. Recent analyses suggest that during a severe accident, a greater fraction of cesium-137 may be released than estimated in WASH-1238. *See* State's Contentions at 158. Moreover, the cesium-137 inventory of the TransStor cask is a factor of 3.4 greater than assumed in WASH-1238. This new information must be evaluated in the EIS.

- *Transportation Distances.* The EIS must consider the great distances over which spent fuel will be shipped to the PFS facility. WASH-1238 is based on a transportation distance of approximately 1,000 miles. WASH-1238 at 38. But as PFS acknowledges, the distance may be more than twice that amount. ER at 4.7-3. Most spent fuel is located at reactors in the Eastern United States, which implies transportation distances much greater than 1,000 miles. For example, the one way mileage from Boston, Massachusetts to Salt Lake City is 2388 miles. PFS cites NUREG-1437 for the proposition that this increase is inconsequential. However, in light of all the deficiencies in WASH-1238, this is not a valid assertion. Doses must be recalculated for the entire shipping distance from plants to the ISFSI, and from the ISFSI to the repository, for all 19 plants served by the proposed ISFSI. *See* State's Contentions at 160-61.

- *Cumulative Transportation Impacts.* The State of Utah has a number of facilities for the storage and/or processing of radiological and hazardous materials, including both civilian and military material. The EIS should examine the cumulative impacts of shipping various kinds of dangerous materials through the State, including cumulative risks of normal and accidental exposure to toxic materials, and risks of accidental collisions. The EIS should also evaluate the interaction of spent fuel transportation to and from the PFS facility on other activities in the area. For instance, State Route 196, a two-lane blacktop road that runs north-south from I-80 at Rowley Junction to Dugway Proving Ground, is the route defined by PFS for transportation of spent fuel rods by heavy haul truck. The EIS must evaluate other uses and priorities for this route, including the fact that it is the primary surface transportation route for Dugway Proving Grounds, and is one of three emergency evacuation routes for the nearby chemical weapons incinerator at Desert Chemical Depot. It is also the sole access for the community of Iosepa, Utah, the adjacent ranching community, and residents of Skull Valley Reservation. There is also a need to evaluate the impacts of upgrading or widening the road, if that is the transportation corridor for transportation of spent fuel rods or as a result of increased traffic and use of the state route.

- *Risks of transporting damaged fuel from PFS facility to originating plant.* Contrary to the requirements of 10 C.F.R. § 72.122(l), PFS's application does not clearly establish measures for assuring the retrievability of spent fuel. If fuel is found to be damaged, PFS

proposes to return it to the originating nuclear power plant or to some other facility where it can be repackaged. The EIS should evaluate the impacts of transporting spent fuel whose cladding is known to be damaged, and therefore less capable of performing its safety function. Moreover, the EIS should evaluate the environmental impacts that would result if the spent fuel could not be transported to the originating plant because the plant had closed, and no other nuclear licensee would accept the fuel for repackaging.

- *Unique impact on transportation corridor.* The I-80 - Union Pacific Railroad transportation corridor east-west through Tooele and Salt Lake Counties is not a designated transportation corridor for other shipments of high level nuclear waste. Therefore, this proposed facility and the transportation corridor impacts which are uniquely associated with the proposed facility pose an otherwise non-existent set of risks to the local community, users of the transportation corridor, and the environment along the corridor. The significant and unique risks must be evaluated as part of the EIS. Impacts to be considered include:

  -- What are the impacts of using non-dedicated trains to transport high level nuclear waste fuel rods, not only through Utah, but across the United States?
  -- What are the impacts of shipment along a corridor which is not and will not likely be proposed for shipment of waste to the proposed deep geologic repository at Yucca Mountain, Nevada?
  -- What are the additional impacts of transporting high level nuclear waste fuel rods from Southern California Edison's nuclear power plants, realizing that these wastes would not otherwise travel through Utah on their way to deep geologic storage at the proposed site at Yucca Mountain, Nevada?
  -- What are the impacts of not providing funding for emergency response along the transportation corridor throughout the United States?
  -- How will transportation by truck or rail be scheduled to avoid delays and conflicts with normal commerce and as well as emergency transportation?
  -- How will conflicting transportation on State Route 196 be mitigated, recognizing that based on information in the license application, there will be up to 200 shipments per year, and turn around time for unloading each cask once it arrives at the ISFSI will take anywhere from 11 to 22 hours per cask? *See* SAR Table 5.1-2.

- *Other impact considerations.* As part of the scope of this EIS, the full and complete impacts to all transportation corridors must be evaluated.

  -- What are the types of accidents which are possible because of the transportation of high level nuclear waste fuel rods?

-- What impacts are caused by such accidents?
-- How will impacts of transportation accidents involving high level nuclear waste be mitigated?
-- Who will bear responsibility for financial and other losses resulting from such accidents?
-- How will that financial responsibility and payment be assured?
-- What are the cumulative possibilities for high level nuclear waste accidents and other accidents associated with existing and currently known activities?
-- What transportation modes will be used by PFS, when will these be identified, and how will these alternatives be evaluated?

## PUBLIC SAFETY AND EMERGENCY RESPONSE

The lack of emergency planning exhibited in the license application and the need for such planning are critical issues. But, emergency planning is a fall-back, fail-safe measure, not the primary means for assuring the safety of the public. In the context of the NRC safety regulations, the NRC must first conclude that the spent fuel can be safely transported in compliance with all relevant regulations. In the context of NEPA, emergency planning is not a substitute for an adequate EIS that evaluates all of the risks and costs posed by the proposed spent fuel transportation, objectively weighs whether the planned transportation constitutes the most cost-beneficial alternative, and then applies appropriate mitigation measures.

A critical aspect of the EIS scoping process is the definition of emergencies, both those that could result from the operation of the proposed storage of high level nuclear waste fuel rods and emergencies which could impact the ISFSI operations. Cumulative impacts of these emergencies should also be developed and evaluated. This evaluation should include a quantitative risk assessment as well as a detailed evaluation of the regulations, procedures, and equipments and personnel necessary to mitigate the impacts of the individual and cumulative problems. The following represents a partial list of the types of problems, accidents, and emergencies which need to be evaluated and mitigated in order to ensure protection of public health and the environment under the scope of the EIS. For example:

- How will the impacts and risks of range or wildfires be evaluated and mitigated?
- How will the risk of snow build-up around storage casks on-site be evaluated and mitigated?
- How will excessive heat and cold and resulting damage during summertime and wintertime storage be evaluated and mitigated?
- What is the necessary response time and capability for righting an overturned cask?
- What would be the impacts of being unable to repackage a cask which is damaged or leaking, during transportation and storage?

The EIS should also indicate what permits, licenses, regulation, and procedures, at a minimum, would be required to ensure that these impacts can be mitigated.

The State Science Advisor acts as coordinator for all state executive agencies for transportation related issues for high level and transuranic radioactive waste. The State Science Advisor has expressed serious and extensive concerns regarding the PFS proposal and its deliberate and inexcusable omission of any consideration of a comprehensive and detailed transportation or emergency response plan.

In recognition of the multitude and seriousness of concerns relating to the transportation of radioactive materials, Congress enacted the Nuclear Waste Policy Act of 1982 as amended in 1987 to provide for the safe, efficient and cost effective transportation of radioactive materials with specific provisions for spent nuclear fuel, naming the Department of Energy's Office of Civilian Radioactive Waste Management as the agency responsible for all shipments of high-level nuclear waste and commercial spent fuel to federal facilities. It is the position of the State of Utah that this proposal between PFS and the Skull Valley Band of Goshutes is an intentional and calculated attempt to circumvent the provisions of that Act which Congress deemed necessary to ensure the safety and environmental protection of nuclear waste shipping campaigns.

In preparation for shipments of high level radioactive waste transportation campaigns, the DOE began development of the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico to serve as a pilot and demonstration program for handling, transporting and storing radioactive waste. Through the WIPP and other DOE related campaigns, the State of Utah has worked cooperatively and productively to design, plan, and implement a comprehensive and detailed transportation program and emergency response capability with critical and necessary input from all stakeholders involved. As a result of the successful cooperation of all parties, DOE will begin shipping materials to the WIPP facility this month with the full assurance of all corridor states that appropriate measures are in place. This effort has required many years of planning, written memoranda of understanding and agreement and development of a relationship of cooperation and trust. The State believes this has been a valuable pilot program and should serve as a model for PFS for the planning, implementation and operation of a high-level nuclear waste storage facility within the State's borders.

Private Fuel Storage proposes to undertake the design, building, transportation to and operation of a facility, the order of magnitude and the potential lethality of which is unprecedented in this country. With no experience, nor concern for the impacted stakeholders, PFS has demonstrated an egregious arrogance and lack of respect for not only the State of Utah but for every corridor state, local community and Native American jurisdiction through which the transportation of

these materials must pass.

It is the State's position that a comprehensive, detailed and cooperatively developed transportation plan to the proposed nuclear waste storage facility be provided to all potential corridor states and tribes. Further, it is the State's position that all provisions of the Nuclear Waste Policy Act be met by the proposers of this facility, including but not limited to financial and technical assistance, training, equipment and mutually agreed upon development for:

- Route selection ;
- Alternative route analysis;
- Route risk analysis;
- Route inspection (highway and rail) contingency routing plans;
- Transportation infrastructure improvements;
- Shipment notification;
- Shipment tracking;
- Shipment escorting;
- Provision of public information on routing and shipments;
- Preparation and enforcement of transportation operations protocols;
- Carrier and shipper compliance reviews;
- Assessment of state and local capabilities regarding safe routine transport and emergency response;
- Enhancement and maintenance of emergency response and recovery capabilities;
- Awareness training for first-on-the-scene and first responder personnel;
- Specialized training for emergency management and recovery personnel;
- Public information training for route community liaison personnel;
- Training for hospital personnel and other medical personnel;
- Waste acceptance scheduling(start date and annual rate);
- Safe and adequate contingency measures for handling and returning damaged fuel casks;
- Cask loading;
- Cask full scale testing;
- Accident notification;
- Safe parking designation and procedures; and
- Provision of equipment for emergency response, inspection, first response personnel.

A separate, comprehensive transportation and handling plan must be developed to address all aspects of the additional rail spur required or intermodal transfer of the high level waste at Rowley Junction, including but not limited to infrastructure improvements, handling equipment and protocols, security and sabotage safeguards, inspection of shipping casks, vehicles and carriers and state oversight and regulation.

It is further the State's position that responsibility for transportation-related damages from accidents involving spent fuel moving to and from this private facility will be solely and completely borne by Private Fuel Storage.

The Utah Division of Comprehensive Emergency Management (CEM) serves to save lives, reduce injuries, and protect property and the environment from the effects of natural and man-caused disasters. This is achieved through a statutory, comprehensive effort to prepare for, respond to, recover from, and mitigate the effects of disasters and emergencies created by a wide variety of hazards. CEM cares for people.

The best way to mitigate against a hazard is to reduce the risks associated with it to as low a level as possible. For example, while the State cannot remove the many earthquake faults that lie under our populated areas, it can establish and enforce appropriate building codes, increase public awareness and understanding of the earthquake threat, and take many related, proactive mitigation measures as individuals, families, and communities to plan and prepare for a major quake that is known to be overdue here.

The State can also continue efforts such as the intensive, cooperative process among local, state and federal agencies to eliminate the huge stockpile of chemical weapons currently being destroyed at the Tooele Chemical Weapons Disposal Facility at Deseret Chemical Depot. When these weapons are gone forever from the State, so will be the risks associated with them. The Chemical Stockpile Emergency Preparedness Program (CSEPP), coordinated by CEM in Utah, represents a great effort on the part of many different levels of government to protect the public during the destruction process. The State's CSEPP successes have been well documented, and have come about only through many years of concentrated work by dedicated professionals who recognize that effective communication and coordination are essential to protect the residents of our State. In fact, Utah CSEPP has established a standard of care that directly or indirectly applies to the emergency management of other technological hazards, and perhaps many natural hazards as well.

On the other hand, CEM's experience with the ISFSI proposed by PFS on the Skull Valley Reservation has proven to be quite a departure from the Utah CSEPP standard of care. Never once has PFS, nor any other representative of this effort, contacted CEM regarding its plans to store high level nuclear waste in Utah. Never once has any reply been offered to the many CEM comments and observations about the gross deficiencies in PFS's Emergency Plan, as outlined in the State of Utah 2.206 Petition (June 27, 1997), and the more recent State of Utah's Contentions. PFS's failure to communicate and coordinate with the State agency whose statutory responsibility for emergency management has been well established for many years is particularly remarkable since the intent of the consortium is to introduce an arguably significant hazard into the State's environment. Simply put, PFS's purpose is quite the opposite of hazard

mitigation; for Utah, it is *hazard promulgation.*

The State is aware that PFS has contacted Tooele County Emergency Management (one of the State's CSEPP partners), and we know, too, that Tooele County Emergency Management has replied to PFS with a list of concerns they share with CEM. However, the ISFSI is not uniquely a Skull Valley Goshute Indian business opportunity, nor an internal Tooele County problem that can be solved within the confines of Tooele County's boundaries. This is a vexing State issue that will affect hundreds of thousands of the State's residents along the expected transportation corridors to the proposed waste site. It is an issue for which appropriate, comprehensive emergency planning, such as in CSEPP, must take place.

In August of 1997, with an eye to emergency management-related issues, three CEM senior staff conducted a careful review and analysis of the PFS license application and related materials, including the Emergency Plan for the proposed PFS facility. More than ninety critical observations and questions regarding the PSF Emergency Plan alone were compiled at that time. These issues appear to remain largely unresolved to this day.

For example, regarding the PFS Emergency Plan, CEM commented: "Transportation planning here is confined to the site itself, and the area surrounding it within Tooele County. The plan does not consider intrastate transportation and interstate transportation planning requirements. This is not satisfactory considering the heavily populated regional transportation corridors along which these dangerous cargos may move. For example, Salt Lake County is likely to be affected, but does not receive any planning consideration (See SAR 1-4-1, and 10 CFR 72.108)."

Other serious questions follow on these observations. What exactly are the identified transportation routes from the nuclear reactors to the ISFSI site? What specific Utah communities will be affected, can they deal with a nuclear waste-related emergency, and what remedial or enhanced emergency management measures will be required? What unique security-related circumstances along the identified routes must be considered -- what factors that could make the shipments vulnerable to sabotage or accident? What is the overall hazard vulnerability of the transfer site at the routes' end? These, and many other concerns must receive appropriate emergency planning consideration.

The State has learned through the precedent of many years' successful participation in the Chemical Stockpile Emergency Preparedness Program that forthright communication, coordination, and effective planning by all jurisdictions and entities are essential to the attainment of public safety. Further, CEM believes that the State's residents, and those who serve them, have a right to accept or reject being subjected to unwarranted, unwanted risks over which they may exercise some control. In the absence of the communication, coordination, and effective planning elements that characterize a successful emergency management effort, the

ISFSI proposed for Skull Valley is viewed as especially unwelcome by Utah CEM. Therefore in the interest of public safety, CEM requests that the NRC reject the PFS proposal.

## SCHOOL AND INSTITUTIONAL TRUST LANDS AND FUNDS

Through the Utah Enabling Act of 1894, Congress granted to the State approximately 1/9th of the lands in Utah for the support of public education (trust lands). The United States Supreme Court has referred to this Enabling Act land grant as a "solemn compact" between the United States and the State of Utah. Andrus v. Utah, 446 U.S. 500, 507 (1980). The grant has also been held to constitute a perpetual trust to which standard trust principles apply.

Trust principles impose fiduciary duties upon the State of Utah, including the duty to manage the trust lands in the most prudent and profitable manner possible, and not for any purpose inconsistent with the best interest of the trust beneficiaries. In Utah, the trust lands are managed by the School and Institutional Trust Lands Administration (Trust Lands Administration), which acts as a trustee for the State's public schools, the major trust beneficiary. Accordingly, the Trust Lands Administration must maximize the commercial gain from trust land uses consistent with long-term support of the trust beneficiaries. Pursuant to this fiduciary duty, the Trust Lands Administration is authorized, among other things, to sell or exchange trust lands, develop mineral resources contained upon or within trust lands, issue grazing permits, special use leases, easements and permit rights-of-entry across trust lands, and designate parcels of trust lands as development property.

Furthermore, imposed upon the Trust Lands Administration is the duty of undivided loyalty to, and a strict requirement to administer the trust corpus for the exclusive benefit of, the trust beneficiaries, which do not include governmental institutions or agencies or the public at large. This "solemn compact" imposes reciprocal duties upon the United States, as grantor of the trust. Consequently, the United States is bound to act "for the support of common schools" that were the beneficiaries of this trust.

It is critical that the NRC take into account the purpose of trust lands in the drafting of an EIS for, and ultimately in its consideration of whether to approve, the construction and operation of an ISFSI by PFS on the Skull Valley Reservation in Tooele County, Utah (the Proposal). The problem of addressing the handling of high level radioactive waste (HLW) is fraught with uncertainties as a result of the complexity of technical issues, its novelty, its extraordinary time horizon, and the extreme difficulty in predicting with any confidence the numerous unknowns associated with HLW. This has resulted in the American people being deeply apprehensive of HLW.

In fact, studies show that the possibility of exposure to radiation evokes considerably more dread than other hazards that may be more dangerous, and that the public has little confidence or trust in the federal agencies regulating HLW, especially concerning the agencies' estimates regarding the health dangers posed by HLW. Consequently, the public fear of the risks of accidents during the packaging, transportation, and storage of HLW is high.

This public perception and attitude towards HLW results in the diminution of the property value of lands surrounding activities involving HLW. Regardless of whether public perception regarding HLW is justified or is simply irrational, the fact is that the public's feelings shape their behavior and attitude regarding HLW, and consequently, the value of lands associated with or surrounding the packaging, transportation, and storage of HLW is adversely impacted. The case of City of Santa Fe v. Komis, 845 P.2d 753 (NM 1992), which dealt with an inverse condemnation action involving the construction of a highway to transport radioactive waste to the Waste Isolation Pilot Project in New Mexico, is illustrative of this point.

The court in Komis held that the plaintiff was entitled to compensation for the loss of market value of its property even if the loss is based on fears not founded on objective standards. The court stated, "if loss of value can be proven, it should be compensable regardless of its source. Thus, if people will not purchase property because they fear living or working on or near a WIPP route, or if a buyer can be found, but only at a reduced price, a loss of value exists." Komis, 845 P.2d at 756-57.

The public fear discussed in the Komis case is by no means isolated to the WIPP project, but stems from the public's general perception of radioactive wastes, and therefore, is present with any proposal involving radioactive wastes. Consequently, the effect of the public's behavior and attitude on the market value and revenue generating potential of trust lands surrounding PFS's proposed ISFSI, intermodal transfer point (ITP), and transportation routes especially concerns the Trust Lands Administration.

The Proposal has the potential of dramatically impacting trust lands, as the Trust Lands Administration administers approximately 42,780 acres of fee surface and mineral, 35,311 acres of fee mineral, and 4,850 acres of fee surface within Skull Valley and the area surrounding Rowley Junction. The market value and revenue generating potential of these trust lands will probably be adversely affected if NRC approves the Proposal.

Pursuant to the applicable rules and regulations implementing the NEPA and NRC statutes, the EIS must evaluate both direct and indirect effects that are "caused by" the Proposal. Under 40 C.F.R. § 1508.8 and 10 C.F.R. § 51, Subpt. A, App. A, this evaluation requires an analysis of the present and future economic effects of the Proposal on surrounding trust lands. Furthermore, this economic analysis must account for all diminution in value to trust lands, including any impact to

trust lands "caused by" the public's attitude towards the Proposal and its involvement with the handling, transportation and storage of HLW.

If the EIS determines that the economic value and revenue generating potential of trust lands will be adversely impacted or that the Trust Lands Administration will be hindered in its ability to effectively manage trust land, the United States, acting through NRC, must honor its duty as grantor of the trust and either compensate the Trust Lands Administration or deny licensing of the Proposal.

In addition, the Trust Lands Administration submits the following comments to be utilized in the development of the EIS for the Proposal:

1. *Purpose and Need* - Pursuant to NEPA, the EIS must analyze the purpose and need for the Proposal. This analysis must assess existing on-site storage capacities of the generators of HLW and the ability of HLW generators to construct additional storage capacity on-site. Moreover, this analysis must account for the possible storage capabilities of the Yucca Mountain site as a repository for HLW in the future. If this analysis determines that existing on-site storage is sufficient, construction of additional storage is feasible, or that the Yucca Mountain site will be available as a repository for HLW in the future, then the EIS should indicate that no valid need exists for the Proposal. Accordingly, NRC should deny the PFS's license application for the Proposal as no need exists and its costs will outweigh its benefits.

2. *Decommissioning* - Under 10 C.F.R. § 72.42, the Proposal can only be licensed for a maximum of forty (40) years, which reflects a twenty (20) year license term with an additional (20) year renewal term. Since the Proposal contemplates a temporary storage facility for HLW, decommissioning of the Proposal facilities must occur. However, as raised in the State's Contentions, questions exist whether decommissioning can occur. As the Contentions indicate, PFS fails to provide sufficient data about the design of its storage casks to assure compatibility with Department of Energy (DOE) repository specifications. Furthermore, the proposed facilities are not capable of repackaging spent fuel. Consequently, a question exists whether the HLW can be removed from the proposed facilities, thereby facilitating decommissioning of the proposed facilities as required under NRC regulations.

   NEPA requires that all reasonable consequences of the Proposal be considered and addressed. Since questions exist regarding the compatibility of the storage casks with DOE specifications and the Proposal fails to provide for repacking of spent fuel, it is reasonable to consider that decommissioning of the proposed facilities could be delayed or will not occur. Accordingly, the EIS must analyze all impacts on trust lands,

including economic impacts, associated with either the delay or the failure to decommission the proposed facilities.

3. *Alternatives* - The EIS must include all reasonable alternatives to the Proposal. The importance of identifying and analyzing all reasonable alternatives is illustrated under NRC's own regulation, 10 C.F.R. § 51, Subpt. A, App. A, which states the alternative section "is the heart of the [EIS]." Pursuant to 40 C.F.R. § 1502.14, NRC must "rigorously explore and objectively evaluate all reasonable alternatives...[and] devote substantial treatment to each alternative...so that reviewers may evaluate their comparative merits." Reasonable alternatives to the Proposal include:

a) *"No Action" alternative* - Under 40 C.F.R. §1502.14(d), the EIS must include the analysis of the no action alternative.

b) *On-site storage* - The EIS must analyze the option of storing HLW at the place of generation. Accordingly, an assessment must occur to determine the existing on-site capacity or the feasibility of constructing additional on-site storage capacity at the facilities generating the HLW. Such an assessment will allow NRC to better analyze whether a legitimate need exists for the Proposal or whether on-site storage is feasible at the place of generation.

Storage at the place of generation ("on-site storage") is the most logical approach in the management of HLW. On-site storage reduces the public's exposure to HLW, and consequently, the health risk posed by HLW is reduced. Furthermore, on-site storage presents a more manageable and controlled environment should an accident occur - the site is secure from the public; employees of generators of HLW are trained in evacuation procedures; trained personnel and specialized equipment are present thereby reducing risk of exposure and facilitating prevention or containment of contamination; the site has undergone extensive scientific studies and been deemed suitable for activities involving radioactive material.

Public exposure and the health risk presented by HLW is extremely high with storage of HLW at a place other than the place of generation ("off-site storage"). Off-site storage requires the utilization of railroads and public highways for the transportation of HLW. Consequently, a less manageable and totally uncontrolled environment exists should an accident occur - no secure site exists, as the public is present; the public is not educated nor trained in protecting themselves from the dangers of radioactive material; trained personnel and specialized equipment are not present; thus, risk of exposure and likelihood of contamination are greatly compounded; railroads and public highways often border waterways, thus facilitating rapid and widespread dispersion of radioactive materials and

increasing the area of contamination.

c) *Alternative site location* - The EIS must analyze the option of alternative site locations. Such alternative site locations must encompass all possible site locations, whether presently feasible or feasible in the future, including utilization of the Yucca Mountain site as a storage facility for HLW.

4. *Transportation* - The EIS must analyze the proposed equipment, the frequency, and the routes to be utilized in the transportation of HLW from the place of generation to the proposed ISFSI site. This analysis must fully examine:

a) *Direct and Indirect Impacts* - The EIS must analyze the direct and indirect impacts of the transportation of HLW to the proposed ISFSI site, including the economic impact to trust lands adjacent to transportation routes. In addition, the EIS must assess the economic impact to the approximately 15,890 acres of fee surface and mineral and approximately 4,140 acres of fee mineral administered by the Trust Lands Administration around Rowley Junction - the proposed ITP site.

b) *Safety Issues* - The EIS must fully examine the safety of all the equipment to be utilized in the transportation of the HLW, including canisters, trucks, railroad cars, loading and unloading equipment, etc.

c) *Accident Rates* - The EIS must determine the accident rates associated with each type of equipment to be utilized in the transportation of HLW, the probability of each type of accident event, and its impact upon each proposed transportation route. In assessing the impact, the EIS must assess any economic impact that may occur as a result of the closure of each proposed transportation route to facilitate the containment and cleanup of any contamination.

5. *Cumulative Impacts* - The EIS must determine and analyze the cumulative impacts, including economic impacts, to trust lands should NRC approve the Proposal. In this evaluation, the EIS must take into account the Proposal's effect on trust lands in conjunction with the Dugway Proving Ground, the Hill Air Force Base Bombing and Gunnery Range, the Wendover Bombing and Gunnery Range, the Army's Chemical Weapon's Incinerator, the Laidlaw APTUS hazardous waste incinerator, and the Envirocare low level and mixed waste landfill.

6. *Affected Environment & Environmental Consequences* - Pursuant to the requirements of NEPA and NRC regulations, the EIS must succinctly describe the environment of the area(s) to be affected by, and assess the environmental consequences of, the Proposal and

its alternatives. In particular, the EIS must address:

a) *Seismology* - The Trust Lands Administration is concerned that Skull Valley has a potential for seismic activity, and may thereby expose trust lands surrounding the Proposal to the threat of contamination from HLW should the Proposal be approved. Accordingly, the EIS must fully examine the geologic stability of the region surrounding the proposed ISFSI site. This examination must assess surface and subsurface faulting, ground motion (including liquefaction), and soil stability.

b) *Hydrology* - Contamination of trust lands via hydrological systems is a serious concern to the Trust Lands Administration. The EIS must analyze the Proposal's potential to contaminate surface and groundwater systems. Accordingly, the EIS must identify all surface and groundwater systems, contamination sources of the Proposal, and the impact of contamination to trust lands down gradient.

Furthermore, the EIS must require the installation of monitoring wells around the proposed ISFSI and ITP facilities to safeguard against contamination of surface and groundwater systems. Baseline data must be compiled to be utilized in conjunction with the monitoring wells to effectively monitor for the presence of contaminants from the Proposal. Moreover, monitoring wells will assist in identifying the direction and migration rate of any contamination should it occur, and thereby, facilitate a more efficient and effective cleanup.

7. *Mitigation* - NEPA and NRC regulations require the EIS to identify mitigation measures for the Proposal. Therefore, the EIS must include measures and assurances that the contamination of any trust lands as a result of the Proposal with be rectified. Furthermore, the EIS must include a means to compensate for any loss of economic value of trust lands or the imposition of any additional costs associated with the management of trust lands as a result of the approval of the Proposal.

8. *Conflicts* - Pursuant to 10 C.F.R. § 51, Subpt. A, App. A, the EIS must identify possible conflicts between the Proposal and its alternatives and the objectives of federal and State policies. The fiduciary duties imposed upon the Trust Lands Administration constitute the basis for its policies outlining the management of trust lands. As previously indicated, in upholding its fiduciary duties the Trust Lands Administration must manage the trust lands in the most prudent and profitable manner possible, and not for any purpose inconsistent with the best interest of the trust beneficiaries. Accordingly, the Trust Lands Administration must maximize the commercial gain from trust land uses consistent with long-term support of the trust beneficiaries.

> The "solemn compact" creating trust lands imposes reciprocal duties upon the United States as grantor of the trust. Consequently, the United States is bound to act "for the support of common schools" that are the beneficiaries of this trust. To the extent the Proposal hinders the ability of the Trust Lands Administration to effectively manage trust lands, or diminishes the market value or revenue generating potential of trust land, the Proposal is in conflict with the objectives of both the State and federal policies for trust lands. Accordingly, the EIS must identify and fully discuss the presence of this conflict.

Notwithstanding the fact that no HLW is generated as a result of the operation of nuclear power plants within the State of Utah, the school children of Utah should not be forced to suffer an economic loss as a result of the storage of HLW pursuant to the Proposal. It is the hope of the Trust Lands Administration that NRC fully consider the purpose of trust lands and the issues submitted above in the drafting of the EIS. And if the EIS determines that the Proposal will hinder the ability of the Trust Lands Administration to effectively manage trust lands or adversely impact the economic value or revenue generating potential of trust lands, the United States, through NRC, should honor its duty as grantor of the trust and either compensate the Trust Lands Administration fully or deny the licensing of the Proposal.

## NATURAL RESOURCE AND HAZARDS IMPACTS

In accordance with NRC regulations, the NRC has determined that the proposed license is a major federal action that warrants the preparation of an EIS. The Utah Geological Survey (UGS) has identified significant geotechnical issues that should be analyzed in depth, not only in the NRC's staff safety review but also in the EIS. These issues are crucial to the safe and responsible siting of the ISFSI and, to date, have not been satisfactorily addressed by PFS. The issues are summarized in following discussion:

- UGS believes that capable faults, as defined by the NRC, may underlie the proposed ISFSI; if so, earthquakes generated by the faults may produce greater vibratory ground motions than that for which the facility is designed, and may pose a threat of surface fault rupture.
- PFS has not conducted a rigorous and detailed investigation of subsurface conditions appropriate for a critical facility of this type; the current level of investigation is very preliminary and not a detailed determination of site suitability necessary for establishing design parameters. In some instances, the PFS characterization of subsurface foundation soils is not supported by their own test data.

These issues are significant and must be analyzed and resolved as a prerequisite for a responsible decision on the future of the proposed facility. Furthermore, Part 51.61 to Title 10 of the Code of

Federal Regulations (10 CFR Part 51.61) requires that the Environmental Report, which forms the basis for NRC's EIS, address the siting evaluation factors contained in 10 CFR Part 72, subpart E. Without proper analysis of geotechnical issues related to siting evaluation factors, including a detailed characterization of the geologic and seismic environment, the potential impacts of this critical facility may not be fully recognized. Thus, the issues described herein must be fully addressed in the EIS. *See* State's Contentions at 80-96. *See also* April 1998 memo to the Utah Department Environmental Quality that highlights potential earthquake hazards in Skull Valley, attached hereto as Exhibit B.

It is unclear how water will be obtained for the proposed site. The Utah Department of Natural Resources and the Division of Water Rights are concerned that the availability of water has not been sufficiently investigated. If the Tribe plans to make water available for the facility under a claim of a federal reserved water right, the Division foresees potential challenges to the validity and extent of the Tribe's water rights claims. If the Tribe plans to make water available for the facility under state-created water rights, the Department of Natural Resources and Division of Water Rights foresee potential challenges under the change application process conducted by the state engineer.

The Tribe's federal reserved water rights will depend on the number of practicably irrigable acres (PIA) located on the reservation. The process of determining PIA requires a detailed analysis of the hydrology, soils, engineering feasibility, economic feasibility and numerous legal issues related to the establishment of the reservation. This is a complex process in and of itself. Once the right is quantified, the type of water use must be changed from irrigation to the industrial or commercial uses associated with the fuel rod storage. Approval of this change of use, regardless of how it is undertaken, will be another time-consuming process fraught with difficulty and perhaps challenges by other water users.

Even if the Tribe chooses to forego claims of reserved rights and uses state-created rights it already holds, or purchases water rights held by others, it will need to file a change application to put the water to the new uses associated with fuel rod storage. Again, deliberations related to this change of use will be time-consuming and complicated -- many challenges can be expected.

The Division of Water Resources disagrees with the drainage area that was used to compute the Probable Maximum Flood (PMF) for the portion of the area that cuts across the access road east of the storage facility. The Applicant used a drainage area of 26 square miles. The State believes the drainage area is closer to 240 square miles. In wetter-than-average years, the large depressions south of the access road filled, the ground was saturated, and most of Skull Valley produced significant amounts of run-off. Wetter-than-average conditions which would occur during a probable maximum flood event would fill the depression and water running off from the southern end of Skull Valley would only drain through the depression near the northeast corner

of the area, causing flooding.

The Division is also concerned with potential contamination of the groundwater aquifer underlying the site and the potential for contamination of other water sources. These impacts would be critical also to springs which provide water to adjacent ranching operations.

According to the Division of Wildlife Resources, risks to ground and surface waters due to an accident either at the PFS facility or along any transportation corridor should not be underestimated nor should the value of those resources to local wildlife be disregarded. The nearby Horseshoe Springs (managed as a wildlife use area by the Bureau of Land Management) and Timpie Springs (managed as a wildlife management area by Utah Division of Wildlife Resources) areas represent important wetlands for migratory birds. They are simply extensions of the much larger Greater Great Salt Lake Wetland Ecosystem. The Great Salt Lake is an internationally recognized wetland as part of the Western Hemispheric Shorebird Reserve Network. Radionuclide contamination of the Great Salt Lake or its tributary waters and associated wetlands would represent an international tragedy.

Because of the unique wind patterns associated with the Stansbury Mountains along the east side of Skull Valley and the presence of an abundant prey source, multiple raptor species occur proximal to the PFS facility. Some of the raptors nest while others simply forage as they migrate through western Utah. Regardless, bioaccumulation of radionuclides in the raptor population from accidental contamination of the raptors' prey sources would have international consequences.

Super-human efforts must be made to avoid or minimize impacts, particularly radionuclide contamination to wildlife or their habitat use areas. Compensatory mitigation for unavoidable construction and operational or maintenance impacts must be planned. The Applicant is urged to coordinate with the division to develop acceptable mitigation strategies.

With respect to population impacts evaluated by the Division of Parks and Recreation, PFS did not meet the requirements of 10 CFR § 72.11, completeness and accuracy of information. The information provided in the initial application process was insufficient and incomplete. The stated impact on population distributions from potential contamination is vastly underestimated. The description of "influence zones" in the initial application process was misleading. The influence zone actually contains one of the most urbanized areas in the country (top third or fifth) -- the Wasatch Front. This was played down or not even mentioned in the original application. For example, there was no discussion of factors or conditions such as "wind travel/wind speed" to show how quickly materials could be broadcast by frequent winds from the north-west, west and south-west.

The Transtor Cask seems flawed. Rodent and insect barriers may be needed to prevent the spreading of waste and radiation from the site. Freeze thaw from moisture could also damage the cask (air inlets and outlets -- natural convection cooling in an area with extreme temperature changes; i.e., 30° below zero to over 105° F).

It seems incongruous to be destroying dangerous chemical warfare materials at Dugway, while introducing additional dangerous and toxic nuclear materials within a few miles. This area has high visual value from Deseret Peak Wilderness Area and freeway, and the Wasatch National Forest area. It is within eight miles of the old Hawaiian Historic settlement area and the Pony Express, California, Donner Party Historic trail alignment. After 20 to 40 years, the storage casks may have to be structurally and mechanically stabilized in order to move them. Do it right the first time!

The fact that USPCI, Aptus, Inc., and Envirocare are already in the area argues that enough is enough. The Wendover Range and aerial munitions testing area is seconds from an off-course F-16, an errant missile or artillery round. The historic pattern of errors, chemical leakages, dead sheep, frequency of carcinogenic anomalies, and nuclear fall-out over the past 50 years in western Utah, speaks poorly for attempting to locate such a dangerous facility this close to the Wasatch Front. The site is well within the active Great Basin Seismic belt. Terming the area "remote" is a relative term. Minutes from the Wasatch Front is not remote. The rate of urban development in Tooele County is rapidly increasing in terms of density and units.

The mission of many government divisions is to improve the "quality of life in Utah." How will this project meet that standard or shared statewide value? It clearly doesn't. Technology was allowed to develop that didn't know how to clean up its own mess. Why perpetuate it at such great economic, social and environmental costs? It may greatly enrich a few absentee reservation and property owners and protect a number of stockholders. But, it is the antithesis of the current, great statewide effort and huge capital development investment to improve infrastructure, provide more publicly accessible open space, and prepare for the 2002 Olympics. If any proposed action such as this cannot meet, implement or augment the array of reasonable State values, such as quality of life, safety, aesthetic beauty, and long-term development options, then it should be summarily dismissed.

Even though the proposed method of transporting these radioactive materials by rail may minimize human exposure, an elevated level of concern is associated with the transport through upland forested areas and associated watershed areas. Incidents and accidents are not uncommon along the various rail routes throughout the State. It is estimated by the Nuclear Information and Resource Service that more than 15,000 shipments could be made over the next 30 years, with each train cask carrying the long-lived radiological equivalent of 200 Hiroshima bombs. Many of the routes cut across key upland watershed areas providing downstream communities with

high quality water.

The rail route from the east runs adjacent to national forest and private forested lands and critical watershed areas. An ongoing project to create statewide water quality guidelines facilitated by the Department of Natural Resources and the Department of Environmental Quality per EPA requirements will assist in protecting these watersheds. However, the exposure from radioactive incidents along transportation corridors appears to offset any and all preventative measures that may be obtained through these guidelines.

The proposed transportation routes include rail lines coming into Utah from the west and east, continuing to Rowley Junction. At this point the radioactive materials would be transferred to trucks for shipment to Skull Valley which could increase the potential for accident. The rail route from the west travels parallel to Great Salt Lake and the state-administered sovereign lands -- an area impacted by extensive flooding in the recent past due to rising elevation of the lake. The obvious danger to nearby resources in Great Salt Lake include the riparian and wetland habitat, brine shrimp industry, mineral and salt extraction and extensive waterfowl habitat.

The potential for hazard to human health is just too high to allow the transportation of these materials through watershed and other key resource areas.

## SOCIO-ECONOMIC IMPACTS

The NRC should not rely on the Applicant's inadequate discussion in the Environment Report of the socio-economic impacts of its proposed facility. See ER § 2.7. Furthermore, the Applicant's Environmental Report states: "the indirect costs, which are derived from socioeconomic and environmental impacts of the facility, are minimal due to the remote location and small size of the actual storage area." ER at 7.3-1. Conversely, the Applicant gives an over-inflated view of the indirect benefit of the project. ER at 7.2-3.

The license application also fails to address the impacts of the PFS proposal on future growth in this area of Utah. The population of Utah in projected to more than double in the next 25 years, with the most significant increases occuring along the Wasatch Front and adjacent counties to the east and west. Tooele County is already experiencing that growth in residential development. Various organizations and partnerships are currently assessing, through public scoping processes, options or scenarios for such growth. There is significant public information available. The NRC should consider that work as part of its EIS scoping, and must evaluate the impacts of transportation and storage of high level nuclear waste on the public and on infrastructure, for the entire life of the proposed facility and operations.

The Applicant's Environment Report fails to adequately analyze known and potential cultural resources in the area. The Utah Division of State History has informed the Applicant that there are at least nine archaeological sites in the area, that a significant portion of the area has yet to be surveyed for historic properties, and there is a high potential for location of other historic properties in the area. *See* April 30, 1997 letter from the Utah Division of State History to Stone & Webster, attached hereto as Exhibit C. Consequently, the draft EIS must address all known and potential cultural resources in the area.

## LAWS, ENTITLEMENTS, REGULATIONS, AND PLANNING REQUIREMENTS

The NRC cannot rely on the Environmental Report prepared by the Applicant because it is inadequate to satisfy the requirements for writing a defensible Environmental Impact Statement. NRC regulations require Environmental Impact Statements to describe approvals, permits, and legal entitlements that the facility will need to undertake the proposed action and the status of compliance with those requirements. 10 CFR § 51.71(c). In addition, the Council on Environmental Quality regulations require full cooperation and lack of duplication with State and local procedures. For example, 40 CFR § 1506.2(d) states:

> To better integrate environmental impact statements into State or local planning processes, statements shall discuss any inconsistency of a proposed action with any approved State or local plan and laws (whether or not federally sanctioned). Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law.

State environmental permits or approval orders, both those authorized through delegated Federal programs and those required by State law, are designed to protect public health and the environment from the adverse effects of facilities and activities that might reasonably be expected to be a source or an indirect source of pollution. In addition to the media-specific environmental regulation, there are also State requirements for facility siting and public notice and review. Also, the State has long term plans in place for the management of the State's air resource (Utah Code Ann. § 19-2-104), radioactive waste (id. § 19-3-107), solid waste (id. § 19-6-104) and comprehensive emergency planning and response (id. § 53-2-104). Finally, Utah is a member of the North West Interstate Compact on Low-Level Radioactive Waste. Low-level waste generated in the State may be disposed of at the Compact site. However, as the PFS facility will be sited on the Skull Valley Reservation, it is unknown whether low-level waste generated on an Indian reservation would be eligible for disposal at the Compact site. The EIS scoping should evaluate all of the foregoing requirements, determine how to ensure those requirements are met, what the impacts of not meeting those requirements would be, and what impacts cannot be mitigated.

One of the contentions the State of Utah submitted in the PFS adjudicatory proceeding before the Atomic Safety and Licensing Board, discusses the entitlements, permits and approvals required under NEPA. The State incorporates by reference Utah Contention T and related responses into these comments. *See* State's Contentions, at 131-141; and State's Reply to NRC Staff's and Applicant's Response to State's Contentions A through DD dated January 16, 1998 (hereinafter "State's Reply") at 74-83.

The application does not address required legal entitlements for the Applicant to undertake critical activities associated with the ISFSI proposal. For example, the NRC must satisfy itself that the Applicant is entitled to use and control the proposed ISFSI site on the Skull Valley Reservation. This requires full disclosure of the lease between the Applicant and the Skull Valley Band of Goshutes. Currently, only a portion of the lease has been released and it is unknown whether the redacted portions of the lease contain termination clauses and other substantive lease provisions that the Applicant and the Band have withheld from scrutiny by the public or the NRC. Likewise, the Applicant has not shown that it is entitled to use or control the off-loading site and intermodal facility at Rowley Junction (or wherever else the Applicant intends to locate its transfer facility).

There is no record of the Applicant's legal entitlement from any governmental entity to widen public roads, rights-of-way or other property for use as a heavy haul road or rail spur from the railhead to the site.[4] Nor is there a citation to any law or regulation that would allow such approvals. In fact, the Environmental Report is fatally flawed because the specific route to the site has yet to be chosen by the Applicant. The Applicant, for the first time and almost one year after it submitted its application to the NRC, announced at the public scoping meeting held on June 2, 1998 that it is studying a new transportation route somewhere west of Skull Valley Road. The Applicant did not publicly disclose any details of the new route. The public cannot legitimately comment on the scope of the EIS until such time as the Applicant submits a transportation and routing plan to NRC as part of its license application. In any event, most of the land between the Union Pacific mainline and the site is held by the State, the county or the federal government (*e.g.*, military, Bureau of Land Management, Forest Service). Thus, the Applicant would need approval from these entities to construct a transportation corridor to the site. Such a route may trigger "major federal action" and the need for an additional independent EIS. The State reiterates its requests that NRC re-open the public comment period on scoping to allow legitimate public comment once the Applicant has deigned to inform the NRC, the State, and the public of its final and detailed plan for transporting and routing the casks to the proposed site.

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[4] *See* comments below regarding the State's jurisdiction over Skull Valley Road.

The Applicant must comply with environmental quality standards and requirements. The EIS must do more than the Applicant's inadequate assessment of air quality impacts from its construction and operation activities at the intermodal site, along the transportation route and at the proposed ISFSI site. The Environment Report has a totally inadequate analysis of air quality modeling techniques. *See* ER 4.3.3, 4.8-2. The Applicant appears to have used EPA "SCREEN3" model which is an inappropriate model for this operation. Furthermore, the Applicant has failed to adequately analyze whether it will be in compliance with the National Air Quality Standards, whether it will be subject to regulation under Section 111 of the Clean Air Act, whether it is a major stationary source of air pollution requiring a Prevention of Significant Deterioration permit. Moreover, the Applicant may require an Operating Permit in accordance with Title V of the Clean Air Act and also a State air quality Approval Order. The EIS must address and show how the Applicant will achieve compliance with these permitting requirements. *See* Utah Contention T at 137-39 and State's Reply at 77-79.

The State of Utah has jurisdiction over all groundwater within the State. Utah Code Ann. § 73-1-1. As such, the EIS must show how the Applicant will come into compliance with Utah's Groundwater Discharge Permit requirements. As is abundantly clear from the application, the retention pond proposed by the Applicant at the north end of the storage pad is designed to leach into groundwater. ER at 4.2-4. This is an unacceptable practice. Furthermore, the Applicant proposes to use a septic tank(s) for its wastewater disposal system. ER at 3.3-4, 5 and SAR 4.3-3. This is yet another unacceptable environmental practice and is a direct contaminant pathway to groundwater. The Environment Impact Statement must analyze the effect of the Applicant's questionable environmental water quality proposal on groundwater and downgradient resources and how the Applicant will achieve compliance with water quality regulations. Utah Contention O at 100-05, 107-08 and State's Reply at 60-61, and Utah Contention T at 139-140 and State's Reply at 81 are incorporated by reference into these comments.

In the arid West, water rights are a significant and often a contentious issue. The problem is exacerbated in this instance because the facility is proposed to be located on an Indian reservation. Not only does this implicate the State's jurisdiction over allocation of water rights within the State but it also raises the question of Federal reserved water rights and whether the Applicant's industrial use of water would fall within those rights. The EIS must address the legal authority of the Applicant to obtain water, the potential challenges from other water users, and the quantification of the amount of water the Applicant is entitled to use.[5] The State has addressed this issue in its Contentions. *See* Utah Contention O at 105-06 and State's Reply at 60-61, and Utah Contention T at 140-41 and State's Reply at 79-82, which are incorporated by

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[5] *See also* discussion on water availability under the Natural Resource and Hazards Impact section above.

reference into these comments.

In addition to permits and approvals from the State of Utah, the EIS should evaluate what permits are required from the U.S. Environmental Protection Agency for activities that occur on the reservation, such as air quality or storm water permits. As currently proposed, the Applicant will disturb wetlands in the transportation corridor and the EIS must address how the Applicant will achieve compliance with the U.S. Army Corps of Engineers Section 404 dredge and fill permits. However, until such time as the Applicant provides a definitive transportation and routing plan, this scoping issue should remain open for public comment.

The State enacted new legislation in the 1998 General Legislative Session that the NRC should review for purposes of scoping. The High Level Nuclear Waste Disposal Act, S.B. 196, *inter alia*, places certain restrictions on the placement of high level nuclear waste and greater than class C radioactive waste in the State of Utah, establishes siting criteria, and requires certain findings and approvals be made by the Department of Environmental Quality. An enrolled copy of S.B. 196 is attached hereto as Exhibit D. In the 1998 session, the State designated SR-196 "[f]rom Route 199 near the control gate at Dugway Proving Grounds northerly via the Skull Valley Road to the west bound on and off ramps of Route 80 at the Rowley Junction Interchange" as a State highway. *See* S.B. 78 (1998). This means that the State of Utah has jurisdiction and control over the Applicant's proposed transportation route from Rowley Junction intermodal transfer facility to the proposed ISFSI site. The EIS must show whether it is feasible for the Applicant to undertake any road widening or rail spur construction activities involving the road and public right-of-way along Skull Valley Road.

The NRC has the obligation to write an EIS that addresses the effect of the Applicant's proposal, including construction, operation, transportation, and long term effects, on the State's overall environmental plans and duly enacted regulatory and legal requirements. Furthermore, the State expects cooperation and coordination from NRC and its contractors by showing that it is willing to openly discuss the full extent of the State's legal and regulatory authority involving the proposed action with appropriate State regulatory officials.

## APPLICANT'S FINANCIAL AND CORPORATE STRUCTURE

Private Fuel Storage is a newly formed limited liability company without any independent assets. *See* LA at 1-3,4. PFS consists of seven or eight electric utilities; however, the member utilities merely make contributions to PFS, and the assets of the member utilities are shielded from liability associated with the PFS project. In Utah Contention E, the State discussed the Applicant's lack of financial qualification to engage in the Part 72 activities for which it seeks a license and in Utah Contention S, the Applicant's lack of assurance that it will have funds

necessary to decommission the facility. The State incorporates by reference Utah Contention F, Financial Assurance, State's Contentions at 27-38; and Utah Contention S, Decommissioning, State's Contentions at 123-130, into these comments.

Given that the Applicant appears to be nothing more than a shell company devoid of any assets or capital, it is critical that the EIS analyze the environmental consequences of licensing, constructing, operating and decommissioning a national centralized facility where spent fuel casks will be stored for 20, 40 or more years. The funding requirements for this project are not only critical to safety concerns but also to the level of maintenance, and timeliness and effectiveness of decommissioning. The environmental consequences that flow from undercapitalization and operating on a shoestring budget must be addressed in the EIS.

Another factor that the EIS must consider is the ability of this limited liability company to be accountable and responsible for the consequences of accidents and environmental contamination along the transportation route and at the site. The EIS should contrast this project with interim storage facilities authorized under the Nuclear Waste Policy Act which are owned and operated by the Department of Energy and have the full financial backing of the United States government.

## ENVIRONMENTAL JUSTICE

Under Executive Order No. 12898 on Environmental Justice, issued on February 11, 1994, the U.S. Nuclear Regulatory Commission is required to:

> ... analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low income communities, when such analysis is required by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. section 4321 *et seq.*[6]

*Environmental Justice* is defined by the U. S. Environmental Protection Agency as:

> ...the fair treatment of people of all races, income, and cultures with respect to the development, implementation and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental impacts resulting from the execution of

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[6] Clinton, W. J., President, February 11, 1994, Memorandum for the Heads of All Departments and Agencies.

environmental programs.[7]

Earlier policy of the Department of Energy, in seeking a Monitored Retrievable Storage (MRS) site, focused on siting the facility(ies) on Indian Reservations and clearly was in violation of this directive. Members of Private Fuel Storage LLC are also responsible for site selection decisions, and the license application for the ISFSI which, if licensed, would violate the Order. Even if the Chairman of the Skull Valley Band of Goshutes approached PFS to site the facility, rather than visa versa, that action does not outweigh the Environmental Justice impacts on members of the Tribe who oppose the facility or individuals who live and work adjacent to the proposed site. But for the protection provided under Environmental Justice provisions, these groups do not have equal protection under the law, equal protection regarding the siting decision, because the proposed facility is located on an Indian Reservation. Nor does the contractual arrangement between the Skull Valley Band of Goshutes and PFS absolve the NRC or the federal government from any responsibility under NEPA, Title VI of the Civil Rights Act, or Executive Order No. 12898.

Therefore, as part of the EIS process, the NRC must fully and completely analyze and evaluate the Environmental Justice data, criteria and impacts of the proposed facility.

- What are the impacts related to the proposed decision to locate the facility on an Indian Reservation?
- What groups of individuals are impacted?
- What are the environmental, human health, social, economic, and other impacts?
- Are these impacts mitigated under one or more of the alternative actions?

If Environmental Justice impacts cannot be mitigated, NRC should disallow the proposed site alternative in the EIS.

## COOPERATING FEDERAL AGENCIES

The Council on Environmental Quality Regulations emphasizes the need for cooperation among Federal agencies early in the NEPA process. Other federal agencies who have jurisdiction by law or who have special expertise with respect to any environmental issue that should be considered in an EIS shall be made a "cooperating agency" at the request of the lead agency. 40 CFR § 1501.6. There are a number of federal agencies with whom the NRC should consult on

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[7] U. S. Environmental Protection Agency, April 22, 1997, Region VIII Environmental Justice Fact Sheet.

this action, including the U.S. Military (Army, Air Force), Bureau of Land Management, Forest Service and Department of Energy.

By contrast, the Bureau of Indian Affairs, Department of Interior, cannot be a cooperating agency with respect to its approval of the lease between the Skull Valley Band of Goshutes and the Applicant. Such an action requires an independent EIS by the BIA because different standards are used in evaluating the impacts of these two major federal actions under NEPA. The BIA has a trust responsibility to all tribal members in evaluating the effects of approving the lease whereas the NRC's EIS will not evaluate the fiduciary responsibility of the federal government to tribal members.

## INCORPORATION OF CONTENTIONS AND OTHER PLEADINGS

Contentions and other pleadings which are filed as part of the licensing hearing before the Administrative Licensing and Appeals Board (ASLB) raise issues and address matters which are relevant and necessary for consideration in the EIS process, regardless of whether the contention or pleading was rejected for licensing board purposes. Therefore, the following contentions and pleadings are incorporated in this written response by reference and raised for evaluation as part of the EIS. As new contentions and pleadings are filed, just as when the license application is modified by NRC staff recommendations or PFS modifications and changes, the new or additional information should be evaluated as part of the EIS, and the NRC should provide an opportunity for public notification and comment.

The State of Utah's Contentions, dated November 23, 1997, are hereby incorporated by reference, and a copy is attached hereto as Exhibit E.

The State filed a 2.206 Petition with the NRC on June 26, 1997, which in part addressed the severity of wildfires in Skull Valley and challenged whether the Applicant had sufficient resources to handle fires at or near the ISFSI. The EIS must evaluate the effect of severe wildfire that occur in Skull Valley as it relates to siting the ISFSI and whether there are sufficient resources available to the Applicant to stave off a wildfire. In addition to incorporating the June 26, 1997, 2.206 Petition by reference into these comments, the State attaches hereto Exhibit F, a copy of the May 27, 1997 memorandum dealing with fire frequency in Skull Valley that was attached as Exhibit 5 to the 2.206 petition.

The following pleadings are also incorporated by reference into these comm

- State of Utah 2.206 Petition, dated June 27, 1998;
- State of Utah 2.206 Petition, dated July 21, 1997;

- Petition to Intervene and Request for Hearing filed by State of Utah, dated September 11, 1997; and
- State of Utah's Reply to the NRC Staff's and Applicant's Response to State of Utah's Contentions A through DD, dated January 16, 1998.

ATTACHMENT B

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 |
| | ) | September 29, 1998 |

# STATE OF UTAH'S CONTENTIONS RELATING TO THE LOW RAIL TRANSPORTATION LICENSE AMENDMENT

The Applicant submitted a significant license amendment dated August 28, 1998 to account for a proposed new rail transportation corridor and a proposed change in the location of the Rowley Junction intermodal transfer point ("ITP"). The State received a copy of the Applicant's license amendment on August 31, 1998.

The amendment describes a proposed new rail line which would originate off the Union Pacific mainline at the intersection of Interstate 80 and Low.[1] The new railroad would parallel the south side of Interstate 80 in a southeast direction for approximately 3 miles, turn due south for

[1] Low is located off Interstate 80 approximately 17 miles west of Rowley Junction. *See* Utah Highway map attached as Attachment 1 to NRC Staff's Response to Request for Hearing and Petition to Intervene Filed by the Confederated Tribes of the Goshute Reservation and David Pete

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approximately 26 miles, then turn east for approximately 3 miles where it would terminate at the ISFSI. Environmental Report ("ER") Rev.1 at 2.1-3. The Applicant intends to construct the railroad on public lands and the Applicant has applied to the U.S. Bureau of Land Management ("BLM") for a 200 foot right-of-way to accommodate the proposed 32 mile route. ER Rev. 1 at 2.1-3, 4.4-1.

In the license amendment, the Applicant proposed a change in the location of the Rowley Junction ITP 1.8 miles to the west of the location described in the initial license application. Safety Analysis Report ("SAR"), Rev. 2 at 3.1-3. The ITP would still be located next to the Union Pacific mainline and in close proximity to Interstate 80 and the industrial salt plant. ER Rev 1 at 4.7-5 & 6. The facilities at the ITP remain the same as in the initial license application, *i.e.*, rail sidings off the Union Pacific mainline, a building housing a 150 ton gantry crane and a tractor/trailer yard. SAR Rev. 2 at 4.5-3.

The State has reviewed the license amendment and now files additional contentions based on the amendment. The States also amends the basis for admitted Contention B relating to Rowley Junction.

Contention HEAVY HAUL. The Low Rail Corridor and Fire Hazards

CONTENTION: The Applicant's Environmental Report fails to give

adequate consideration to the potential for fire hazards and the impediment to response to wild fires associated with constructing and operating the Applicant's proposed rail line in the Low corridor.

**Basis:** The ER must consider the environmental effects of the proposed action. 10 CFR § 51.45(c). The ER must also address the regional environmental effects of the proposed action. 10 CFR § 72.10(b). The Applicant's proposed movement of casks by locomotive in the Low rail line corridor presents a new wildfire ignition source. This is a serious matter in an area that is prone to wildfires.

There is a history of wildfires moving south to north through Skull Valley along the eastern side of the Cedar Mountains. *See* Affidavit of David Schen, attached hereto as Exhibit 1. Also fires are often known to cross the Cedar Mountains from the west into the western edge of Skull Valley. Id. at ¶ 7. The Applicant's proposed rail corridor will run south along the eastern edge of the Cedar Mountains for a distance of 26 miles from Interstate 80 to the northwestern side of the Skull Valley Reservation. The vegetation in this area is primarily desert shrub and grass land. Vegetation includes native grasses, sage brush and Utah juniper, and introduced species such as June grass (cheat grass) and crested wheat grass. Due to frequent and recurring wild fire and a history of heavy grazing, the primary vegetation is June grass. Fuels in this plant

community dry in early June and ignite very easily. Id. at ¶ 8. There are few, if any, irrigated areas in the vicinity of the rail line that would interrupt a fire caused by the Applicant's use of the rail line. Id. at ¶ 9. Thus, construction, operation and activities associated with the rail line will introduce a new potential fire source into an area that already has a high potential for wildfires. Id. at ¶ 7.

First, various activities that will take place because of the Applicant's rail transportation system will introduce new sources of igniting wildfire. During construction of the rail line, activities such as welding, grinding of rail and the presence of fuel for the operation of machinery will present potential fire hazards. Id. at ¶ 10. Most of these activities will not cease once construction is completed because on-going track maintenance will create similar hazards. Id. When the transportation corridor is in active use, a wildfire could start, for example, from sparks caused by friction or from the train exhaust stack. A fire could also be caused from a hot brake shoe sheering off the locomotive or rail carriage wheels. Id. at ¶ 11.

The ER is woefully deficient in its discussion of fire hazards posed by the new railroad and it does not discuss, at all, the potential for starting wildfires. There is no mention of the potential for the operation of the rail line to ignite wildfires or how the Applicant will respond if it is responsible for causing a

wildfire. The sum and substance of the Applicant's discussion about wildfires appear to be a statement that to reduce the potential for fires the Applicant's rail corridor will be 40 feet wide and cleared of vegetation and the rail line will be constructed to an elevation that will be close to grade. ER Rev. 1 at 4.4-9. It should be noted that the Applicant must rely on whatever width of right-of-way the BLM will grant it to cross public lands. Given the Applicant's plan to clear 776 acres of vegetation, there is no certainty that BLM will grant the Applicant the width it requests. *See* ER Rev. 1 at 4.4-1. Furthermore, a 40 foot wide corridor may not be sufficient to prevent sparks from being thrown beyond the cleared corridor. The ability of fire fighting equipment to cross the Applicant's rail line is discussed below.

Second, the ER fails to evaluate, or even mention, the increased risk of wildfires caused by an increase of human activity near the railroad. Presently, access to the west side of Skull Valley is poor but the railroad will be accompanied by more developed access. Usually, rail lines have an access road alongside to facilitate maintenance. In addition, improved points of access to the west side of Skull Valley may be developed during construction of the rail line. Thus, the improved access to the west side of Skull Valley may result in an increase in the occurrence of human caused fires. Schen Affidavit at ¶ 12.

Third, the Applicant's proposed rail line will create an impediment to

fighting wild fires. As mentioned above, current access to the west side of Skull Valley is poor. Id. at ¶ 13. Typically in this area responders use four-wheel drive vehicles and drive cross country to fight wild land fires. Hand crews may also be used but generally, heavy equipment is not used because of the damage it may cause to the fragile ecosystem. The four-wheel drive vehicles carry a water tank containing 200-300 gallons of water. The vehicles will have difficulty directly crossing the rail line. Even if the rail line is constructed close to existing grade, fire fighting vehicles will be unable to climb up the vertical grade and profile of the rail, especially given the gross weight of the vehicle and water tank and also because the vehicle will be unable to get any traction from the ballasted rail bed. Id. Thus, the rail line will cause response vehicles to detour to a constructed rail crossing instead of being able to follow a fire cross country. This is likely to significantly delay wildfire responses, thus increasing the risk that wildfires will spread.

In addition, responders to fires will be put at increased risk because of the potential for collisions with trains in the dense smoke of a range fire. Id. at ¶ 14. Furthermore, the presence of hazardous material such as spent nuclear fuel may further endanger responders as well as impede their fire fighting activities around such hazardous material because firefighters will be reluctant to pursue a wildfire in the vicinity of a train load of spent nuclear fuel casks. If

firefighters are aware that high level nuclear waste is within the perimeter of the fire they will err on the side of caution and personal safety and back off until the subject area specialist ascertains that the hazardous cargo is contained and fire fighter safety guaranteed. Id. at ¶ 15. This will be likely be the case whether or not the spent nuclear fuel in the transportation cask will be at risk if it is engulfed by a wildfire. Id. The ER fails to address these additional risks.

To be complete, the Environmental Report must address how activities in the Low rail corridor may cause the potential to ignite wildfires, what mitigation measures the Applicant intends to take, and how the presence of high level nuclear waste affects fire fighting efforts. The ER must also analyze how the 26 mile north-south rail line may impede fire fighting activities.

Contention II. Costs and effects associated with the Low Rail Corridor

Contention: The Low Corridor License Amendment does not comply with 10 CFR § 72.100(b) or NEPA, including 10 CFR § 51.45(c), and 40 CFR § 1508.25 because it fails to evaluate, quantify and analyze the costs and cumulative impacts associated with constructing and operating the rail line on the regional environment.

Basis: NRC regulations require Applicant to define the potential effects of the ISFSI on the region. In particular, 10 CFR § 72.100(b) requires an evaluation of "the effects on the regional environment resulting from

construction, operation, and decommissioning of the ISFSI...." Moreover, 10 CFR § 51.54(c) requires an analysis in the environmental report of "other benefits and costs of the proposed action." Furthermore, Council on Environmental Quality ("CEQ") regulations require that an Environmental Impact Statement consider cumulative impacts. 40 CFR § 1508.25(c). "Cumulative impact" is defined in 40 CFR § 1508.7 as:

> the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

CEQ regulations further require that "cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement." Id. § 1508.25(a)(2).

The Low Rail Corridor is being constructed solely to move spent nuclear fuel casks from the Union Pacific mainline at the junction of Interstate 80 and Low across public lands to the Skull Valley reservation. The rail corridor has no other independent utility other than to serve the Applicant's ISFSI. Thus, the Low Rail Corridor is inextricably part of the Applicant's ISFSI project and as such must be evaluated under the criteria in 10 CFR §§ 72.100(b) and 51.54(c) and CEQ regulations.

The Low Corridor License Amendment is wholly without discussion of the direct and indirect costs or cumulative impacts associated with the construction and operation of the rail line. Rather the amendment describes only the indirect benefits of the rail line, *e.g.*, the rail line will provide "opportunities for further Band economic development projects." ER Rev. 1 at 7.2-3.

There are numerous costs and cumulative impacts associated with the Low Rail Corridor that must be evaluated and quantified, including the following:

1. The operation of the rail line creates an increased risk of fire in an area that is prone to range fire. *See* Contention ~~HEAVY HAUL~~ HH above, whose basis is incorporated herewith by reference. The ER fails to quantify the costs associated with fires ignited as a result of activities occurring in the rail corridor. Nor has the Applicant evaluated the cumulative impacts that these newly introduced fire hazards pose to the Skull Valley area.

2. There is the potential that endangered, threatened and candidate endangered species may be found in the Low Corridor, *e.g.*, Ute Ladies-Tresses, Least Chub, Spotted Frog, Peregrine Falcon, Bald Eagle and Mountain Plover ER Rev. 1, Table 2.3-2. These species, other sensitive species, and their food base may be impacted by construction activities, noise levels and operation of

the railroad. Furthermore, some wildlife species will be permanently driven out of the area either because of destruction of habitat or from noise and other activities associated with construction, operation, and maintenance of the railroad. ER Rev. 1 at 4.4-4. Noise levels from construction and operation of the railroad may also disrupt mating and breeding activities. Furthermore, the railroad may act as an artificial barrier to the traditional range of some wildlife. For example, the railroad will probably cut off winter feeding range for wild horses and it may disrupt other established wildlife migration patterns for mule deer and pronghorn antelope. Id. None of these costs associated with the railroad has been quantified, nor the cumulative impacts sufficiently analyzed in the ER.

3. No account has been taken of the visual impact the railroad will have on the nearby BLM Cedar Mountains Wilderness Study Area ("WSA") or other locations in Skull Valley. The Cedar Mountains WSA is located parallel to and to the west of the Applicant's rail line. *See* 2 Utah BLM Statewide Wilderness Final Environmental Impact Statement at "Cedar Mountains WSA" Map 2 (showing WSA boundaries) (November 1990) attached hereto as Exhibit 2. In some places the WSA boundary is less than two miles from the railroad. *Cf.* Exh. 2 and License Application, Rev. 1, Fig. 1-1. Moreover, the Applicant has not quantified the costs associated with noise levels from construction activities

and operation of the railroad on wilderness and recreational areas. The railroad will be visible from the WSA and other recreation areas in Skull Valley and noise from the operation of the rail line will be heard, thus destroying the solitary values associates with wilderness areas.

4. Clearing and grubbing activities prior to railroad construction will destroy as much as 776 acres of acres of vegetation. ER Rev. 1 at 4.4-3. This vegetation provides habitat for a variety of wildlife species. Id. The Applicant claims it will be able to revegetate a significant amount (621 acres) of vegetation destroyed during construction, with a permanent loss of 155 acres of vegetation. Id. The area of habitat destruction is located in a sensitive, slow growing, xeric environment. Such areas, notoriously sensitive to environmental impacts, are difficult to restore. The ER is inadequate because it fails to demonstrate how the Applicant plans to carry out revegetation of 621 acres in such an sensitive and slow growing environment. Any discussion of revegetation efforts must also show where and how the Applicant will obtain access to needed water.

5. The ER states that the rail line will cross the Hastings Trail and Donner-Reed Trail. ER Rev. 1 at 2.9-3. Thus, two significant historical resources may be lost where the rail line crosses these two pioneer trails. The ER does not quantify or otherwise evaluate this loss as a cost of obtaining a license to store

spent nuclear fuel on the Skull Valley reservation.

6. The Applicant's 26 mile long north-south railroad along Skull Valley will impede recreational users and ranchers from their established ability to cross Skull Valley from east to west (or west to east). While the ER mentions that the proposed rail line will cross several roads, it is unclear whether there will be constructed rail crossings for all roads, including dirt jeep trails. Moreover, the presence of the railroad nonetheless disrupts recreational activities such as off road vehicle use and hunting and it will also disrupt ranching activities. ER Rev. 1 at 4.4-8. Once again, the ER fails to quantify the costs or evaluate the cumulative impacts associated with the railroad – this time as they relate to recreational users and ranchers.

None of the above-mentioned costs and impacts have been adequately quantified and evaluated (if at all) by the Applicant in its Environmental Report and thus the ER is deficient to meet the requirements of NEPA.

Contention B-1. License Needed for Intermodal Transfer Facility

CONTENTION: PFS's application should be rejected because it does not seek approval for receipt, transfer, and possession of spent nuclear fuel at the Rowley Junction Intermodal Transfer Point ("ITP"), in violation of 10 CFR § 72.6(c)(1), in that the Rowley Junction operation is not merely part of the transportation operation but a de facto interim spent fuel storage facility at

which PFS will receive, handle, and possess spent nuclear fuel. Because the ITP is an interim spent fuel storage facility, it is important to provide the public with the regulatory protections that are afforded by compliance with 10 CFR Part 72, including a security plan, an emergency plan, and radiation dose analyses.[2]

BASIS (as amended): Initially the Applicant intended to locate an intermodal transfer point at Rowley Junction and either construct a rail line along Skull Valley Road or move casks from Rowley Junction by heavy haul truck along Skull Valley Road to the ISFSI. License Application, Rev. 0 at 1-1. In its recent license amendment, the Applicant retains two alternatives for shipping casks to the ISFSI: one by rail, the other by intermodal transfer from rail to heavy haul truck. The location of the rail line has changed from Rowley Junction to Low, but the Intermodal Transfer Point remains at Rowley Junction–albeit 1.8 miles to the west of the initial site.[3] For all intents and

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[2] The wording of this contention is as admitted by the Board. LBP-98-7 at 56-58, App. A at 1. The "Basis" is amended to account for proposed changes at the ITP as a result of the Applicant's license amendment dated August 28, 1998. Contention B-1 is supported by the Declaration of Dr. Marvin Resnikoff, attached hereto as Exhibit 3.

[3] Although the Low railroad is the Applicant's professed preferred alternative for transporting the casks to the ISFSI (ER Rev. 1 at 2.1-3), many things need to happen before the Applicant may build and use the railroad. For this option to be viable, the Applicant must acquire a 776 acre (*i.e.* 32 mile long 200 foot wide) right-of-way across public lands from the U.S. Bureau of Land Management ("BLM"). ER Rev. 1 at 4.4-1. This major federal action will require BLM to prepare an EIS as well as comply with other procedures under the Federal Land Policy Management Act, 43 USC §§ 1701 to 1784. Consequently, the vitality of the Rowley

purposes, the factual and legal issues raised by the State and admitted by the Board in Contention B remain unchanged.

Like the original application, the proposed ITP consists of a "rail siding off the Union Pacific Railroad mainline, a 150 ton gantry crane, and a tractor/trailer yard area." SAR Rev. 2 at 4.5-3. The crane is single-failure proof, and housed in a weather enclosure. Id. At the ITP, spent fuel casks will be transferred from railroad cars to heavy-haul tractor/trailer trucks for transport along Skull Valley Road to the ISFSI. Id. at 4.5-4. The ITP would still be located next to the Union Pacific mainline and in close proximity to Interstate 80 and the industrial salt plant. ER Rev. 1 at 2.1-3, 4.4-1.

The Applicant's operations at Rowley Junction are not merely a part of the transportation operation. Cask receipt, handling and transfer mechanisms will be the same as proposed at the originally proposed ITP. The Applicant will be receiving and handing hundreds of tons of spent nuclear fuel at a fixed location, using fixed equipment that is owned and operated by the Applicant for the purpose of facilitating the onsite storage of spent fuel at the ISFSI.

Under the current license amendment, the ITP will still receive a substantial number of spent nuclear fuel casks. On average, the Applicant

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Junction ITP as an integral of the Applicant's ISFSI operation still remains, at least until completion of the BLM approval process.

expects the Rowley Junction ITP to receive two shipments per week, with each shipment consisting of 1-3 transportation casks. *See* letter dated September 21, 1998, with attachment, from John Donnell, Private Fuel Storage to Glenn Carpenter, BLM, attached hereto as Exhibit 4. Thus, between 100-300 casks annually will be shipped to the Rowley Junction ITP. When the shipments come into Rowley Junction, the Applicant must offload each cask from the rail car using its gantry crane located at the ITP onto a heavy haul truck for transport along Skull Valley Road. It is doubtful that a heavy haul truck could perform more than one cask shipment due to the time required to load the cask onto the truck at the ITP, the vehicle's slow speed, and the time required to be spent at the ISFSI before the truck can be released for a return shipment. *See* SAR Table 5.1-2.

Neither the initial application nor the recent license amendment discusses the number of heavy haul trucks that will be available to transport the casks, the mechanical reliability of these units, and their performance under all weather conditions.[4] SAR Rev. 2 at 4.5.4.2 states that the maximum weight of the loaded shipping cask will be 142 tons and require the use of overweight trailers. The tractor/trailer is 12 feet wide and travels at "low speeds." Given

[4] Without such an explanation, a worse case scenario should be assumed.

the special design features, size and probable costs of these units (*see* SAR Fig. 4.5-4), it should be assumed that the Applicant will only have one unit available to transport casks from Rowley Junction ITP to the ISFSI.

Given the operational constraints on the ITP associated with the anticipated slow speeds and long travel distances (24 miles one-way) required for heavy haul transport from the transfer point to the proposed ISFSI, the anticipated number of shipments (100 to 300 casks annually, requiring 100 to 300 one-way heavy haul trips), and the anticipated use of a public highway (with no available heavy haul routing alternatives), a queuing of casks at the intermodal transfer point awaiting heavy haul transport is apparent. During the projected lifetime of the facility a large number of casks will be transported though Rowley Junction, and at least part of the time, a cask or casks will be present at Rowley Junction, thus making Rowley Junction a storage facility for nuclear materials.

Another factor that may significantly contribute to the queuing of casks at Rowley Junction is the fact that PFS intends to return defective or contaminated casks to the originating utility. Thus, there are likely to be heavy haul trucks going in both directions, necessitating greater use of cranes and more coordination of transfer operations.

As a result, the ITP will constitute a de facto interim spent fuel storage

facility, as defined in 10 CFR § 72.3, at which PFS will receive, handle, and possess spent nuclear fuel for extended periods of time. Accordingly, PFS should not be granted a license unless it includes possession of spent nuclear fuel at the ITP.

Moreover, Part 72 licensing is necessary in order to protect the public health and safety. The ITP is stationary in nature, including the construction and installation of a facility and heavy equipment, the continuous presence of spent fuel arriving at or departing from the ITP, and the potential long-term storage of some of the fuel. Because of the stationary nature of the ITP, it is important to provide the public with the regulatory protections that are afforded by compliance with 10 CFR Part 72. For instance, PFS should have a security plan that protects the site from intruders according to NRC standards. There should also be an emergency plan to protect workers and the public in the event of an accident at the ITP. PFS should also provide assurance that the ITP is designed in a way that protects public health and safety, using appropriate structures, equipment, and protective measures. The SAR and the recent license amendment fail to address these concerns. In the absence of such measures, the ITP poses an unacceptable safety and health risk to workers and the public.

The State Satisfies the Commission's Late-Filing Criteria:

The State submits that it satisfies the criteria under 10 CFR. § 2.714(a)(1) for late-filing the two new contentions and a contention with an amended basis:

First, the State has good cause for late filing, because the license amendment on which it relies only became available when PFS provided it to the State on August 31, 1998. Since that time the State has worked with State agencies and experts in reviewing the information and developing contentions based on the amendment. During the past month, the State's time and resources have also been consumed in reviewing informal discovery material and responding the Applicant's discovery requests. The State submits that, given the need to review the material and work with experts to evaluate it and prepare contentions, and given the other competing demands of litigation, it is reasonable to submit these contentions within thirty days of receiving the material.

Second, the State has no means, other than this proceeding, to protect its interests in the issues identified above.

Third, the State's participation in this proceeding can reasonably be expected to assist in developing a sound record. The State is represented by experienced counsel, and assisted by experts from State agencies as well as those whom the State has retained to provide expert assistance for this and other

contentions. *See* Affidavit of David C. Schen (Exhibit 1) and Declaration of Dr. Marvin Resnikoff (Exhibit 3).

Fourth, there are no other parties who will represent the State's interests with respect to the issues raised in the above Contentions.

Finally, it is unlikely that admission of these contentions would broaden or delay the proceeding significantly, as the scope of issues submitted by the State and ruled on by the Board is quite broad already. Moreover, Contention B has already been admitted and Contention ~~HEAVY HAUL~~ HH C is similar to the fire issues admitted in Contention R. Moreover, other intervenors who have not yet received a copy of the license amendment will be entitled to file contentions after their review of the material. Thus, the State's filing now will not delay the proceeding. Furthermore, any delay is outweighed by the significance of this issue raised as a result of the new transportation corridor. Accordingly, the above Contentions satisfy the NRC's criteria for late consideration.

DATED this 29th day of September, 1998.

Respectfully submitted,

Denise Chancellor, Assistant Attorney General
Fred G Nelson, Assistant Attorney General
Diane Curran, Special Assistant Attorney General
Connie Nakahara, Special Assistant Attorney General

Attorneys for State of Utah
Utah Attorney General's Office
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## CERTIFICATE OF SERVICE

I hereby certify that copies of STATE OF UTAH'S CONTENTIONS RELATING TO THE LOW RAIL TRANSPORTATION LICENSE AMENDMENT were served on the persons listed below by electronic mail (unless otherwise noted) with conforming copies by United States mail first class, this 29th day of September, 1998:

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Mail Stop: 16-G-15 OWFN
U. S. Nuclear Regulatory Commission
Washington, DC 20555
(*United States mail, first class only*)

Denise Chancellor
Assistant Attorney General
State of Utah

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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

STATE OF UTAH )
) ss.
COUNTY OF SALT LAKE )

## AFFIDAVIT OF DAVID C. SCHEN

I, DAVID C. SCHEN, being first duly sworn upon oath, depose and state as follows:

1. I am employed as Ecosystem Management Coordinator at the Division of Forestry, Fire, and State Lands, Utah Department of Natural Resources, and have worked within this Division since 1971.

2. I earned a Bachelors of Science degree in Forestry in 1971, from Utah State University.

3. I worked as Area Forester (1971-1979) in the Division's Bear River Area office, where I was responsible for the fire protection program; as

the Division's Regional Manager (1979-1982) responsible for delivering fire protection services to three areas; and as Forest Stewardship Coordinator (1982-1995).

4. As Ecosystem Management Coordinator (1995 to present), my duties have included oversight of the fire management program and management of fire crews within the Division, which is responsible for fire protection services on 15 million acres of forest, range, and watershed lands within the State of Utah. I have taken part in numerous fire qualification and certification courses as part of my duties. In addition, since 1985 I have served on incident management teams which are used for fire suppression, and am qualified as operations section chief, responsible for directing fire suppression during particular incidents.

5. As part of my duties, I have reviewed the License Amendment Application dated August 28, 1998, submitted to the Nuclear Regulatory Commission by Private Fuel Storage, LLC, Applicant for an Independent Spent Fuel Storage Installation on the Skull Valley Goshute Reservation.

6. The License Amendment Application describes a new transportation route along which the Applicant proposes to transport spent

nuclear fuel by rail spur from the Union Pacific main rail line near Low, Utah to the Skull Valley Goshute Reservation. The spur is proposed to be constructed along the eastern edge of the Cedar Mountains for a distance of 26 miles.

7. In my opinion, based upon my experience and training, the License Amendment Application does not adequately address a number of fire hazard issues pertinent to this new transportation corridor (the Low rail corridor), because this area is prone to wildfires. There is a history of fires moving south to north through Skull Valley along the eastern side of the Cedar Mountains; such fires have been known to frequently cross over the Cedar Mountain from the west spreading into the western part of Skull Valley.

8. The vegetation in Skull Valley is primarily desert shrub and grass land. Fuels in this plant community dry in early June and ignite very easily. Vegetation includes native grasses, sage brush, Utah juniper, and introduced species such as June grass (cheat grass) and crested wheat grass. Due to frequent and recurring wild fire and a history of heavy grazing, the primary vegetation is June grass.

9. I am aware of only a few irrigated areas in Skull Valley, but they

are located nearby the ranches on the east side of the valley and close to the reservation. There are also some mudflats in the north end of the valley. Neither of these two types of areas are sufficient to interrupt a wildfire occurring in Skull Valley.

10. The activity associated with the construction and maintenance of the rail spur, such as welding, grinding of rail and the presence of fuel for the operation of machinery will present potential fire hazards.

11. Additionally, fires can result in sparks caused by friction or from the train exhaust stack, or from a hot brake shoe sheering off the locomotive or rail carriage wheels.

12. The rail spur may result in an increase in the occurrence of human caused fires. Rail lines typically have an access road alongside to facilitate maintenance. In this case additional or improved points of access to the west side of Skull Valley might be developed from the highway during construction of the rail line. Since the Low Corridor is proposed to cross primarily public land, the improved access on the west side is likely to result in more recreational use of the area, and thus, a greater potential for human caused fires.

13. Access to the west side of Skull Valley has always been poor for fire response vehicles and personnel. In this area responders typically use four-wheel drive vehicles and drive cross country to fight wild land fires. Hand crews may also be used but generally, heavy equipment is not used because of the damage it may cause to the fragile ecosystem. The four-wheel drive vehicles carry a water tank containing 200-300 gallons of water. The vehicles will have difficulty directly crossing the rail line. Even if the rail spur is constructed close to existing grade, fire fighting vehicles will be unable to climb up the vertical profile of the grade and rail, especially given the gross weight of the vehicle and water tank and also because the vehicle will be unable to get any traction from the ballasted rail bed.

14. Responders to fires will be put at increased risk because of the potential for collisions with trains in the dense smoke of a range fire.

15. In my opinion, if fire fighters were aware that high level nuclear waste was within the perimeter of the fire, they would err on the side of caution and personal safety. Firefighters will be reluctant to pursue a wildfire in the vicinity of a train load of spent nuclear fuel casks. They may very likely back off until a subject area specialist ascertained that the hazardous cargo was

contained and fire fighter safety was guaranteed.

FURTHER AFFIANT SAYETH NOT.

DATED this September 29, 1998.

David C. Schen

DAVID C. SCHEN

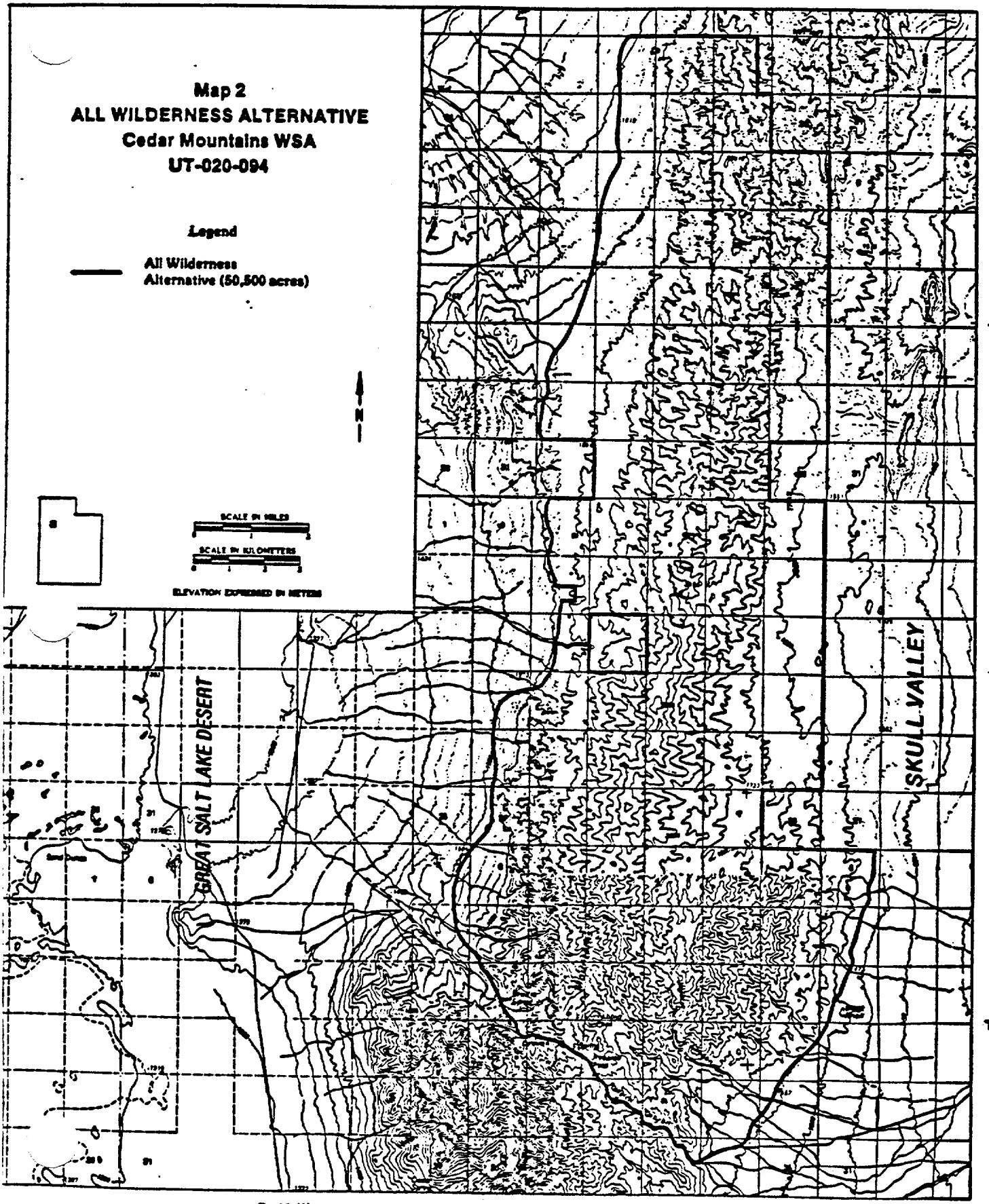
Voluntarily signed and sworn to before me this 29 day of September, 1998, by the signer, whose identity is personally known to me or was proven to me on satisfactory evidence.

[illegible] CRIFFITHS

Notary Public

NOTARY PUBLIC
Residing at: Murray UT

My Commission expires: 1-25-99


Map 2
ALL WILDERNESS ALTERNATIVE
Cedar Mountains WSA
UT-020-094
Legend
All Wilderness Alternative (50,500 acres)
N
SCALE IN MILES
SCALE IN KILOMETERS
ELEVATION EXPRESSED IN METERS
GREAT SALT LAKE DESERT
SKULL VALLEY
T. 2 S.
T. 3 S.
T. 4 S.
R. 11 W.
R. 10 W.

UNITED STATES OF AMERICA

BEFORE THE U.S. NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

| | | |
|---|---|---|
| In the Matter of | ) | |
| | ) | |
| PRIVATE FUEL STORAGE, L.L.C. | ) | |
| (Independent Spent Fuel | ) | Docket No. 72-22-ISFSI |
| Storage Installation) | ) | |
| | ) | September 29, 1998 |
| | ) | |

DECLARATION OF DR. MARVIN RESNIKOFF

I, Dr. Marvin Resnikoff, declare under penalty of perjury that:

1. I am the Senior Associate at Radioactive Waste Management Associates, a private consulting firm based in New York City. On November 20, 1997 and January 16, 1998, I prepared declarations which were submitted to the Licensing Board by the State of Utah in support of its contentions regarding Private Fuel Storage, L.L.C.'s proposed Independent Fuel Storage Installation. A statement of my qualifications was attached to November 1997 declaration.

2. I am familiar with Private fuel Storage's ("PFS's") license application and Safety Analysis Report in this proceeding, as well as the nonproprietary versions of applications for the storage and transportation casks PFS plans to use. I am also familiar with NRC regulations, guidance documents, and environmental studies relating to he transportation, storage, and disposal of spent nuclear power plant fuel, and with NRC decommissioning requirements.

3. I assisted in the preparation of, and have reviewed, the State of Utah's Contention B-1, License Needed for Intermodal Transfer Facility. The technical facts presented in the State's Reply regarding those contentions are true and correct to the best of my knowledge, and the conclusions drawn from those facts are based on my best professional judgment.

Dr. Marvin Resnikoff

*Private Fuel Storage, L.L.C.*



*P.O. Box C4010, La Crosse, WI 54602-4010*
*Phone 303-741-7009 Fax: 303-741-7806*
*John L. Donnell, P.E., Project Director*

September 21, 1998

Mr. Glenn Carpenter
District Manager
Bureau of Land Management
2370 South 2300 West
Salt Lake City, UT 84119

APPLICATION FOR TRANSPORTATION ON FEDERAL LANDS
PRIVATE FUEL STORAGE FACILITY
PRIVATE FUEL STORAGE L.L.C.

Reference: 1) Private Fuel Storage LLC letter, Parkyn to Carpenter, Application for Transportation on Federal Lands, dated August 28, 1998

Enclosed is a revised first page to the right-of-way application for the Intermodal Transfer Point that was transmitted in Reference 1. A clarification has been made for Project Description items 7 (e) and (f) in explaining the number of rail shipments per week and transportation casks per shipment. The text has been changed from "less than one rail shipment per week" to "two rail shipments on average" in 7 (e), and from "each rail shipment consists of 3 - 5 transportation casks" to "1 - 3 transportation casks" in 7 (f).

We hope that this change has not cause you any inconvenience. If you have any questions, please contact me at 303-741-7009.

Sincerely,

John L. Donnell

John L. Donnell, Project Director
Private Fuel Storage L.L.C.

Enclosure

Copy to: L. Bear
D. Allison
M. Delligatti
J. Silberg
M. Swimmer
J. Donnell
[redacted]icellor
D. Allison
P. Winmill

STANDARD FORM 299 (10/95)
...ed by DOI/USDA/DOT
...87 and Federal
...Notice 5-22-95

# APPLICATION FOR TRANSPORTATION AND UTILITY SYSTEMS AND FACILITIES ON FEDERAL LANDS

FORM APPROVED
OMB NO. 1004-0060
Expires: August 31,1998

FOR AGENCY USE ONLY

NOTE: Before completing and filing the application, the applicant should completely review this package and schedule a preapplication meeting with representatives of the agency responsible for processing the application. Each agency may have specific and unique requirements to be met in preparing and processing the application. Many times, with the help of the agency representative, the application can be completed at the preapplication meeting.

Application Number

Date Filed

1. Name and address of applicant *(include zip code)*

Private Fuel Storage L.L.C.
PO Box C4010
La Crosse, WI 54602-4010

2. Name, title, and address of authorized agent if different from item 1 *(include zip code)*

John Donnell, Project Director
PO Box 5406
Denver, CO 80217-5406

3. TELEPHONE *(area code)*
303-741-7009

Applicant Private Fuel Storage L.L.C.

Authorized Agent

4. As applicant are you? *(check one)*
a. ___ Individual
b. ___ Corporation*
c. ___ Partnership/Association*
d. ___ State Government/State Agency
e. ___ Local Government
f. ___ Federal Agency
g. ✓ Limited Liability Corporation

* *If checked, complete supplement page*

5. Specify what application is for: *(check one)*
a. ✓ New authorization
b. ___ Renewing existing authorization No.
c. ___ Amend existing authorization No.
d. ___ Assign existing authorization No.
e. ___ Existing use for which no authorization has been received *
f. ___ Other*

* *If checked, provide details under item 7*

6. If an individual, or partnership are you a citizen(s) of the United States? ___ Yes ___ No

7. Project description (describe in detail): (a) Type of system or facility, *(e.g., canal, pipeline, road)*; (b) related structures and facilities; (c) physical specifications *(Length, ...th, grading, etc.)*; (d) term of years needed; (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of ...truction; and (h) temporary work areas needed for construction *(Attach additional sheets, if additional space is needed.)*

(a) The right of way (ROW) will be used to construct an intermodal transfer point (ITP) next to the Union Pacific mainline 1.8 miles West of Timpie, Utah, on a parcel of ground within the N½ SE ¼ SE ¼ of Section 12, T.1N., R.8W., SLBM, which is public land administered by the BLM. See attached Figure 2.1-1 drawings 0599501-EY-09 & 0599502-EY-14. The ITP is discussed in more detail in the Environmental Report (ER) at Section 3.2.1.4, "INTERMODAL TRANSFER POINT/SKULL VALLEY ROAD."

(b) The ITP will be use as part of the transportation of spent commercial nuclear fuel to the Private Fuel Storage Facility (PFSF), a temporary spent fuel storage site. The sealed transportation casks will be transferred from rail cars to trucks at the ITP for further shipment to the PFSF via Skull Valley Road. See description of the PFSF in ER Sec. 3.2.1.2, "STORAGE FACILITY."

(c) The ROW is approximately 9 acres of flat land located between the Union Pacific mainline and the I-80 frontage road (2 acres of Union Pacific land will also be used). The facilities will include one metal building (80 ft by 200 ft) and a 30 ft wide by 500 ft long access road connecting the ITP to an existing frontage road. The ITP also includes rail sidings, which are on Union Pacific right of way. See ER Sec. 3.2.1.4, "INTERMODAL TRANSFER POINT/SKULL VALLEY ROAD."

(d) Term of use expected to be 50 years.

(e) During the initial years of operation until the storage facility reaches its capacity of 4000 stored canisters, it is expected that between 100 to 200 shipments of transportation casks will be shipped to the site each year, resulting in two rail shipments on average per week being transferred to trucks at the ITP throughout the year. At the end of the storage facility's life, the 4000 canisters will be shipped from the site to the Department of Energy. See details in ER Section 3.3, "FACILITY OPERATION."

(f) Each rail shipment consists of 1 – 3 transportation casks to be transferred to trucks. See ER Sec. 1.2. "NEED FOR THE FACILITY," for a more detailed discussion of the anticipated shipment volumes.

(g) Construction of the ITP is scheduled to begin at the beginning of 2001 and last about 1 year. See ER Sec. 1.3, "PROPOSED PROJECT SCHEDULE."

(h) All work will be performed within the request ROW boundaries and Union Pacific land.

...ttach a map covering the area and show location of project proposal See attached Figure 2.1-1 and drawings 0599601-EY-09 and 0599602-EY-14

9. State or Local government approval: ___ Attached ___ Applied for ✓ Not Required

(Continued next page)

ATTACHMENT C



## Committee on Commerce Hearing Witness

## Hearing Regarding: Nuclear Waste Policy Act of 1999

| Date | Subcommittee(s) | Status | Panel |
|---|---|---|---|
| 03/12/99 | Subcommittee on Energy & Power | Testified | Panel 1, Witness 1 |

See Also
Energy
Yucca Mountain
H.R. 45
Thomas Links
H.R. 45

# Statement of The Honorable Bill Richardson

Secretary
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Thank you, Mr. Chairman, and Members of the Subcommittee, for the opportunity to appear before you today to discuss alternatives for the management of spent nuclear fuel from civilian nuclear power plants until we are able to permanently dispose of it in a geologic repository.

The Administration continues to believe that the overriding goal of the Federal Government's high-level radioactive waste management policy should be the establishment of a permanent, geologic repository. Such a repository is essential not only to dispose of commercial spent fuel, but also to dispose of: spent fuel and high-level waste from the cleanup of the Department's nuclear weapons complex, unique commercial spent fuel transferred to the Department (such as Three Mile Island and Fort St. Vrain spent fuel), and spent fuel and high-level waste associated with the Navy's nuclear-powered fleet. A permanent repository is also important to our non-proliferation efforts to demonstrate alternatives to reprocessing, important for the disposition of foreign research reactor fuel being returned to the U.S., and an option for disposition of surplus plutonium from nuclear weapons stockpiles.

## YUCCA MOUNTAIN

Before addressing the proposed legislation -- H.R. 45, the Nuclear Waste Policy Act of 1999 --and an alternative approach, I would like to review quickly how this

Administration has moved the Civilian Radioactive Waste Management Program forward in the last several years. In many of the earlier years it appeared that there was little progress towards siting a repository. In 1993, however, the Department broke ground and began drilling the miles of tunnel needed for scientific investigations, completing the five-mile loop in 1997. We also drilled a cross-drift at the horizon of the potential repository area. Reaching these areas, we are now able to verify model predictions that could not be confirmed without being inside the mountain. We are conducting three different thermal tests to evaluate how the heat of the waste could impact the surrounding rock and the repository structure. We are also now able to study water movement through the mountain. The verification of our models with real data from the mountain reduces the uncertainties in our assessment of whether Yucca Mountain will work as a permanent repository.

We are reaching the conclusion of our site characterization effort at Yucca Mountain. In December 1998, I submitted the Viability Assessment of a Repository at Yucca Mountain to the Congress and to the President. This subcommittee received testimony on the Viability Assessment in February when the Acting Director, Lake Barrett, appeared before you.

The Viability Assessment revealed no technical "showstoppers," but it did identify additional scientific and technical work needed before a decision can be made whether to recommend Yucca Mountain as the site for a repository. Consequently, we have asked for close to a $50 million increase in the FY2000 budget for site characterization activities to address these concerns - a 17.4 per cent increase. We will study the presence and movement of water through the repository block, the effects of water movement on the waste package, and the effects of heat from the decay of radioactive materials inside the waste packages on the site's geologic and hydrologic behavior.

It is important to underscore that the scientific and technical work being carried out at Yucca Mountain represents cutting-edge science on a first-of-a-kind project. The United States is at the forefront in developing a geologic repository, and the decisions we make will have impacts throughout the international community.

We are on target to decide in 2001 whether Yucca Mountain is suitable to be the location of a repository and to submit a license application to the U.S. Nuclear Regulatory Commission in 2002. In short, since 1993, although we were

not able to make up for time lost during the early years of the program, we have maintained steady progress and met the key milestones of our Program Plan.

## CONTRACTUAL OBLIGATIONS FOR SPENT FUEL MANAGEMENT

I want to assure you that I am very conscious of the Department's contractual obligation to take spent fuel from utilities beginning in 1998. Notwithstanding the progress being made at Yucca Mountain, the nuclear utility industry and state utility commissions are understandably concerned about the Department's inability to accept spent fuel on the schedule anticipated at the time of enactment of the Nuclear Waste Policy Act of 1982. The inventory of spent fuel in the United States continues to grow. Spent fuel from nuclear power reactors is now stored at 72 commercial reactor sites in 33 states. We know some have already reached their capacity and many are reaching their capacity. Each year reactor sites will require additional on-site storage either in pools or with dry cask storage. There are currently 10 utilities with dry storage facilities in 8 states, and many utilities are concerned about the costs and physical and regulatory limitations on their continued storage of spent fuel at their reactor sites.

As you are aware, the Department is in litigation with a number of utilities related to the Department's contractual obligation to take spent fuel from utilities. The U.S. Circuit Court of Appeals for the District of Columbia has found that the Department has a contractual obligation to commence spent fuel disposal no later than January 31, 1998. The Court, however, has twice rejected the request from utilities for an order directing the Department to physically move spent fuel from their sites and found that the contracts the Department has with the utilities provide a potentially adequate mechanism for relief. Pursuant to the ruling of the Court of Appeals, the Department announced that it would process claims presented to it under the contract, and we have entered into settlement discussions with several utilities.

In separate litigation, ten utilities have filed claims for damages. In the first three cases the Court found that the Department had breached its contracts, and the Department is now engaged in determining the amount of damages owed to these utilities. The other Court of Claims cases are in very preliminary stages with potentially years of litigation still ahead. As indicated by the Justice Department in its testimony before this Subcommittee on February 10, the damages being sought by the ten utilities before the Court of Claims could

total $8.5 billion. This is more than the existing balance in the Nuclear Waste Fund and is roughly 85 percent of the remaining cost to open the repository in 2010. Potential claims from other utilities could be many times this amount.

The Justice Department also stated that a decision on whether payments for these judgments would come out of the Nuclear Waste Fund is still pending. Should it become necessary to use the Fund to pay these claims, the Department's ability to complete the repository program would be in jeopardy. Ironically, claims against the Fund could also require a significant increase in the fee charged utilities to maintain the program, and could trigger yet another round of litigation and claims.

I also want to point out that several utilities have come and talked to us about their specific problems and proposed potential solutions. Some of these utilities have asked the Department to take title to their spent fuel onsite at their reactors.

## ADMINISTRATION VIEWS OF H.R. 45

The Administration opposes H.R. 45, which would require the Department to begin accepting waste at an interim storage facility in Nevada no later than June 30, 2003. Making a decision now to put interim storage in Nevada is not the right approach. It simply does not make sense to transport spent fuel across country to Yucca Mountain until we have completed the scientific work and know where a final repository will be. Spent fuel is currently being stored safely at reactor sites, under U.S. Nuclear Regulatory Commission oversight, and can continue to be stored safely until a repository is open.

From a budgetary standpoint, enactment of H.R. 45 could also have several negative impacts on the repository program. First, it will add the cost of construction of an interim storage facility to the program budget, and it will advance the costs of transportation much earlier than now planned. Between now and the year 2010, we estimate that H.R. 45 would add approximately $1.5 billion to the total cost of the civilian radioactive waste program because of the additional cost of the interim storage facility. It would also require expending $2-3 billion dollars for transportation prior to knowing whether Yucca Mountain will be the site for a permanent repository.

In addition to these new budgetary burdens, and perhaps more significantly, H.R. 45 would not provide the Department or the Federal Government relief from the billions of dollars of potential damages likely to be awarded through litigation. By

imposing new statutorily defined obligations and deadlines, H.R. 45 would also create the potential for new litigation if the Department were unable to meet these requirements or if it had the effect of altering the existing utility contracts.

As I stated in my introductory remarks, it is critical to many national goals that we develop the capability to permanently dispose of high-level radioactive waste and spent fuel. We believe H.R. 45 could seriously jeopardize our ability to carry out this effort. For these reasons, and because of the central fact that we have not completed the work necessary to make a decision to recommend Yucca Mountain as a permanent repository site, the Administration remains unequivocally opposed to the enactment of legislation requiring construction and operation of an interim storage facility at Yucca Mountain, and I would recommend a veto of any such legislation.

**PROPOSAL TO TAKE TITLE ON-SITE**

As the Subcommittee has requested, I would like to discuss the Department taking legal title to utilities' spent fuel at reactor sites until a repository is opened. Let me emphasize first that the Department is only at the beginning of the process of analyzing this approach and discussing it with the utility industry and other interested parties. However, it appears to be a practical option that would provide a near-term solution to utilities' spent fuel storage needs and would be relatively easy to implement. The chairman's invitation letter raised a number of specific questions such as how it would be funded, when it would be implemented, who would own and regulate these sites, and how it would affect the Department's contractual liability. These are all very important questions that the Department is in the process of answering, and many of those answers will depend upon the specific needs of individual utilities.

Let me discuss briefly some of the concepts we believe are appropriate to consider as part of that discussion.

Conceptually, the Department could offer to take title to spent fuel consistent with our schedule for acceptance provided under its contracts with utilities. By taking title to the spent fuel, the Department could either assume financial responsibility for the utility's continued management of the spent fuel or possibly assume possession and responsibility for management of the spent fuel. We assume that utilities may have differing opinions on these alternatives, based upon their individual circumstance. For example, a utility with a permanently shut down reactor and no ongoing nuclear operations may want the Department to assume complete

responsibility for the management of the spent fuel and storage facilities, while other utilities with operating reactors may prefer the Department only to take financial responsibility.

As part of an agreement to take title, the Department could agree either to reimburse the utility for the incremental cost of storing that spent fuel or to take a more direct role in the management of the spent fuel and storage facilities. We believe we could implement this proposal by modifying the existing contracts with utilities. We would still have to address a range of issues, including liability, financial and operational responsibilities.

While we want to hear from utilities and other interested parties on how taking title to spent fuel could most efficiently be implemented, our initial thoughts are that a continued reliance on the utilities to manage their spent fuel, rather than the Department, would be most practical and least intrusive on utility operations. Again, the purpose of initiating this dialogue is to better understand what the utilities think and to obtain other relevant perspectives on the issue. Under any approach, the Nuclear Regulatory Commission would continue to provide regulatory oversight of spent fuel storage activities at sites.

In return for the Department taking title and financial responsibility for the spent fuel, the Department would expect the utilities to terminate their litigation and claims; something that H.R. 45 does not address. This would end the uncertainty that continuing the litigation brings to all parties and ensure the continuance of a repository program. The potential cost of current litigation damages already places the repository program in jeopardy. If the Department is unable to proceed with a permanent solution, future costs could be even greater. Consequently, the cost to take title appears to be minimal compared to the potential cost of damages, which as I noted above could end up being assessed against the Nuclear Waste Fund.

The cost of taking title onsite would depend on the final arrangements worked out with utilities for spent fuel management. We have not done a detailed cost estimate. Our rough estimate is that it could cost up to $2 to $3 billion between now and 2010. That cost estimate assumes that we would take title of the fuel in accordance with our contract acceptance schedule. There may also be ways in which these costs can be reduced. For example, one of the major costs of continued onsite storage is the cost of dry storage casks. It may be possible to consider federal purchase or lease of these

casks. Here again, we need to hear from the industry on their views on how we can best address these issues.

Funding for the DOE to take title on-site could be achieved through a variety of means, ranging from deferral of ongoing spent fuel disposal fee payments, to direct reimbursement for costs incurred, to advance payments for anticipated costs. As with other program costs, payments could come from a mix of Nuclear Waste Fund balances, current payments, or appropriated funds. Again, we need to hear from the industry on their views of payment and funding options.

## PROGRAM FUNDING REQUIREMENTS

As we continue to discuss and develop the specifics of a take title alternative to centralized interim storage, we need to take a serious look at how such a proposal would be paid for without imposing undue burdens on either utility ratepayers or the taxpayers. I also want to analyze further proposals that would ensure that the revenues raised by the nuclear waste fee remain available to complete the job of safe management and disposal of nuclear waste.

Both the Administration and the Congress have been aware for some time that the overall constraints of the federal budget process have the potential to limit the availability of funding for the nuclear waste program in the out years. Therefore, I would like to work together with the Congress to assure the repository program continues to be adequately funded. If the Yucca Mountain site is found suitable, it is critical that funding is available after 2001 to meet our obligations as program demands increase and to ensure our ability to meet a date certain for disposal of waste.

In exploring any funding alternatives, I want to preserve the two important objectives I mentioned above : (1) that we do not impose undue burdens on either utility ratepayers or the taxpayers; and (2) that the revenues raised by the nuclear waste fee remain available to complete the job.

## CONCLUSION

Mr. Chairman, we are reaching the conclusion of our site characterization effort. We know technical questions about the site remain. We need to finish our scientific and technical work. Ultimately, it is not only the Department of Energy, but also the Nuclear Regulatory Commission (NRC) that will need to pass judgment on whether a repository can be constructed and operated safely. Therefore, in completing the remaining work at the site, we need to ensure that we have an adequate

technical basis to support a rigorous NRC licensing process. This will require a continued and sustained effort over the next couple of years. However, the completion of the characterization effort is in sight.

I know that you and many other Members of Congress are frustrated because we have not accepted spent fuel and want to be responsive to utilities and state regulatory commissions that have had to deal with additional spent fuel management responsibilities. I want to reiterate the Administration's view that enactment of interim storage legislation is not the solution. Shipping 10,000 metric tons of spent fuel to Yucca Mountain, as proposed in H.R. 45, is inconsistent with the process and principles established for making a decision on the permanent disposal of our Nation's spent nuclear fuel.

I ask this Subcommittee not to proceed with adoption of interim storage legislation and to work with me to fashion a more practical solution. This legislation would place significant additional financial, programmatic, and legal liabilities on the Department's civilian nuclear waste repository program. It would prejudge the selection of Yucca Mountain. And it would not resolve the billions of dollars in claims arising out of the delay in accepting utility spent fuel. We need to address the utilities' spent fuel problems, and I believe that we are at a point where there is a genuine opportunity to explore alternatives.

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| Action | Schedule | News | Contacts | Members |

| Subcommittees | Publications | Commerce-Democrats | Search |

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***The House Committee on Commerce***
***2125 Rayburn House Office Building***
***Washington, DC 20515***
***(202) 225-2927***
***Commerce@mail.house.gov***

Michael O. Leavitt
Governor
Craig L. Dearden
Commissioner
Ferris E. Groll
Deputy Commissioner

# State of Utah

**ATTACHMENT D**

DEPARTMENT OF PUBLIC SAFETY
DIVISION OF COMPREHENSIVE EMERGENCY MANAGEMENT

State Office Building, Room 1110
Box 141710
Salt Lake City, Utah 84114-1710
(801) 538-3400
(801) 538-3770 FAX Line

Earl R. Morris
Director

May 4, 1999

Mr. Scott C. Flanders
Senior Environmental Project Manager
Spent Fuel Project Office
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Flanders:

The Utah Department of Public Safety, Division of Comprehensive Emergency Management (CEM) is the sole State agency designated to mitigate, prepare for, respond to, and recover from the effects of disasters and emergencies throughout Utah. Our vital mission is specifically mandated by Utah statute, and we work closely with local, State and federal agencies, and private sector organizations in the fulfillment of this important work. CEM's long history of service has been recognized to be among the finest in the emergency management field.

As CEM Director, I am appointed as the Governor's Authorized Representative (GAR) in times of emergency and disaster, with specific duties and responsibilities delineated in the State of Utah Emergency Operations Plan that correlate to the Federal Response Plan. I also hold the primary State relationship with the Federal Emergency Management Agency through Region VIII in Denver, Colorado. For example, the GAR coordinates all wildfire suppression activities throughout the State, working closely with the Utah State Forester and the federal Interagency Fire Center.

From this perspective, it is incomprehensible that Private Fuel Storage, L.L.C. (PFS) persists in ignoring the health and safety requirements of the residents of Utah by avoiding contact and coordination with CEM, a posture it has maintained since the inception of its initial proposal to store high-level nuclear waste on the Skull Valley Band, Goshute Indian Reservation in Tooele County. CEM has previously provided extensive oral and written comments during previous public scoping processes related to the PFS proposal, and has directly provided substantial information to PFS and Nuclear Regulatory Commission representatives. To-date, PFS has made no attempt to address any of the critical issues and emergency planning elements brought forth by CEM.

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In the absence of PFS' recognition of its responsibility to follow the precedent of "maximum protection" of the public and environment previously established by CEM, and PFS' continuing failure to cooperate, communicate and coordinate with CEM on all emergency management planning requirements, this agency must vigorously oppose any efforts by PFS to establish the high-level nuclear waste storage facility at Skull Valley. Accordingly, CEM expresses its complete lack of confidence in Private Fuel Storage's proposal of this ill-conceived facility that is so clearly not in the best interests of the people of Utah.

Thank you for your consideration and support of our position.

Sincerely,

Earl R. Morris
Director

ERM/dc/ls

cc: Dr. Dianne Nielson, Executive Director
Utah Department of Environmental Quality

Ferris E. Groll, Deputy Commissioner
Utah Department of Public Safety

Mr. Leo Berggen, Resource Advisor
U.S. Department of the Interior
Bureau of Land Management

Mr. Dale Hamberg
Land Operation Officer
U.S. Department of the Interior
Bureau of Indian Affairs

ATTACHMENT E

Utah!

# State of Utah

*School and Institutional*
TRUST LANDS ADMINISTRATION

Michael O. Leavitt
Governor

David T. Terry
Director

675 East 500 South, Suite 500
Salt Lake City, Utah 84102-2818
801-538-5100
801-355-0922 (Fax)
http://www.trustlands.com

April 14, 1999

LINDA COVILLE
ACTING STATE DIRECTOR
USDI, BUREAU OF LAND MANAGEMENT
UTAH STATE OFFICE
PO BOX 45155
SALT LAKE CITY, UTAH
84145-0155

Dear Ms. Coville:

Let me take this opportunity to congratulate you on your appointment to this position. I look forward to continuing our productive relationship. Please accept this letter as a formal nomination of lands to the BLM/State of Utah Exchange MOU FOCUS LIST:

All public lands in the following sections:

Township 1 South, Range 8 West, SLB&M
Sections 1-12

Township 1 North, Range 8 West, SLB&M
Section 31

Township 1 North, Range 9 West, SLB&M
Sections 7-9, 17, 18, 21, 22, 23, 25-27, & 35

Township 1 North, Range 10 West, SLB&M
Sections 13, 14, 22-24, 26, 27, 33-35

As we contemplate growth along the Wasatch Front, we anticipate that these lands will have potential for long-term industrial development. We would appreciate your immediate attention to this proposal. If you have any questions regarding this nomination, please don't hesitate to contact me.

Sincerely,

KEVIN S. CARTER
ASSISTANT DIRECTOR - SURFACE

**ENSIGN RANCHES OF UTAH, L.C.**
**139 East South Temple, Suite 310**
**Salt Lake City, Utah 84111**
**(801) 328-1600**
**Fax (801) 328-1616**



May 24, 1999

Mr. Leon E. Berggren, Resource Advisor
BUREAU OF LAND MANAGEMENT
Salt Lake District
2370 South 2300 West
Salt Lake City, UT 84119

Via Fax: 977-4397 & Via US Mail

RE: Private Fuel Storage's Proposed Rail Spur in Skull Valley, Tooele County, UT

Dear Mr. Berggren:

On Thursday, April 29th, 1999, Mr. Gregg Simonds, the head of our agricultural operations in Skull Valley, gave oral testimony during the scoping meeting that was held at the Little America Hotel in Salt Lake City regarding the above referenced rail spur.

At that time, Mr. Simonds raised several issues or impacts which ought to be considered in approving the rail spur. However, we believe that the issues raised by Mr. Simonds can ultimately be mitigated. We do not oppose the rail spur being constructed in Skull Valley.

Very truly yours,

Christopher F. Robinson

Christopher F. Robinson
President

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SALT LAKE DISTRICT OFFICE
2370 SOUTH 2300 WEST
SALT LAKE CITY, UTAH 84119

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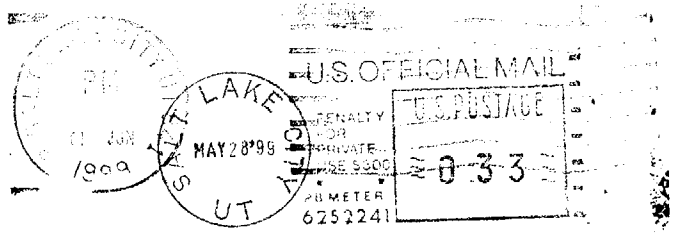


US Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike MS 06F18
Rockville, MD 20852-2738

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Delligatti
Flanders
Docket

# LAND AND WATER FUND OF THE ROCKIES

**MAY 28, 1999**
**VIA US Mail and Email**

Scott C. Flanders
Senior Environmental Project Manager
Licensing and Inspection Directorate
Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Mail Stop 0-6F18
Washington DC 20555
email: nrcweb@nrc.gov


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email: lawfund@rmci.net

**UTAH OFFICE**
3267 East 33rd South #412
Salt Lake City, UT 84109
(801) 355-4545
email: joro61@inconnect.com




**Re: Scoping Comments of Southern Utah Wilderness Alliance (SUWA), Ohngo Gaudadeh Devia (OGD) and Margene Bullcreek on Preparation of an Environmental Impact Statement (EIS) Analyzing the Private Fuel Storage Facility Proposed by Private Fuel Storage, LLC (PFS).**

Dear Mr. Flanders,

This letter constitutes the scoping comments of the Southern Utah Wilderness Alliance (SUWA), Ohngo Gaudadeh Devia (OGD) and Margene Bullcreek regarding the preparation of an environmental impact statement (EIS) analyzing the potential environmental impacts of the proposed PFS facility. These comments supplement those given orally at the April 29, 1999 public scoping meeting held in Salt Lake City, Utah by SUWA and Margene Bullcreek (both individually and behalf of OGD).

Initially, SUWA, OGD and Margene Bullcreek hereby adopted, restate and incorporate by reference the scoping comments previously submitted by OGD, Lisa Bullcreek and Margene Bullcreek on June 19, 1998 to Edward Y. Shum, Environmental Project Manager for the Spent Fuel Licensing Section of the Spent Fuel Project Office, U.S. Nuclear Regulatory Commission regarding previously announced preparation of an EIS to study the environmental impacts of this same project. Those comments are attached hereto.

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18 pp

Furthermore, SUWA, OGD and Margene Bullcreek hereby incorporate by reference the scoping comments submitted by John Kennedy on behalf of the Confederate Tribes of the Goshutes in response to your office's most recent call for scoping comments on this project. Those comments are stated in a letter dated May 21, 1999.

In addition to undertaking the considerations and analyses noted in these previously submitted and incorporated comments, the EIS should determine how and by what entity or entities transportation of nuclear waste to the proposed facility and on the proposed rail spur will be regulated and should analyze the thoroughness and potential environmental impacts of this regulation (or lack of regulation).

The EIS should reflect that the proposed facility and the proposed rail line will occupy traditional ancestral lands which are of central importance to the members of the Skull Valley Band and which may contain important artifacts of their traditional culture. The EIS must determine the impact of the proposed facility and rail line on the connection between Band members and their ancestral lands, on access to these lands and on artifacts and other elements of historical and cultural significance that may be present there.

The EIS should consider that substantial trust funds exist to promote agricultural development on the Skull Valley Reservation and should analyze what impact the construction, operation and decommissioning of the proposed facility and rail line will have on the ability of Band members to utilize and/or access these funds.

The EIS should consider and analyze the implications of the fact that the lands of the Skull Valley Reservation are valuable and can be and have been used for livestock grazing and agricultural production.

Thank you for this opportunity to comment on your efforts to analyze the proposed PFS facility and rail spur. Please, if you have any questions, contact me at 801-487-9911 or the address below.

RICHARD CONDIT
Land and Water Fund of the Rockies
2260 Baseline Road, Suite 200
Boulder, Colorado 80302
(303) 444-1188 ext. 219

JORO WALKER
Land and Water Fund of the Rockies
2056 East 3300 South Street, Suite 1
Salt Lake City, Utah 84109
(801) 487-9911

**NEPA SCOPING COMMENTS on behalf of**
**OHNGO GAUDADEH DEVIA (OGD), LISA BULLCREEK**
**and MARGENE BULLCREEK**

**IN THE MATTER OF:**
**PRIVATE FUEL STORAGE, L.L.C.**
**NRC DOCKET No. 72-22**

## *INTRODUCTION*

These comments regarding the NRC's environmental impact statement (EIS) scoping process are filed on behalf of Ohngo Gaudadeh Devia (OGD), Margene Bullcreek, and Lisa Bullcreek (collectively referred to as "Commentors"). OGD is primarily comprised of members of the Skull Valley Band of Goshute. OGD is dedicated to preserving the culture, traditions, and physical surroundings of the Skull Valley Band of Goshute. Margene Bullcreek and Lisa Bullcreek live on the Skull Valley Reservation. They are members of OGD and join in the organization's comments today. However, Margene and Lisa Bullcreek are also providing individual comments that have been recorded at the June 2, 1998 public meeting and are reflected herein.

## *PRELIMINARY STATEMENT*

At the outset, the Commentors wish to raise several objections that are relevant to the EIS process. First, the Commentors object to the failure of the Department of Interior and/or Bureau of Indian Affairs (BIA) to prepare an EIS. With all due respect, the NRC and its contractors have comparatively little insight into the social, cultural, religious, and economic affairs of the Skull Valley Band of Goshute. At a minimum, the BIA should have conducted an EIS regarding the impacts of leasing a portion of the Skull Valley Reservation to Private Fuel Storage, L.L.C. (PFS).

Second, the Oak Ridge National Laboratory (ORNL) was chosen by the NRC to prepare the EIS. With all due respect, both the NRC and ORNL have well established institutional prejudices in favor of nuclear power. The Commentors respectfully note that it would have been far better if the NRC chose a contractor with no involvement or interest in nuclear power issues.

Finally, the Commentors are deeply concerned that the EIS process is being or will be prejudiced by the ongoing NRC licensing process. Considering the spirit of the National Environmental Policy Act (NEPA) and the EIS process, the Commentors believe that such basic questions as whether the proposed facility is needed or whether there are alternatives to the proposed facility should have been addressed through the NEPA process long before a licensing proceeding was initiated. See, 40 C.F.R. § 1502.2(g).

***SOCIAL, CULTURAL, AND RELIGIOUS IMPACTS***

1. **Social and Cultural Impacts:** The EIS must specifically investigate and analyze the impacts the proposed facility will have on social interactions and cultural activities of persons living on or near the Skull Valley Reservation. The Commentors are traditionalists, which means they engage in activities that they believe preserve important aspects of their way of life.

For example, the Commentors believe in a living Mother Earth. It is an important part of their heritage to protect the water, air, soil, plant life, and animal life from harm. In their homes and on other areas of the Reservation the Commentors hold family gatherings, celebrations, memorial services and community meetings.

The Skull Valley Reservation is a small place. The construction and operation of the PFS facility on approximately 100 acres will create an intimidating presence that will inhibit Commentors initiation of and participation in many social and cultural events on or near the Skull Valley Reservation.

2. **Religious Impacts:** The EIS must specifically investigate and analyze the impacts the proposed facility will have on spiritual life and religious practices of persons living on or near the Skull Valley Reservation. The Commentors conduct and are involved in spiritual ceremonies involving young people, elders, and persons living outside of the Reservation. The Commentors believe that there is a sense of tranquility on their land and a spirituality in the air, mountains, and whole environment on the Reservation. This tranquility and spirituality will be destroyed by the construction and operation of the PFS facility.

***CUMULATIVE IMPACTS TO HUMAN HEALTH AND THE ENVIRONMENT***

3. **Cumulative Impacts and Risks:** The EIS should analyze the cumulative environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) of the transportation of spent fuel and construction and operation of the proposed facility considering circumstances involving the release of radiation caused by: (1) normal operations; (2) malfunctions; (3) human error(s); (4) design flaws; (5) minor accidents; and (6) major accidents. The scenarios describing the release of radiation should also be considered in conjunction with current releases of hazardous wastes from the following nearby facilities: Tooele Chemical Demilitarization Facility; Tooele Army Depot; Dugway Proving Ground; Wendover Air Force Bombing Range; Hill Air Force Bombing

Range, APTUS Hazardous Waste Incinerator; Laidlaw Hazardous Waste Incinerator and Landfill; Envirocare of Utah Low Level Waste Disposal Facility; U.S. Pollution Control, Inc. (USPCI); Magnesium Corporation of America (MAGCORP); Cargill Salt; Climax Chemical Co.; North American Salt Co.; PPM, Inc.; and Tekoi Test Facility operated by Alliant Techsystems (Skull Valley). The emissions of other industrial facilities involved in smelting, metal production, and refining should also be included in a comprehensive risk analysis. Current meteorological conditions, incidence and types of disease, incidence and types of illness, average life span, and causes of death in the impacted areas must be considered when adding the risks of the transportation of spent fuel, construction and operation of the proposed facility to the already high pollution and illness burdens faced by the impacted communities.

4. **Cumulative Impacts, Connected Actions and Segmentation — Facility Construction and Operation and Transportation Impacts.** The EIS should analyze the cumulative environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) of the construction and operation of the facility together with potential impacts resulting from transportation of the spent fuel and/or the design of shipping casks for transport of this fuel. In addition, the proposed construction and operation of the facility, the proposed transportation of the fuel to the site and the design of shipping casks are connected actions, the impacts of which should be considered together in a single EIS. These proposed actions are interrelated and should not be segmented. This analysis should include consideration of the possibility that the facility will operate,

accept and store fuel for 40 or more years and should consider that the storage casks utilized by PFS will necessarily be untested for long term durability and reliability.

In addition, the EIS should consider the cumulative impacts (including cumulative adverse impacts to minority and impoverished individuals living in nearby communities) posed by the increased probability of accidents in the transportation, handling and storage of the fuel due to the location of the proposed facility, intermodal transfer facility and associated transportation corridors near various military bombing ranges and testing sites and near transportation routes for the explosives used at these sites.

5. **Potential for Lowering Water Table and Contaminating Water Supply**. The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) to the water table and water supply caused by the construction and operation of the facility. This analysis should consider the impacts of facility water use and the potential for contamination of the water supply and the possible impacts on wildlife, wildlife habitat and nearby communities. This analysis should also consider the real possibility that the facility will handle, accept and store spent fuel for more than 40 years and that the operation of the facility will constitute a long-term threat to the local water supply, both from overuse and contamination.

6. **Radiation Control:** The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) that may be caused by the failure of PFS to establish and maintain a radiation control program that

adequately monitors and prevents the release of radiation during the following stages of project activities: (1) preparation for shipment of spent fuel and related wastes; (2) shipment of spent fuel; (3) unpacking and transfer of spent fuel from shipping to storage casks; (4) re-packing of spent fuel due to container damage or wear, and (5) storage of spent fuel for 20, 40, and greater than 40 years. This analysis should also include evaluations of the impacts of radiation releases during normal operations and minor accidents on persons working at the facility, persons working at facilities or on equipment involved in the transportation of the spent fuel, persons at the boundary of the controlled area, and persons outside of the controlled area.

*ACCIDENTS, SABOTAGE, NATURAL EVENTS, AND EMERGENCY PLANNING*

7. **Seismic Conditions:** The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) that may be caused by tremors, earthquakes, and other seismic events on the transportation, handling and storage of the spent fuel at the location of the proposed facility, intermodal transfer facility, and associated transportation corridors. This analysis should include, but should not be limited to, evaluation of cask-pad stability during various types of seismic events.

8. **Flooding:** The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) that may be caused by normal flooding and a maximum flood at the location of the proposed facility,[6] intermodal transfer facility, and associated transportation corridors.

9. **Full Range of Accidents and Potential Impacts:** The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) of the full range of potential accidents which: a) could occur as a result of the construction and operation of the proposed facility such as those accidents caused by human error, sabotage, and fire; and b) as a result of any handling, transport or movement of casks (including human error, sabotage, fire, traffic incidents, cask drop and bend, lid drop damage and/or due to improper welds and damage to casks that result in a loss of the confinement barrier). These analyzes should consider: a) the potential impacts of similar handling accidents that could occur at the Intermodal Transfer Facility; b) the likely scenario that the facility will operate, accept and store waste for more than 40 years and is likely, during this extended time, to receive defective fuel canisters, experience handling accidents and be required to open or reload damaged canisters and casks; and, c) that the storage casks utilized by PFS will necessarily be untested for long term durability and reliability.

Moreover, the EIS should consider the potential impacts of multiple accidents involving the proposed facility and other significant facilities in the area. For example, the EIS should specifically address circumstances where an accident occurs at the proposed facility and an accident occurs at the Dugway Proving Ground, Tooele Chemical Demilitarization Facility (TOCDF), and/or the Tooele Army Depot involving the release of deadly chemical warfare agents. The EIS should specifically evaluate the impacts of the release of radioactive materials from the proposed facility in combination with a release of chemical warfare agents GB (Sarin), VX, Mustard (H, HD, or HT),

Lewisite, and/or other chemical warfare agents. This evaluation should include an examination of the ability of emergency responders to address two serious incidents that occur within a short time of each other.

Finally, the EIS must also consider the potential impacts that could occur if there is a release of chemical warfare agent(s) (e.g., VX) that requires the proposed facility to be abandoned for days, weeks, or months.

**10. Serious Accident or Incident Involving the Release of Radiation:** The EIS should analyze the full range of potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) that may result from an accident or incident involving the release of radiation that is so severe that it (1) seriously injures or causes the deaths of all residents of the Skull Valley reservation, and (2) permanently contaminates the lands occupied and utilized by the Skull Valley Goshutes.

**11. Adequacy of Emergency Plan and Impacts On Those Living Near the Facility:** The EIS should analyze the full range of potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) that may result from an emergency at the facility in light of the current emergency plan and in the context of the lack of an adequate emergency plan associated with the facility designed to protect those living within a five mile radius of the facility and the environment upon which they depend. The EIS should consider impacts such as those to the cultural, economic and psychological well being of these individuals and the likely scenario that these individuals will experience disempowerment and alienation as a result of being

excluded from and not being consulted about safety and emergency plans related to the facility.

*RECREATION AND PUBLIC LANDS*

**12. Impacts to Recreation:** The EIS should consider the potential impacts of the construction, operation and decommissioning of the proposed project (including the intermodal transfer facility and associated transportation and workforce activities) on recreation in nearby public and private lands, including the Deseret Peak Wilderness Area. This analysis should include consideration of visual impacts, impacts caused by accidents or the degradation of casks, and impacts on air and water quality. The analysis should consider a) impacts on opportunities for solitude and primitive, unconfined recreation and to experience natural conditions where the imprint of human work is substantially unnoticeable; and, b) the real possibility that the facility will handle, accept and store spent fuel for more than 40 years and therefore that the operation of the facility will constitute a long-term threat to these recreation values.

**13. Impacts to Specially Designated Public Lands:** The EIS should consider the potential impacts of the construction, operation and decommissioning of the proposed project (including the intermodal transfer facility and associated transportation and workforce activities) on specially designated public lands including wilderness areas, proposed wilderness areas (contained in the Citizens Wilderness Proposal, endorsed by the Utah Wilderness Coalition)[1], and wildlife and bird refuges. This analysis should

[1] H.R. 1500, the Citizens Proposal, includes proposed wilderness areas on Bureau of Land Management Lands immediately north of Deseret Peak Wilderness (the North Stansbury area) and south of Deseret Peak Wilderness (Big Hollow). H.R. 1500 also includes a large proposed tract in the central Cedar Mountains, west of the

include: a) consideration of the potential impacts caused by accidents or the degradation of casks, transportation and handling of spent fuel; b) noise; c) workforce activities; d)impacts on air and water quality; impacts on opportunities for solitude and primitive, unconfined recreation and to experience natural conditions where the imprint of human work is substantially unnoticed. This analysis should consider the real possibility that the facility will handle, accept and store spent fuel for more than 40 years and therefore that the operation of the facility will constitute a long-term threat to these important lands.

***WILDLIFE AND PLANTS***

**14. Impacts to Wildlife and Plants.** The EIS should consider the potential environmental impacts (including the cumulative impacts of the proposed project taken together with the current environmental impacts of the many military sites and industrial sites within the vicinity of the proposed project) of the construction, operation and decommissioning of the proposed project on wildlife, including threatened, endangered and petitioned species of animals and plants, on critical or potential habitat for these species, on sensitive species (as determined by the U.S. Forest Service), and on other birds, particularly those protected by the Migratory Bird Treaty, giving special attention to ecosystem health. The EIS should consider special relationships such as corridors and edge environment, the potential for habitat fragmentation and the fragile nature of the desert and high altitude environments. This analysis should include consideration of impacts caused by traffic (including road kill), accidents at the facility, and impacts on water and air quality. The EIS analysis should also consider the disparate impacts on and

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proposed facility. The most resent Utah Wilderness Coalition review includes additional proposed areas immediately north and south of this Cedar Mountain tract.

the unique burdens faced by minority and low income individuals, including the traditional life styles of members of the Skull Valley Goshute Tribe which may result from impacts on wildlife, plants and their habitat. It is important that the analyzes in the EIS include the impacts on plants, wildlife, and special or sacred areas that are part of a subsistence diet, cultural events, and religious activities. These analyzes should consider the real possibility that the facility will handle, accept and store spent fuel for more than 40 years and therefore that the operation of the facility will constitute a long-term threat to these resource, religious, and cultural values.

15. **Impacts to the Great Salt Lake:** The EIS should consider the potential impacts of the construction, operation and decommissioning of the proposed project (including the intermodal transfer facility and associated transportation and workforce activities) on the Great Salt Lake, especially on the shore and migratory bird populations and wetlands habitat. This analysis should include consideration of the potential impacts caused by accidents or the degradation of casks, transportation and handling of spent fuel, noise, and workforce activities and impacts on air quality, water quality and ecosystem integrity and should include the cumulative impacts of the proposed project taken together with the current environmental impacts of the many military sites and industrial sites within the vicinity of the proposed project. This analysis should also consider the real possibility that the facility will handle, accept and store spent fuel for more than 40 years and therefore that the operation of the facility will constitute a long-term threat to these birds and wetlands habitat.

16. **Impacts on Other Ecologically Significant Areas:** The EIS should consider the potential environmental impacts (including the cumulative impacts of the proposed

project taken together with the current environmental impacts of the many military sites and industrial sites within the vicinity of the proposed project) of the transportation of spent fuel and construction and operation of the proposed facility on Horseshoe Springs, Timpie Springs Waterfowl Management Area, and Salt Mountain Springs.

***CONSTRUCTION AND MONITORING PROBLEMS***

**17. Impacts of Inability to Construct, Operate and Decommission:** The EIS should consider the potential environmental impacts (including potential disparate impacts and impacts unique to minority and low income individuals) of the reasonably foreseeable event that PFS will fail (for financial or other reasons) to properly complete construction, operation or decommissioning of the facility.

**18. Impacts of Failure to Monitor Radiation Releases Outside the Facility:** The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) from any failure by PFS to adequately monitor for radiation releases within and outside the facility. This analysis should include any potential impacts on the health of individuals and the natural environment near the facility caused by accidental, but unmonitored releases of radiation.

**19. Impacts of Construction and Routine Operations of Proposed Facility:** The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) caused by the construction and routine operation of the proposed facility, including associated transportation activities. This analysis should consider visual impacts and impacts from noise, strangers, worker and visitor traffic, and

the transportation of spent fuel to the facility. These activities will impact wildlife, habitat, water and air quality and the cultural integrity of those living on tribal lands and will put at risk tribal and ancestral lands and historical and archeological sites. This analysis should consider the real possibility that the facility will handle, accept and store spent fuel for more than 40 years and therefore that the operation of the facility will constitute a long-term threat to these cultural and resource values.

**20. Inadequate Quality Assurance:** The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) caused by the substandard quality assurance (QA) program being proposed by PFS. See, 10 C.F.R. Part 72, Subpart G. The lack of a rigorous QA program will increase the risk of errors and accidents that will likely lead to the emission of radioactive materials into the environment.

***TRAINING ISSUES***

**21. On-site Training:** The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) which may result from the inexperience of operators of the proposed facility, particularly in light of the inability of PFS to attract qualified personnel and to keep qualified personnel at the remote facility. In addition, even if PFS should attract qualified personnel, the EIS should consider that the current training and certification plan for PFS personnel fails to satisfy NRC requirements. See, 10 C.F.R. Part 72, Subpart I. Inadequate training will increase the risk of errors or accidents.

22. **Remoteness of Facility.** The EIS should consider the potential environmental impacts (including disparate impacts on and the unique burdens faced by minority and low income individuals in communities surrounding the proposed facility) which may result from the remoteness and vulnerability of the facility and potentially grave environmental, health and safety implications that follow from the great distances that must be traveled by law enforcement and emergency personnel to reach the facility.

***INADEQUATELY DESIGNED OR DAMAGED CASKS***

23. **Inadequate Design.** The EIS should analyze the potential environmental impacts (including potential disparate impacts and impacts unique to minority and low income individuals) which may be caused by the overheating of the storage casks and concrete cylinders.

24. **Damaged, Leaking and Contaminated Casks.** The EIS should analyze the potential environmental impacts (including potential disparate impacts and impacts unique to minority and low income individuals) which may be caused by the likely scenario that the casks holding the spent fuel will be damaged or will leak or become contaminated during transportation or during the 20 to 40 year storage period at the facility. The EIS should also consider the impacts in the likely event that facility may operate and accept and store spent fuel for more than 40 years. This analysis should consider the impacts that may result if damaged casks or canisters must be returned to the generating facility or otherwise disposed of during operation or decommissioning of the site, particularly if PFS is unable or unwilling (for financial or other reasons) to facilitate this return or disposal.

*NO ACTION AND ALTERNATIVES*

**25. Environmental Benefits of No Action:** The EIS should evaluate the potential positive environmental impacts that may occur if the proposed facility is not approved for construction and operation. PFS has stated in the company's Environmental Report (ER) that the "[i]nability of an operating reactor to provide sufficient spent fuel storage capacity will cause the shutdown of that reactor." ER at 1.2-1. PFS further stated that "the availability of the [proposed facility] may be the only alternative to the premature shutdown of a nuclear power reactor with its attendant costs and loss of generating capacity." ER at 1.2-2. The EIS should consider the positive impacts of the gradual shutdown of nuclear reactors with spent fuel storage capacity problems that are replaced by energy conservation and efficiency measures and renewable forms of energy. The positive impacts may include a significant reduction in high level nuclear waste (i.e., spent fuel) production and other forms of pollution associated with nuclear reactors. In addition, a gradual move from nuclear power to renewable energy sources, energy conservation and efficiency measures may lead to reduced costs for power consumers.

**26. Alternatives:** The EIS should consider alternative sites for the storage of the spent nuclear fuel planned for the PFS facility. In particular, the EIS should consider storage in place or near the nuclear reactors that are alleged to have waste storage problems. Commentors believe that the current plan to site the PFS facility on the Skull Valley Reservation is discriminatory and violates principles of Environmental Justice and Civil Rights Laws.

*CONCLUSION*

The Commentors urge the NRC and it's contractors to carefully consider all of the issues raised in these comments. The siting and licensing of the proposed PFS facility raises many complex and important issues that deserve thoughtful investigation and analysis.

Respectfully submitted,

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