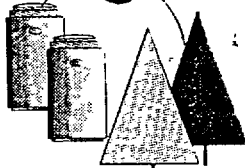


RAS 5768

72-22-ISFSI-Staff Exhibit AA-Rec'd 4/24/02  
Staff Exhibit AA

Private Fuel Storage, LLC

DOCKETED  
USNRC

2003 FEB -5 AM 9: 22

OFFICE OF THE SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFFP.O. Box C4010, La Crosse, WI 54602-4010  
John D. Parkyn, Chairman of the Board  
August 28, 1998

## NUCLEAR REGULATORY COMMISSION

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

Docket No. _____	Office File No. <u>AA</u>
In the matter of _____	
Staff <u>X</u>	IDENTIFIED <u>X</u>
Applicant _____	RECEIVED <u>X</u>
Intervenor _____	REJECTED _____
Other _____	WITHDRAWN _____
DATE <u>4-24-02</u>	Witness <u>Cathari</u>
Clerk <u>pmf</u>	

Dear Mr. Carpenter:

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

- References:
- 1) Stone & Webster letter, Hennessy to Carpenter, Transmittal of License Application, dated July 29, 1998
  - 2) BLM letter, Lamb to Shum, #1793 (UT-934), dated June 30, 1998

Please find enclosed right-of-way applications for utilization of BLM managed public lands in support of two transportation options for the Private Fuel Storage Facility (PFSF) project. As noted in Reference 1, we had been in the process of amending our NRC License Application (LA) documents to reflect a revised approach to offsite transportation that is based on the information in the enclosed right-of-way applications. The NRC LA amendment has been completed and is being transmitted to the NRC concurrent with the submittal of these applications to BLM.

The purpose of the NRC LA is obtain a license to store nuclear power plant spent fuel on the Skull Valley Indian Reservation and includes an Environmental Report (ER) that contains a description of the environmental effects of transporting spent fuel to the PFSF, as well as the effects associated with constructing and operating the PFSF on the reservation. It is our understanding that the NRC will include BLM as cooperating agency in the ER review process and associated preparation of an EIS.

Our preferred transportation mode is by direct rail to the PFSF which necessitates a new rail spur. The proposed new rail spur originates from the Union Pacific mainline at Low Junction south of I-80 and proceeds along the western side of Skull Valley for 32 miles on BLM land to the Goshute Reservation (see enclosed figure 2.1-1 and drawings 0599602-EY-10, 11, 12, and 13).

Template = SEC4-028

SEC4-02

Mr. Glenn Carpenter  
Page 2  
August 28, 1998

An alternate transportation mode is to offload the shipping casks from the rail mainline at an Intermodal Transfer Point (ITP) onto heavy haul trucks and travel on Skull Valley Road to the reservation. The proposed ITP is also on BLM land approximately 1.8 miles west of Timpie north of I-80 (located in the north half of the southeast quarter of the southeast quarter of section 12, T1N, R8W consisting of approximately 11 acres as shown on enclosed drawing 0599601-EY-9 and 14) and includes a short access road to connect to the existing frontage road .

Both modes of transportation are viable. The rail spur is the preferred mode of transportation because it involves less handling of the casks and is therefore more efficient and timely. In addition, while there is little traffic and population on Skull Valley Road, the large tractor/trailers needed to haul the casks will create some level of interference, which will be avoided using the rail spur. The intermodal / truck alternate provides a supplementary mode of transportation to the PFSF.

The Private Fuel Storage L.L.C. is aware of BLM topics of interest (Reference 2) and is looking forward to working with the BLM in addressing these topics and obtaining approval of the enclosed right-of-way applications.

If you have any questions, please contact me at 608-787-1236 or our Project Director, John Donnell, at 303-741-7009.

Sincerely,



John D. Parkyn, Chairman  
Private Fuel Storage L.L.C.

JDP:sg

Enclosures

H:\SHARED\PFS\LETTERS\0826A.SAM

Mr. Glenn Carpenter

Page 3

August 28, 1998

Copy to:

Mr. Leon Bear, Skull Valley Band of Goshute Indians

Mr. Mark Delligatti, NRC

Mr. Jay Silberg, Shaw Pittman

Mr. John Donnell, PFSLLC

Ms. Denise Chancellor, State of Utah

Mr. David Allison, BIA

Ms. Patricia Winmill, Parsons Behle

Ms. Margaret Swimmer, Hall Estill

APPLICATION FOR TRANSPORTATION AND  
UTILITY SYSTEMS AND FACILITIES  
ON FEDERAL LANDS

RECEIVED

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: **U76985**

Date Filed: **8/31/98**

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

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

\* If checked, complete supplement page

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, width, 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 construction 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 a railroad spur from the Union Pacific mainline at Low, Utah to Skull Valley Indian Reservation across Public Lands administered by the BLM. The attached Figure 2.1-1 and drawings 0599602-EY-10, 11, 12, & 13 depict the general route of the proposed right of way. See Environmental Report (ER) Section 3.2.1.5, "LOW CORRIDOR RAIL SPUR," for a more detailed description of the proposed spur.
- (b) The rail spur will be used to transport sealed transportation casks of spent nuclear fuel to the Private Fuel Storage Facility (PFSF), a temporary spent commercial nuclear fuel storage site. See description of the PFSF in ER Sec 3.2.1.2, "STORAGE FACILITY."
- (c) The ROW is 32 miles long (3 mi parallel to I-80, 26 mi S, and 3 mi E to PFSF). A permanent right of way, anticipated to be 200 ft wide, is requested. Within this right of way, 40 ft will be used for the track bed with the remaining being related cuts and fills, which will be re-vegetated. See ER Sec 3.2.1.5, "LOW CORRIDOR RAIL SPUR," for a more detailed description of the physical specifications of the spur. The applicant has commenced environmental and constructability analyses within a 1 mile wide corridor along the general route depicted in the attached drawings. Additional studies and analyses will be necessary in order to finalize the alignment within that corridor.
- (d) Term of use is 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 less than one round trip being made on average each week. 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 3 - 5 transportation casks. See ER Sec 1.2, "NEED FOR THE FACILITY," for discussion of the anticipated shipment volumes.
- (g) Construction of the rail spur is scheduled to begin in the fall of 2000 and last about 14 months. See ER Sec. 1.3, "PROPOSED PROJECT SCHEDULE."
- (h) A temporary use area of 100 ft, 50 ft on each side of the 200 ft wide permanent right of way may be necessary for construction (storage area along the corridor to temporarily stockpile soil). See ER Sec. 4.4, "EFFECTS OF CONSTRUCTION AND OPERATION OF THE LOW CORRIDOR RAIL SPUR," for a discussion of the proposed construction.

8 Attach a map covering the area and show location of project proposal. See attached Figure 2.1-1 and drawings 0599602-EY-10, 11, 12, and 13 for a depiction of the general route of the proposed right of way.

9 State or Local government approval ☐ Attached ☐ Applied for ☒ Not Required

10 Nonreturnable application fee ☐ Attached ☐ Not required

11 Does project cross international boundary or affected international waterways? ☐ Yes ☒ No (if "yes," indicate on map)

12 Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested

The PFSLLC has the technical and financial capability to construct, operate, maintain, and terminate the proposed railroad spur.

#### Technical Capability

PFSLLC personnel have experience with the design, construction, and operation of rail transportation facilities and spent fuel handling associated with Nuclear Generating Plants and spent fuel storage facilities. The rail spur will be operated in accordance with all applicable NRC and DOT requirements. Chapter 9 of the PFSF Safety Analysis Report (SAR) provides a discussion of Technical Qualifications of the PFSF staff to design, construct, and operate the PFSF and related facilities.

#### Financial Capability

A financing plan has been developed that ensures the PFSLLC has reasonable assurance of obtaining the necessary funds to construct, operate and decommission the PFSF. See details of the financial capabilities in the LA, Sec. 1.6, "FINANCIAL QUALIFICATIONS" and Sec. 1.7, "DECOMMISSIONING FUNDING ASSURANCE."

13a Describe other reasonable alternative routes and modes considered

Two modes of transporting the casks from the Union Pacific mainline to the PFSF are being pursued. The preferred approach is by direct rail from the mainline to the PFSF via the proposed new rail spur discussed herein. Alternately, the casks would be transferred from rail car to truck trailer at an intermodal transfer point and transported to the PFSF via the Skull Valley Road using trucks. The intermodal concept is discussed in ER Sec. 3.2.1.4, "INTERMODAL TRANSFER POINT / SKULL VALLEY ROAD".

b Why were these alternatives not selected?

Both modes of transporting the casks are viable. The intermodal / truck option provides an additional method of transportation to the PFSF. The rail spur is the preferred mode of transportation to the PFSF because it involves less handling of the casks and is therefore more efficient and timely in comparison to the highway. In addition, while there is little traffic on the Skull Valley Road, the large tractor/trailers needed to haul the casks will create some level of traffic interference, which will be avoided using the rail spur.

c Give explanation as to why it is necessary to cross Federal Lands

Most of the land in the Skull Valley from the rail mainline to the Skull Valley Indian Reservation is public land administered by the BLM. No feasible rail spur route can be constructed outside of the BLM boundaries.

14 List authorizations and pending applications filed for similar projects which may provide information to the authorizing agency (Specify number, date, code, or name)

NRC License Application for the PFSF Independent Spent Fuel Storage Installation (ISFSI) (Docket No. 72-22, dated 6/20/97)

15 Provide statement of need for project, including the economic feasibility and items such as: (a) cost of proposal (construction, operation, and maintenance), (b) estimated cost of next best alternative, and (c) expected public benefits

The Department of Energy (DOE) was mandated by the Nuclear Waste Policy Act of 1982 to provide permanent disposal of spent nuclear fuel from the nation's commercial nuclear power plants. However, the DOE has not met its 1998 deadline and will not be able to provide permanent storage until at least 2010. As a result, utilities have to provide interim storage for their spent fuel beyond 1998. The PFSF allows storage for those plants, which may be unable to increase their own storage space or where increased on-site storage might be economically disadvantageous. The PFSF may be the only alternative to the premature shutdown of a power plant resulting in the loss of electrical power to the public. It also allows nuclear power plants that are permanently shutdown to remove all the spent fuel from the site and decommission. Construction of the rail spur is an integral part of the PFSF project. The need for the PFSF is described in ER Sections 1-1, "BACKGROUND," and 1-2, "NEED FOR THE FACILITY."

- (a) The cost of the new rail spur is still being evaluated, but the construction cost is currently estimated at \$25 million. See ER Sec. 7.3, "COSTS," for a detailed discussion of the costs of the PFSF.
- (b) Capital cost of the intermodal / truck option is estimated at \$10 million. Although the capital costs of the rail spur are higher, it is preferred because of the intrinsic benefits of less handling of the casks and avoidance of the highway system.
- (c) The proposed spur line is necessary in order to allow transportation of the spent fuel casks from the mainline to the storage facility for interim storage and, at the end of such storage, for transporting the spent fuel back to the mainline for movement to a permanent storage site. The direct benefit of the PFSF is the continued generation of electric power by the subscribing nuclear power plants. The benefits to the Skull Valley Band of Goshute Indians are steady revenue for the Tribal Government and Band members, jobs for tribal members, increased business at their convenience store during construction and operation, and the potential for new economic development due to the improved transportation access to the reservation. The benefits for Tooele County are cask surcharges, increase in regional employment due to the facility construction and operation, and procurement of materials and supplies for the facility. See ER Sec. 7.2, "BENEFITS," for a discussion of benefits.

16 Describe probable effects on the population in the area, including the social and economic aspects, and the rural lifestyles

There are no demographic impacts along the entire rail corridor since the route does not encounter any private ranches or public activities. Therefore, relocation of residential structures, or realignment of fencing, driveways, and roadside utilities will be minimal if required at all. In addition, all construction activity is south of Interstate 80, which eliminates any conflicts associated with the highway, such as overpass/underpass construction. See ER Sec 4.4.1, "EFFECTS ON GEOGRAPHY, LAND USE, AND DEMOGRAPHY," for details

No adverse impacts on socioeconomic resources are anticipated. Minor short-term employment will result from construction activities associated with the rail spur. These activities will utilize a local labor force commuting daily to the project area and will therefore not induce relocation of families and associated impacts on local government services. See ER Sec. 4.4.6, "EFFECTS ON SOCIOECONOMICS "

17 Describe likely environmental effects that the proposed project will have on (a) air quality, (b) visual impact, (c) surface and ground water quality and quantity, (d) the control or structural change on any stream or other body of water, (e) existing noise levels, and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability

- (a) The overall impacts on air quality from construction and operation will be minor and limited to the general vicinity of the corridor. Any impacts will mainly be associated with emissions of fugitive dust from construction activities and from locomotive emissions during cask transport operations. No long-term impacts on the local meteorology/climatology will result from these activities. See ER Sec. 4.4.3, "EFFECTS ON AIR QUALITY," for more details.
- (b) Due to the low profile of the rail spur, the rail line will not be obviously visible from most locations in the valley. The rail spur will be apparent near I-80 and from high elevations in the Cedar Mountains. The visual change will be similar with other developments in the area, such as I-80, the RR mainline, and Skull Valley Road. Because of low recreational use of the area, the impact is not expected to be a significant impact. See ER Sec. 4.4.8, "EFFECTS ON REGIONAL HISTORICAL, CULTURAL, SCENIC, AND NATURAL FEATURES," for more details.
- (c) There are no existing surface water bodies in the rail spur corridor. Ground water is over 100 ft below the surface. Therefore it is not expected that the rail spur will have any impact on hydrological resources. See ER Sec 4.4.4, "EFFECTS ON HYDROLOGICAL RESOURCES."
- (d) No bodies of water exist along the rail spur route except for dry arroyos, which will require the installation of culverts or small bridges to cross. See ER Sections 4.4.1, "EFFECTS ON GEOGRAPHY, LAND USE, AND DEMOGRAPHY," and "ENVIRONMENTAL PROTECTION AGENCY," for details.
- (e) Since the distance between the proposed rail spur and residences along Skull Valley Road is 5 to 10 miles, construction and operation noise is not expected to be very audible. Sound level predictions for the locomotive and rail cars delivering casks to the site indicate that the maximum noise levels would be 31 dBA at Skull Valley Road, 26 dBA near Eight Mile Spring Road, and 19 dBA at the intersection of I-80 and Skull Valley Road. These levels are low and will have a minimal impact on valley residences and mountain wilderness study areas. See ER Sec 4.4.7, "EFFECTS OF NOISE AND TRAFFIC," for details.
- (f) Within the right-of-way, construction activities would temporarily remove 776 acres of greasewood and desert shrub/saltbrush habitat. Assuming a permanent railroad bed width of 40 ft, about 155 acres will be permanently altered. The remaining 621 acres will be re-vegetated after construction. There are no unique vegetation habitat features in the areas proposed for vegetation removal. See ER Sec 4.4.2, "EFFECTS ON ECOLOGICAL RESOURCES," for details.

18 Describe the probable effects that the proposed project will have on (a) populations of fish, plantlife, wildlife, and marine life, including threatened and endangered species, and (b) marine mammals, including hunting, capturing, collecting, or killing these animals

- (a) The level of impact to the local population of wildlife from construction and operation is expected to be minimal. Construction activities will temporarily disturb resident wildlife along the rail spur. Larger mammals would temporarily avoid the construction area, but likely return following the completion of construction. Ecological surveys indicate that there are no threatened and endangered species located within the rail spur corridor, except for transient, infrequent occurrences by Bald Eagles and Peregrine Falcons. These should not be adversely affected by construction activities, since these activities are temporary. The rail spur has the potential to divide grazing animals and natural wildlife travel corridors between the west and east sides of Skull Valley briefly during construction. See ER Sec. 4.4.2, "EFFECTS ON ECOLOGICAL RESOURCES," for details.
- (b) Due to the location, no effects to marine mammals will occur.

19 State whether any hazardous material, as defined in this paragraph, will be used, produced, transported or stored on or within the right-of-way or any of the right-of-way facilities, or used in the construction, operation, maintenance or termination of the right-of-way or any of its facilities. "Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601 et seq., and its regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste" as defined in the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6901 et seq., and its regulations. The term hazardous materials also includes any nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101(14), 42 U.S.C. 9601(14), nor does the term include natural gas.

Spent commercial nuclear reactor fuel will be transported within the rail spur right-of-way. The spent fuel is safely packaged in shipping casks licensed by the NRC under 10 CFR 71, "Packaging and Transportation of Radioactive Material," transported in accordance with 49 CFR 173, "Shippers General Requirements for Shipments and Packages" and 49 CFR 174, "Carriage by Rail," and physically protected in accordance with 10 CFR 73, "Physical Protection of Plants and Materials."

20 Name all the Department(s)/Agency(ies) where this application is being filed

Department of Interior / Bureau of Land Management

I HEREBY CERTIFY, That I am of legal age and authorized to do business in the State and that I have personally examined the information contained in the application and believe that the information submitted is correct to the best of my knowledge

Signature of Applicant

*John L. Jannell for John Parkyn*

Date

*8-28-98*

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction

**PRELIMINARY PLAN OF DEVELOPMENT**  
**Right of Way Application U-76985**  
**Private Fuel Storage L.L.C. - Rail Line**

The following is a preliminary Plan of Development ("POD") for the construction of a rail line along proposed right of way U-76985 (the "ROW"). The preliminary POD is being submitted in advance of the completion of certain surveys, analyses and designs that are necessary to finalize the POD, in order to apprise BLM of the general outline of Private Fuel Storage (PFS) proposed rail line POD. PFS will incorporate additional information as it becomes available in subsequent revisions to the POD. In addition, other matters discussed below may be refined, amended or expanded upon in subsequent POD revisions.

**1. PURPOSE AND NEED FOR THE FACILITY**

1.1 The Facility. ROW U-76985 will be used to construct a single track, railroad line from the Union Pacific mainline at Low, Utah to the Skull Valley Indian Reservation across public lands administered by the BLM.

1.2 Purpose. The rail line will be used to transport sealed shipping casks of spent nuclear fuel to the Private Fuel Storage Facility (the "Storage Facility"), a temporary spent commercial nuclear fuel storage facility proposed to be located on the Skull Valley Indian Reservation. The nuclear power industry's critical need for a temporary spent fuel storage facility is described in detail in the ROW Application at paragraph 15 and in the Environmental Report (the "ER"), submitted as part of the Nuclear Regulatory Commission's (the "NRC") licensing process, a copy of which has been provided to the BLM, at Sections 1.1, "Background," and 1.2, "Need For The Facility." The design and use of the Storage Facility is described in the ER, in Chapter 3, "The Facility."

1.3 Need for the ROW. Because most of the land in Skull Valley is public land administered by the BLM, it is necessary to use public land in order to provide rail access between the Union Pacific mainline and the Storage Facility located on the reservation.

**2. DESIGN CRITERIA**

2.1 ROW Location. Figure 2.1-1 and drawings 0599602-EY-10, 11, 12, & 13, attached to the ROW application, depict the general route of the proposed ROW. In general, the rail line will traverse Range R9W between Township T1N and T5S. Environmental surveys have been conducted within a ½ mile corridor along the general route depicted in the drawings. Future aerial surveys and constructability analyses will be conducted to narrow the corridor to the final alignment profile. When the surveys and analyses are complete, the POD will be revised to reflect a more definitive description of the route.



PRELIMINARY PLAN OF DEVELOPMENT  
Right of Way Application U-76985  
Private Fuel Storage Rail Line

constructed so as not to impair travel on the roads. When the surveys are completed, PFS will amend the POD to identify the location of each of these crossings. Because the roads are rarely traveled, the terrain is flat, and PFS's trains will, be infrequent and travel at approximately 20 miles per hour, safety concerns do not require installation of safety devices such as lights or barriers.

2.11 Fences. The rail line will not be fenced, which will limit the potential effects on wildlife and grazing resources in the area. Because of the low speeds and infrequency of the trains and the visibility offered by the flat terrain along the rail corridor, safety concerns do not require fencing.

2.12 Access. PFS does not propose to construct an access road along the rail line in order to avoid impacts to the area that might otherwise arise from the public's use of such a road to access the interior of Skull Valley. As described below in Section 6, neither maintenance requirements nor fire concerns require construction of an access road.

2.13 Design Drawings. When environmental and aerial surveys, constructability analyses and preliminary design of the rail line are complete, PFS will amend the POD to include appropriate design drawings, including the following:

- Centerline Survey Plat.
- Plan And Profile Sheets.
- Typical Rail Bed Cross-Sections.
- Typical Crossing Details.
- Typical Culvert/Bridge Details.
- Typical Cut and Fill Diagrams.

### 3. GOVERNMENTAL AGENCY INVOLVEMENT

Construction of the rail line may require several state permits including a stream alteration permit under Utah Code Ann. § 73-3-29 and a general storm water construction permit under Utah Code Ann. § 19-5-107. Details of these permits are discussed in Chapter 9 of the ER.