

CHAPTER 1

GENERAL AND FINANCIAL INFORMATION

1.1 APPLICATION FOR LICENSE

Private Fuel Storage L.L.C. (PFSLLC) proposes to construct and operate an Independent Spent Fuel Storage Installation (ISFSI) at an away from reactor site located on the Skull Valley Indian Reservation in Tooele County, Utah. The Private Fuel Storage Facility (PFSF) site is located approximately 27 miles west-southwest of Tooele City in the center of Skull Valley, 1.5 miles west of Skull Valley Road. The site location is shown in Figure 1-1.

The function of the PFSF will be to store nuclear fuel that has been discharged from U.S. commercial nuclear generating plants. Spent fuel will be transported to Utah by rail. One of two alternatives will be selected for transport between the railroad main line and the PFSF site. The shipping cask will either be off-loaded at an intermodal transfer point at the railroad main line and loaded onto a heavy haul tractor/trailer for transporting to the PFSF, or the shipping cask will be transported via a new railroad spur connecting the PFSF directly to the railroad main line.

Multi-purpose canisters will be utilized for both the shipping casks and storage casks. No handling of bare fuel will occur at the PFSF since operations will be limited to handling of sealed canisters. The project will operate under a "start clean, stay clean" (contamination free) philosophy which will serve to minimize the possibility of transporting any externally contaminated canisters to the PFSF. The canisters will be stored at the PFSF in a vertical configuration inside concrete storage casks, which will be stored on concrete pads in a protected area of the site.

This license application for the proposed PFSF has been prepared in accordance with 10 CFR Part 72 and the guidance provided in NRC Regulatory Guide 3.50, "Standard Format and Content for a License Application to Store Spent Fuel and Radioactive Waste", Rev. 1, September 1, 1989. The License Application consists of the following parts:

- (a) The License Application including the Proposed Technical Specifications and Preliminary Decommissioning Plan, as required by 10 CFR 72.26 and 10 CFR 72.30, respectively, which are set out herein.
- (b) The technical information outlined in a Safety Analysis Report as required by 10 CFR 72.24 which is enclosed in a separate document entitled "Private Fuel Storage Facility Safety Analysis Report" forwarded herewith and made a part hereof.
- (c) The emergency planning information required by 10 CFR 72.32 which is contained in a separate document entitled "Private Fuel Storage Facility Emergency Plan" forwarded herewith and made a part hereof.
- (d) Environmental information required by 10 CFR 72.34 and 10 CFR 51, Subpart A, which is contained in a separate document entitled "Private Fuel Storage Facility Environmental Report" forwarded herewith and made a part hereof.
- (e) Physical safeguards information required by 10 CFR 72, Subpart H which is contained in a separate document entitled "Private Fuel Storage Facility Security Plan". The Security Plan is forwarded under separate cover in accordance with 10 CFR 72, Subpart H and is made a part hereof.

Operations at the originating reactors in preparation or support of spent fuel shipments to the PFSF are performed under the individual reactor's license. Such activities include loading spent fuel into the canisters, seal welding the canisters, and transferring the canisters into shipping casks. Any changes to the reactor licensee's facilities or procedures in order to accommodate these activities will be the responsibility of the individual licensee, and are not a part of this License Application.

Transportation of the spent fuel shipping casks from the originating reactor to the PFSF will occur in accordance with 10 CFR 71 and the originating reactor's license, and is not a part of this License Application.

**1.2 NAME OF THE APPLICANT**

Private Fuel Storage L.L.C.

**1.3 ADDRESS OF APPLICANT**

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

**1.4 DESCRIPTION OF BUSINESS OF APPLICANT**

PFSLLC is a limited liability company owned by eight U.S. utilities which serve more than 17 million customers in 21 states. Its headquarters are in La Crosse, Wisconsin.

In 1996, the member utilities provided electrical energy to over 17 million customers in the states of Wisconsin, Minnesota, New York, Iowa, Michigan, Illinois, Pennsylvania,

New Jersey, West Virginia, Ohio, Indiana, Virginia, Kentucky, Tennessee, North Dakota, South Dakota, Alabama, Mississippi, Georgia, Florida, and California. The operating revenue for the member utilities in 1996 totaled \$37 billion.

## 1.5 LEGAL STATUS AND ORGANIZATION

PFSLLC is a limited liability company organized and existing under the laws of the state of Delaware with its principle office located in La Crosse, Wisconsin, at the address stated above. It is registered and authorized to transact business in the state of Utah.

PFSLLC is not owned, controlled, or dominated by any alien, a foreign corporation, or foreign government. The names of PFSLLC directors and principal officer, all of whom are citizens of the United States, are provided at the end of this chapter.

## 1.6 FINANCIAL QUALIFICATIONS

A financing plan has been developed which ensures that the PFSLLC has reasonable assurance of obtaining the necessary funds to construct, operate and decommission the PFSF. Several mechanisms will be used, including equity contributions from PFSLLC members pursuant to Subscription Agreements, pre-shipment customer payments pursuant to Service Agreements (through which the customers of the PFSLLC commit to store their spent fuel at the PFSF and the PFSLLC agrees to provide the customers with storage services), and annual storage fee payments pursuant to Service Agreements. The PFSLLC is also retaining the option of obtaining portions of the construction funds through the sale of debt securities secured by the Service Agreements.

The PFSF project has been developed on a phased basis. Steps I and II, which involved preliminary investigations, predated the formation of the PFSLLC. Step III began with the formation of the PFSLLC and concluded with the filing of the License Application. This step was funded by direct payments to the PFSLLC from member utilities pursuant to Subscription Agreements. Step IV includes the NRC licensing proceeding as well as detailed design and preparation of bid specifications. The budget for Step IV is approximately \$10 million, including contingencies, to be funded by direct payments to the PFSLLC from the member utilities pursuant to Subscription Agreements. These Step IV payments will be made on a quarterly basis. Given the relatively small size of this payment for any participating utility, there is the reasonable assurance that the PFSLLC will obtain Step IV funding.

Step V represents the construction of the PFSF. The budget for this phase is \$100 million and includes site preparation; construction of the access road, administration building, visitors center, security and health physics building, operations and maintenance building, canister transfer building and storage pads; procurement of canister transfer and transport equipment; and transportation corridor construction. The Step V budget also includes necessary personnel costs, licensing fees, and host benefits, as well as a contingency amount.

Step V will be funded through several mechanisms. An additional \$6 million in equity contributions is planned from PFSLLC members pursuant to Subscription Agreements. The bulk of the Step V costs is expected to be funded through Service Agreements with PFSF customers (including both PFSLLC members and non-members). Payments under each Service Agreement will be spread out over the period of time from construction through spent fuel delivery. No construction will proceed unless Service Agreements committing for a significant quantity of spent fuel storage have been signed. The nominal target is 15,000 MTU of storage commitments. Raising the non-

equity portion of Step V costs through Service Agreements will allow the PFSLLC to avoid financing costs for construction. The PFSLLC, however, retains the option to finance the non-equity portion of Step V costs through debt financing secured by Service Agreements. As with direct financing from customers, no construction will take place without the commitment through Service Agreements for a significant quantity of spent fuel storage. Unless PFSLLC members and non-members have committed to a significant quantity of storage, construction of the PFSF will not begin. Thus, there will be reasonable assurance that the PFSLLC will obtain Step V funding.

Step VI, the operational phase of the PFSF, will also be funded through the Service Agreements. The significant costs of this phase will include procurement and/or fabrication of canisters (\$432 million) and storage casks (\$134 million). These components will be obtained on an as-needed basis, to coincide with the schedule for moving spent fuel to the PFSF. All capital costs associated with the storage of any spent fuel will be paid by the customer pursuant to the Service Agreement prior to the acceptance by the PFSLLC of that spent fuel. Since the PFSF will not accept spent fuel for storage without prior payment through Service Agreements of the necessary capital costs for transportation and storage, there is reasonable assurance that the PFSLLC will obtain the necessary Step VI costs.

The on-going operations and maintenance cost for spent fuel in storage at the PFSF will be paid by the customer on an annual basis as required by the Service Agreements. The annual operations and maintenance cost is estimated to be \$49 million for a 20 year facility operating life and \$31 million for a 40 year life. The Service Agreements will provide assurance for the continued payment of these costs by requiring the customers to provide annual financial information, meet creditworthiness requirements, and , if necessary, provide additional financial assurances (such as an

advance payment, irrevocable letter of credit, third-party guarantee, or a payment and performance bond).

#### 1.7 DECOMMISSIONING FUNDING ASSURANCE

The PFSF will be operated under a "start clean, stay clean" philosophy, with contractual obligations in the Service Agreement with each customer and PFSF administrative procedures to assure that no radioactive contamination is introduced into the facility. Thus the intention is to maintain the PFSF free of radiological contamination at all times. During the operational phase of the facility, all radioactive contamination will be removed immediately upon its discovery. The cost estimate for decommissioning nonetheless conservatively assumes that certain areas and components will require decontamination.

The method of funding decommissioning activities consists of two components: storage cask decommissioning and decommissioning for the remainder of the facility. The costs for decommissioning each storage cask is estimated at \$17,000. This amount will be prepaid into an externalized escrow account under the Service Agreement with each customer, prior to shipment of each spent fuel canister to the PFSF. The full amount of potential decommissioning costs will thus be collected in a segregated account prior to the receipt of each spent fuel canister at the PFSF. This method of funding provides for prepayment of the storage cask decommissioning costs prior to any potential exposure of the storage cask to radiation or radioactive material, and therefore prior to the need for any decommissioning. As storage cask decommissioning is completed, the amount of funds in the escrow account will be adjusted periodically to reflect the remaining decommissioning efforts. This method of funding complies with the requirements of 10 CFR 72.30(c)(1).

The costs of decommissioning the remainder of the facility and site is estimated to be \$1,631,000, which will be funded through a letter of credit coupled with an external sinking fund. Customers will be required under the Service Agreements to pay the costs to decontaminate any portion of the facility for which they may be responsible for contaminating. As the actual costs of decontamination and decommissioning are paid into the external sinking fund, the letter of credit will be reduced by an equivalent amount. This funding method complies with the requirements of 10 CFR 72.30(c)(3).

The per-canister fee and the amounts of the escrow account, external sinking fund and letter of credit will be reviewed and adjusted annually to account for inflation and any changes in the scope or cost of decommissioning. The escrow account, letter of credit and external sinking fund will be established in conformance with the guidance of NRC Regulatory Guide 3.66.

#### 1.8 SITE LOCATION AND COMPLETION DATES

The proposed PFSF is located on the Skull Valley Indian Reservation which is within Tooele County, Utah, 27 miles west-southwest of Tooele City. The site is located 1.5 miles west of the Skull Valley Road. It is anticipated that the PFSF will be issued a specific license to receive, transfer and possess spent fuel in accordance with the requirements of 10 CFR 72 prior to January 1, 2000. Construction of the PFSF is scheduled to start on January 1, 2000, with completion by December 31, 2001. The construction and preoperational testing will be completed in time to allow operation of the facility in 2002.

#### 1.9 RESTRICTED DATA

This application does not contain any Restricted Data or other defense information, and