

## **16 EMERGENCY PLAN**

### **16.1 Conduct of Review**

This chapter of the SER evaluates the Emergency Plan submitted by PFS in support of the application to construct and operate the Facility at the Reservation of the Skull Valley Band of Goshute Indians. This safety evaluation is based on Revision 10 to the PFS Facility Emergency Plan.

Section 72.32(a), Emergency Plan, of 10 CFR Part 72 provides the regulatory requirements for ISFSI emergency plans. Section 72.40(a)(11) requires that for the issuance of a license, the applicant's emergency plan must comply with 10 CFR 72.32. NUREG-1567, Standard Review Plan for Spent Fuel Dry Storage Facilities (March 2000), as revised by Interim Staff Guidance - 16 (June 2000), provides guidance for staff reviewers.

#### **16.1.1 Facility Description**

10 CFR 72.32(a)(1) requires a brief description of the licensee's Facility and area near the site. The Emergency Plan describes the Facility and site and provides detailed maps of the site, including the cask storage area and important supporting structures. Detailed maps and descriptions of the area adjacent to the site and the area near the site are provided. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(1).

#### **16.1.2 Types of Accidents**

10 CFR 72.32(a)(2) requires the identification of each type of radioactive materials accident. The Emergency Plan describes types of accidents that could result in the release of radioactive material, the processes and physical locations where they could occur, and how they could occur. The possible onsite and offsite consequences of potential accidents are discussed. The Emergency Plan describes the potential accidents involving radioactive materials that could occur at the Facility. The Emergency Plan, therefore, meets requirements of 10 CFR 72.32(a)(2).

#### **16.1.3 Classification of Accidents**

10 CFR 72.32(a)(3) requires a classification system for classifying accidents as "alerts." As stated above, the applicant identified a list of potential radiological accidents. Additionally, NUREG-1567 provides guidance on the types of events that the Emergency Plan may consider. The Emergency Plan provides a classification system, based on emergency action levels, that classifies the accidents identified by the applicant in accordance with the guidance of NUREG-1567. The Emergency Plan provides emergency action levels that specifically characterize the occurrence of accidents that warrant the declaration of an alert. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(3).

#### **16.1.4 Detection of Accidents**

10 CFR 72.32(a)(4) requires that the means for detecting accident conditions be described. The Emergency Plan provides a complete description of the means for detecting accident

conditions that is applicable to each of the potential accidents that were identified through compliance with 10 CFR 72.32(a)(2). The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32.(a)(4). The staff notes that the installation or deployment of instrumentation and equipment, the training of staff in its use, and the training of staff in the reporting of emergency conditions will be inspected prior to operation.

#### **16.1.5 Mitigation of Consequences**

10 CFR 72.32(a)(5) requires that the Emergency Plan briefly describe the means and equipment provided to mitigate the consequences of the accidents identified in the Emergency Plan. The mitigation of consequences must also be described in terms of protection of workers and a description of the program to maintain equipment must be provided. NUREG-1567 provides guidance on limiting actions performed by installed systems and trained site personnel, appropriate protective measures for site personnel, and necessary types of protective facilities and equipment.

The Emergency Plan describes the equipment to be installed and design features that mitigate emergency events. The Emergency Plan describes actions to be taken by trained site personnel to mitigate emergency events. The Emergency Plan describes actions, including radiological protective actions, to be taken to protect onsite personnel. The Emergency Plan describes arrangements made for first aid, medical, and hospital services. The Emergency Plan describes response equipment, facilities, and communications equipment that will be available to support mitigation efforts. The types of equipment and the locations of the equipment are described. Provisions to inventory and test equipment are described.

The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(5). The staff notes that the installation of equipment, procedures for the use of equipment, procedures for personnel mitigative actions, and the training of personnel will be inspected prior to operation.

#### **16.1.6 Assessment of Releases**

10 CFR 72.32(a)(6) requires that the Emergency Plan contain a brief description of the methods and equipment that will be used to assess releases of radioactive material. The Emergency Plan describes radiological sampling and monitoring methods that will be used to assess the extent of radioactive releases. The Emergency Plan describes the instrumentation and equipment that will be used by trained personnel to assess the extent of radioactive releases. The Emergency Plan identifies the personnel who will be trained and qualified in the methods and the use of instrumentation and equipment for the assessment of radioactive releases. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(6).

#### **16.1.7 Responsibilities**

10 CFR 72.32(a)(7) requires that the Emergency Plan provide a brief description of the responsibilities of personnel should an accident occur, including identification of personnel responsible to promptly notify offsite response personnel and the NRC. Personnel responsible for developing, maintaining, and updating the Emergency Plan are also to be identified.

The Emergency Plan describes the normal site organization and identifies personnel responsible for maintaining and updating the Emergency Plan, implementing procedures, and Emergency Plan related records. The Emergency Plan identifies the personnel who are responsible for ensuring that offsite notifications are performed promptly. The Emergency Plan describes the emergency response organization and the responsibilities and authority of key positions within it. Personnel with the responsibility to declare emergencies during normal and off normal hours are identified. The Emergency Plan identifies the communications chain for notifying and mobilizing emergency response personnel during normal and non-working hours. The Emergency Plan describes methods for activation of the staff necessary for Emergency Plan implementation. The personnel responsible for overall direction of emergency response and notification of State and local agencies, as well as NRC, are identified for normal and off normal hours.

The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(7).

#### **16.1.8 Notification of Coordination**

10 CFR 72.32(a)(8) requires that the Emergency Plan contain a commitment to and a brief description of the means to promptly notify offsite response organizations; that a control point be established; that notification and coordination be planned; that unavailability of some personnel, parts of the facility and some equipment will not prevent notification and coordination. The licensee must also commit to notify the NRC immediately after notification of the appropriate offsite response organizations and not later than one hour after the licensee declares an emergency.

The Emergency Plan contains a commitment to promptly notify offsite response organizations. The Emergency Plan describes the means to notify offsite response organizations, the means to request offsite assistance, including medical assistance, and the identification of the personnel responsible to perform the notifications. The organization described in the Emergency Plan is responsible to activate the emergency response organization and perform notifications in a timely manner under accident conditions, during normal and off normal hours. Diverse methods of notification are described. Facilities with notification equipment are described as spatially separated. These features allow notification and activation to be performed even if some personnel, equipment, and/or parts of the facility are unavailable. The Emergency Plan contains a commitment to notify NRC after completion of local notifications, but not later than one hour after the alert has been declared. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(8).

#### **16.1.9 Information to be Communicated**

10 CFR 72.32(a)(9) requires that the Emergency Plan provide a brief description of the types of information on facility status, radioactive releases and recommended protective actions, if necessary, to be given to offsite response organizations and the NRC. NUREG-1567 provides further guidance on the types of information that should be communicated.

The Emergency Plan provides a description of the minimum information which will be communicated to offsite response organizations and the NRC in the event of an emergency, which is in compliance with the information required by 10 CFR 72.32(a)(9). This information is

consistent with NUREG-1567 guidance. The responsible offsite agencies are listed in the Emergency Plan. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(9).

#### **16.1.10 Training**

10 CFR 72.32(a)(10) requires that the Emergency Plan describe, briefly, the training the licensee will provide to workers on how to respond to an emergency and any special instructions and orientation tours that will be offered to fire, police, medical, and other emergency personnel.

The Emergency Plan describes the program to train Facility personnel on how to respond to an emergency. With respect to fires, the applicant has also committed to meet applicable NFPA standards. The Emergency Plan describes the training program that will be offered to offsite support agency personnel who may be called upon to provide support to the Facility. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(10). The staff notes that prior to operation, site inspection will verify that appropriate personnel have attended training and that the content of training is in accordance with the commitments of the Emergency Plan.

#### **16.1.11 Safe Condition**

10 CFR 72.32(a)(11) requires that the Emergency Plan provide a brief description of means for restoring the Facility to safe operation after an accident. NUREG-1567 provides guidance suggesting that this description include a commitment to ensure all equipment important to safety has been restored to a state of readiness.

The Emergency Plan contains a description of the means for restoring the Facility to safe operation after an accident and a commitment to develop written recovery procedures for such actions. The Emergency Plan contains criteria for the return to operations and a commitment to ensure that equipment important to safety has been checked and restored to normal operation before the Facility is returned to operation. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(11).

#### **16.1.12 Exercises**

10 CFR 72.32(a)(12) requires that the Emergency Plan provide a description of the program for conduct of exercises, drills and communications tests.

The Emergency Plan describes the drill and exercise program. The program includes: biennial exercises, annual radiological drills, annual medical drills, and annual fire drills. With respect to fires, the applicant has also committed to meet applicable NFPA standards. The Emergency Plan states that offsite response organizations will be invited to participate in the biennial exercise. The Emergency Plan commits to check communications equipment semiannually, including the check and update of all necessary phone numbers. The Emergency Plan describes the evaluation of drills and correction of identified deficiencies and the confidentiality of exercise scenarios. The Emergency Plan identifies the Emergency Preparedness Coordinator as responsible to determine and implement corrective actions in response to

identified deficiencies. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(12). The staff notes that prior to operation, site inspection will verify that drills have been conducted in accordance with the Emergency Plan, and the licensee will demonstrate that PFS personnel can implement the Emergency Plan.

#### **16.1.13 Hazardous Chemicals**

10 CFR 72.32(a)(13) requires that the Emergency Plan certify that the licensee has met its responsibilities under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499.

The Emergency Plan states that there will be no hazardous substances onsite in excess of the threshold planning quantities stipulated by the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499. Therefore, planning for hazardous chemicals is not required to be addressed in the Emergency Plan because this Act does not apply. The Emergency Plan states that the requirements of the Act have been met. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(13).

#### **16.1.14 Comments on the Emergency Plan**

10 CFR 72.32(a)(14) requires that the licensee allow offsite response organizations expected to respond in case of an accident 60 days to comment on the initial submission of the Emergency Plan before submitting it to the NRC and provide any comments received to the NRC.

The Emergency Plan contains a copy of a letter, from the Tooele County Department of Emergency Management (1997), documenting that the Emergency Plan has been reviewed by the applicable offsite response organization. The Emergency Plan contains the applicant's response to said comments. The Emergency Plan commits to providing Emergency Plan revisions to the offsite response organization. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(14).

#### **16.1.15 Offsite Assistance**

10 CFR 72.32(a)(15) requires that the Emergency Plan briefly describe arrangements for requesting and effectively using offsite assistance.

The Emergency Plan describes the means for requesting assistance from offsite response organizations when necessary. The Emergency Plan identifies offsite response organizations expected to provide support. The Emergency Plan states that assistance agreements will be documented in letters of agreement that will be reviewed annually and renewed every five years. The Emergency Plan describes the training that will be offered to offsite response organizations. The Emergency Plan, therefore, meets the requirements of 10 CFR 72.32(a)(15).

## **16.2 Evaluation Findings**

10 CFR 72.40(a)(11) requires that the applicant's Emergency Plan comply with 10 CFR 72.32. The Emergency Plan submitted in support of the application to license the Facility meets the requirements of 10 CFR 72.32(a). Based on the applicant's submittal of its Emergency Plan, the content of the application meets the requirements of 10 CFR 72.24(k). The staff has concluded that the Private Fuel Storage Facility Emergency Plan, Revision 10, meets applicable regulations and guidance and is adequate.

## **16.3 References**

Private Fuel Storage Limited Liability Company. 2000. *Emergency Plan for the Private Fuel Storage Facility, Revision 10*. Docket Number 72-22. La Crosse, WI: Private Fuel Storage Limited Liability Company.