6.1.5.1 Fire

REMOVE the last paragraph under "**Locomotives"** on page 6-8 of the SER, and INSERT:

Locomotives

By Facility administrative procedures, the locomotives will not enter the Canister Transfer Building. PFS proposes to use railroad switching locomotive model MP–15AC to push the 150-ton depressed center flat car carrying the spent fuel shipping cask inside the Canister Transfer Building. The locomotive, manufactured by General Motors Electro-Motive Division, has 1,500 hp with an 1100 gal. diesel fuel tank. The shipping cask car has a coupled length of approximately 74 to 105 ft. A spacer car of coupled length of approximately 66 ft will be placed in between the shipping cask car and the locomotive. The rail cars will enter the Canister Transfer Building through the west doorway of the cask load/unload bay. The distance from the west doorway to the location where the shipping cask would be positioned for hoisting is approximately 103 ft. The nearest end of the locomotive fuel tank will be approximately 20 ft outside the Canister Transfer Building. By Facility administrative procedures, the locomotive engineers would be instructed to keep the locomotives outside the Canister Transfer Building. Additionally, PFS proposes to install wheel stops onto the rails in the cask load/unload bay east of the bay centerline to physically prevent locomotives from entering into the Canister Transfer Building.

REMOVE the paragraph entitled "**PROPANE STORAGE TANKS"** on page 6-9 of the SER and INSERT:

Propane Storage Tanks

Propane for heating the Canister Transfer Building and the Security and Health Physics Building will be stored in a group of four centralized tanks. Each tank will have a capacity of 5,000 gal. or less so that the combined capacity of all four tanks will be not more than 20,000 gal. The four storage tanks will be separated by missile walls to ensure that a single tornado missile cannot rupture more than one tank. The tanks will be located outside the restricted area and at least 1,800 ft away from the nearest cask storage pads and the Canister Transfer Building and approximately 1,000 ft west of the Operations and Maintenance Building. Additionally, propane for heating the Operations and Maintenance Building and the Administration Building will be stored in relatively small propane tanks located near these structures. PFS specifies that a crushed rock surface devoid of vegetation will be placed a minimum of 100 ft radially outward from the propane tanks to stop propagation of wildfires. Evaluation of potential detonation of the propane in Chapter 15, Accident Analysis, of this SER shows that the generated air overpressure at a distance of 1,800 ft will be less than 1 psi, the recommended safe limit for structural damage by Regulatory Guide 1.91 (Nuclear Regulatory Commission, 1978). These above ground storage tanks will be designed in accordance with the requirements of NFPA 58, Liquified Petroleum Gas Code (National Fire Protection Association, 1998e). NFPA 58 provides the requirements for construction of liquefied petroleum gas storage tanks. It also requires a minimum distance of 50 ft from any nearby building for propane tanks having capacity 2,001–30,000 gal. Heating systems will be designed following NFPA requirements. Additionally, all outdoor pipes between the tanks and the buildings will be located below ground.

REMOVE the first full paragraph on page 6-12 of the SER and INSERT:

The HI-STORM 100 Cask System has been evaluated for a bounding, hypothetical fire caused by 50 gallons of spilled diesel fuel. This evaluation is described in detail in the HI-STORM 100 FSAR and has been reviewed and found to be acceptable by the staff (as documented in the NRC's HI-STORM 100 SER). PFS proposes to use the HI-STORM 100 storage casks with a reduced compressive strength from that of 3,000 psi of the concrete overpack (Private Fuel Storage Limited Liability Company, 2001a). This is a reduction from 4,200 psi identified in the HI-STORM 100 FSAR. Concrete compressive strength is controlled primarily by the water-cement ratio. The density of the concrete is inconsequentially affected by variation of the ratio of these two materials (Holtec International, 2001). The thermal conductivity of the concrete is governed by the concrete density. Therefore, use of lower strength concrete will not have any effect on the thermal performance of the overpack concrete since the material density remains essentially the same. Based on the assessment of the potential fire hazards and the fire protection measures at the Facility, there is reasonable assurance that the cask system will not be exposed to fires that exceed the design basis fire.

REMOVE Section 6.3 of the SER and INSERT:

6.3 References

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