

U.S. Nuclear Waste Technical Review Board

Transportation Planning Activities & Lessons Learned
Salt Lake City, Utah

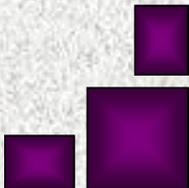


Private Fuel Storage

John Parkyn

Chairman of the Board
Private Fuel Storage, L.L.C.

October 14, 2004

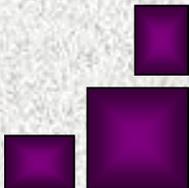


PFS History

- Started in 1995, 8 Utility Members, Applied for NRC License in 1997
- NRC Safety Hearings in 2000
- NRC Environmental & Final Safety Hearings in April - June 2002
- Final Environmental Impact Statement & Final Safety Evaluation Report Recommended License, December 2001

Major Benefits

- Less Expensive than On-site Storage by an Individual Utility
- Enhances Security of Spent Fuel



Aerial View

CEDAR MOUNTAINS

LAKESIDE MOUNTAINS

RAIL LINE

ACCESS ROAD

HICKMAN KNOLLS

Looking to the north, this artist's concept shows the PFSF facility, including the Low Corridor Rail Line and the site access road.

Looking West

GRASSY MOUNTAINS

CEDAR MOUNTAINS

RAIL SIDINGS

UNION PACIFIC
MAINLINE RAILROAD

RAIL LINE

INTERSTATE 80

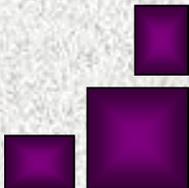
To PFS Storage Facility

Looking to the west, I-80 can be seen as it disappears around the north end of the Cedar Mountains. An artist's concept shows how the PFSF rail siding might appear adjacent to the Union Pacific tracks, and also the route of the Low Corridor Rail Line.

Transportation Strategic Concepts

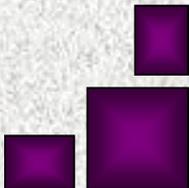
- Technical Review Committees to Select Best Canister Vendors
- Extensive Review of Handling Requirements of Source and Destination

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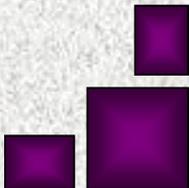
Transportation Strategic Concepts

- Review of Truck vs. Rail Only Option
- Decision to Select Rail Only
 - Reduces interactions with public highway vehicles
 - Enhances security of shipments
 - Reduces by a factor of 20 to 60 the number of shipments



Rail Shipment Enhancement

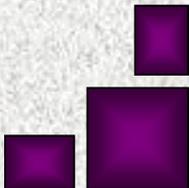
- Meeting With Railroads to Discuss Their Needs to Cover Shipping
- Discussion with American Association of Railroads to Draft Transportation Standards



Basis for Safety Standards

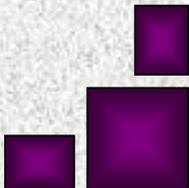
- Cask Licensed and Reviewed by NRC
- Rail Lines Maintain Rail Rights-of-Way to Standards Set by Federal Railroad Administration

These two inputs determine overall safety.



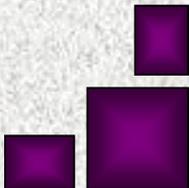
Basis for Safety Enhancement

- Equipment (rolling stock) a Priority of PFS
 - Set a new level of precision
 - Use the quality control process developed by railroads
 - Develop a conservative standard to ensure each rail line hauling spent fuel achieves a high level of safety



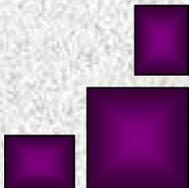
Standard

- Each Bearing Transmits Conditions of Vibration and Temperature While in Route
- Electro Magnetic Braking To Shorten Stopping Distance
- Shelved Couplers to Protect Against Rough Track Decoupling
- 20+ Parameters Transmitted Live Time to Satellite
- Full Test of Prototype
- Continuing Surveillance of Each Cask Car in Service
- Single Use Trains



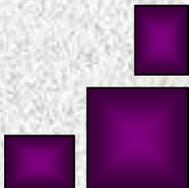
Route Selection

- Once Equipment Upgraded - Route Selection Process Next Issue
- PFS Determines Best Route From Each Customer to Storage Site
- Consult With Railroads on Initial Round of Review for Their Route Preference
- Review and Modify With Federal Agencies and Stake Holders



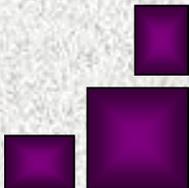
Total Concept

- Safe Equipment Operating on Optimized Route



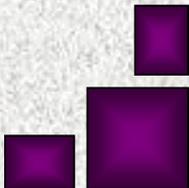
2004

- ASLB Hearing on F16 Crash – August
- ASLB Decision Expected During December 2004 - January 2005



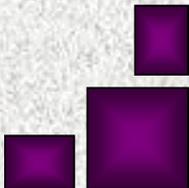
Construction

- Rail Car Testing of Prototype to Be Completed
- Fabrication of Rolling Stock and Handling Equipment Parallels Site Construction and Startup



Operations

- Scheduled for 2005
- 200 Canisters Per Year Capability
- 40,000 MTU (4,000 Canisters)
Capacity Under Current License
- Open to All Utilities and All
Canister Vendors



Questions??

