

High Burnup Used Fuel Demonstration Workshop

August 22-23, 2012

Objective: A long-term dry storage demonstration utilizing used high-burnup (>45 GWD/MTU) commercial reactor fuel is needed to support the safe extended storage of used fuel, and its transportation and handling. A demonstration can be used to gather data to support the continued licensing of storage and transportation systems and can help instill confidence in the management of used nuclear fuel while a final disposition pathway is determined. The integration of commercial and government efforts is essential to the success of a program to execute a demonstration. A demonstration has multiple layers of risk in the form of cost, schedule, equipment, and methodology to name a few. Any demonstration must be coupled with laboratory testing to characterize what is being tested, to determine what has been happening to the fuel over the storage life, and to develop an understanding of the end-of-storage-life properties.

This workshop is intended to bring together interested parties to assist in the identification and resolution of issues that must be addressed in an integrated strategy for a used fuel demonstration program. The U.S. Department of Energy is developing plans for a high burn-up used nuclear fuel storage and transportation confirmatory data project and the outcomes from this workshop will be used to inform that effort. Since many of the topics are universal in nature, international participation is encouraged.

Attire: Wednesday Business Casual **for tour:** Sturdy shoes with closed-toe and closed-heel are required. Natural fiber slacks (cotton) are preferable due to the sensitivity of INL personal contamination monitors and their tendency to detect naturally occurring radon, which is attracted to synthetic fiber (i.e., polyester). **Thursday:** Business casual

Host: Steve Marschman, (208) 533-8041

Meeting Coordinator: Connie Bates, (208) 526-5908

Revision Number: 3

Date agenda revised: 8/16/2012

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Wednesday, August 22, 2012

Shilo Inn Suites Hotel, 780 Lindsay Boulevard, (208) 523-0088

7:30 Registration/light refreshments.....

Shilo Inn Yellowstone Room

08:00 Welcome.John Grossenbacher
Laboratory Director, (208) 526-9021

08:15 The Role of the INL and UNFDave Hill
Deputy Lab Director for Science and Technology, (208) 526-0707

08:45 Workshop Overview.Steve Marschman
Program Manager, (208) 533-8041

09:15 UFD Campaign Update.Ken Sorenson
UFD Storage and Transportation Lead, (505) 844-0074

09:45 Break

10:00 NRC Expectations for a HBU DemonstrationBob Einziger
Senior Materials Scientist, (301) 492-3283

10:45 Industry's Perspective on the Need for a Demonstration.....Rod McCullum
Director, Used Fuel Programs, (202) 739-8082

11:30 Lunch (on your own)

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Shilo Inn Yellowstone Room

13:00 Critical Data to Obtain from a Demonstration Brady Hanson
R&D Investigations Lead for UFD, (509) 375-5051

15:00 Break

Tour of INTEC

15:30 Badging and Load Bus to Leave for INTEC,
Working Box Dinner served on bus ride
During Ride to INTEC: Presentation Video "CWI FRR Fuel" and Presentation Speaker
Phil Winston, "INL Spent Nuclear Fuel Cask Storage Area"

17:30 Arrive INTEC 603 for tour

19:15 Leave INTEC for town

20:30 Arrive at Shilo Inn

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Thursday, August 23, 2012

Shilo Inn Suites Hotel, 780 Lindsay Boulevard, (208) 523-0088

7:30 Light refreshments.....

Shilo Inn Yellowstone Room

08:00 Day 1 Wrap Up..... Carl Beyer
Chief Scientist, (509) 372-4605

08:30 Department of Energy Action to Support a Demonstration..... Steve Marschman
Program Manager, (208) 533-8041

09:30 Break

09:45 Demonstration Logistics Issues..... John Kessler
Manager, Used Fuel and HLW Management Program, (704) 595-2737

11:45 Lunch (on your own)

13:00 Regulatory Process..... David Pstrak
Chief, Structural Mechanics and Materials Branch, (301) 492-3299

13:45 Vulnerabilities/Uncertainties..... Ken Sorenson
UFD Storage and Transportation Lead, (505) 844-0074

14:30 Meeting Summary and Action Items Discussion..... Carl Beyer, Steve Marschman

15:00 Meeting Adjourn, opportunity for additional discussions