Overview of Workshop Objectives and Scope

Presented to: NWTRB Workshop on Evaluation of Waste Streams Associated with LWR Fuel Cycle Options

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Workshop Objectives

• Benchmark fuel cycle models/codes/tools against each other – it is NOT intended as an exercise to identify preferred scenarios.

• Establish consistency in input assumptions for the calculations of spent fuel generation and management in the U.S.

• Understand how the scenario definitions provided by the NWTRB are applied in the calculation of spent fuel characteristics.

• Reach consensus on areas of agreement, differences, and suggestions for future interactions and direction.
Analysis Scope

• Limited to light water reactor (LWR) technology

• Sequential analysis phases
  – Characteristics of U.S. spent fuel inventory as of December 2009
  – Spent fuel discharged through 2100
  – Impact of repository disposal
  – Steady state reprocessing and fabrication of PWR MOX and recycled UOX fuel
  – Impact of reprocessing combined with repository disposal
Workshop Attendees

• Participants
  – Organizations that have indicated they have tools or codes that allow analysis of workshop scenarios and will present the results of these analysis during the workshop.

• Other Attendees
  – Observers of work presented by Participants, who will be invited to participate in the discussion periods if time allows, and during the public comment periods.
Review of Agenda

• **Scenario Definitions and Analysis Phases**
  – Basis for and description of scenarios
  – Expected outcomes from benchmarking

• **Overview of Analysis Tools & Methods**
  – Presentations of analysis methodology
  – Observations, including similarities and differences

• **Analysis Results**
  – Five scenario phases
  – Presentation of results by each Participant
  – Round table discussion - comparison of results

• **Where Do We Go From Here?**
  – Working groups to resolve differences identified in results
  – Plans for further meetings
  – Definition of additional scenarios
The Workshop is a Public Meeting

• It is being recorded.
• A transcript will be available on the Board’s website (www.nwtrb.gov) in a few weeks.
• All presentations and other documents provided by attendees will be posted to the Board’s website.
• Documents and written comments submitted by members of the public will be posted to the Board’s website.
• Public input is welcome – during the discussion of results if time allows plus during public comment period at the end of each day.
About the Board

• Established under the terms of the 1987 Amendments to the Nuclear Waste Policy Act.

• Congressional mandate to:
  – Conduct an independent and ongoing evaluation of the technical validity of activities undertaken by the Secretary of Energy related to the management of high-level radioactive waste (HLW) and commercial, research & defense-related spent nuclear fuel (SNF).
  – Report its findings to Congress and the Secretary of Energy at least twice per year.

• Eleven Board members:
  – Nominated by the Academy of Science
  – Appointed by the President
  – Serve four year terms
Let’s get started!