Program Update from DOE-NE:
Office of Integrated Waste Management (IWM)

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Disclaimer

This is a technical presentation that does not take into account contractual limitations or obligations under the Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste (Standard Contract) (10 CFR Part 961). For example, under the provisions of the Standard Contract, spent nuclear fuel in multi-assembly canisters is not an acceptable waste form, absent a mutually agreed to contract amendment.

To the extent discussions or recommendations in this presentation conflict with the provisions of the Standard Contract, the Standard Contract governs the obligations of the parties, and this presentation in no manner supersedes, overrides, or amends the Standard Contract. This presentation reflects technical work which could support future decision making by DOE. No inferences should be drawn from this presentation regarding future actions by DOE, which are limited both by the terms of the Standard Contract and Congressional appropriations for completing a spent nuclear fuel repository.
Transportation Planning Activities

- FY21 Program Plans
- Recent Work Products
- Railcar Updates and ISSMS
- Intergovernmental Engagement
- Knowledge Management
- New Work
- NTSF Annual Meeting Series
FY21 Program Plans

• FY21 Congressional Appropriations Language and Report Language:
  – **Nuclear Waste Disposal**: “For Department of Energy expenses necessary for nuclear waste disposal activities to carry out the purposes of the Nuclear Waste Policy Act of 1982, Public Law 97–425, as amended, including interim storage activities, $27,500,000, to remain available until expended, of which $7,500,000 shall be derived from the Nuclear Waste Fund.”

  – **Integrated Waste Management Systems**: “The Department is directed to continue site preparation activities at stranded sites, to evaluate the re-initiation of regional transport, and undertake transportation coordination efforts. Additionally, it is noted that spent nuclear fuel is in many cases located in or near cities and Indian reservations. As the Department continues to plan for an integrated waste management system for our nation's spent nuclear fuel, the Department is encouraged to include planning for the removal of spent nuclear fuel from sites located near cities and Indian reservations.”
Secretary Jennifer Granholm was sworn in February 2021
• Deputy Secretary David Turk was sworn in March 2021
• Assistant Secretary nominations are expected soon (e.g. NE-1, EM-1)
• IWM continues to work on existing transportation projects consistent with Congressional direction
• Some new direction has been received from the Administration
• More direction expected after an NE-1 is confirmed

FY21 Program Plans cont.
Recent IWM Work Products

• **Nuclear Power Plant Infrastructure Evaluations for Removal of Spent Nuclear Fuel**, released April 2021
  – Includes site visit information for Oyster Creek (NJ) and Pilgrim (MA)
Railcar Updates and ISSMS

- 12-Axle Atlas Railcar Testing continues.
- Buffer car testing is complete. Request for approval has been sent to AAR.
- US Navy has finished single-car testing on the Rail Escort Vehicle (REV). Their REV is going back to the fabricator for final fitting out.
  - DOE’s REV is almost finished and will be shipped to Pueblo, CO soon.
- Request for Proposals for fabrication with an option to test a prototype 8-axle Fortis railcar to go out in June 2021
  - AAR approval for 8-axle Fortis design was received in January 2021
- Work on an Integrated Safety and Security Management System (ISSMS) is also underway.
  - AAR S-2043 requires sensors on railcar equipment to monitor railcar performance and identify unexpected changes in equipment performance before a problem arises.
  - The ISSMS will be integrated into and monitored by the existing Transportation Tracking and Communications (TRANSCOM) system.
  - Security escorts traveling in REVs will be able to monitor sensors and will be notified of any performance alerts.
  - ISSMS is currently in the project management planning stage and expected to be completed in mid-2024.
Intergovernmental Engagement

• Cooperative Agreements: Current 5-year funding agreements for SRGs and TRMTC end in September
  – IWM planning to set up a new 5-year cycle to start Oct. 2021
• “Transportation Core Group”
  – Next call planned for Spring/Summer 2021
• NTSF
  – March 2021 Webinar on Type B Package Testing
  – Continued participation in the Planning Committee
  – SNF Rail/Routing AHWG will meet next in late June/July 2021
  – NTSF Wiki Site refresh group
• Critical Infrastructure Partnership Advisory Council (CIPAC) – Working group on private SNF transport
  – DHS, NRC, and FRA leading the working group
  – IWM staff participating as an “observer”
  – Now also has a State and Tribal sub-working group
Knowledge Management

• Knowledge Management (KM) presents challenges to organizations worldwide including nuclear and radioactive waste management sectors.
  – Aging workforce
  – Loss of institutional knowledge
  – Limited number of younger people entering nuclear fields

• Similar challenges within DOE-IWM
  – Developing a KM project plan for SNF transportation activities
    • transitioning from ad-hoc to structured KM
  – Includes infrastructure evaluation work, reviewing past program information and public comments, capturing information from subject matter experts nearing retirement, preserving documents and data, etc.
  – Retaining past information will help DOE operate more efficiently in a future SNF transport program.
New Work: Consent-Based Siting

- FY21 appropriations language directed DOE to pursue interim storage
- DOE management has directed IWM to resume consent-based siting activities
- Pick up where prior activity left-off in 2017, revisiting public comments received and the draft Consent-Based Siting Process document
- Additional information to come
Thursday July 8, 2021
Nuclear Power Plant Site Evaluations Status Report
Speaker: Dr. Steve Maheras, Pacific Northwest National Laboratory
Questions?