

SPENT NUCLEAR FUEL PACKAGE PERFORMANCE DEMONSTRATION (PPD)



WHAT IS IT?

The U.S. Department of Energy (DOE) is making preliminary plans to conduct physical demonstrations on a full-sized spent nuclear fuel (SNF) transportation rail cask, inspired by a history of similar testing endeavors worldwide and recommended by the National Academy of Sciences and the Blue Ribbon Commission. DOE is currently considering both prescribed regulatory tests and non-regulatory demonstration tests. DOE is currently considering both demonstrations prescribed in regulations for cask certifications and non-regulatory demonstrations. The DOE's PPD plans will be informed by responses to its [Request For Information \(RFI\)](#), released on July 31, 2024. Interested parties are encouraged to respond to the RFI to share their views on how DOE should design and conduct a PPD.

WHY ARE WE DOING IT?

The PPD is intended to:

- Build public trust and confidence in the safety of SNF transportation, particularly by rail.
- Provide the foundation for a broader public information sharing campaign and discussion about the future of SNF and SNF transportation safety.
- Strengthen relationships and improve communication between DOE and State, local, and Tribal governments and a broad range of stakeholders - creating "sharable confidence" among involved parties.
- Allow DOE to gather technical data and further inform computer models.

WHEN ARE WE DOING IT?

The PPD will undergo a phased development schedule, preliminarily planned from 2024 to 2028. The demonstration date will depend on authorization, funding, and availability of materials and services for the demonstration(s).

Phase 1:

Preliminary Outreach

- Advises overall project development
- Focus on existing nuclear transportation community (State, Tribal, Federal, Industry)

Spring 2024 through Summer 2024

Phase 2:

Request for Information (RFI) and Comment Period

- RFI published, gather responses, review feedback
- Increase breadth of outreach
- Informs PPD protocols and the materials and services DOE may need to procure

Summer 2024 through Spring 2025

Phase 3:

Request for Proposals (RFP) through PPD Implementation

- Broadest outreach
- Informs PPD design and DOE communications

Spring 2025 through 2028 (target)

HOW CAN I PARTICIPATE, AND WHO DO I CONTACT?

A link to the RFI, RFI background information, and updates on the project are available at <https://curie.pnnl.gov/DOE-PPD>. DOE will offer webinars and listening sessions to answer questions and seek feedback. To receive more information about the PPD, [subscribe to our mailing list](#) or contact:

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