

DOE-managed HLW. DOE will also have to develop and obtain NRC approval of transportation casks for all DOE-managed SNF and HLW, unless the department chooses to use an existing transportation cask design. Additional types of new casks may be required for transporting some commercial SNF that cannot be transported in existing transportation casks.

Finding 3. The Board finds that DOE will have to complete existing canister designs or develop new cask and canister designs for storing and transporting SNF and HLW. The Board also finds that the time

needed to develop new cask or canister designs for SNF or HLW can be greater than a decade. Therefore, DOE will need to allow for considerable advance planning and early coordination with the NRC during the development of new cask and canister designs.

Recommendation 3. The Board recommends that for planning purposes, DOE should allow for a minimum of a decade to develop new cask and canister designs for SNF and HLW storage and transportation, or DOE should conduct its own detailed evaluation of the time needed to complete design, licensing, fabrication, and testing of

new casks and canisters.

As the Board continues its independent evaluation of DOE activities related to nuclear waste management, it expects to review and evaluate additional topics related to the department's research and analysis of transporting SNF and HLW.

References

1. U.S. Nuclear Waste Technical Review Board, "Preparing for Nuclear Waste Transportation—Technical Issues That Need to Be Addressed in Preparing for a Nationwide Effort to Transport Spent Nuclear Fuel and High-Level Radioactive Waste," Arlington, VA, NWTRB (September 2019).
2. U.S. Nuclear Waste Technical Review Board, "Evaluation of the Technical Basis for Extended Dry Storage and Transportation of Used Nuclear Fuel," Arlington, VA, NWTRB (December 2010).
3. National Academy of Sciences, Committee on Transportation of Radioactive Waste, "Going the Distance? The Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste in the United States," Washington, DC, The National Academies Press (2006).
4. U.S. Nuclear Waste Technical Review Board, "Management and Disposal of U.S. Department of Energy Spent Nuclear Fuel," Arlington, VA, NWTRB (December 2017). ■



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