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Abstract Submission Form

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Used Fuel Disposition Campaign – Objectives, Mission, Plans and Current Activities

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The safe management and disposition of used nuclear fuel and/or high level nuclear waste is a fundamental aspect of the nuclear fuel cycle. The United States currently utilizes a once-through fuel cycle where used nuclear fuel is stored on-site in either wet pools or in dry storage systems with ultimate disposal in a deep mined geologic repository envisioned. However, a decision not to use the proposed Yucca Mountain Repository will result in longer interim storage at reactor sites than previously planned. In addition, alternatives to the once-through fuel cycle are being considered and a variety of options are being explored under the U.S. Department of Energy's Fuel Cycle Technologies Program.

These two factors lead to the need to develop a credible strategy for managing radioactive wastes from any future nuclear fuel cycle in order to provide acceptable disposition pathways for all wastes regardless of transmutation system technology, fuel reprocessing scheme(s), and/or the selected fuel cycle. These disposition paths will involve both the storing of radioactive material for some period of time and the ultimate disposal of radioactive waste.



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To address the challenges associated with waste management, the DOE Office of Nuclear Energy established the Used Fuel Disposition Campaign. The mission of the Used Fuel Disposition Campaign is to identify alternatives and conduct scientific research and technology development to enable storage, transportation, and disposal of used nuclear fuel and wastes generated by existing and future nuclear fuel cycles. The near-and long-term objectives of the Used Fuel Disposition Campaign are presented.

Disposal, Transportation, Storage

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