

Spent Fuel Management and Support for Resolution of Yucca Mountain

The development of a spent nuclear fuel and high-level waste (HLW) management plan is critical for the continued viability of nuclear energy, and is an enabling condition for new plant orders in the United States. The industry supports Yucca Mountain as an integral part of the spent fuel management plan.

Yucca Mountain

The lack of a viable solution for disposing of spent nuclear fuel could inhibit the future use and development of nuclear generation. The unique technical and regulatory aspects of Yucca Mountain require independent industry assessment and input throughout the regulatory development and licensing process.

Spent Fuel Storage and Transportation

Interim spent fuel management (storage and transportation) has become increasingly expensive and difficult to license. This puts in jeopardy the very large investment that utilities have made in "dual-purpose" systems that were designed and built to store and transport spent fuel but have received licenses only for storage.

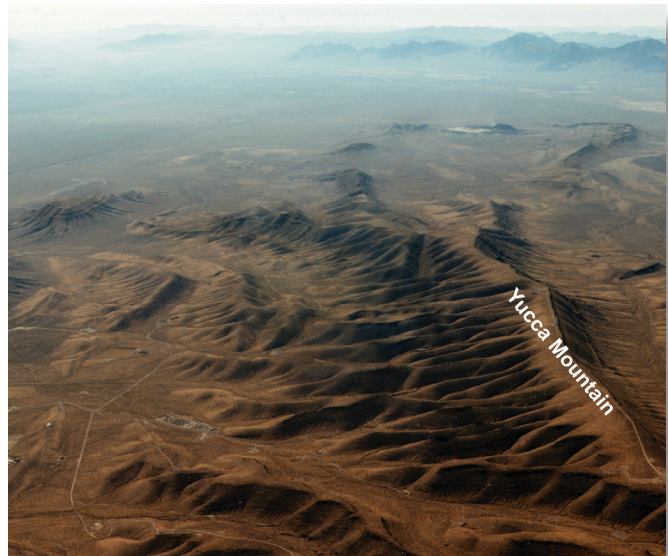
There are numerous technical issues related to interim spent fuel storage and transportation that constantly surface during Nuclear Regulatory Commission (NRC) licensing of these systems, and much additional work is required to address the NRC concerns. For instance, it will be necessary to provide the technical bases to allow for the licensing of high burnup spent fuel transportation systems since the majority of spent fuel being discharged from reactors now falls into that category.

EPRI's R&D Plan

EPRI is focused on (1) achieving a positive and timely regulatory decision on the proposed repository based on the scientific evidence; (2) establishing technical bases and risk-informed approaches for resolving and improving spent fuel storage and transportation issues; and (3) evaluating the impacts of future advanced nuclear fuel cycles on HLW and used fuel management.

Collaboration

EPRI works very closely with the Nuclear Energy Institute (NEI) since this work involves significant licensing and policy implications. EPRI regularly interacts with the Department of Energy (DOE) and its contractors to ensure that EPRI's Yucca Mountain-related work is both relevant and timely. EPRI also closely collaborates with Electricité de France (EDF) and many other national research organizations and universities that are involved in research and development (R&D) on spent fuel storage, transportation, and disposal issues.



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Electric Power Research Institute

3420 Hillview Avenue, Palo Alto, California 94304-1338 • PO Box 10412, Palo Alto, California 94303-0813 USA
800.313.3774 • 650.855.2121 • askepri@epri.com • www.epri.com

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