

Federal Used Fuel Management Program

The Nuclear Waste Policy Act of 1982 (the Act) required the federal government to transfer used fuel from commercial reactor sites to a permanent repository. Commencement of the transfer was to begin in 1998. Congress further directed the Department of Energy (DOE) in 1987 to evaluate Yucca Mountain in Nevada as the only site to host a permanent geologic repository for disposal of the commercial used fuel as well as high-level waste from government activities. DOE determined the site was viable in 2002 and in 2008 filed a license application with the Nuclear Regulatory Commission (NRC).

DOE sought to withdraw the license application in 2010 following objections from the state of Nevada, and the development of a permanent repository at Yucca Mountain was defunded that year. While the NRC found that DOE's proposed repository design met the NRC's applicable safety and environmental requirements (except for certain land withdrawal and water rights requirements), no funding has been provided to continue the licensing process since 2010.

Costs for inaction to establish a federal used fuel management program have been largely borne by three entities: nuclear reactor owners, U.S. taxpayers, and the communities that host a nuclear power plant no longer in operation. The Act required that nuclear reactor owners pay a fee on the generation of electricity from nuclear plants into a Nuclear Waste Fund to cover program costs related to the disposal of commercial nuclear waste (the costs to dispose of government-generated wastes were to be covered by appropriations from the Treasury); with more than \$45 billion currently in the Fund. Each day without a solution costs taxpayers about \$2 million, totaling between \$500 million and \$800 million annually.

Used commercial nuclear fuel is safely stored in robust, disaster-proof containers.

- The U.S. has been safely storing spent nuclear fuel for more than six decades.
- The used fuel rods are stored in containers with multiple layers of protection—including thick metal canisters inside thick concrete containers.
- Used nuclear fuel containers are designed to withstand disasters such as earthquakes, hurricanes and wildfires. The layers of protection have been proven effective for more than sixty years.

The U.S. commercial nuclear industry is supportive of ongoing efforts by the Department of Energy to restart the federal used fuel management program.

- NEI members look forward to working with the Administration and Congress to reach a consensus for the long-term management of the nation's used fuel. Federal efforts to site consolidated interim storage facilities should be paired in the near-term with a resumption of federal efforts to establish a permanent geological repository.
- The private sector is developing consolidated interim storage solutions, one of which was recently licensed by the NRC. Any federal program should complement and support the innovation underway by the private sector.

The federal entity managing the used fuel program should focus on both consolidated interim storage and permanent geological disposal, and be given the resources and authority necessary for success.

- A comprehensive federal used fuel management program should allow for the licensing, construction, and operation of both private and federal consolidated storage facilities for used nuclear fuel.
- Government efforts to develop a consolidated interim storage program should be accompanied by efforts to develop geological disposal capabilities.
- Communities, states and tribal governments that are considering hosting a permanent geological repository and consolidated storage facilities must have the ability to negotiate host-community benefits and other considerations related to the waste management program, as well as the equitable distribution of those benefits.
- DOE, or another organization assigned responsibility for the management of used fuel storage and disposal, should be empowered with the authority and resources to succeed, including access to the Nuclear Waste Fund for its intended purpose. The government entity should not be reliant on the annual appropriations process, but operate with all appropriate congressional oversight.
- The government must be held to the contracts and court findings to protect the rights of electricity ratepayers and reactor owners:
 - » The Nuclear Waste Fund fee should not be raised above zero unless it can demonstrated that (1) the annual expenses for the program's ongoing projects exceeded the Fund's annual investment income, and (2) the projected life-cycle cost demonstrates that the fee must be reinstated to achieve full cost recovery over the life of the program.

- » Standard contract holders should not be required to waive their right to recover damages or settle claims resulting from the federal government's breach of contract as a condition of the government accepting used nuclear fuel for consolidated storage or permanent disposal.

The U.S. commercial nuclear industry supports extensive community engagement throughout the process to identify, develop and build interim storage facilities and a permanent repository.

- The Department of Energy's request for information (RFI) is a positive step forward.
- The licensing review conducted by the NRC to determine if a site meets the public health and environmental safety requirements includes several opportunities for the federal government to solicit public comment and engagement.
- Once potential host sites are identified and the NRC completes its review, DOE should engage regularly and openly with community leaders, elected officials, and members of the community as part of its site selection process.
- DOE should actively engage with disadvantaged communities as part of the site selection process to ensure understanding of community-specific needs and equitable distribution of benefits.