



# NUCLEAR INFORMATION AND RESOURCE SERVICE

6930 Carroll Avenue, Suite 340, Takoma Park, MD 20912  
301-270-NIRS (301-270-6477); Fax: 301-270-4291  
[nirsnet@nirs.org](mailto:nirsnet@nirs.org); [www.nirs.org](http://www.nirs.org)

## Yucca Mountain—a Brief History

The Nuclear Waste Policy Act (NWPA or Act) governs the long-term management of the most concentrated radioactive waste: “spent” nuclear fuel rods and residues from reprocessing these rods. This waste is generated by both civilian and military activities, the vast majority coming from production of electricity, which under NWPA will transfer from private energy corporations to the taxpayers at some point. The focus of the Act is to establish permanent, regulated “final resting places” for this waste since it will be a health and security hazard for more than a million years.

Originally passed in 1982, the Act has unfortunately failed to deliver a solution for this waste, largely thanks to subsequent actions taken by Congress that circumvented safeguards built into the Act. Congress has created the following situation in Nevada, at the proposed nuclear waste site called Yucca Mountain:

- In 1987 Congress chose an area of Nevada to be the only site to be characterized, abandoning a multiple-site approach that included various geological options in WA, TX, LA UT, MS as well as NV. Congress took this action without benefit of expertise in geology, and the subsequent selection of Yucca put the nation’s nuclear waste program in the ditch with a site that is so flawed it does not warrant further investment.
- Politics was the un-denied basis for choosing Nevada, and, indeed the historical nick-name for the amendment to the Act was “Screw Nevada.”
- Today, there is no radioactive waste at Yucca Mountain; only an access tunnel was dug. The buildings erected are now gone and the staff laid-off. The State of Nevada and impacted Indian Tribes have consistently opposed the site—positions that have not changed. So far, \$14 billion has been spent, while \$86 billion is the DOE estimate of projected cost.
- As the characterization of the Yucca site proceeded, several geological factors emerged early:
  - Ongoing and sometimes severe earthquake activity – fault lines traversing the site itself.
  - Fractures in the rock which were determined to prevent the site from meeting the existing EPA radiation safety standards for geologic repositories due to release of

radioactive gases over time. The fractures allow water to move in the mass of the mountain, likely violating the Act's siting guidelines.

- Congress, instead of allowing the standards and criteria in the Act to disqualify a bad site, forced backfits to enable their chosen site to go forward by directing EPA to write a site-specific radiation standard for Yucca and allowing cover-up of data that could have disqualified the site.
- Throughout the 1990's, members of Congress sponsored bills that would have moved this radioactive waste to a "consolidated" surface storage site. President Clinton and many jurisdictions that would be impacted by transport of waste to Nevada opposed this plan. In 2000 Clinton's veto of this legislation was sustained by the Senate.
- The Bush administration received the Environmental Impact Statement for Yucca Mountain and approved it in less than 24 hours. The Department of Energy (DOE) filed an application for a license for the site from the Nuclear Regulatory Commission, and a number of parties, including the State of Nevada, intervened by filing nearly 300 specific objections. The licensing hearing proceeding is on hold, due to a lack of appropriated funds.
- The DOE tried to withdraw the application when President Obama directed it to do so in 2009. A federal court ruled that the DOE could not do so. The NRC has proceeded on a very limited basis with its Staff review (called the Safety Evaluation Report) being published in 2014-2015. The institutional section states that the project cannot proceed without support from the State of Nevada since the DOE does not have jurisdiction over water and lands that are required for the project to proceed.

*--Mary Olson, February 2015*