

**GETTING INVOLVED WITH NUCLEAR WASTE: THE DRAFT ENVIRONMENTAL
IMPACT STATEMENT PUBLIC INVOLVEMENT PROCESS AT THE U.S.
DEPARTMENT OF ENERGY'S YUCCA MOUNTAIN PROJECT**

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ABSTRACT

In August 1999, the U.S. Department of Energy released a Draft Environmental Impact Statement to construct, operate, monitor, and eventually close a proposed repository for the nation's spent nuclear fuel and high-level radioactive waste at Yucca Mountain (about 100 miles northwest of Las Vegas, Nevada). This Environmental Impact Statement presented a unique challenge. Since no other deep geologic repository has been built in the world, the proposed action is unprecedented and therefore public involvement for this document had to be thorough and allow for all ages, races, and geographical locations to participate.

One of the challenges of the public involvement process was the legislative guidelines and limitations imposed upon this particular Department of Energy document. First, the National Environmental Policy Act states that the comment period after a Draft Environmental Impact Statement is released be a minimum of 45 days with at least one hearing. Yet when the proposed action is a large project that involves 77 sites in 35 states and transportation across 45 states, the minimum requirements of the National Environmental Policy Act are wholly inadequate for meaningful public involvement.

Second, the Nuclear Waste Policy Act as amended, provided a roadmap for this Environmental Impact Statement that limited many of the alternatives normally evaluated in an Environmental Impact Statement. Many stakeholders expressed feelings of inefficacy; they felt they could not significantly alter the proposed action--only facets of it. Thus, there were often misconceptions and false expectations placed upon the public involvement process.

Another area of substantial challenge surrounded our stakeholders. The Department of Energy considered the local, county, state, and national audiences for the Draft Environmental Impact Statement public involvement process. Many stakeholders disagreed amongst themselves on issues ranging from content and analysis within the document to the format, number, location, and timing of the hearings.

Once the hearings were scheduled, holding 21 hearings (9 in Nevada and 12 out of state) in a 199-day comment period presented challenges to logistics, publicity and sheer physical endurance of all participants. Finding a balance between consistency, equity, and efficiency was a continuous challenge.

The results of this extensive effort were positive. Over 11,000 comments were received from just under 3000 individuals and over 2700 people attended the public hearings. Primary areas that received comment were transportation, support or opposition to the proposed repository, and

general National Environmental Policy Act concerns. Based on this extensive input received from the public, the Department will be making many additions and changes in the Final Environmental Impact Statement.

BACKGROUND

The United States made decisions many decades ago to pursue a nuclear weapons program and to develop nuclear energy for civilian use. These decisions committed the Nation to perpetual custody of a large and growing inventory of radioactive materials. Spent nuclear fuel from commercial power plants constitutes the largest portion of this inventory. The balance consists of nuclear materials—primarily from defense activities, managed by the Department of Energy.

The Nuclear Waste Policy Act of 1982 established the Office of Civilian Radioactive Waste Management within the U.S. Department of Energy. The Office of Civilian Radioactive Waste Management's mission is to develop and manage a federal system for disposing of all spent nuclear fuel and high-level radioactive waste. The statute provides detailed direction for the scientific, technical, and institutional development of the system. It also designated the U.S. Nuclear Regulatory Commission as the licensing authority for a repository facility.

Under the Nuclear Waste Policy Act, commercial spent nuclear fuel is to be permanently emplaced in a deep geological repository. In 1985, under provisions of the Nuclear Waste Policy Act, the President determined that a separate repository for defense-related high-level radioactive waste would not be required; this waste could be disposed of along with commercial spent nuclear fuel in the civilian repository. In 1986, the President approved three sites for characterization. The Nuclear Waste Policy Amendments Act of 1987 then directed the Department of Energy to characterize only the Yucca Mountain site in Nevada as a potential location for a repository. Under the Office of Civilian Radioactive Waste Management's current schedule, if a repository at Yucca Mountain were recommended for development and approved for licensing, waste emplacement would begin in 2010.

Located 100 miles northwest of Las Vegas, Nevada, on remote and semiarid federal land, Yucca Mountain has for many years been the subject of studies to support the determination of whether it should be developed as a repository for spent nuclear fuel and high-level radioactive waste. If a repository is developed there, the Office of Civilian Radioactive Waste Management will accept stored waste from various sites across the Nation, transport it to Yucca Mountain, and emplace it in the repository. The Office of Civilian Radioactive Waste Management will develop a plan for closing the repository, but future generations would decide when to permanently close it.

At the conclusion of site characterization, the Secretary of Energy will draw upon the information produced during site studies and from other appropriate sources, such as the Final Environmental Impact Statement, to determine whether to recommend to the President that a repository be developed at the site. If the Secretary does recommend the site for development, and if the President recommends the site to Congress, then the State of Nevada will have an opportunity to disapprove the designation. If Nevada disapproves the designation, Congress must act to designate the site for development. If the site is designated, the Department of

Energy must submit a license application to the Nuclear Regulatory Commission for authorization to construct a repository.

An essential element of the Department of Energy's evaluation of Yucca Mountain as a potential repository is a thorough understanding of the potential environmental impacts that could occur if the President recommends that Yucca Mountain become the national spent nuclear fuel and high-level radioactive waste repository. The National Environmental Policy Act provides Federal agency decisionmakers with a process to consider potential environmental consequences of proposed actions before agencies make decisions. In following this process, the Department of Energy prepared the *Draft Environmental Impact Statement for a Geological Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada* to provide the necessary background, data, and analyses to help decisionmakers and the public understand the potential environmental impacts of the proposed repository, and solicit comments for consideration in the development of a Final Environmental Impact Statement.

PUBLIC INVOLVEMENT

The National Environmental Policy Act requires public involvement throughout the development of an Environmental Impact Statement including the scoping and draft stages. A comment response document published with the Final Environmental Impact Statement will provide responses to the comments received during the public comment period. Given the complexity of the Yucca Mountain Project, the broad stakeholder base, and the extensive legislative and political interest in this project, the public involvement process supporting the development of the Environmental Impact Statement presented an enormous challenge.

The Department of Energy faced a unique public involvement challenge with this Environmental Impact Statement because there are only two alternatives evaluated. In the typical case, the scoping phase of an Environmental Impact Statement allows stakeholders the opportunity to help define what alternatives are evaluated. In this case, only the alternative to construct, operate, monitor and eventually close a repository was cited by the 1987 amendment of the Nuclear Waste Policy Act. Early in the development of the Environmental Impact Statement, stakeholders expressed concern about limiting the Environmental Impact Statement to just that alternative and the validity of the Yucca Mountain Project public involvement process. In response to these scoping comments, the Department responded by expanding the discussion of a no action alternative—evaluating spent nuclear fuel and high-level radioactive waste remaining in storage at their current facilities. The purpose for expanding the analysis of this alternative was to allow the public to compare the alternative required by the Nuclear Waste Policy Act to the situation as it exists today. It is not an alternative the Department is endorsing.

Stakeholders for this project are defined as members of the public who may be impacted by a proposed action to construct, operate and monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at the Yucca Mountain site. This includes the general public, interest groups, nuclear utilities, agency representatives, elected and appointed officials, the State of Nevada, and the nine counties (Affected Units of Government) surrounding the proposed site.

While the National Environmental Policy Act requires only one hearing, additional meetings were held to reach stakeholders in: the largest population center in proximity to Yucca Mountain (Las Vegas); the State's capital (Carson City); the Nation's capital; centralized national population centers and major transportation hubs; and counties potentially affected by the construction of Nevada transportation infrastructure. The public comment period—already one of the longest public comment periods—was extended from 180 days to 199 days to allow for additional public hearings and to give additional time for the stakeholders to comment on the document.

Advance notification of hearing schedules was given to designated points of contact with the Nevada's U.S. Congressional Delegation and Affected Units of Local Government including the State of Nevada. Points of contact for the Affected Units of Government were identified in order to obtain recommendations regarding hearing logistics and other hearing-related details. The hearing schedule was published in the Notice of Availability for the Draft Environmental Impact Statement document which was distributed to all states. Consequently, the Department of Energy responded to some of the states' requests for additional hearings.

The final list of hearings included nine Nevada cities and these 12 national locations: Atlanta, Georgia; Boise, Idaho; Chicago, Illinois; Cleveland, Ohio; Denver, Colorado; Lincoln, Nebraska; Lone Pine, California; St. Louis, Missouri; Salt Lake City, Utah; San Bernardino, California; and Washington, D.C.

To successfully manage the complicated logistics and coordination in the cities outside of Nevada, Yucca Mountain Project staff members worked with state officials, obtained information and made arrangements via the internet and contracted with a media buyer to place hearing advertisements in newspapers.

Informing Stakeholders

Press releases were sent to more than 160 print and broadcast media outlets for each hearing. The release was also distributed to representatives of the Affected Units of Governments and other stakeholders. Advertisements were placed in local English and Spanish newspapers within seven days prior to each hearing. Information was mailed to and Yucca Mountain Project staff members met with key stakeholders, including the State of Nevada, the Affected Units of Government, and various elected officials. Members of the Yucca Mountain Project staff were on hand at the hearings to field media questions.

The initial hearing schedule, plus changes to the hearing schedule or public comment period, were sent out to the Draft Environmental Impact Statement mailing list. The internet was broadly used to inform stakeholders of Draft Environmental Impact Statement information. Draft Environmental Impact Statement public information materials--including fact sheets, public reading room lists, the Federal Register notice of availability, the Comment Summary Document from the scoping meetings and the Environmental Impact Statement cost summary report--were posted on the Department of Energy Yucca Mountain Project webpage.

Stakeholders were told about the Draft Environmental Impact Statement on any Public Open House Tours, which were conducted once a month. Stakeholders were also encouraged to comment and attend the public hearings.

Other informational briefings about the Draft Environmental Impact Statement were presented to organizations throughout the country. Briefings made were to:

- Savannah River Citizens Advisory Board
- Nevada Test Site Community Advisory Board
- Idaho National Engineering Laboratory Citizens Advisory Board
- High-Level Waste Tank Closure Workshop
- National Waste Transportation Conference
- Bureau of Mines
- Interim Study Committee on Highway Transportation
- Nuclear Waste Repository Program Committee
- Advisory Committee on Nuclear Waste
- Nuclear Waste Technical Review Board
- Nuclear Regulatory Commission
- Bureau of Land Management
- U.S. Army Corps of Engineers
- U.S. Air Force
- U.S. Navy
- National Park Service
- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- Native American Tribal Nations
- Affected Units of Local Government
- Various Nevada counties and state officials

Advertisements for the hearings were placed in newspaper during the week prior to the hearing. Based on input from the public, advertisements were run twice and included in the Sunday paper if at all possible, to increase public awareness. Also, many stakeholder groups assisted the Department in getting hearing notifications out by sending out fliers to members of their organizations.

Hearings

Afternoon and evening hearings were held in each location to accommodate stakeholders. Based on community input, hearing times varied by location to achieve higher attendance numbers and, in some cases, the hearing schedule changed.

Ten to 12 people including the Department of Energy and contractor technical and public affairs representatives staffed each meeting. Exhibit and meeting materials were shipped to locations ahead of the staff's arrival to allow for ease in travel and immediate availability of needed items. Prior to each hearing, the staff met with the professional facilitator and court reporter hired to support the hearing. In this meeting, hearing format and formal comment period rules were discussed.

An exhibit with basic project information was set up before the hearing to allow stakeholders an opportunity to familiarize themselves with the material and speak informally with Yucca Mountain Project technical experts. The hearing began with a presentation that included information on the project's background, Draft Environmental Impact Statement development, structure and content. Following a question and answer period in which experts fielded clarifying questions from stakeholders, the formal comment period of the hearing began.

Conclusion

Approximately 2200 people attended the 21 hearings, and almost 800 of them provided testimony. Over 250 submittals were received at the hearings, and the Department of Energy received 550 letters and 168 faxes providing comments. Over 170 sets of comments were provided via email. In all, the Department of Energy received over 11,200 comments on the Draft Environmental Impact Statement.

Although national in scope, the Yucca Mountain Project Environmental Impact Statement process involved many stakeholders from many different states and organizations through a wide range of avenues. In return, the public provided a wealth of comments that will assist the Department of Energy in making the appropriate changes for the Final Environmental Impact Statement.