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**DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR A GEOLOGIC REPOSITORY  
FOR THE DISPOSAL OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE  
WASTE AT YUCCA MOUNTAIN, NYE COUNTY, NEVADA**

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**BACKGROUND AND SELECTED TALKING POINTS**

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**Background:**

The Nuclear Waste Policy Act, as amended, requires that an Environmental Impact Statement (EIS) be prepared to accompany the Secretary of Energy's recommendation to the President that the Yucca Mountain site be developed as a repository. This EIS is also to be adopted, to the extent practicable, by the Nuclear Regulatory Commission (NRC) to meet its National Environmental Policy Act (NEPA) requirements associated with issuance of a license for a Yucca Mountain repository.

Although this EIS is prepared under NEPA requirements, the Nuclear Waste Policy Act provides some important exceptions to NEPA requirements. According to the Act, the EIS is not to consider the need for a repository, or the time of initial availability of a repository. And, it is not to consider alternatives to geologic disposal or alternatives to Yucca Mountain site. The Draft EIS for Yucca Mountain does consider the No Action Alternative, which was not specifically excluded by the Act.

This Draft EIS includes a generic analysis of national transportation modes and routes from the 72 commercial reactor sites and 5 Department of Energy waste source sites, in 35 states, to Yucca Mountain. Also, alternative transportation modes, highway routes, and potential rail corridors in Nevada are analyzed in the Draft EIS.

The Department of Energy's (DOE) preferred alternative in this Draft EIS is to proceed with the 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 Yucca Mountain. DOE also states in this Draft EIS that although it is uncertain when it will make transportation related decisions, it believes this Draft EIS provides the information necessary to make decisions regarding the basic approaches (for example, mostly rail or mostly truck shipments), as well as the choice among alternative transportation corridors. However, it is recognized that specific implementation decisions in Nevada would require additional NEPA reviews.

**Selected Talking Points:**

1 The No Action Alternative does not meet the NEPA requirement that it be a reasonable alternative to the Proposed Action. Neither of the two scenarios analyzed as the No Action Alternative would ever be considered for implementation. Scenario 1 assumes that spent nuclear fuel and high-level radioactive waste would remain at the 77 source sites under institutional control for at least 10,000 years. Scenario 2 assumes that the waste would remain at the 77 sites

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in perpetuity, but under institutional control for only about 100 years. DOE states in the Draft EIS that it recognizes that neither scenario would be likely if there were a decision not to develop a repository at Yucca Mountain, however, they are part of the analysis to provide a baseline for comparison to the Proposed Action. *If the alternative is not reasonable, then the comparison also is not reasonable, or of any substantive value.*

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\* The Draft EIS does not identify and specifically analyze national transportation routes for rail and highway shipments, although highway routes can be identified by applying national highway routing regulations to these shipments, and rail routes can be identified by examining available rail lines and their classification. *The Draft EIS could have analyzed impacts specific to national transportation routes after first identifying the routes, based on available information, but it did not make such an analysis. Instead it performed a limited generic transportation analysis that avoided analysis of specific conditions, impacts, and hazards along the routes.*

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\* The description of the Proposed Action does not represent the DOE's reference repository design. Three alternative thermal load designs for the repository, each with its own performance characteristics, environmental impacts, and health and safety implications are analyzed, but none is said to be the preferred action design. Instead, the claim is that whatever design is finally selected, outside of this EIS analysis, its impacts will have been bounded by the analyses, and the analyses of the additional design options described in Appendix E. *The Draft EIS does not fully describe the Proposed Action, as required by NEPA. Instead, it claims to have bounded the potential impacts by analyzing a range of design alternatives and options without selecting a preferred alternative and option(s). This approach was taken because the repository design is still evolving outside of this EIS process, and the design of the repository considered for site recommendation is not known, and will not be selected based on this EIS process. The Final EIS should include the selected repository design and an analysis of its potential impacts, including a comparison with reasonable alternatives that were considered.*

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\* A description and analysis of the affected environment for each Nevada transportation route and corridor alternative should be provided in this EIS. *DOE states in this Draft EIS that it believes this EIS provides the information necessary to make decisions regarding the basic approaches (for example mostly rail, or mostly truck shipments), as well as the choice among alternative transportation corridors. While selection of the preferred transportation alternative, in Nevada, is not included as part of the decision to proceed with the Proposed Action, it is clear DOE intends to use this EIS at some later date to make specific transportation mode, route, and corridor decisions. This being the case, this EIS should include analyses of potential impacts and hazards of all alternatives in order to support a selection from among the alternatives. During the preparation of this Draft EIS, sufficient information to support such an analysis could have been developed. This Draft EIS is not sufficient to select among the alternatives for waste transportation in Nevada to Yucca Mountain.*

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\* Socioeconomic impact analysis in this Draft EIS is limited to standard impacts. There is no analysis of potential socioeconomic upset due to repository operation and transportation, under both normal and accident conditions. *The knowledge that nuclear waste transportation or accidents are associated with particular locations can have adverse economic impacts on those*

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*locations due to stigma. Las Vegas and Clark County, Nevada, with their tourism based economy are particularly vulnerable to economic impacts of stigma. Other locations along national transportation routes, both urban and rural, are subject to the same kind of effect from stigma, especially under accident conditions. This EIS should consider the potential socioeconomic impacts of stigma associated with the proposed action, and evaluate potential mitigation options.*

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\* The Proposed Action includes a permanent withdrawal of 230 square miles of federal land, including the Yucca Mountain site, which is less than 2 square miles, and a large surrounding area. The southern boundary of the withdrawal area, adjacent to the nearest population, would be approximately 12 miles from the location of the waste emplacement area. *This is an unnecessarily large withdrawal of land that at some future date may be desired for some other public purpose. Further, such a large land withdrawal area does not assure long-term safety of the repository because it only represents an institutional control that cannot be relied upon to protect the waste after permanent repository closure. At some point in the future, this control will no longer exist. The EIS should provide a defensible rationale for the permanent land withdrawal of this magnitude from other public uses.*

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\* Regarding environmental justice, the DOE states in the Draft EIS that it believes there would be no disproportionately high and adverse impacts to minority or low-income populations as a result of the Proposed Action, including national transportation. The Draft EIS includes a differing perspective from Native Americans in Nevada. *The Draft EIS provides no response to the Nevada Native Americans' differing position. Also, with the generic nature of the national transportation analysis, the Draft EIS finding regarding environmental justice is without basis. Analyses along specific transportation routes were not carried out in support of the DOE's finding.*

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