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County of Inyo

YUCCA MOUNTAIN LICENSING PROCEEDING WORKSHOP

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INFORMATION MATERIAL

(prepared by Attorney Greg James)

Introduction

The Nuclear Regulatory Commission (“NRC”) received an application from the Department of Energy (“DOE”) on June 3, 2008, for a license to construct and operate the nation’s first geologic repository for high-level nuclear waste at Yucca Mountain, Nevada. Receipt of the application initiated a technical licensing review by the NRC Staff and initiated adjudicatory hearings before one or more of the NRC’s Atomic Safety and Licensing Boards, which will hear challenges by a number of parties to the technical and legal aspects of the DOE application. Based on the results of the licensing review and the hearings, the Commission will determine whether to authorize construction of the Yucca Mountain repository.

Background

The Nuclear Waste Policy Act of 1982 (“Act”) placed responsibility on DOE for the construction and operation of a geologic repository for high-level waste. High-level nuclear waste consists primarily of spent fuel from the nation’s commercial nuclear power plants, spent fuel from U.S. Navy reactors, and certain waste generated by DOE during development of nuclear weapons. Under the Act, the repository is to hold about 77,000 tons of high-level waste. Approximately 57,000 tons of commercial spent fuel are already in temporary storage at nuclear power plants across the country.

The Act gave the NRC the responsibility for regulating geologic disposal of the waste and directed DOE to study potential locations for a geologic repository. In 1987, Congress adopted amendments to the Nuclear Waste Policy Act which directed DOE to focus solely on Yucca Mountain as the site of a repository.

The Act established “affected units of local government (AULGs).” The AULGs can request assistance from DOE to mitigate economic, social, public health and safety and environmental impacts of DOE’s site characterization activities at Yucca Mountain. Although counties in Nevada were designated as AULGs, DOE refused to designate the County of Inyo as

an AULG. The County commenced litigation against DOE in 1990, and in 1991, a federal appellate court ruled that the County was entitled to be designated as an AULG. In accordance with the court's decision, in 1991, DOE designated the County as an AULG, and Inyo County began participation as an AULG.

From 1991 through 2007, the County has received approximately \$6.7 million for Yucca Mountain oversight activities. From 2002 through 2007, the County has received approximately \$6.4 million to conduct scientific studies under cooperative agreements with DOE. (DOE has determined that oversight funds made available to AULGs may be used "to pay for participation in the Yucca Mountain licensing proceedings before the NRC, including preparing for this participation," but the funds may not be used to engage in litigation concerning the proposed repository.)

In 2002, DOE determined that Yucca Mountain would be a suitable location for the repository; also, in 2002, the President and Congress accepted that determination and directed DOE to submit a license application for the repository. The application was submitted in June 2008.

The Licensing Review Process

Docketing Review and Environmental Determination

On September 8, 2008, the NRC Staff announced that it had completed its docketing review, sometimes called an "acceptance" review, and that it had determined that the application contains enough information for the NRC Staff to initiate its formal technical review. The decision to docket the application triggered a three-year schedule set by Congress for the NRC to reach a decision on whether to approve construction. Under the Act, the NRC may ask Congress for a one-year extension if needed.

On October 22, 2008, the NRC Staff announced that it had completed an examination of DOE's environmental documents and had determined that the NRC can adopt, with further supplementation, DOE's Environmental Impact Statement ("EIS") on the proposed repository. The NRC Staff found that additional supplementation of the environmental documentation is needed to address all of the repository's impacts on groundwater and on surface discharges of groundwater. DOE has issued a notice that it will prepare the necessary supplementation of the environmental documents. The County submitted comments to DOE recommending that the supplementation include an analysis of the potential impacts resulting from transport of radioactive contaminants to through a regional aquifer that underlies the proposed repository.

The Adjudicatory Process

On October 22, 2008, the NRC published a notice stating that a hearing on the license application will be conducted and that interested parties could file petitions to intervene in the licensing proceedings. The matters to be considered at the hearing are whether the license application satisfies the applicable safety, security, and technical standards and whether the applicable requirements of the National Environmental Policy Act ("NEPA") have been met.

Hearings on these matters will be conducted by the Atomic Safety and Licensing Board Panel, which currently consists of 16 full-time judges and several part-time judges, all with legal or technical expertise. The panel may appoint multiple boards of three judges to hear the legal and technical contentions regarding the Yucca Mountain application. For the Yucca Mountain construction authorization proceeding, hearings before the ASLB will follow a formal, trial-type process.

The October 22nd notice stated that potential parties had until December 22, 2008 to file Petitions to Intervene. To be admitted as a party to the proceeding, potential parties must satisfy three requirements – they must demonstrate “standing,” they must file at least one litigable contention, and they must be able to demonstrate compliance with the documentation requirements of the LSN.

With regard to standing, Nevada (as the host state) and Nye County (as the host county) automatically have standing, but still must submit at least one litigable contention in order to be parties to the proceeding. Concerning Inyo County’s standing, NRC’s October 22nd notice stated that “any AULG seeking party status shall be considered a party to this proceeding, provided that it files at least one admissible contention...” A contention contests the adequacy of DOE’s license application or the NRC Staff’s determination regarding adoption of the DOE EIS. On December 22, 2008, the County of Inyo filed a Petition for Intervention that contains 12 contentions.

Participants in the hearing will include DOE, the NRC Staff and any parties and interested governments that have been admitted to the proceeding. The DOE, the NRC and other parties may submit answers to the County’s Petition by February 10, 2009. The County has until February 24, 2009 to respond to any answers that are filed. It is anticipated that the ASLB will conduct a prehearing conference in March and that it will issue a decision on what contentions are admissible in May, 2009. Parties may appeal decisions on the admissibility of contentions to the NRC and may join other contentions filed by parties. (A schedule of the hearing process from the NRC is attached.)

Evidentiary Hearings

Once a decision has been made as to which contentions are admissible, one or more ASLBs will be appointed to conduct the hearing. The ASLBs may hear evidence and issue decisions on the admissible contentions concerning DOE’s application, or concerning the NRC Staff’s determination regarding adoption of the DOE EIS. An ASLB may also hold “limited appearance” sessions, at which members of the public may make brief oral statements concerning the proposed repository, and may invite the public to submit written statements.

At an evidentiary hearing, parties and interested governments will present witnesses, conduct cross-examination and make oral arguments before the ASLB regarding the contested safety and environmental issues. The NRC Staff position will be based on its Safety Evaluation Report (a major component of the license application) on the proposed facility and its EIS adoption review. DOE, the NRC Staff, admitted parties and interested governments can submit written testimony and exhibits to the ASLB, and those materials will become part of the public record of the proceeding.

The ASLBs are likely to issue several decisions on contentions before the final decision on construction authorization is issued. Parties may seek NRC review of these decisions. The Commission's final decision may be appealed to a U.S. Court of Appeals.

If construction of the Yucca Mountain repository were to be authorized, before beginning to operate the facility, DOE would have to update the application requesting a license to receive and possess high-level waste at Yucca Mountain. This application would also be subject to the NRC Staff technical review and hearing processes.

Inyo County's Contentions

Of the County's 12 contentions, 5 allege that the license application does not satisfy the applicable safety, security, and technical standards, and 7 allege that the applicable requirements of the National Environmental Policy Act have not been met. Two of the County's contentions are "joint" contentions filed together with Nye, Churchill, Esmeralda, Lander and Mineral Counties in Nevada. Nye County is the "sponsor" of these two contentions and will have the burden of supporting the contentions before the NRC. The following is a summary of Inyo County's contentions:

- Contentions 1 and 2 (a license contention and a NEPA contention) are based upon research and work by the Hydrodynamics Group and concern the failure of the license application and the EIS to adequately address the potential transport of radionuclides through the lower carbonate regional aquifer that underlies the proposed repository and that discharges water at springs in Death Valley National Park.
- Contentions 3 and 4 (a license contention and a NEPA contention) are based upon the research and work of the Hydrodynamics Group and concern the failure of the license application and the EIS to adequately address the cumulative impacts of groundwater pumping in the region of the proposed repository on the upward hydraulic gradient in aquifers that underlie the proposed repository. (DOE acknowledges that the upward gradient acts as a barrier to radionuclides entering the lower carbonate aquifer. A loss of the upward gradient could facilitate radioactive materials entering the regional aquifer system.)
- Contention 5 (a NEPA contention) are based on the research and work of Hydrodynamics Group and concerns expressed by the NRC Staff and focuses on the EIS's failure to adequately address the repository's potential impact on the volcanic/alluvial aquifer that extends from under the proposed repository to Franklin Lake Playa and other areas within Inyo County.
- Contentions 6 and 7 (both NEPA contentions) are based upon the research and work of Hydrodynamics Group and concern the failure of the EIS to adequately address the potential for radionuclides from the repository to travel through groundwater and to surface at Franklin Lake Playa and other locations and the EIS's failure to assess the nature and extent of mitigation and remediation measures that will be necessary if radionuclides surface at Franklin Lake Playa.

- Contentions 8 and 9 (a license contention and a NEPA contention) are based upon the research and work of Geosciences Consultants and concern the failure of the license application and the EIS to adequately describe the volcanic field in the Greenwater Mountain Range in Inyo County and to adequately assess the potential for igneous intrusion of the repository. (The volcanic field in the Greenwater Range is within 30 miles of the repository, may be a part of the same volcanic field in which the repository is located, and volcanic events in the Greenwater Range may indicate that igneous intrusion of the repository is more likely than projected by DOE.)
- Contention 10 (a NEPA contention) focuses on the EIS's failure to analyze the socioeconomic impacts of the repository in Inyo County.
- Contention 11 is a joint license contention with the Nevada counties which focuses on the failure of the license application to include the National Incident Management System in Safety Analysis Report.
- Contention 12 is a joint license contention with the Nevada counties which contends that the license application lacks any basis for excluding the possibility of aircraft crashes into the repository site during the pre-closure period.

Contentions Filed by Other Governments and Entities

State of California

The State of California filed a Petition to Intervene which contains 24 NEPA contentions and no license contentions. Four of the contentions concern groundwater impacts that are virtually identical to Inyo County's contentions: 1 (carbonate aquifer), 5 (impacts on volcanic/alluvial aquifer), 6 (discharge of groundwater at Franklin Lake Playa) and 7 (mitigation at Franklin Lake Playa). 12 of California's contentions address road, railroad and barge transportation issues, and the remaining contentions address miscellaneous topics.

State of Nevada

The State of Nevada filed a Petition to Intervene which contains 229 contentions that address a wide range of issues: 201 of Nevada's contentions are license contentions, 23 contentions are NEPA contentions and 5 are miscellaneous contentions.

County of Nye, Nevada

The County of Nye, Nevada filed a Petition to Intervene which contains 7 contentions: 4 of the contentions are license contentions (two of these contentions focus on the failure of the license application to adequately assess the capability of the lower natural barrier (the rock formations below the repository) to impede movement of radionuclides from the repository following closure of the repository. Two of the Nye County contentions are joint contentions and are identical to Inyo County contentions 11 and 12. The final Nye County contention is a NEPA contention focusing on the failure to consider cumulative impacts over time.

Clark County, Nevada

The County of Clark, Nevada filed a Petition to Intervene which contains 15 contentions: 12 of the contentions are safety contentions of which 7 contentions focus on volcanism—one of which is nearly identical to Inyo County contention 8 (Geosciences Consultants works for both Clark County and Inyo County). The Clark County petition also contains 3 NEPA contentions, one of which focuses on the lack of assessment of socio-economic impacts.

Churchill, Esmeralda, Lander and Mineral Counties, Nevada

The Counties of Churchill, Esmeralda, Lander and Mineral, Nevada filed a Petition to Intervene which contains the two joint license contentions, 3 NEPA contentions and 1 license contention.

White Pine County, Nevada

The County of White Pine, Nevada filed a Petition to Intervene containing 4 NEPA contentions.

Timbisha Shoshone

Timbisha Shoshone Yucca Mountain Oversight Program Non-profit Corporation filed a Petition to Intervene which contains three contentions—land ownership, water rights and NEPA.

Native Community Action Council

The Native Community Action Council of Baker, Nevada filed a Petition to Intervene which contains three contentions—land ownership, water rights and NEPA.

Nuclear Energy Institute

The Nuclear Energy Institute filed a Petition to Intervene which contains six license contentions and 3 NEPA contentions (the contentions generally support the licensing of the repository).

Caliente Hot Springs Resort, Nevada

The Caliente Hot Springs Resort, Nevada filed a Petition to Intervene which contain 1 NEPA contention based on the failure of Caliente Rail Corridor EIS to assess potential impacts of the proposed rail line on the resort.

Eureka and Lincoln Counties, Nevada

Eureka and Lincoln Counties, Nevada each filed a petition to participate in the licensing proceeding as “Interested Governmental Participants.”