

**STATEMENT OF WORK FOR
MR. A. GRELLA FOR
REVIEW OF THE U. S. DEPARTMENT OF ENERGY
DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR
A PROPOSED GEOLOGIC REPOSITORY FOR HIGH-LEVEL RADIOACTIVE WASTE
AT YUCCA MOUNTAIN, NEVADA**

BACKGROUND:

The U.S. Department of Energy (DOE) has prepared a draft environmental impact statement (DEIS) for a proposed geologic repository for the disposal of high-level radioactive waste (HLW) at Yucca Mountain, Nevada. This DEIS will be submitted in support of any site recommendation report to the President that is required by law. The Nuclear Regulatory Commission (NRC) has special expertise related to radiological health and safety and has jurisdiction to license the construction, operation, and closure of such a repository. The NRC also has responsibility under the National Environmental Policy Act of 1969 (NEPA) to provide comments on the DEIS. Additionally, the Nuclear Waste Policy Act of 1982, as amended, requires NRC to provide sufficiency comments on the site recommendations to the President made by DOE.

DOE released the DEIS for public comment on August 5, 1999. The public comment period is scheduled to last 180 days. NRC will conduct a thorough review of the DEIS during this period, and the Center for Nuclear Waste Regulatory Analyses (CNWRA) will provide technical support in the review. The CNWRA requires consultant support from Mr. Grella for the DEIS.

STATEMENT OF WORK:

Mr. Grella is to conduct an evaluative review of the DEIS in the area of transportation impacts.

The transportation review shall include design criteria relating to such concerns as criticality, thermal loads, confinement of radioactive materials, and structural integrity. It shall also include evaluation of packaging of radioactive material for transport (specifically spent nuclear fuel) and compliance with U.S. Department of Transportation requirements for packaging and shipping radioactive materials.

The evaluative review shall include an evaluation of supporting data, data-gathering methods, analysis methods, and any relevant supporting documents to determine whether the stated environmental impacts have been adequately supported. The evaluative review shall also include an assessment of potential environmental impacts and the proposed mitigation measures. Significant assumptions and areas of uncertainty that underlie the stated impact for the preferred and alternative disposal options should also be identified and evaluated. Mr. Grella should specifically comment on any areas of the DEIS that, in his experience, would likely be at issue during the judicial review process.

If Mr. Grella identifies concerns regarding a predictive methodology used in the DEIS, an alternative preferred methodology should be described and a rationale for this preference should be provided. Any comments should be specific and should provide a path for resolution. The CNWRA will provide an example of an appropriate comment format. These comments should include an identification of any required copyrighted references or areas requiring additional clarification.

The evaluative review comments are to be provided to the CNWRA by October 25, 1999.

Comments are to be submitted in hard copy and electronically, in a format compatible with WordPerfect Version 8.0.

The reviewer shall comply with all applicable quality assurance requirements of the CNWRA. A quality assurance indoctrination will be provided at a kickoff meeting to be held at CNWRA facilities in San Antonio, Texas, during August or September 1999.

LEVEL OF EFFORT:

The level of effort for the review is 100 hours.

Mr. Grella should plan for travel to participate in the following meetings:

One meeting of one day duration at the CNWRA in San Antonio, Texas, to initiate the review. The specific date will be negotiated.

One meeting of two-day duration at NRC headquarters in Rockville, Maryland, for a technical exchange with DOE, tentatively scheduled for the week of October 1, 1999.

Two public meetings of two-day duration in Las Vegas, Nevada, during October and November 1999. One of these meetings shall include an additional one-day visit to the Yucca Mountain site. Trip reports documenting important issues, conclusions, or results from the public meeting shall be submitted to the CNWRA within a two-week period following the meeting.

PERIOD OF PERFORMANCE:

The period of performance shall be from August 5, 1999, until February 4, 2000.