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STATE OF NEVADA  
AGENCY FOR NUCLEAR PROJECTS/  
NUCLEAR WASTE PROJECT OFFICE

NARRATIVE REPORT

JANUARY, 1992

The Agency for Nuclear Projects/Nuclear Waste Project Office (NWPO) is the State of Nevada agency designated by State law to monitor and oversee U.S. Department of Energy (DOE) activities relative to the possible siting, construction, operation and closure of a high-level nuclear waste repository at Yucca Mountain and to carry out the State of Nevada's responsibilities under the Nuclear Waste Policy Act of 1982.

Initially created by Executive Order of the Governor in 1983, the NWPO, together with a seven-member Commission on Nuclear Projects, was formally established in statute by the 1985 Nevada State Legislature. The Office is supported by Nuclear Waste Fund money channeled through DOE, Office of Civilian Radioactive Waste Management.

During the reporting period the NWPO continued to work toward the objectives designed to implement the Agency's oversight responsibilities.

A. PROGRESS IN MEETING OBJECTIVES

OBJECTIVE 1

Assure that the health and safety of Nevada's citizens are adequately protected with regard to any federal high-level radioactive waste program within the State.

Status

To meet this objective, the NWPO works with the Governor's office, the Nevada State Legislature, the Nevada Commission on Nuclear Projects and statewide and local government coordinating and advisory committees to assure open and direct communication and an integrated State approach to the repository program.

Because the proposed Yucca Mountain repository project has the potential to affect the health and safety of Nevada's citizens in a variety of ways and over an extended period of time, all of the NWPO's efforts during the reporting period were designed to assure adequate protection of Nevada's citizens with regard to any federal HLW program in the State. This is an overriding objective that is encompassed by every other objective and by every activity engaged in by the NWPO.

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## OBJECTIVE 2

Take the responsibilities and perform the duties of the State of Nevada as described in the Nuclear Waste Policy Act of 1982 (Public Law 97-425) and the Nuclear Waste Policy Amendments Act of 1987.

### Status

State responsibilities and duties under the Nuclear Waste Policy Act of 1982 and the Nuclear Waste Policy Amendments Act of 1987 include the monitoring, review and involvement in the policies and activities of the Department of Energy and the Office of Civilian Radioactive Waste Management (DOE/OCRWM) in the siting process for a high-level radioactive waste repository. Further, the State of Nevada is conducting independent studies and reviews dealing with the technical, environmental, socioeconomic and transportation aspects of the repository siting and planning process. The NWPO continues its cooperation with local governments and Indian tribes within the State and has made provisions for public information and involvement in its activities.

Funding reductions for State activities resulting from congressional FY 1989, FY 1990, and FY 1991 budget actions continue to affect the ability of the NWPO to carry out roles and responsibilities as prescribed in the NWPA and NWPAA. Technical, environmental, socioeconomic and transportation efforts - all related to assuring public health and safety - have had to be reduced or, in some cases, eliminated, postponed or rescheduled over extended periods of time.

During the reporting period, NWPO technical and planning staff participated in and/or made presentations at numerous meetings, workshops, conferences, or planning sessions including:

### PLANNING DIVISION MEETINGS

- Socioeconomic Research Team meeting on development of the Summary Report  
(January 3-4, 1992 in Dallas)
- Division of Emergency Management orientation to Project Oasis  
(January 6, 1992 in Carson City)
- Clark County Steering Committee  
(January 23, 1992 in Las Vegas)
- State/Local Planning Group Meeting  
(January 31, 1992 in Fallon)

#### TECHNICAL DIVISION MEETINGS

- NWTRB Meeting on DOE Program, Management, and Budget (January 7-8, 1992 in Arlington, VA)
- NWTRB Meeting on Seismic Vulnerability (January 22-23, 1992 in Irvine, CA)

#### OBJECTIVE 3

Advise the Governor, the State Commission on Nuclear Projects and the Nevada State Legislature on matters concerning the potential disposal of high-level radioactive waste materials in the State.

##### Status

During the reporting period, NWPO staff continued to work with the Governor's Office, the State Commission on Nuclear Projects and the State Legislature's Study Committee on High-Level Radioactive Waste to keep each apprised of developments relative to DOE's high-level waste (HLW) disposal program.

The NWPO Director worked closely with the Governor's Office to assure that the Governor and his staff were adequately informed on the HLW issues.

Nuclear Waste Project Office staff kept the Commission on Nuclear Projects advised as to the status of the program and the technical, socioeconomic and transportation findings of ongoing State studies. During the period, the NWPO continued to provide financial assistance and informational materials to the Legislature's Committee on High-Level Radioactive Waste. The NWPO funded a legislative analyst to keep committee members informed on key issues and also provided resources for nuclear waste-related committee activities.

#### OBJECTIVE 4

Work closely and consult with affected local governments and State agencies.

##### Status

During the period, the NWPO continued to work closely and cooperatively with affected local governments and Indian tribes in Nevada, those that have been formally awarded affected unit of local government status as well as others in the State that stand to be affected by the repository or related activities. The State/Local Government Planning Group (SLPG) expanded to include the seven newly designated affected counties and plans were made for coordinating activities among

various entities. A joint State/Counties coordination and planning meeting was held in Fallon on January 31, 1992.

The NWPO continued to provide funds to the City of Las Vegas, the City of North Las Vegas, the City of Henderson, Esmeralda County, the Western Shoshone National Council and the Moapa Band of Paiutes to assist these entities in participating in State and federal HLW programs and to enable them to evaluate potential repository-related socioeconomic and transportation impacts. In addition, other local governments which have expressed interest in the repository program - particularly those which could be impacted by highway or rail transportation of waste to a repository at Yucca Mountain were kept advised of developments and other information. These entities include the City of Reno, the City of Sparks, Washoe County, Elko County, Humboldt County, and Boulder City. Due to funding constraints, involvement of these local jurisdictions has been limited to the provision of information and informal consultation.

The NWPO continued to work cooperatively with the University of Nevada Las Vegas, the University of Nevada, Reno, the State Department of Transportation and other agencies in implementing State/local transportation analyses. In addition, the NWPO continued its cooperative efforts with the State Department of Conservation and Natural Resources, the Department of Employment Security, the State Division of Health, the Division of Emergency Management and other State agencies with regard to environmental, health and safety, and other activities being undertaken as part of the State's oversight responsibilities.

#### OBJECTIVE 5

Monitor and evaluate federal planning and activities regarding high-level radioactive waste disposal. Plan and conduct independent State studies regarding the proposed repository.

#### Status

Work was carried out in four major areas during the reporting period. These were technical planning and evaluation, socioeconomic impact assessment, transportation planning and assessment and public information.

##### 1. Technical Programs

During the reporting period, the Office and its technical contractors focused most of their attention on review of DOE study plans. Office staff participated in two site tours of Yucca Mountain: January 9 for congressional staff; and January 13 for Ivan Selin, NRC Chairman.

In January, researchers at the University of Nevada - Las Vegas attended the third national meeting on Volcan de Colima in Colima, Mexico at the invitation of the government of Mexico. They participated in international panel discussions on volcanic discussions on volcanic risk assessment studies and probability determinations.

Geochemistry researchers continued a literature review of waste glass technology. Recent literature suggests water content in the waste form could be a problem for long-term stability of glass. Literature also suggests that tektites are more stable than basalt glass or present waste glass.

A paper titled "Isotopic Constraints on Modern Evaporation Rates and Soil Moisture in the Western U.S." by R. Craig and N. Ingraham, Desert Research Institute, was completed and submitted to the Geological Society of America for publications.

John Bell, Nevada Bureau of Mines and Geology submitted a manuscript titled "Late Quaternary Geomorphology and Soils in Crater Flat, Next to Yucca Mountain, Southern Nevada" to the journal Quaternary Research. Coauthors are F. Peterson, R. Dorn, and A. Ramelli. Alan Ramelli, Nevada Bureau of Mines and Geology, submitted a manuscript titled "Late Quaternary Faulting at Crater Flat, Yucca Mountain, Southern Nevada" to the journal Geology. Coauthors are J. Bell and C. dePolo. 115 drill core samples were received at the University of Nevada - Reno from the DOE Sample Management Facility. Quality Assurance verification of the shipment was performed. Analysis of the samples will begin next month.

The tectonics research team began a map compilation of Quaternary-age faults in southern Nevada. The team plans to publish the map when compilation is complete. The natural resources research team conducted a field review of Paleozoic-age stratigraphic on NTS for consultants from Boise State University. The field review focused on outcrops of Eleana formation eastern facies and western facies. Suggestions were made about future research efforts.

## 2. Socioeconomic Impact Assessment

State socioeconomic studies continued to be implemented during the period. Studies were actively coordinated with affected local government programs through the State/Local Government Planning Group. All ten formally-designated "affected" counties are members of the Planning Group as are the City of Las Vegas, the City of

North Las Vegas, the City of Henderson, the Western Shoshone National Council and the Moapa Band of Paiutes. In addition, NWPO representatives participated in meetings of the Clark County Nuclear Waste Steering Committee, which oversees the Clark County socioeconomic effort.

The focus of the work during the period was on the development of two reports aimed at identifying and presenting findings and insights about what has been learned as a result of the Yucca Mountain socioeconomic and transportation studies over the past five years. One report being prepared by the State and the study team focuses on the key findings and learnings of studies carried out over the years. The second report is being prepared by the Technical Review Committee and attempts to present what Committee members consider to be the most important learnings of the past five years, drawing upon each member's unique perspective and experience.

The concurrent exercises in pulling together key findings, learnings and experience constitute a timely effort to take stock of the Yucca Mountain socioeconomic project to date and to bring this phase of the study to closure.

In addition to planning for the summary reports, work continued on updating and evaluating the REMI economic forecasting model and on carrying out studies related to risk and risk effects and their contributions to socioeconomic impacts of a repository and related activities.

Continued work on understanding the role of trust in explaining risk perception and risk perception effects was also ongoing during the period.

Work continued on a collaborative effort with Nye County to finalize and maintain the Project Description Scenario Development System for use in modeling project characteristics and providing inputs for impact assessment activities.

### 3. Transportation Planning and Assessment

State transportation work during continued to focus on expanding the route characterization and risk analysis database development and evaluation being implemented by the UNLV Transportation Research Center under contract to the NWPO. In addition, NWPO staff and researchers continued to evaluate DOE's rail access activities (i.e., the Caliente Rail Spur Study), cask design activities and

analyze the effects of HMTUSA and related changes in federal regulations on State and local governments with respect to nuclear waste transportation.

In addition to specific work/research activities, meetings were held between NWPO staff, transportation advisors, contractors, State agencies and local governments to review and oversee work plans.

Consultation continued with the University of Nevada, Reno, College of Engineering regarding for the Center for Infrastructure Studies' transportation-related activities funded through the NWPO, as specified in the FY 1991 congressional appropriations measure.

#### 4. Public Information

Public Information activities during the period continued to involve all phases of a program to develop and provide information on the Department of Energy's Yucca Mountain project and the State of Nevada's oversight role in it. NWPO staff continued to prepare and disseminate information to the public and the media and assisted the Nevada Nuclear Waste Task Force, the principal NWPO public information contractor, in the preparation of public information newsletters. The staff also coordinated the release of information regarding the repository program with the Governor's Office, the Nevada Commission on Nuclear Projects, and the Task Force.

The staff continued to develop and maintain print and electronic files of media coverage of the repository program and nuclear waste, and monitored public hearings, forums, and other meetings.

The staff assisted media organizations in arranging interviews and gathering background information about the project, as well as assisting in public presentations by NWPO officials, members of the Commission, and the Task Force.

Daily the staff fielded phone solicitations for information and other requests for NWPO-produced materials, such as newsletters, maps, fact sheets, overviews, videotapes, and various technical, socioeconomic, and transportation documents. The staff also continued to manage and evaluate the performance and accomplishments of contractors in the public information field.

## B. OFFICE ORGANIZATION TO MEET OBJECTIVES

The NWPO continued to operate with a central office staff, supplemented by contractual services for needed technical and specialized expertise, in order to provide high-quality oversight and monitoring of federal HLW activities and to plan and conduct independent State studies. At the close of the report period, NWPO staff consisted of the following:

Executive Director

Accountant

Accounting Clerk III

Management Assistant III

Management Assistant II

Management Assistant I

Administrative Aide II (clerical)

- currently vacant due to budget constraints

Micro-Computer Specialist III

Quality Assurance Manager

Administrator of Technical Programs

Technical Coordinator

- currently vacant due to budget constraints

Environmental Scientist (contract employee)

Radiation Physicist (contract employee)

Repository Engineer (contract employee)

- currently vacant due to budget constraints

Technical Policy Coordinator (contract employee)

Administrator of Planning

Planner/Research Analyst

Transportation Advisor (contract employee)

Public Affairs Manager

Deputy Attorney General

Senior Legal Secretary II (clerical)

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