

***Committee  
on  
High-Level Radioactive Waste***



***January 2001***

***Legislative Counsel Bureau  
Bulletin No. 01-22***



COMMITTEE ON HIGH-LEVEL RADIOACTIVE WASTE

BULLETIN NO. 01-22

JANUARY 2001



## TABLE OF CONTENTS

	<u>Page</u>
Report to the 71st Session of the Nevada Legislature by the Nevada Legislature’s Committee on High-Level Radioactive Waste.....	1
I.    Background Information .....	2
II.   Program Overview .....	3
A.    Federal Historical Perspective .....	3
B.    State Historical Perspective .....	5
1.    Creation of Permanent Legislative Oversight Committee.....	6
2.    Creation of Commission and State Agency.....	6
3.    Affected Units of Local Governments.....	7
III.  Legislative Oversight – 1999 through 2000 .....	7
A.    Committee Oversight Meetings.....	8
B.    Legislative High-Level Radioactive Waste Interim Storage and Transportation Working Group of the National Conference of State Legislatures .....	9
C.    Meetings Monitored .....	10
IV.  Future Oversight Activities of the Nevada Legislature’s Committee on High-Level Radioactive Waste.....	10
A.    Yucca Mountain Site Characterization Program.....	11
B.    Site Recommendation Consideration Report .....	11
C.    Site Recommendation Report .....	11
D.    Utility Contract Litigation .....	12

	<u>Page</u>
E. Possible Amendments to the Nuclear Waste Policy Act .....	12
F. Additional Oversight Issues .....	13
V. Conclusion .....	13
VI. Appendices .....	15
Appendix A	
<i>Nevada Revised Statutes</i> 459.0085, “Creation; membership; duties; compensation and expenses of members” .....	17
Appendix B	
Information from the 1997 Edition of the United States Nuclear Regulatory Commission’s <i>Information Digest</i> .....	21
Appendix C	
Map of Commercial and DOE Sites .....	29
Appendix D	
Page 42 from <i>The Nuclear Waste Primer – The League of Woman Voters</i> Education Fund .....	33
Appendix E	
“Current milestones in U.S. repository program” .....	39
Appendix F	
“Statutory process of the Site Recommendation” .....	43
Appendix G	
“Nevada Agency for Nuclear Projects Summary of Mission and Functions” .....	47
Appendix H	
“Affected Units of Local Governments and Contact Persons” .....	51
Appendix I	
Meeting Notices and Agendas of the Nevada Legislature’s Committee on High-Level Radioactive Waste .....	55

	<u>Page</u>
Appendix J	
Section 116(a) and (b) of the Nuclear Waste Policy Act .....	69
Appendix K	
Potential Nevada Routes for Legal-Weight Truck Shipments of Spent Nuclear Fuel and High-Level Radioactive Waste Material .....	73



**REPORT TO THE 71st SESSION OF THE NEVADA LEGISLATURE BY THE  
NEVADA LEGISLATURE'S COMMITTEE ON HIGH-LEVEL  
RADIOACTIVE WASTE**

The Nevada Legislature's Committee on High-Level Radioactive Waste is a permanent committee, which is authorized by *Nevada Revised Statutes* 459.0085. (See Appendix A.) Created in 1985, the Committee is responsible for performing legislative oversight responsibilities to study and evaluate:

- Information and policies regarding the location in this State of a facility for the disposal of high-level radioactive waste;
- Any potential adverse effects from the construction and operation of a facility and the ways of mitigating those effects;
- Any other policies relating to the disposal of high-level radioactive waste; and
- Recommendations concerning appropriate legislation to be presented to the Legislature and the Legislative Commission.

The following eight legislators served on the Committee during the 1999-2000 interim period:

Senator Lawrence E. Jacobsen, Chairman  
Assemblyman Harry Mortenson, Vice Chairman  
Senator Mike McGinness  
Senator Bill R. O'Donnell  
Senator Raymond C. Shaffer  
Assemblyman John J. Lee  
Assemblyman Robert (Bob) E. Price  
Assemblywoman Sandra J. Tiffany

Three committee meetings and one site visit to Yucca Mountain were held during the 1999-2000 interim. Committee members have also participated on the High-Level Radioactive Waste Working Group of the National Conference of State Legislatures (NCSL) that included site visits to: (1) the Waste Isolation Pilot Project in New Mexico (*the only operating nuclear waste repository in the United States*); (2) the Savannah River Nuclear Site in South Carolina; and (3) two meetings in Washington, D.C., to meet with key elected representatives and government officials. In addition, members have monitored meetings of: (1) the United States Nuclear Waste Technical Review Board; (2) the Advisory Committee on Nuclear Waste of the U.S. Nuclear Regulatory Commission (NRC); (3) technical exchanges between the U.S. Department of Energy (DOE) and the U.S. Nuclear Regulatory Commission (NRC); and (4) the Nevada Commission on Nuclear Projects (NCNP).

As well as performing its mandated oversight duties, the Committee has closely followed the actions by the 106th Session of the United States Congress to amend the Nuclear Waste Policy Act (NWPA) of 1982 (42 *United States Code* [U.S.C.] 10101 *et seq.*). Both houses of Congress passed amendments to the NWPA, but President Bill Clinton vetoed the bill. An effort by the Senate to overturn the veto failed.

No recommended action is being proposed at this time. However, the Committee will continue to monitor: (1) the legal encounters concerning DOE's failure to begin accepting spent nuclear fuel from the commercial nuclear power plants\*; (2) amendments to the NWPA of 1982, as amended, which are expected to be proposed again during the 107th Congress; (3) the site characterization program at Yucca Mountain; (4) the anticipated Site Recommendation Report to the U.S. Secretary of Energy, the President, and Congress; and (5) other activities including transportation issues pertaining to the nation's high-level radioactive waste program. If deemed appropriate, the Committee will recommend relevant action to the Legislature or Legislative Commission.

*\*On August 31, 2000, the U.S. Court of Appeals for the Federal Circuit upheld a lower court's ruling allowing nuclear power companies to pursue legal claims against the DOE for the government's failure to begin storing spent nuclear fuel. The utilities can now return to the claims court to determine how much the government will have to pay, which has been estimated by the nuclear industry to be as much as \$50 billion. The DOE's appeal to have the August 31, 2000, court ruling overturned was denied by a Federal Court of Appeals on December 1, 2000.*

## **I. BACKGROUND INFORMATION**

How best to dispose of high-level nuclear waste has been a scientific and public concern since the beginning of the nuclear age. The first nuclear power plant in the United States began operation in 1957. Since that time, more than 100 nuclear power plants have been constructed, and in 1999 they produced more than 20 percent of the nation's electricity. (See Appendix B, "Information from the 1997 Edition of the United States Nuclear Commission's *Information Digest*," which includes a pie chart of energy generation sources.) However, the benefits of nuclear power come harnessed with the enormous challenge of safely managing the temporary storage and permanent disposal of spent fuel and high-level radioactive waste. (See Appendix C, "Map of Commercial and DOE Sites.")

In 1982, Congress passed the NWPA, which was crafted to provide for the safe and permanent disposal of spent nuclear fuel from the nation's civilian power plants and defense high-level radioactive waste, in a deep geological repository. This policy was based primarily on recommendations from the scientific community, including a 1957 report by the National Academy of Sciences, which recommended the burial of high-level and transuranic radioactive waste in geologic formations. (See Appendix D, "Page 42 from *The Nuclear Waste Primer* – The League of Woman Voters Education Fund.")

Following passage of the NWPA, nine potential repository sites were studied in six states. Based on these studies, the President of the United States approved three sites for intensive scientific study called site characterization. The three sites were Yucca Mountain, Nevada; Deaf Smith County, Texas; and Hanford, Washington. In 1987, Congress amended the NWPA and directed the DOE to study only Yucca Mountain to determine if it is suitable to be the nation's first deep geologic nuclear waste repository. Site characterization scientific studies and research activities are presently underway to determine if the site is suitable. A Site Recommendation Report is scheduled to be submitted to the Secretary of Energy in the year 2001.

To conduct State oversight of the Yucca Mountain Site Characterization Program, in 1985 the Nevada Legislature created the Committee on High-Level Radioactive Waste (HLRW), NCNP, and Nevada's Agency for Nuclear Projects (NANP).

The purpose of this report is to provide general information on: (1) the Federal Nuclear Waste Program; (2) the State and local government oversight organizations; as well as (3) the activities and goals of the HLRW Committee.

## **II. PROGRAM OVERVIEW**

### **A. Federal Historical Perspective**

The site characterization of Yucca Mountain began in 1977 when the DOE initiated an investigation to determine the possibility of disposing high-level radioactive waste in a geologic repository at the Nevada Test Site (NTS). Over the next two years, the DOE investigated a number of locations at the NTS and ultimately selected Yucca Mountain as a potentially acceptable repository site.

The enactment of the NWPA in 1982 established the national policy for the disposal of high-level radioactive waste materials. These materials consist primarily of spent nuclear fuel from commercial power reactors and defense high-level radioactive waste. The NWPA directed the Federal Government to accept title and be responsible for the timely development of a national capability to accept, transport, store, and permanently dispose of high-level radioactive waste in a manner that will assure public and worker health, protect the environment, merit public confidence, and be economically viable.

The NWPA created the Office of Civilian Radioactive Waste Management (OCRWM) within the DOE and assigned it the responsibility for developing a waste management system. The NWPA also:

- Established a Nuclear Waste Fund to finance the system through a surcharge of 1.0 mil per kilowatt-hour on electricity produced by nuclear power;

- Specified the process for siting repositories for the permanent deep geologic disposal of spent nuclear fuel and high-level radioactive waste;
- Required the DOE to submit a proposal to construct a facility for monitored retrievable (interim) storage of spent nuclear fuel;
- Required the President of the United States to evaluate the use of the repositories to be developed under the NWPA for the disposal of high-level waste from defense activities; and
- Included specific provisions for the participation of states and Indian Tribes in the waste management program.

The DOE developed guidelines for evaluating the suitability of sites for repositories, obtained concurrence on the guidelines from the NRC (*the federal agency responsible for licensing a repository or interim storage facility*), and started the site screening process. Nine possible repository sites, located throughout the nation, were initially evaluated. Three of those sites (Yucca Mountain, Nevada; Deaf Smith, Texas; and Hanford, Washington) were ranked as being the most suitable for a detailed study and analysis (site characterization) as possible repository sites.

Amendments to the NWPA, in 1987, specified Yucca Mountain as the only site to be characterized to determine its suitability as a geologic repository. In accordance with the NWPA, the DOE developed a Site Characterization Plan in 1988. The OCRWM, through its Yucca Mountain Project Office, is conducting the scientific investigations as described in the plan to determine if Yucca Mountain is suitable for a permanent repository.

If the DOE finds Yucca Mountain suitable, it must develop and submit a Site Recommendation Report, which includes a Final Environmental Impact Statement (EIS), to the Secretary of Energy who will forward it to the President, if the Secretary agrees with the site recommendation. If approved by the President and Congress, the DOE will submit an application to the NRC for a license to construct and operate a repository. (See Appendix E, “Current milestones in U.S. repository program.”)

The Draft EIS for a repository at Yucca Mountain, Nevada, was released to the public on August 13, 1999. Approximately 2,769 individuals attended the 21 public hearings that were held by the DOE; 716 commented at the hearings. Ten hearings were held in Nevada with the remainder being held at different locations throughout the United States. More than 11,000 comments from the hearings, United States mail, electronic mail, and facsimile are being addressed and considered both individually and collectively before being responded to in the Final EIS. The Final EIS will accompany the site recommendation, which is scheduled to be submitted to the Secretary of Energy in June 2001.

If the President sends the site recommendation to Congress, the Governor or Legislature of the State of Nevada may disapprove the site designation and submit to Congress a notice of disapproval. Under Section 114 [42 U.S.C. 10134] of the NWPA, the Governor and Legislature have 60 days to submit a notice of disapproval after the date that the President forwards the site recommendation to Congress. (See Appendix F, “Statutory process of the Site Recommendation.”)

If the Governor or the Legislature submits a notice of disapproval, the repository site will be disapproved unless Congress passes a resolution of repository siting approval during the first 90 calendar days of continuous session after the date a notice of disapproval is received.

According to the NWPA, if the DOE finds Yucca Mountain unsuitable, the agency must mitigate all site characterization activities and any significant adverse environmental impacts, and provide recommendations to Congress for further action to assure safe, permanent disposal of spent fuel and high-level radioactive waste.

Contact Max Powell at 702/794-1368 or go to the DOE Web site at <http://www.ymp.gov> for detailed information on the Yucca Mountain Site Characterization Program.

## **B. State Historical Perspective**

The NWPA, as amended, authorizes the State of Nevada (Legislature and Governor) to carry out oversight on all aspects of the High-Level Radioactive Waste Program. State legislative oversight began in 1983 with the adoption of Senate Concurrent Resolution No. 52 (File No. 135, *Statutes of Nevada 1983*), which directed the Legislative Commission to appoint an interim committee to observe and participate in the federal study. The Committee’s major objectives were to:

- Become familiar with the federal program for study of potential locations of a repository; and
- Establish a structure within the State of Nevada to analyze and address the issues associated with the possibility of locating a repository in the state.

The subcommittee recommended to the 1985 Legislature that:

- The Legislature should continue to be actively involved in the State’s program by creating a permanent legislative committee to perform oversight functions and formulate recommendations concerning the high-level radioactive waste repository issue.
- An executive branch advisory commission and agency should be legally created by statute.

## ***1. Creation of Permanent Legislative Oversight Committee***

In 1985, the Legislature's Committee on High-Level Radioactive Waste, codified as *Nevada Revised Statutes* 459.0085, was created by Senate Bill 55 (Chapter 211, *Statutes of Nevada*). This permanent committee was charged with legislative oversight responsibilities as outlined on page 1 of this report.

The Committee was not authorized to undertake technical studies or duplicate efforts of the State's Agency for Nuclear Projects.

## ***2. Creation of Commission and State Agency***

Pursuant to the Federal NWSA, Nevada's Agency for Nuclear Projects (NANP) was established in early 1983 by Executive Order and placed within the Department of Minerals. In December 1983, it was transferred to the Governor's Office. In 1985, Senate Bill 56 (Chapter 680, *Statutes of Nevada 1985*) created the Commission on Nuclear Projects and statutorily provided for the NANP. *Since 1983, the DOE has provided grants totaling more than \$73 million for the operation of the office.*

Major functions of NANP include:

- Identifying health, safety, and environmental issues which are of concern to Nevada;
- Reviewing and evaluating the DOE's environmental, socioeconomic, and technical studies; and
- Performing selective independent studies of critical issues in order to confirm or negate the DOE's analysis.

The NANP has aggressively performed its monitoring and oversight responsibilities. Emphasis has been placed on reviewing and commenting on technical studies in the areas of hydrology, groundwater travel time, pneumatic pathways, volcanism, seismology, transportation routes and modes, waste packaging, and socioeconomic impacts, as well as providing information to the public about the Yucca Mountain Site Characterization Program.

Details of NANP's oversight activities can be obtained by contacting their office at 1802 North Carson Street, Suite 252, Carson City, Nevada 89701; telephone: 775/687-3744; or Web site: <http://www.state.nv.us/nucwaste/yucca/agency>. Copies of NANP reports and studies are available at most public libraries throughout the state. (See Appendix G, "Nevada Agency for Nuclear Projects Summary of Mission and Functions.")

### ***3. Affected Units of Local Governments***

The NWPA provides that units of local governments, which might be affected by a repository, may conduct certain types of independent oversight of the High-Level Radioactive Waste Program.

The Affected Units of Local Governments (AULG) have been identified as the county in which the proposed repository site is being studied and the counties which surround it. The AULG for the Yucca Mountain Site Characterization Project are Churchill, Clark, Esmeralda, Eureka, Lander, Lincoln, Mineral, Nye, and White Pine Counties in Nevada, and Inyo County in California.

The oversight activities of the AULG may include the following:

- Review studies and materials for the purpose of determining any potential economic, social, public health and safety, and environmental impacts of a repository.
- Develop a request for impact assistance.
- Engage in monitoring, testing, or evaluating activities with respect to site characterization programs.
- Provide information to residents regarding activities of the DOE, NRC, or State with respect to the site.
- Request information from, and make comments and recommendations to DOE regarding activities undertaken with respect to the site.

Details of the activities and the status of each AULG's oversight program may be obtained by contacting a specific AULG directly. (Appendix H, "Affected Units of Local Governments and Contact Persons," contains a list of each AULG with a contact person and telephone number.)

### **III. LEGISLATIVE OVERSIGHT – 1999 THROUGH 2000**

In performing its oversight responsibilities in 1999 and 2000, the High-Level Radioactive Waste Committee conducted three hearings and participated in four meetings of the NCSL's High-Level Radioactive Waste Working Group. Committee members also monitored meetings of: (1) the Nuclear Waste Technical Review Board; (2) the NRC's Advisory Committee on Nuclear Waste; (3) Nevada's Commission on Nuclear Projects; and (4) various technical exchange and management meetings between DOE and NRC.

## A. Committee Oversight Meetings

Listed below are the dates, locations, and a brief description of each meeting held by the HLRW Committee during 1999 and 2000.

- The November 18, 1999, meeting was held in Las Vegas. The DOE, the U.S. Environmental Protection Agency (EPA), NANP, Clark County, and representatives from the AULG reported on the status of their respective scientific and oversight efforts. The Committee members were provided with an update on DOE's underground and surface scientific studies relating to the Yucca Mountain site characterization project, the Draft Environmental Impact Statement and public hearings, proposed radiation health standards to be established by the EPA, and Clark County emergency management preparedness efforts regarding proposed shipments of high-level radioactive waste.
- The February 3 and 4, 2000, meeting was held in Las Vegas, and included an oversight tour to Yucca Mountain. The trip included a tour of the Exploratory Studies Facility (tunnel) beginning at the North Portal and traveling by man-train to the drift-scale heater test being conducted in alcove 5. The DOE also described other scientific and engineering studies being conducted to determine if the Yucca Mountain site is suitable for a permanent high-level radioactive waste repository.

At the business meeting, presentations were made by the DOE, NANP, NRC, the State Department of Conservation and Natural Resources, and representatives from Clark County and the other Affected Units of Local Governments. The meeting provided the Committee members with an update on DOE site characterization activities, the status of the Yucca Mountain Environmental Impact Statement, proposed changes to DOE's siting guidelines for a high-level radioactive waste repository, and an overview of DOE's application for water rights from the State of Nevada. Information was also provided on the proposed amendments to the NRC's regulations for a high-level radioactive waste repository and accompanying license application review plan, and the status of the Spent Nuclear Waste Shipping Cask licensing regulations.

- C The November 29, 2000, meeting was held in Las Vegas. The DOE, NANP, AULG, and NCSL made presentations. The Committee members were provided an update on the scientific and engineering testing activities (seepage testing, drift-scale heater test, and cross-drift tests), proposed repository design, milestones and steps to complete a repository, and the statutory process of the site recommendation. In addition, information was provided on the NANP oversight activities of the DOE's site characterization activities, and plans to prepare a response to the proposed site recommendation report. Also provided was an update of the AULG's oversight efforts with emphasis on developing impact assessment reports relating to the proposed repository.

See Appendix I, “Meeting Notices and Agendas of the Nevada Legislature’s Committee on High-Level Radioactive Waste,” for copies of agendas of the meetings held in 1999 and 2000.

### **B. Legislative High-Level Radioactive Waste Interim Storage and Transportation Working Group of the National Conference of State Legislatures**

The members of Nevada’s HLRW Committee also serve on the Legislative High-Level Radioactive Waste Working Group of the NCSL. The NCSL Working Group held four meetings during 1999 and 2000.

Listed below are the dates, locations, and a brief description of each meeting held by the NCSL Working Group.

- The September 23 and 24, 1999, Working Group meeting was held in the Washington, D.C., area. The group heard presentations from: (1) DOE; (2) NRC; (3) the Nuclear Energy Institute; (4) GPU Nuclear; and (5) the NCSL staff on Keystone Center’s Decommissioning Dialogue and progress of the Hanford, Washington, Nuclear Site Cleanup.
- The April 6 and 7, 2000, Working Group meeting was held in New Mexico. The group made a site visit to the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico. The WIPP became the nation’s first operating underground repository for defense-generated radioactive (transuranic) waste on March 26, 1999. The project facilities include disposal rooms excavated 2,150 feet under ground in an ancient, stable salt formation. The April 7, 2000, workshop focused on the transportation of nuclear waste, packaging systems, routing, tracking shipments; and emergency responder, training, accident analysis, and response.
- The September 18 and 19, 2000, meeting of the Working Group was held in the Washington, D.C., area. Presentations were made by: (1) DOE; (2) NRC; (3) Duke Energy; (4) the National Association of Regulatory Utility Commissioners; (5) the Nuclear Energy Institute; and (6) Energy Resources International. Information was also provided concerning GPU Nuclear’s Skull Valley Private Fuel Storage Project, the Fissile Materials Disposition Program, the Waste Acceptance Queue, Dry Storage Technologies, and current utility storage needs.
- The November 14 and 15, 2000, meeting of the Working Group was held in Augusta, Georgia. The group toured the Savannah River Nuclear Site, which included the defense waste processing facility, chemical separations plants, heavy water extraction plant, tritium extraction facility, and waste management facilities. The November 15, 2000, workshop topics included an overview of the Savannah River Site’s role in the nation’s nuclear weapons development and reduction programs, long-term stewardship, and environmental justice issues.

### C. Meetings Monitored

In addition to participating in the meetings listed above, the members of the Committee have also monitored meetings of other oversight organizations, which are listed below:

1. The Nuclear Waste Technical Review Board: This board was created to advise both Congress and the Secretary of Energy on the technical and scientific validity of the DOE's Civilian Radioactive Waste Program. The members are appointed by the President from a list of nationally recognized scientists who are recommended by the National Academy of Sciences.
2. The Advisory Committee on Nuclear Waste to the Nuclear Regulatory Commission: This committee conducts independent oversight of the nation's high-level radioactive waste program and reports its findings and recommendations to the NRC. The Committee also consists of nationally recognized scientists who are appointed by the NRC.
3. Nevada's Commission on Nuclear Projects: This Commission was created by the Nevada Legislature to review, report, and make recommendations to the Governor and Legislature on matters relating to the disposal of radioactive waste. The Commission is composed of seven members appointed by the Governor (three members chosen by the Governor, two members who are recommended by the Legislative Commission, and two members who are recommended by the Nevada Association of Counties and the Nevada League of Cities).
4. Technical Exchange Meetings between DOE and the NRC staff, which are conducted regularly to share information on specific aspects of the Yucca Mountain Site Characterization Project.
5. Miscellaneous Meetings with stakeholders, Affected Units of Local Governments, and other interested groups and organizations.

### IV. FUTURE OVERSIGHT ACTIVITIES OF THE NEVADA LEGISLATURE'S COMMITTEE ON HIGH-LEVEL RADIOACTIVE WASTE

The efforts of the Federal Government to implement a program to accept, store, and dispose of the nation's spent nuclear fuel from commercial nuclear power plants and military high-level radioactive waste continues to be a perplexing problem and emotionally charged issue, especially for Nevadans. To keep informed on this important project, the ongoing oversight and monitoring efforts of the Nevada Legislature's Committee on High-Level Radioactive Waste will focus on the following areas:

## **A. Yucca Mountain Site Characterization Program**

Even though the DOE plans to have the Site Recommendation Report (SRR) completed by mid-2001, important scientific studies and engineering tests will continue in order to develop data needed to reduce uncertainties in key technical areas and, if Congress finds the site suitable, to augment a license application to the NRC. The ongoing studies and tests include: (1) water flow and seepage testing; (2) cross-drift studies; (3) a drift-scale thermal test; (4) groundwater flow tests; (5) waste emplacement drifts; and (6) waste package design and placement. (See Appendix E, "Current milestones in U.S. repository program.")

## **B. Site Recommendation Consideration Report**

The Site Recommendation Consideration Report is designed to provide public review and comment of a summary of technical information and a preliminary evaluation of site suitability under the proposed 10 *Code of Federal Regulations* [CFR] Part 963 that the Secretary will consider before deciding whether to recommend the Yucca Mountain site. This document, which is not required by the NWPA, is scheduled to be released in early 2001.

## **C. Site Recommendation Report**

In mid-2001, the Secretary is scheduled to make the decision whether to recommend Yucca Mountain to the President as a repository site for highly radioactive materials. This decision will be based on the results of the site characterization studies, which have been conducted at Yucca Mountain since 1987. The Site Recommendation will include the following material:

- Description of the proposed repository, including preliminary engineering specifications;
- Description of the waste form and proposed packaging, and an explanation of their relationship to the geologic medium of such site;
- Discussion of data, obtained in site characterization activities, relating to the safety of the site;
- Final EIS for the site;
- Preliminary comments of the NRC as to the sufficiency of the site characterization and waste form proposal for licensing of the repository;
- Views and comments of the Governor and Legislature of any state, or governing body of any affected Indian tribe, as determined by the Secretary, together with the response of the Secretary of such views;

- Such information as the Secretary considers appropriate; and
- Any impact report submitted under Section 116(C)(2)(B) [42 U.S.C. 10136(C)(2)(B)] by the State of Nevada. (See Appendix F, “Statutory process of the Site Recommendation.”)

If the Secretary considers the site suitable, a recommendation to proceed will be given to the President.

If the President considers the Yucca Mountain site qualified for application for a repository construction authorization, the President shall submit a recommendation of such site to Congress. According to the NWPA, the State of Nevada would then have 60 days to submit a notice of disapproval to Congress. If the Governor or Legislature submits a notice of disapproval, the site is disapproved unless Congress passes a joint resolution for repository siting approval within the first 90 calendar days of continuous congressional session after receiving Nevada’s notice of disapproval. (See Appendix J, “Section 116(a) and (b) of the Nuclear Waste Policy Act.”)

If the President does not consider the Yucca Mountain site qualified, the DOE will cease activity at Yucca Mountain and await further instructions from Congress.

#### **D. Utility Contract Litigation**

In response to a petition from 33 electric utility companies and 46 states, the U.S. Court of Appeals for Washington, D.C., ruled that the NWPA obligated the DOE to begin accepting spent nuclear fuel (SNF) from commercial nuclear power plants by January 1998. Initially, the Court ruled that the provisions in the *Standard Contract* between DOE and the nuclear utilities provided adequate remedies. However, several power utility companies, which did not agree with the court ruling, filed petitions asking for monetary awards for extra expenses incurred by having to keep SNF on site. A federal court ruled in August 2000 that nuclear utilities might seek millions of dollars in damages from the government for the DOE’s failure to accept SNF as required by the NWPA. In December 2000, a U.S. Court of Appeals upheld the August 2000 decision. As a result, these rulings and the potential for monetary damages assessed against the Federal Government may increase the pressure on Congress to again try to establish a temporary nuclear waste storage facility at the Nevada Test Site.

#### **E. Possible Amendments to the Nuclear Waste Policy Act**

Attempts to amend the Nuclear Waste Policy Act failed during the 104th and 105th Sessions of Congress and were vetoed by President Clinton during the 106th Congress. The failed bills would have allowed for the development of an interim high-level nuclear waste storage facility at the Nevada Test Site, and established weaker radiation health standards than those recommended by the EPA. Indications are that similar legislation may be introduced in the 107th Congress. Even though this legislation has failed in the past, circumstances regarding the nuclear waste issue may have changed due to a new Administration, membership changes in Congress, and the recent

Federal Appeals Court ruling making the DOE monetarily liable for missing the 1998 deadline. Therefore, this issue is still very much alive and continues to be of concern to the State of Nevada.

#### **F. Additional Oversight Issues**

- The NRC study to update the requirements for Spent Fuel Transportation Package Performance and other related transportation issues, including possible transportation routes through Nevada. (See Appendix K, “Potential Nevada Routes for Legal-Weight Truck Shipments of Spent Nuclear Fuel and High-Level Radioactive Waste Material.”)
- Proposed new DOE (10 CFR 963) and NRC (10 CFR 63) guidelines for evaluating the suitability of Yucca Mountain as a nuclear waste repository.
- The DOE Yucca Mountain right-of-way renewal application to the U.S. Bureau of Land Management as required by the Federal Land Policy and Management Act.
- The strain and stress on the earth’s crust study being conducted by the California Institute of Technology and Harvard University.
- The DOE and Nye County cooperative Early Warning Drilling Program.
- The University of Nevada, Las Vegas (UNLV); DOE; and NANP fluid inclusion study.
- Development of new radiation safety standards for a nuclear waste repository by the U.S. Environmental Protection Agency.
- The proposed Skull Valley Band of the Goshute Indian Tribe private spent nuclear fuel interim storage facility project near Dugway, Utah.
- Liaison with state and local government monitoring agencies.

#### **V. CONCLUSION**

During the last two years, OCRWM has continued the characterization of the Yucca Mountain, Nevada, site for a possible permanent nuclear waste repository. It now appears the agency believes the scientific studies and engineering tests that began in 1987 have generated sufficient information that a site recommendation report can be submitted by the Secretary during 2001. (See Appendix E, “Current milestones in U.S. repository program.”) If the recommendation finds the site suitable and the Secretary agrees, the Site Recommendation Process begins. (See Appendix F, “Statutory process of the Site Recommendation.”)

This is a very important phase of the nuclear waste repository site selection process. This is the time when the Governor and/or Legislature have the opportunity to voice formal official objection to having a repository placed in Nevada. Section 116 of the NWPA authorizes the Nevada Governor or Legislature to formally submit a notice of disapproval to Congress, which would disallow a repository in Nevada, unless Congress overrides the state's disapproval. (See Appendix J, "Section 116(a) and (b) of the Nuclear Waste Policy Act.")

The Committee on High-Level Radioactive Waste is of the opinion that it is premature at this time to make any recommendations to the Legislature. The Committee will continue to vigilantly monitor the progress of the DOE, Congress, and the new Administration, and make recommendations for legislative action at the appropriate time.

## VI. APPENDICES

	<u>Page</u>
Appendix A <i>Nevada Revised Statutes</i> 459.0085, “Creation; membership; duties; compensation and expenses of members” .....	17
Appendix B Information from the 1997 Edition of the United States Nuclear Regulatory Commission’s <i>Information Digest</i> .....	21
Appendix C Map of Commercial and DOE Sites.....	29
Appendix D Page 42 from <i>The Nuclear Waste Primer – The League of Woman Voters Education Fund</i> .....	33
Appendix E “Current milestones in U.S. repository program” .....	39
Appendix F “Statutory process of the Site Recommendation” .....	43
Appendix G “Nevada Agency for Nuclear Projects Summary of Mission and Functions” .....	47
Appendix H “Affected Units of Local Governments and Contact Persons” .....	51
Appendix I Meeting Notices and Agendas of the Nevada Legislature’s Committee on High-Level Radioactive Waste .....	55
Appendix J Section 116(a) and (b) of the Nuclear Waste Policy Act .....	69
Appendix K Potential Nevada Routes for Legal-Weight Truck Shipments of Spent Nuclear Fuel and High-Level Radioactive Waste Material .....	73



APPENDIX A

*Nevada Revised Statutes* 459.0085, “Creation; membership;  
duties; compensation and expenses of members”



## NEVADA REVISED STATUTES

### COMMITTEE ON HIGH-LEVEL RADIOACTIVE WASTE

**NRS 459.0085 Creation; membership; duties; compensation and expenses of members.**

1. There is hereby created a committee on high-level radioactive waste. It is a committee of the legislature composed of:

- (a) Four members of the senate, appointed by the majority leader of the senate.
- (b) Four members of the assembly, appointed by the speaker.

2. The legislative commission shall select a chairman and a vice chairman from the members of the committee.

3. The committee shall meet at the call of the chairman to study and evaluate:

(a) Information and policies regarding the location in this state of a facility for the disposal of high-level radioactive waste;

(b) Any potentially adverse effects from the construction and operation of a facility and the ways of mitigating those effects; and

(c) Any other policies relating to the disposal of high-level radioactive waste.

4. The committee shall report the results of its studies and evaluations to the legislative commission and the interim finance committee at such times as the legislative commission or the interim finance committee may require.

5. The committee may recommend any appropriate legislation to the legislature and the legislative commission.

6. The director of the legislative counsel bureau shall provide a secretary for the committee on high-level radioactive waste. Except during a regular or special session of the legislature, each member of the committee is entitled to receive the compensation provided for a majority of the members of the legislature during the first 60 days of the preceding regular session for each day or portion of a day during which he attends a committee meeting or is otherwise engaged in the work of the committee plus the per diem allowance provided for state officers and employees generally and the travel expenses provided pursuant to NRS 218.2207. Per diem allowances, salary and travel expenses of members of the committee must be paid from the legislative fund.

(Added to NRS by 1985, 685; A 1987, 399; 1989, 1221; 1995, 1454)

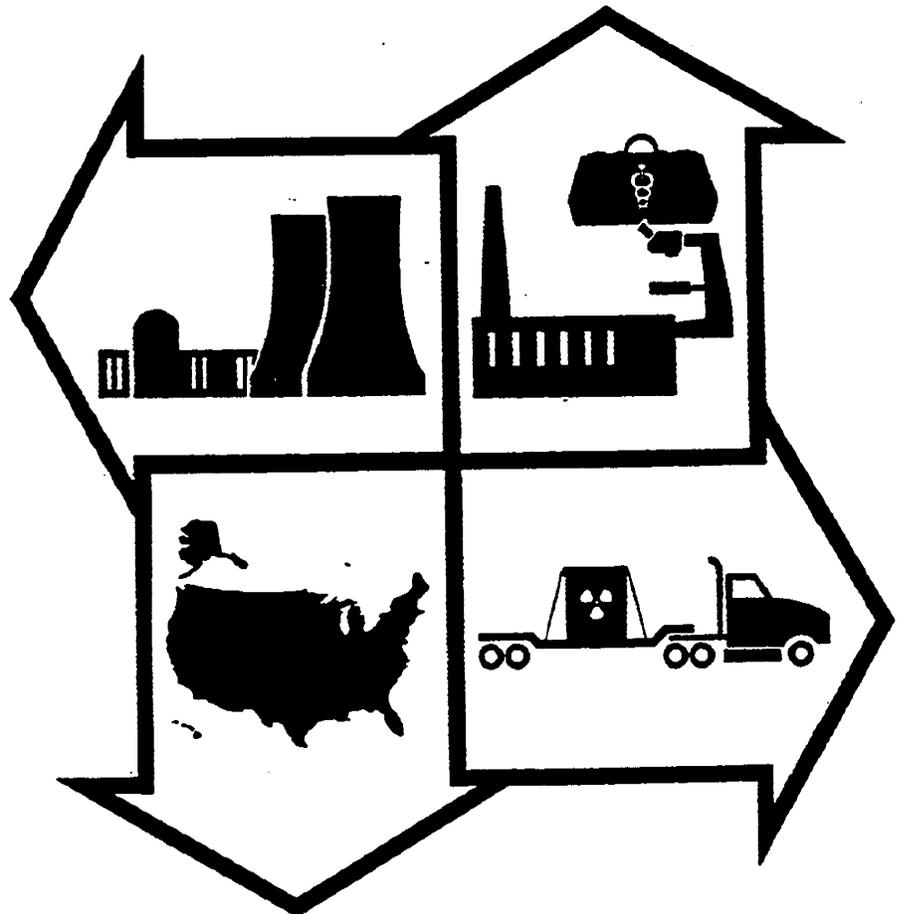


APPENDIX B

Information from the 1997 Edition of the United States Nuclear  
Regulatory Commission's *Information Digest*



# INFORMATION DIGEST





# U.S. and Worldwide Energy

---

---

## U.S. Electricity

---

---

### Capability and Net Generation:

U.S. electric generating capability totaled approximately 687 gigawatts in 1998. Nuclear energy accounted for approximately 14 percent of this capability (see [Figure 7](#)).

U.S. net electric generation totaled approximately 3,212 thousand gigawatthours in 1997. Nuclear energy accounted for approximately 21 percent of this generation (see [Figure 7](#)).

In 1998, 104 operating nuclear reactors in 31 States generated approximately one-fifth of the Nation's electricity (see [Table 3](#)).

- 4 States relied on nuclear power for more than 50 percent of their electricity
- 16 additional States relied on nuclear power for 25 to 50 percent of their electricity

Since 1977, nuclear electric generation has nearly tripled and coal-fired generation has nearly doubled, while electricity generated by all other sources has decreased by 18 percent (see [Table 4](#) and [Figure 9](#)).

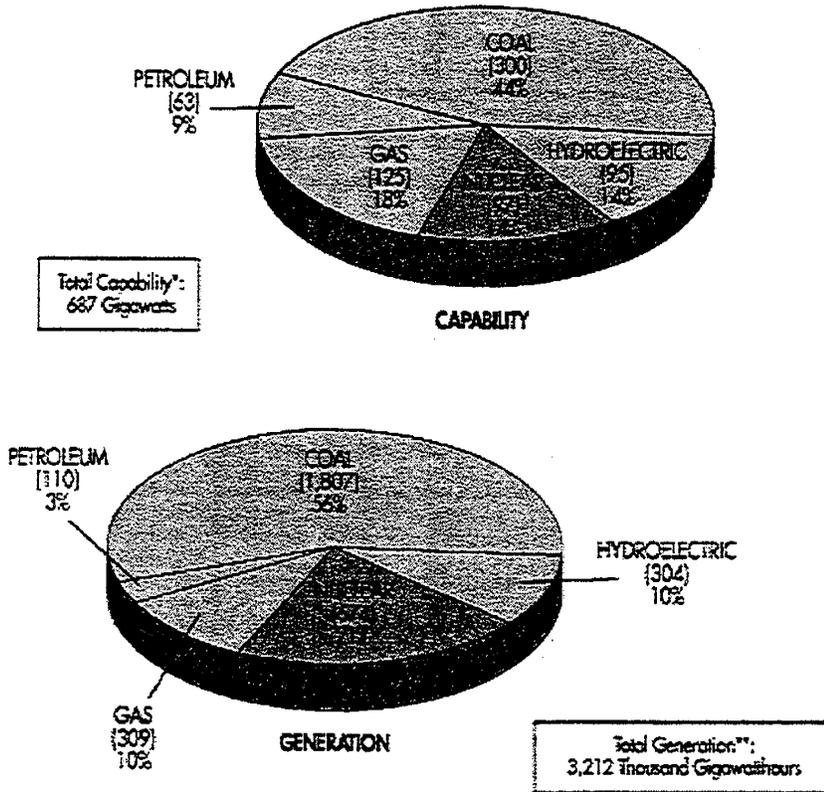
Electricity from coal and nuclear sources, which accounted for 58 percent of the U.S. generating capability, produced 77 percent of the net electricity generated in 1998 (see [Table 5](#) and [Figure 10](#)).

### Average Production Expenses

The production expense data presented herein include all nuclear and coal-fired utility-owned steam electric plants (see [Table 6](#) and [Figure 11](#)).

- In 1998, production expenses averaged \$21.61 per megawatthour for nuclear reactors and \$20.60 per megawatthour for coal-fired plants

Figure 7. U.S. Electric Capability and Net Generation by Energy Source, 1998



\* Total value includes approximately 7 gigawatts of other generating capability (geothermal, refuse, solar, wind, and wood), which represents 1 percent of total capability.

\*\* Total value includes approximately 7 thousand gigawatthours of generation by other energy sources (geothermal, wood, waste, wind, photovoltaic, and solar), which represents less than 1 percent of total generation.

Note: Net summer capability. Percentages are rounded to the nearest whole number. Numbers rounded to the nearest thousand.

Source: DOE/EIA Inventory of Power Plants in the United States as of January 1, 1999, Table 1 (<http://www.eia.doe.gov>), and DOE/EIA Monthly Energy Review [DOE/EIA-0035 (99/11)], Table 7.1 [page 95]

Figure 7. U.S. Electric Capability and Net Generation by Energy Source, 1998

**Table 3. Electric Generating Capability and Electricity Generated in Each State by Nuclear Power, 1998**

	<u>Percent Net Nuclear</u>			<u>Percent Net Nuclear</u>	
<b>State</b>	<b>Capability</b>	<b>Generation</b>	<b>State</b>	<b>Capability</b>	<b>Generation</b>
Alabama	23	25	Missouri	7	11
Arizona	25	37	Nebraska	21	29
Arkansas	18	30	New Hampshire	50	59
California	14	30	New Jersey	29	75
Connecticut	36	22	New York	17	27
Florida	11	18	North Carolina	22	34
Georgia	17	28	Ohio	8	11
Illinois	35	42	Pennsylvania	27	35
Iowa	6	10	South Carolina	37	57
Kansas	12	25	Tennessee	19	30
Louisiana	12	25	Texas	7	13
Maryland	15	27	Vermont	65	75
Massachusetts	20	21	Virginia	22	42
Michigan	18	15	Washington	5	7
Minnesota	18	27	Wisconsin	13	18
Mississippi	17	28	Others*	0	0

\*There are 19 States and the District of Columbia with no nuclear generating capability.

*Note:* Net summer capability. Capability is the percent of electricity the State is capable of producing with nuclear energy. Generation is the percent of all sources of electricity actually produced with nuclear energy. Percentages are rounded to the nearest whole number.

*Source:* DOE/EIA Inventory of Power Plants in the United States as of January 1, 1999, Table 17 <<http://www.eia.doe.gov>>, and DOE/EIA Electric Power Monthly (11/99), Table 12 <<http://www.eia.doe.gov>>.

Figure 8. Net Electricity Generated in Each State by Nuclear Power, 1998

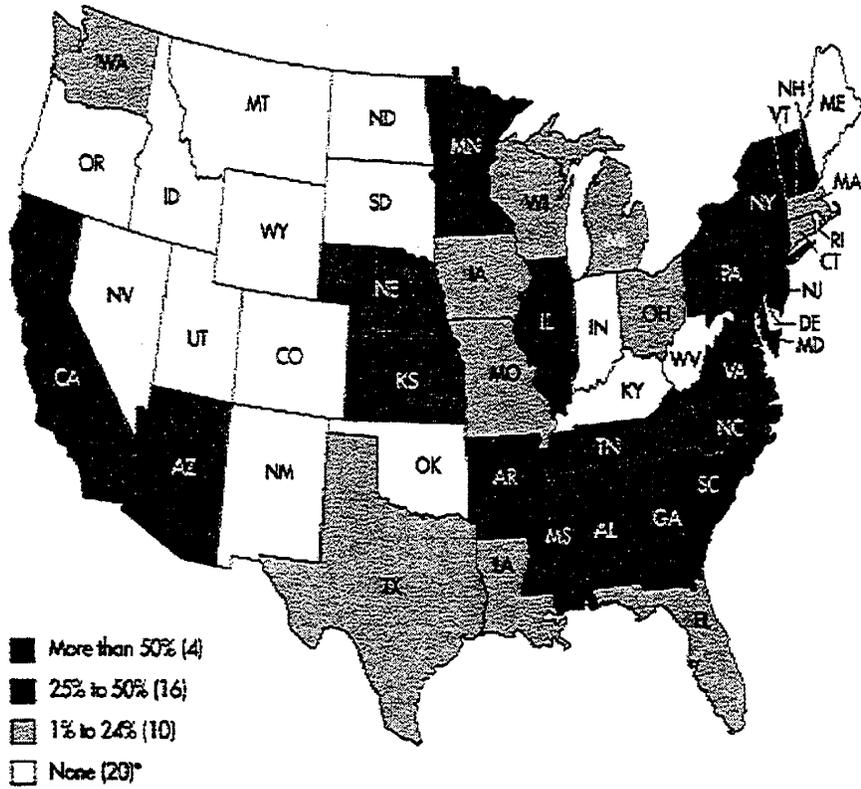


Figure 8. Net Electricity Generated in Each State by Nuclear Power, 1998

## APPENDIX C

### Map of Commercial and DOE Sites



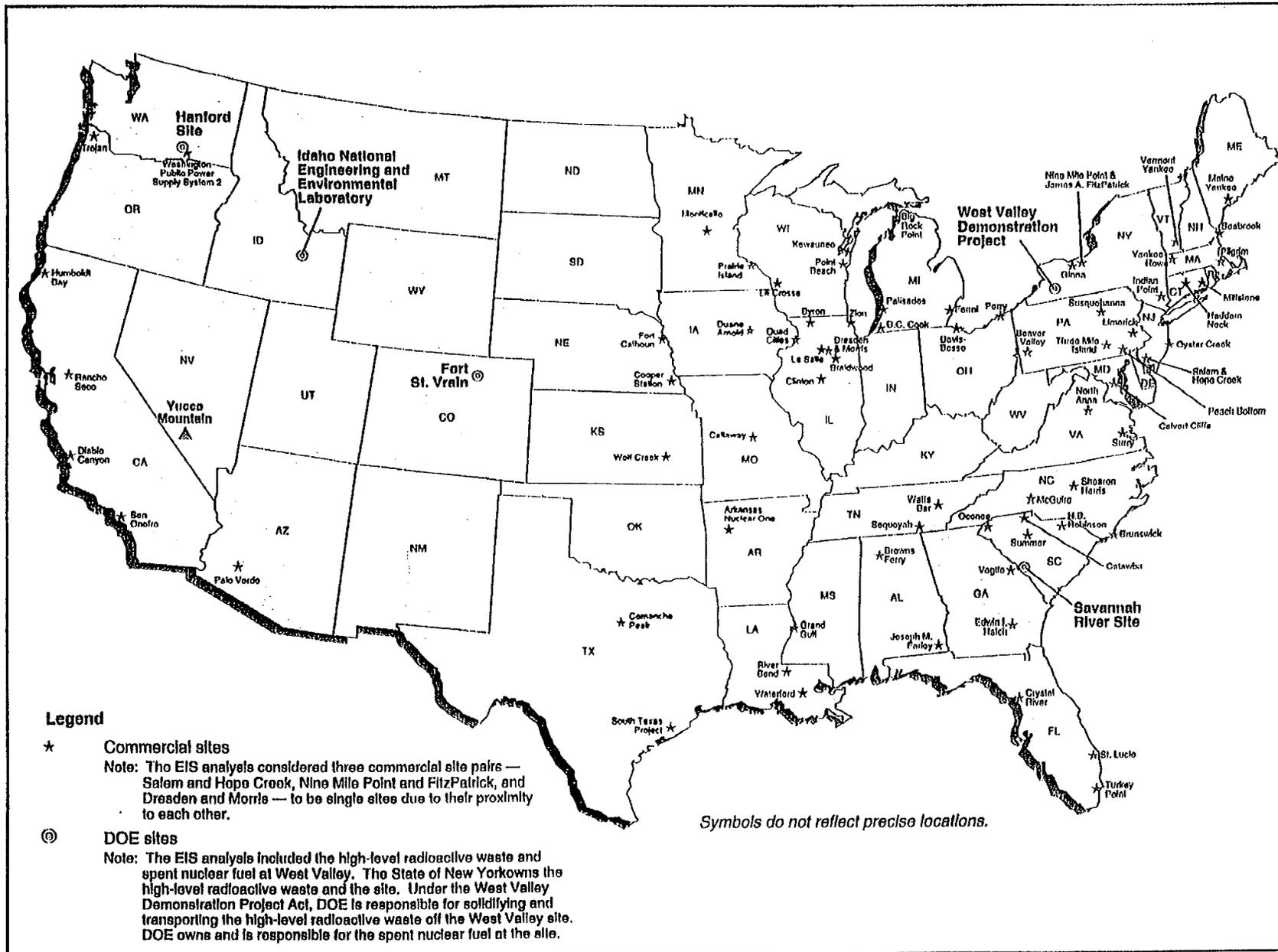


Figure S-1. Locations of commercial and DOE sites and Yucca Mountain.



APPENDIX D

Page 42 from *The Nuclear Waste Primer* – The League  
of Woman Voters Education Fund



THE  
*NUCLEAR*  
*WASTE*  
PRIMER

THE LEAGUE OF WOMAN VOTERS  
EDUCATION FUND



high-level waste permanently. As the following section on policies and programs explains in more detail, Congress in 1987 directed DOE to confine its siting investigations for this facility to Yucca Mountain, Nevada. If constructed, the repository would isolate nuclear waste in a stable geologic (rock) formation at least one thousand feet below ground. A combination of natural geologic features and engineered components is expected to provide a series of barriers to prevent the uncontrolled release of radionuclides into the environment. The barriers will include the chemical and physical form of the waste; the covering (cladding) on the fuel rods; the canister that will hold the waste; any packing material around the canister; and the natural characteristics of the rock formation itself.

The concept of geologic disposal of high-level waste and spent fuel has widespread international acceptance in much of the scientific community. A 1992 report from the National Academy of Sciences notes that most countries have concluded that "the best means of long-term disposal of high-level radioactive waste is deep geological emplacement, always including some form of engineered containment or encapsulation and generally with some limited retrieval capability, at least initially."

Geologic disposal has been the focus of federal research for more than 30 years. As early as 1957, a National Academy of Sciences report to the Atomic Energy Commission recommended the burial of high-level and transuranic waste in geologic formations. The Academy urged the investigation of a large number of potential sites and specifically recommended further research on salt beds and salt domes.

In addition to investigating salt extensively (see Chapter 6), DOE has conducted research on geologic formations of basalt, tuff, and crystalline rock (granite) as potential nuclear waste disposal sites. The department conducted experiments in basalt at the Hanford Reservation in Washington and in granite and other kinds of rock formations at the Nevada Test Site, in addition to participating in international research projects.



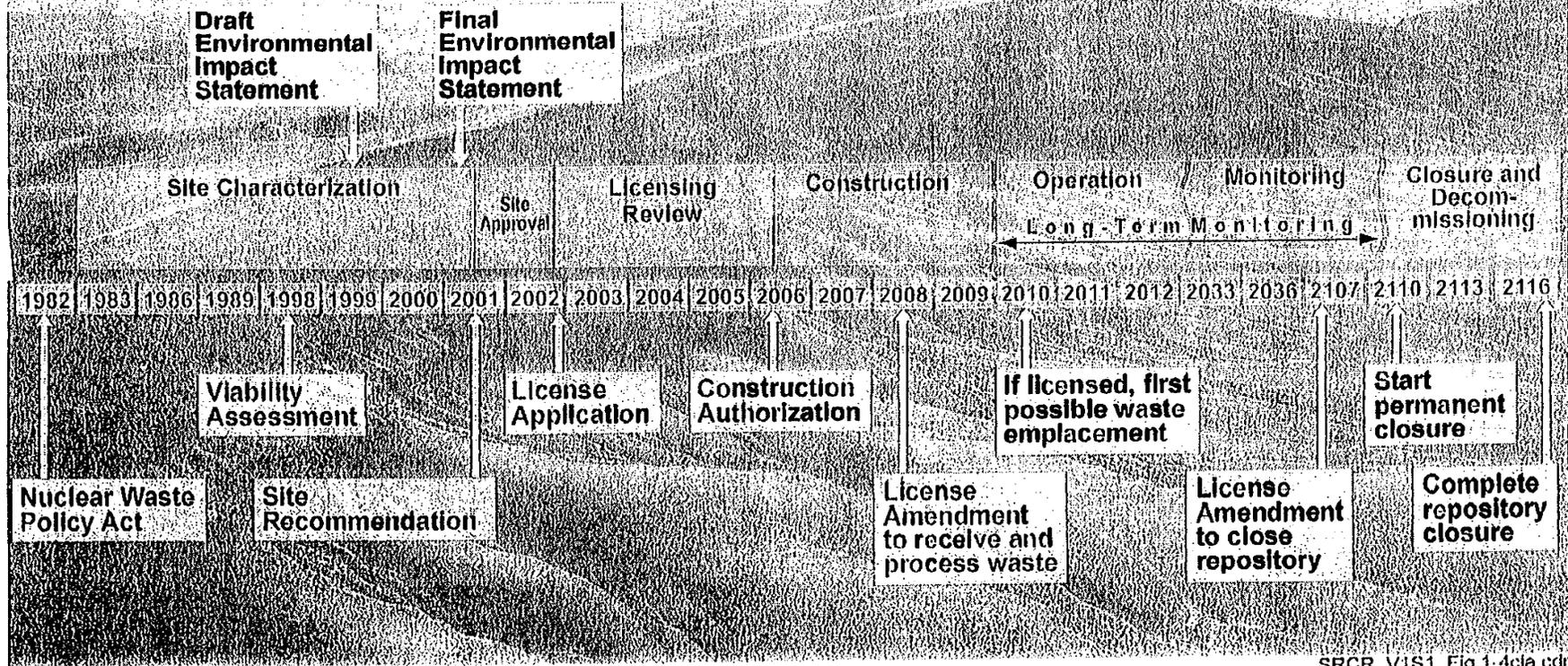
## APPENDIX E

“Current milestones in U.S. repository program”



# Current milestones in U.S. repository program

41



SRCR\_VIS1\_Fig.1-4cla.cdr

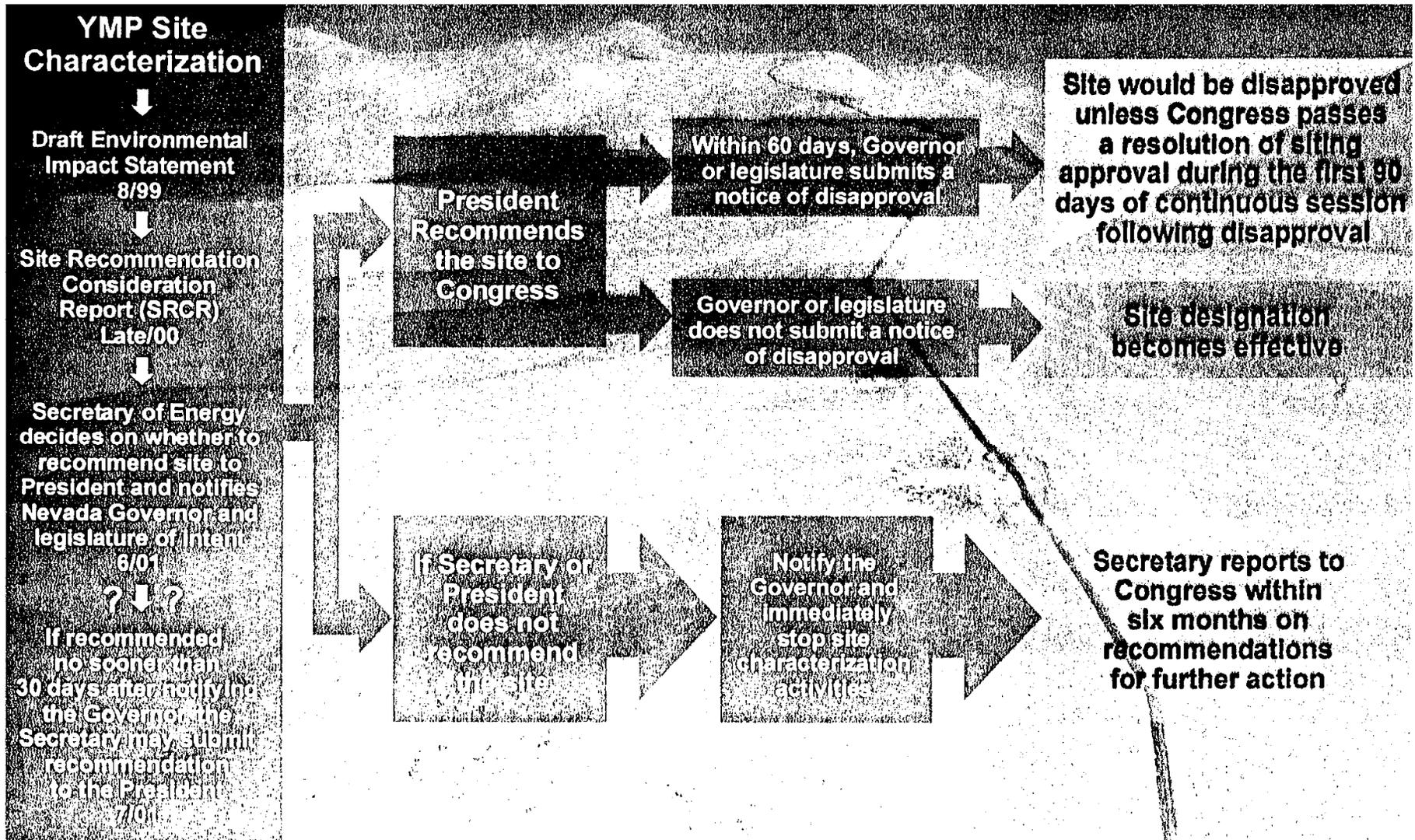


APPENDIX F

“Statutory process of the Site Recommendation”



# Statutory process of the Site Recommendation



45

Q:\PRODUCTS\STATUTORY\_PROCESS.cd



## APPENDIX G

### “Nevada Agency for Nuclear Projects Summary of Mission and Functions”



# NEVADA AGENCY FOR NUCLEAR PROJECTS SUMMARY OF MISSION AND FUNCTIONS

---

## AGENCY MISSION STATEMENT

The mission of the Nevada Agency for Nuclear Projects is to assure that the health, safety, and welfare of Nevada's citizens and the State's unique environment and economy are adequately protected with regard to any federal high-level nuclear waste disposal activities in the State.

...

## ORGANIZATIONAL STRUCTURE AND FUNCTIONS

The Agency for Nuclear Projects operates as part of the Nevada Governor's Office and consists of a Division of Technical Programs and a Division of Planning. The Executive Director is appointed by the governor and serves at the pleasure of the Commission on Nuclear Projects. The seven member Commission advises the governor and legislature on nuclear wastes issues and oversees Agency activities. The Agency oversees the federal high-level radioactive waste disposal program; carries out independent technical, socioeconomic and other studies; works closely with state agencies and local governments on matters relating to radioactive waste; and provides information to the governor, legislature, and any interested parties. The Agency uses a small, central staff supplemented by contractual services for needed technical and specialized expertise in order to provide high quality oversight and monitoring of federal activities, to conduct necessary independent studies, and to avoid unnecessary duplication of efforts and resources.

The work of the Agency specifically includes:

- monitoring all DOE activities relative to the federal high-level nuclear waste repository proposed for Nevada;
- coordinating State and local responses and reviews of DOE technical and planning documents and proposals, and assuring that all affected State and local governmental agencies are appropriately involved in all phases of federal repository activities;
- conducting independent reviews of hydrological, geological, engineering and other technical aspects of the proposed federal repository project; conducting independent studies in areas of socioeconomic, transportation, and others as needed;
- consulting and coordinating with other appropriate State agencies for input and guidance regarding the design of the State program, for review and comment relative to federal documents, and for identifying potential impacts of the federal program and formulating mitigation strategies;
- coordinating and facilitating the involvement of affected local governments in planning for impacts associated with a potential repository in the State;
- identifying health, safety and environmental issues which are of concern to the State and developing State responses and strategies for addressing these issues;
- providing timely and accurate information to the Governor, the Legislature, local governments, and the public on all aspects of the federal program;
- identifying major legal issues arising out of the proposed repository project and developing strategies for effectively addressing such issues to the benefit of the State and affected local communities;
- representing Nevada's interests at the national level, including participation in Nuclear Regulatory

Commission deliberations and rulemaking activities concerning licensing of a waste repository, sharing information on Nevada's activities with other affected states; and working with organizations such as the Western Governors' Association, the National Governors' Association, the Western Interstate Energy Board, various DOE working groups and other entities to identify, evaluate, and plan for impacts and associated consequences of repository activities and related nuclear materials transportation.

...

## **STATUTORY AUTHORITY**

The Agency functions under the authority specified in the Nevada Revised Statutes (NRS 459.009 - 459.0098).

---

Nuclear Waste Project Home Page

---

State of Nevada  
Nuclear Waste Project Office  
Capitol Complex  
Carson City, NV 89710  
(702) 687-3744

\*

## APPENDIX H

### “Affected Units of Local Governments and Contact Persons”



**AFFECTED UNITS OF LOCAL GOVERNMENTS  
AND CONTACT PERSONS**

**CHURCHILL COUNTY**

Mr. Alan Kalt  
Churchill County Comptroller  
155 North Taylor Street, Suite 182  
Fallon, NV 89406-2748

Telephone: (775) 428-1414

**CLARK COUNTY**

Mr. Dennis A. Bechtel  
Planning Manager  
Clark County Nuclear Waste Division  
500 South Grand Central Parkway, Suite 3012  
Las Vegas, NV 89155-1751

Telephone: (702) 455-5175

**ESMERALDA COUNTY**

Mr. George McCorkell  
Program Director  
Esmeralda County Nuclear Waste Repository  
Oversight Program  
P.O. Box 490  
Goldfield, NV 89013

Telephone: (775) 485-3419

**EUREKA COUNTY**

Mr. Leonard Fiorenzi  
Public Works Director  
Eureka County  
P.O. Box 257  
Eureka, NV 89316

Telephone: (775) 237-5372

**INYO COUNTY**

Mr. Andrew Remus  
Project Coordinator  
Inyo County Yucca Mountain Repository  
Assessment Office  
P.O. Drawer L  
Independence, CA 93526

Telephone: (760) 878-0447

## LANDER COUNTY

Nuclear Waste Program  
Lander County  
P.O. Box 10  
Austin, NV 89310

Telephone: (775) 964-2447

## LINCOLN COUNTY

Mr. Jason Pitts  
Coordinator  
Lincoln County Nuclear Waste Program  
P.O. Box 1068  
Caliente, NV 89008

Telephone: (702) 726-3511

## MINERAL COUNTY

Ms. Judy Shankle  
Administrator  
Office of Nuclear Projects  
Box 1600  
Hawthorne, NV 89415

Telephone: (775) 945-2484

## NYE COUNTY

Mr. Les W. Bradshaw  
Manager  
Nye County Department of Natural Resources  
and Federal Facilities  
1210 East Basin Road, Suite 6  
Pahrump, NV 89048

Telephone: (702) 727-7727

## WHITE PINE COUNTY

Mr. Bill Ott  
Director  
White Pine County Nuclear Waste  
Project Office  
959 Compton Street  
Ely, NV 89301

Telephone: (775) 289-2033

APPENDIX I

Meeting Notices and Agendas of the Nevada Legislature's  
Committee on High-Level Radioactive Waste



STATE OF NEVADA  
LEGISLATIVE COUNSEL BUREAU

LEGISLATIVE BUILDING  
401 S. CARSON STREET  
CARSON CITY, NEVADA 89701-4747  
Fax No.: (775) 684-6600



LEGISLATIVE COMMISSION (775) 684-6800  
ANN O'CONNELL, Senator, Chairman  
Lorne J. Malkiewicz, Director, Secretary

INTERIM FINANCE COMMITTEE (775) 684-6821  
WILLIAM J. RAGGIO, Senator, Chairman  
Gary L. Ghiggeri, Fiscal Analyst  
Mark W. Stevens, Fiscal Analyst

LORNE J. MALKIEWICH, Director  
(775) 684-6800

Wm. GARY CREWS, Legislative Auditor (775) 684-6815  
ROBERT E. ERICKSON, Research Director (775) 684-6825  
BRENDA J. ERDOES, Legislative Counsel (775) 684-6830

MEETING NOTICE AND AGENDA

Name of Organization: Nevada Legislature's Committee on High-Level Radioactive Waste  
(*Nevada Revised Statutes* 459.0085)

Date and Time of Meeting: Thursday, November 18, 1999  
9:30 a.m.

Place of Meeting: Grant Sawyer State Office Building  
Room 4412  
555 East Washington Avenue  
Las Vegas, Nevada

Note: Some members of the committee may be attending the meeting and other persons may observe the meeting and provide testimony, through a simultaneous videoconference conducted at the following location:

Legislative Building  
Room 2135  
401 South Carson Street  
Carson City, Nevada

A G E N D A

I. Opening Remarks and Introductions by the Chairman.

Senator Lawrence E. Jacobsen

\*II. Approval of Minutes of December 16, 1998, Meeting.

III. Reports to Committee.

A. Update on Status of the High-Level Radioactive Waste Program of the United States Department of Energy.

J. Russell Dyer, Ph.D., Acting Project Manager, Department of Energy  
Yucca Mountain (Nevada) Site Characterization Office

Topics to include:

1. The underground and surface scientific studies relating to the Yucca Mountain Site Characterization project.
2. The Yucca Mountain Draft Environmental Impact Statement and Public Hearings.
3. The impacts on a repository design and program from the Radiation Health Standards proposed by the U.S. Environmental Protection Agency and the U.S. Nuclear Regulatory Commission.
4. The Yucca Mountain Site Characterization program schedule for Federal Fiscal Year 2000.

B. Update on the Nevada Agency for Nuclear Projects' (NANP) activities and review of scientific studies.

Robert R. Loux, Executive Director

Topics to include:

1. The State agency review of the Yucca Mountain Draft Environmental Impact Statement and participation at public hearings.
2. The NANP-sponsored Pre-Public Hearing Workshops.
3. The proposed Radiation Health Standards by the U.S. Environmental Protection Agency and the Nuclear Regulatory Commission for a possible repository at Yucca Mountain.
4. Status of legal actions involving the State or being monitored by the NANP.

C. Lunch.

- D. Overview of the proposed radiation health standards for a possible high-level radioactive waste repository at Yucca Mountain by the U.S. Environmental Protection Agency.

Steve Page, Director, Office of Air and Radiation

- E. Update on High-Level Radioactive Waste activities of the National Conference of State Legislatures.

Linda Sikkema, Program Principal

- F. Update on activities of the Citizens Against Nuclear Waste in Nevada (CANWIN).

Cheryl Lau, President

- G. Clark County Radioactive Waste Oversight activities.

Dennis Bechtel, Planning Manager for the Clark County Department of Comprehensive Planning, Las Vegas

Bob Andrews, Clark County Emergency Management

- H. Update on oversight activities of the Affected Units of Local Governments.

IV. Public Testimony.

V. Comments and Discussion by Committee Members.

VI. Adjournment.

\*Denotes item on which the committee may take action.

---

Note: We are pleased to make reasonable accommodations for members of the public who are disabled and wish to attend the meeting. If special arrangements for the meeting are necessary, please notify the Research Division of the Legislative Counsel Bureau, in writing, at the Legislative Building, 401 South Carson Street, Carson City, Nevada 89701-4747, or call Nenita Wasserman, at (775) 684-6825, as soon as possible.

---

Notice of this meeting was posted in the following Carson City, Nevada, locations: Blasdel Building, 209 East Musser Street; Capitol Press Corps, Basement, Capitol Building; Carson City Courthouse, 198 North Carson Street; Legislative Building, 401 South Carson Street; and Nevada State Library, 100 Stewart Street. Notice of this meeting was faxed for posting to the following Las Vegas, Nevada, locations: Grant Sawyer State Office Building, 555 East Washington Avenue; and Clark County Office, 500 South Grand Central Parkway.



STATE OF NEVADA  
LEGISLATIVE COUNSEL BUREAU

LEGISLATIVE BUILDING  
401 S. CARSON STREET  
CARSON CITY, NEVADA 89701-4747  
Fax No.: (775) 684-6600

LEGISLATIVE COMMISSION (775) 684-6800  
ANN O'CONNELL, Senator, *Chairman*  
Lorne J. Malkiewicz, *Director, Secretary*

INTERIM FINANCE COMMITTEE (775) 684-6821  
WILLIAM J. RAGGIO, Senator, *Chairman*  
Gary L. Ghiggeri, *Fiscal Analyst*  
Mark W. Stevens, *Fiscal Analyst*

LORNE J. MALKIEWICH, *Director*  
(775) 684-6800



Wm. GARY CREWS, *Legislative Auditor* (775) 684-6815  
ROBERT E. ERICKSON, *Research Director* (775) 684-6825  
BRENDA J. ERDOES, *Legislative Counsel* (775) 684-6830

**MEETING NOTICE AND AGENDA**

Name of Organization: Nevada Legislature's Committee on High-Level Radioactive Waste  
(*Nevada Revised Statutes 459.0085*)

Date and Time of Meeting: Friday, February 4, 2000  
9:30 a.m.

Place of Meeting: Grant Sawyer State Office Building  
Room 4412  
555 East Washington Avenue  
Las Vegas, Nevada

Note: Some members of the committee may be attending the meeting, and other persons may observe the meeting and provide testimony, through a simultaneous videoconference conducted at the following location:

Legislative Building  
Room 4100  
401 South Carson Street  
Carson City, Nevada

*If you cannot attend the meeting, you can listen to it live over the Internet. The address for the legislative Web site is <http://www.leg.state.nv.us>. For audio broadcasts, click on the link "Listen to Meetings Live on the Internet."*

**AGENDA**

I. Opening Remarks and Introductions by the Chairman.

Senator Lawrence E. Jacobsen

\*II. Approval of Minutes of November 18, 1999, Meeting.

III. Reports to Committee.

- A. Update on status of the High-Level Radioactive Waste Program of the United States Department of Energy.

J. Russell Dyer, Ph.D., Project Manager, Department of Energy  
Yucca Mountain (Nevada) Site Characterization Office

Topics to include:

1. The Yucca Mountain Draft Environmental Impact Statement.
2. The status of the underground and surface scientific studies relating to the Yucca Mountain Site Characterization project.
3. The status of proposed changes to the Siting Guidelines for a High-Level Radioactive Waste Repository.

- B. Update on the Nevada Agency for Nuclear Projects' (NANP) activities and review of scientific studies.

Robert R. Loux, Executive Director

Topics to include:

The State agency review of the Yucca Mountain Draft Environmental Impact Statement and participation at public hearings.

- C. Lunch.

- D. Overview and status of Application for Water Rights by U.S. Department of Energy at Yucca Mountain, Nevada.

Pete Morros, Director  
Nevada Department of Conservation and Natural Resources

- E. Overview of the Nuclear Regulatory Commission activities regarding the management, transportation, and disposal of high-level radioactive waste.

Topics to include:

1. The status of the proposed amendments to the NRC licensing regulation for a high-level radioactive waste repository and accompanying License Application Review Plan.

2. The status of the Spent Nuclear Waste Shipping Cask licensing regulations.

F. Update on oversight activities of the Affected Units of Local Governments.

Dennis Bechtel, Planning Manager, Clark County Department of Comprehensive Planning, Las Vegas

Mike Baughman, Ph.D., President, Intertech Services Corporation, Carson City

IV. Public Testimony.

V. Comments and Discussion by Committee Members.

VI. Adjournment.

\*Denotes item on which the committee may take action.

---

Note: We are pleased to make reasonable accommodations for members of the public who are disabled and wish to attend the meeting. If special arrangements for the meeting are necessary, please notify the Research Division of the Legislative Counsel Bureau, in writing, at the Legislative Building, 401 South Carson Street, Carson City, Nevada 89701-4747, or call Nenita Wasserman, at (775) 684-6825, as soon as possible.

---

**Notice of this meeting was posted in the following Carson City, Nevada, locations:** Blasdel Building, 209 East Musser Street; Capitol Press Corps, Basement, Capitol Building; Carson City Courthouse, 198 North Carson Street; Legislative Building, 401 South Carson Street; and Nevada State Library, 100 Stewart Street. **Notice of this meeting was faxed for posting to the following Las Vegas, Nevada, locations:** Grant Sawyer State Office Building, 555 East Washington Avenue; and Clark County Office, 500 South Grand Central Parkway.



STATE OF NEVADA  
LEGISLATIVE COUNSEL BUREAU

LEGISLATIVE BUILDING  
401 S. CARSON STREET  
CARSON CITY, NEVADA 89701-4747  
Fax No.: (775) 684-6600

LEGISLATIVE COMMISSION (775) 684-6800  
ANN O'CONNELL, Senator, *Chairman*  
Lorne J. Malkiewicz, *Director, Secretary*

INTERIM FINANCE COMMITTEE (775) 684-6821  
WILLIAM J. RAGGIO, Senator, *Chairman*  
Gary L. Ghiggeri, *Fiscal Analyst*  
Mark W. Stevens, *Fiscal Analyst*

LORNE J. MALKIEWICH, *Director*  
(775) 684-6800



Wm. GARY CREWS, *Legislative Auditor* (775) 684-6815  
ROBERT E. ERICKSON, *Research Director* (775) 684-6825  
BRENDA J. ERDOES, *Legislative Counsel* (775) 684-6830

REVISED  
MEETING NOTICE AND AGENDA

Name of Organization: Nevada Legislature's Committee on High-Level Radioactive Waste  
(*Nevada Revised Statutes 459.0085*)

Date and Time of Meeting: Wednesday, November 29, 2000  
9:30 a.m.

Place of Meeting: Grant Sawyer State Office Building  
Room 4412  
555 East Washington Avenue  
Las Vegas, Nevada

Note: Some members of the committee may be attending the meeting, and other persons may observe the meeting and provide testimony, through a simultaneous videoconference conducted at the following location:

Legislative Building  
Room 3138  
401 South Carson Street  
Carson City, Nevada

*If you cannot attend the meeting, you can listen to it live over the Internet. The address for the legislative Web site is <http://www.leg.state.nv.us>. For audio broadcasts, click on the link "Listen to Meetings Live on the Internet."*

A G E N D A

I. Opening Remarks and Introductions by the Chairman.

Senator Lawrence E. Jacobsen

\*II. Approval of Minutes of February 4, 2000, Meeting.

III. Reports to Committee.

- A. Update on status of the High-Level Radioactive Waste Program of the United States Department of Energy.

J. Russell Dyer, Ph.D., Project Manager, Department of Energy  
Yucca Mountain Site Characterization Office

Topics to include:

1. The status of the studies relating to the Yucca Mountain Site Characterization project, including surface and subsurface studies, total system performance assessment, and engineered barriers.
2. Schedule for Site Recommendation Report and opportunity for the State of Nevada and local governments to review and comment.

- B. Update on the Nevada Agency for Nuclear Projects' (NANP) oversight activities.

Robert R. Loux, Executive Director

Topics to include:

1. An overview and status of Nevada's Agency for Nuclear Projects' (NANP) oversight activities, and monitoring of United States Department of Energy's scientific studies;
2. Status of special studies on C-22 Corrosion Testing and Fluid Inclusion;
3. Plans for the review and comment of the proposed Site Recommendation Consideration Report and Site Recommendation Report, and the preparation of the state's response if the DOE finds Yucca Mountain to be a suitable site for a repository;
4. Plans for use of Fiscal Year 2001 federal oversight funding to the State that has been awarded to Nevada's Division of Emergency Management; and
5. Miscellaneous information on the High-Level Radioactive Waste Program.

- C. Lunch.

D. Joint briefing by representatives of the Affected Units of Local Governments on their plans and progress of the impact assessment reports relating to the proposed Yucca Mountain Repository.

1. Overview of Clark County's Oversight Program and Issues

Myrna Williams, Clark County Commissioner  
Dennis Bechtel, Clark County Dept. of Comprehensive Planning

2. Overview of Nye County's Oversight Program and Issues

Jeff Taguchi, Nye County Commissioner  
Les Bradshaw, Manager, Nye County Dept. Natural Resources

E. Update on High-Level Radioactive Waste activities of the National Conference of State Legislatures.

Linda Sikkema, Program Principal

IV. Public Testimony.

V. Comments and Discussion by Committee Members.

VI. Adjournment.

\*Denotes item on which the committee may take action.

---

Note: We are pleased to make reasonable accommodations for members of the public who are disabled and wish to attend the meeting. If special arrangements for the meeting are necessary, please notify the Research Division of the Legislative Counsel Bureau, in writing, at the Legislative Building, 401 South Carson Street, Carson City, Nevada 89701-4747, or call Nenita Wasserman, at (775) 684-6825, as soon as possible.

---

**Notice of this meeting was posted in the following Carson City, Nevada, locations:** Blasdel Building, 209 East Musser Street; Capitol Press Corps, Basement, Capitol Building; Carson City Courthouse, 198 North Carson Street; Legislative Building, 401 South Carson Street; and Nevada State Library, 100 Stewart Street. **Notice of this meeting was faxed for posting to the following Las Vegas, Nevada, locations:** Grant Sawyer State Office Building, 555 East Washington Avenue; and Clark County Office, 500 South Grand Central Parkway.



## APPENDIX J

Section 116(a) and (b) of the Nuclear Waste Policy Act



## NUCLEAR WASTE POLICY ACT

### PARTICIPATION OF STATES

Sec. 116. (a) Notification of States and affected tribes. The Secretary shall identify the States with one or more potentially acceptable sites for a repository within 90 days after the date of enactment of this Act [enacted Jan. 7, 1983]. Within 90 days of such identification, the Secretary shall notify the Governor, the State legislature, and the tribal council of any affected Indian tribe in any State of the potentially acceptable sites within such State. For the purposes of this title [42 U.S.C. 10121 et seq.], the term potentially acceptable site means any site at which, after geologic studies and field mapping but before detailed geologic data gathering, the Department undertakes preliminary drilling and geophysical testing for the definition of site location.

*\* (b) State participation in repository siting decisions.*

*(1) Unless otherwise provided by State law, the Governor or legislature of each State shall have authority to submit a notice of disapproval to the Congress under paragraph (2). In any case in which State law provides for submission of any such notice of disapproval by any other person or entity, any reference in this subtitle [42 U.S.C. 10131 et seq.] to the Governor or legislature of such State shall be considered to refer instead to such other person or entity.*

*(2) Upon the submission by the President to the Congress of a recommendation of a site for a repository, the Governor or legislature of the State in which such site is located may disapprove the site designation and submit to the Congress a notice of disapproval. Such Governor or legislature may submit such a notice of disapproval to the Congress not later than the 60 days after the date that the President recommends such site to the Congress under section 114 [42 U.S.C. 10134]. A notice of disapproval shall be considered to be submitted to the Congress on the date of the transmittal of such notice of disapproval to the Speaker of the House and the President pro tempore of the Senate. Such notice of disapproval shall be accompanied by a statement of reasons explaining why such Governor or legislature disapproved the recommended repository site involved.*

*(3) The authority of the Governor or legislature of each State under this subsection shall not be applicable with respect to any site located on a reservation.*

*\* Emphasis added*



## APPENDIX K

### Potential Nevada Routes for Legal-Weight Truck Shipments of Spent Nuclear Fuel and High-Level Radioactive Waste Material



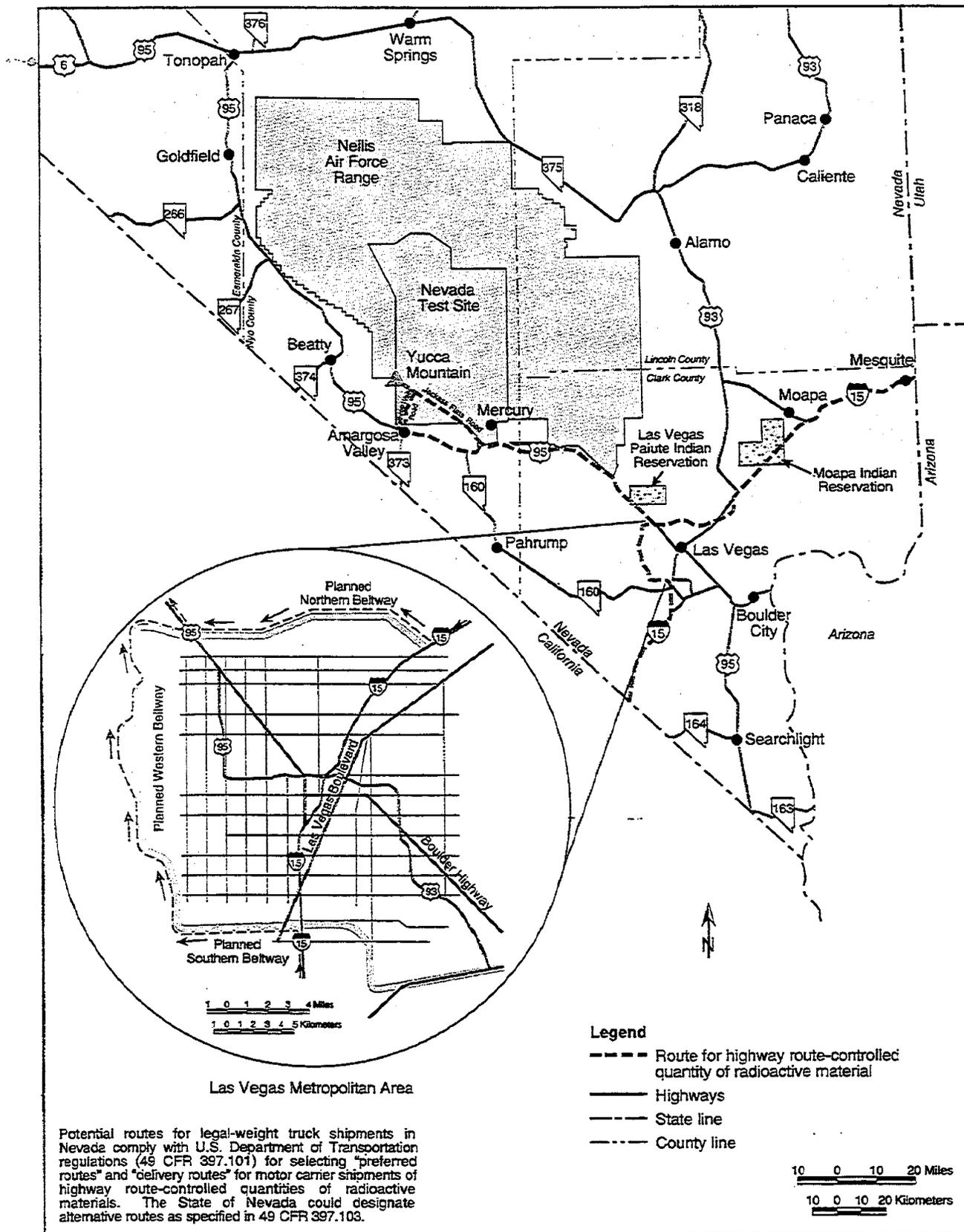


Figure S-12. Potential Nevada routes for legal-weight truck shipments of spent nuclear fuel and high-level radioactive waste to Yucca Mountain.

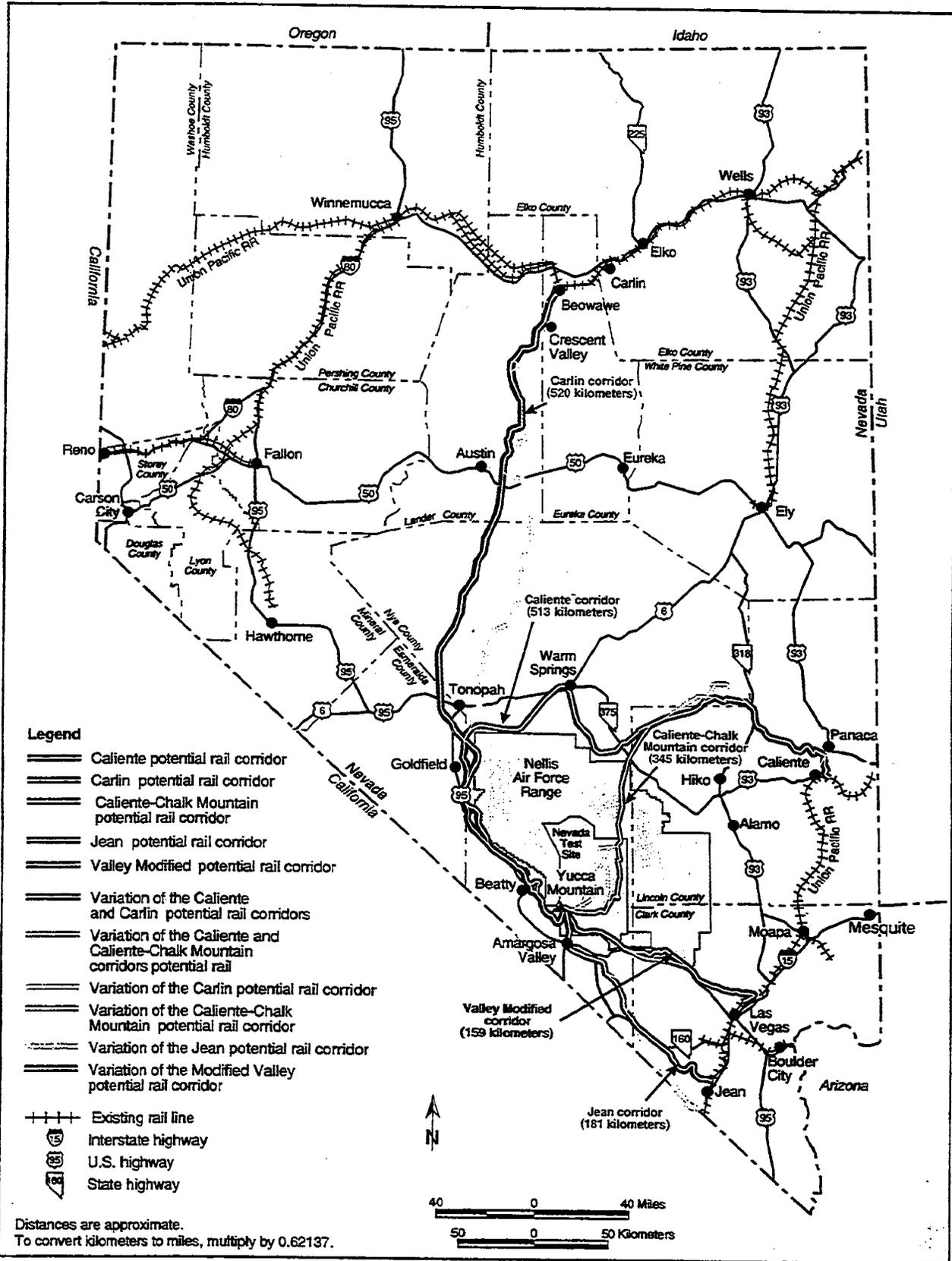


Figure S-13. Potential Nevada rail routes to Yucca Mountain.

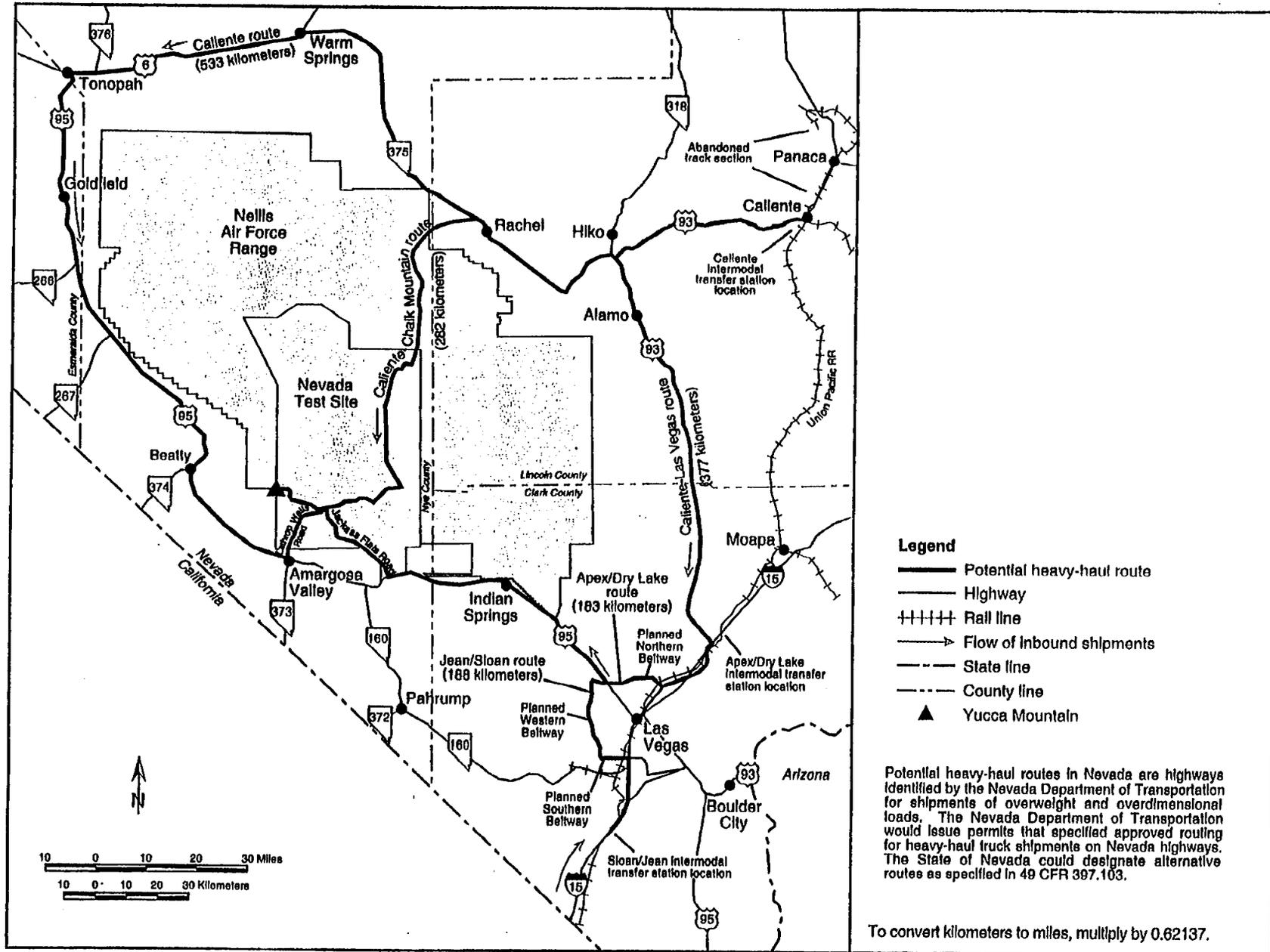


Figure S-14. Potential intermodal transfer station locations and potential routes in Nevada for heavy-haul trucks.