Background Paper 83-3

NEVADA AND HIGH-LEVEL RADIOACTIVE WASTE

TABLE OF CONTENTS

INTRODUCTION

Disposal of high-level radioactive waste is a national issue and as such involves all 50 states. Nevada, however, has more at stake than many states because it could be designated as host to a national high-level radioactive waste repository. A considerable amount of time has been devoted to negotiating a national policy on high-level radioactive waste by the 97th Congress. Many states already have, however, articulated their own positions regarding high-level radioactive waste disposal, not only through legislative action, but also by executive order and judicial proceedings. Nevada's options and opportunities, once a national high-level radioactive waste policy develops, are thus colored by Nevada's historical involvement in nuclear programs, by Congressional policy, and by other states' precedents and examples.

A HIGH-LEVEL RADIOACTIVE WASTE REPOSITORY FOR NEVADA

High-level radioactive waste is only one classification of radioactive waste. High-level radioactive waste is characterized by the release of energy which is significantly greater than that released by other types of radioactive waste. This factor influences the manner of its disposal, that is, the heat generated and the radiation emitted, require waste isolation both in handling and ultimate disposal.[1]

High-level radioactive waste is the result of nuclear defense activities and reprocessing of spent fuel from nuclear reactors. In addition, spent fuel from nuclear reactors must be disposed of in the same way as high-level radioactive waste if it is not reprocessed.

The matter of disposing of high-level radioactive waste is not new. The Federal Government has been trying to develop permanent disposal capacity for high-level radioactive waste and spent fuel since the 1950's. The magnitude of the disposal problems is contributed to by 75 million gallons of high-level reprocessed waste, mostly of government origin, which is stored in government facilities at Richland, Washington, Idaho Falls, Idaho, and Savannah River, South Carolina, and at a commercial site in West Valley, New York.

Approximately 7,000 metric tons of spent fuel is stored underwater in storage pools at commercial reactors across the country. An additional 515 tons of spent fuel is stored in pools at West Valley, New York, and Morris, Illinois.

Without a repository, high-level radioactive waste from commercial reactors is accumulating rapidly. By 1981, the United States had 74 nuclear plants in operation and some 85 additional plants under construction. These plants are likely to exceed the capacity of on-site storage by 1990. There is also high-level radioactive waste which continues to be generated by defense activities and which is only being stored, not disposed of, at the above-mentioned federal reservations.

It must be noted that Nevada has no nuclear power plants and no prospects of nuclear power generation within its borders, and although both commercial and defense low-level radioactive waste is disposed of in Nevada, high-level radioactive waste from either commercial or defense activities is not routinely stored or buried in Nevada. The State of Nevada does, however, have every likelihood of becoming a host state for the Nation's high-level radioactive waste repository. This possibility is rooted in a history of federal commitment of Nevada resources to a variety of nuclear activities, particularly defense related activities, based on suitability of Nevada for such uses.

With the acceleration of nuclear weapons testing in 1949 and 1950 in response to National policy, test sites in the continental United States, rather than on remote Pacific islands, needed to be established to reduce weapons development lead times and expenses.[2] Site selection was on the basis of population density, safety, favorable year-round weather conditions, security, available labor sources, reasonable accessibility, including transportation routes, and favorable geology.

Review of information about fallout, thermal, and blast effects combined with remoteness from population centers, geologic media which permitted placement of nuclear devices at sufficient depth for proper containment and control of radiation, the relatively deep water table and very slow water movement, and weather conditions which allow year-round testing led to construction of the Nevada Test Site facilities in 1951. Nuclear weapons testing ensued, both above and beneath the surface, at the Nevada Test Site. More than 500 tests had been conducted by June 30, 1979, and testing continues.

In its review of disposal of high-level radioactive waste for Congress in 1979,[3] the United States General Accounting Office (GAO) pointed out that existing federal nuclear reservations should be considered for disposal sites before others are selected because they are highly contaminated. The GAO report further noted that the Nevada Test Site is the least likely site (of four contaminated federal reservations including the Nevada Test Site, Hanford, Idaho National Engineering Laboratory, and Savannah River) to be cleaned up.[4] While only a small volume of high-level waste is stored there, unknown but suspected significant amounts (1) have been scattered over the land from early above-ground weapons tests and (2) remain trapped in the caverns and shafts associated with underground tests. United States Department of Energy (USDOE) officials told the GAO staff that prior nuclear activities have resulted in de facto commitment of the Nevada Test Site for long-term nuclear uses.[5]

More recently, the Nevada Test Site has been studied for the purpose of demonstrating that it has a technically sound geological medium for disposal of high-level radioactive waste. In 1976, the National Waste Terminal Storage Program was announced which would provide structure and coordination to the diffuse USDOE programs related to the development of a high-level radioactive waste repository. Since then the USDOE has been studying several types of media for isolation of high-level radioactive waste. The media types and their locations are illustrated in figure 1.

Evaluation of the volcanic tuff and granite formations at the Nevada Test Site began in 1976. The program of evaluation of nonsalt rock types was accelerated in 1981 pursuant to a Presidential directive. Among the steps to accomplishing the goals of this program is the sinking of exploratory shafts in volcanic tuff in 1983 and early 1984.[6]

Exploratory data from the Nevada Test Site suggests that it is a suitable site for a repository. Work activity under way at the site includes the quantitative application of screening criteria by the use of favorability functions, studies of chemical reactions of waste and rock, field measurements of radionuclide migration, the use of isotope geochemistry to date the age of the latest movements of faults in the region, and the analysis of data from recently

FIGURE 1

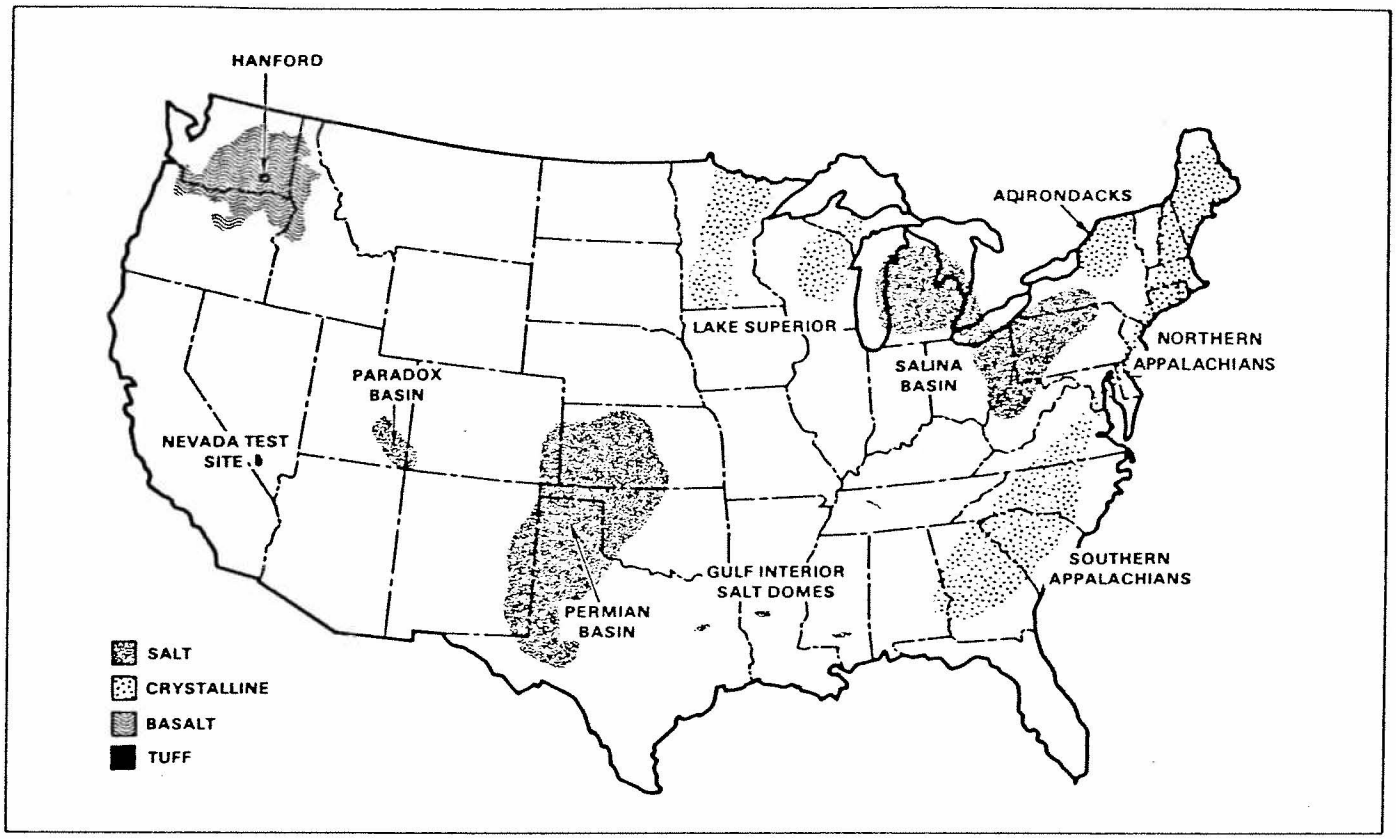


Figure 1. Regions under consideration for the isolation of high-level nuclear waste.

FROM: Harry Smedes, The National Program for Isolating High-Level Nuclear Waste, Underground Space 6 (4-5), January-April 1982, p. 221.

installed microseismic arrays on Yucca Mountain. All of these studies are summarized in a recent USDOE report.[7]

CONGRESSIONAL POLICY

Meanwhile, the states, and certainly Nevada, have awaited the delineation of a national policy on the disposal of high-level radioactive waste by Congress. In 1978, President Jimmy Carter set up the Interagency Review Group (IRG) as a first step toward strengthening and accelerating the federal nuclear waste management program. The final report and recommendations of the IRG were issued in March 1979.[8] Key elements included (1) creation of a State Planning Council to advise the executive branch and work with Congress in dealing with the problem; (2) maintenance of a policy of consultation and concurrence with a host state; (3) adoption of an interim planning strategy; (4) development of away-from-reactor (AFR) storage facilities; (5) establishment of a low-level radioactive waste disposal system; (6) expansion of Nuclear Regulatory Commission (NRC) licensing authority; (7) expediting of U.S. Environmental Protection Agency (EPA), U.S. Department of Transportation, and Nuclear Regulatory Commission regulatory actions; (8) full citizen participation; (9) completion of a national plan for waste management; and (10) international cooperation.

Subsequently, the State Planning Council was convened and on August 1, 1981, issued recommendations on national radioactive waste management policies to President Ronald Reagan. The recommendations encompassed high-level waste, low-level waste, spent fuel, and transportation of waste. With regard to high-level radioactive waste, the council expressed the need for Congress to enact legislation that establishes the national policy and intergovernmental framework for the permanent disposal of high-level radioactive waste. The legislation should not discriminate on the basis of source (commercial or defense). The council further specified principal elements of the national repository program which should be included in the legislation:

- A technically conservative program based on the investigation of multiple sites;
- Target time schedules for meeting key objectives;
- A consultation and concurrence process;

- The role of any demonstration or test facilities in achieving the primary program objectives;

- Mechanisms to recover the costs of disposal from the generators of the waste and to compensate the host state for the socioeconomic impacts of repository development; and

- An extension of the NRC licensing authority to new facilities for the permanent disposal of wastes above the EPA standard.

These recommendations have been embodied in several pieces of legislation considered by Congress. Although comprehensive radioactive waste legislation received a considerable amount of attention in the 96th Congress, and low-level radioactive waste policy was enacted,[9] Congress failed to adopt a policy for high-level radioactive waste. Several committees in each house of the 97th Congress labored over bills regarding high-level radioactive waste. The bills included HR 5016 from the House Science and Technology Committee, HR 3809 from the House Interior Committee, S 1662 adopted by the Senate, and HR 6598 passed by the House Energy Committee.[10]

On December 20, 1982, Congress adopted HR 3809, the Nuclear Waste Policy Act of 1982, and it was forwarded to the President.[11] The act establishes a schedule for building a repository deep underground to permanently isolate high-level radioactive waste from mankind. The USDOE must nominate five sites for the first repository and recommend three of them to the President by 1985. After environmental impact statements, public hearings, licensing by the Nuclear Regulatory Commission and construction are completed, the first facility should be ready to accept waste in the mid-1990's. In addition, the USDOE must recommend five sites for a second repository by 1989.

The bill also requires the government to examine the concept of monitored retrievable storage as an alternative to permanent repositories. In addition, the government is authorized to build or buy facilities to store spent nuclear fuel from civilian power plants until it can be reprocessed or placed in permanent repositories. Finally, the Federal Government must work closely with affected states since they will have the opportunity to veto a federal decision to put a repository within their borders. Both houses of Congress must override the state's veto or the objection stands.

Objections to portions of the bill, by various interest groups, hindered adoption of any policy. For example, states where away-from-reactor storage for spent fuel is likely to be located--Barnwell, South Carolina, West Valley, New York, and Morris, Illinois--object to AFR storage provisions. The inclusion of military waste in the bill has also been a bone of contention. Third, delaying the timetable has been suggested in several proposed amendments in order to avoid making a decision prematurely.

STATES' RESPONSES

In the face of ambiguous national policy on high-level radioactive waste management, states have sought to define their own positions. Although the problem of disposal of high-level radioactive waste has existed more than two decades, states have not really become involved until the last 5 to 7 years. Two reasons have been suggested for states' acceptance of federal policymaking on high-level radioactive waste.[12] First, state legislatures were convinced that any regulatory efforts by them would be struck down as unconstitutional encroachments on federal prerogatives. Second, state governments had no technological reasons for challenging the Federal Government's management of nuclear waste.

Satisfaction with federal activities related to high-level radioactive waste has, however, eroded. The Congressional Office of Technology Assessment points to three main sources of opposition:[13] (1) the inherent cost and risks of high-level radioactive waste disposal; (2) fears of unfairness in siting decisions; and (3) low federal credibility. In 1970, Project Salt Vault in Kansas was abandoned after local citizens voiced strong opposition and new geologic evidence revealed serious technical problems with the chosen site. A similar pattern of events occurred in Michigan in 1975 and early 1976.

Such credibility gaps resulted in a flurry of state legislative activity in the late 1970's. Five types of laws have been identified:[14] (1) to ban permanent storage of all radioactive waste--the Michigan model, adopted in 1978; (2) to ban permanent storage of radioactive waste generated outside the state--the Arizona model, 1978; (3) to require state government approval for establishing a permanent storage repository--the Alaska model, 1978; (4) to ban further construction and licensing of nuclear power plants until adequate means of permanent radioactive waste disposal

are developed--the California model, 1976; and (5) to provide for state participation in site selection through comprehensive industrial facility and waste management programs not limited to the nuclear industry--the Wyoming model, 1975. Several examples of recent state legislation imposing prohibitions on high-level radioactive waste and resolutions opposing disposal of high-level radioactive waste in the states are summarized in tables I and II.

A referendum which appeared on Massachusetts' November 1982 ballot would have limited high-level radioactive waste disposal in a way similar to the California model. It would have required, among other things, that a federally licensed facility for the storage of high-level radioactive waste be in operation before submitting to the voters the matter of approval of any nuclear power plants or nonmedical low-level radioactive waste disposal sites in the state.

In the spring of 1982, the governor of Utah wrote the USDOE asking that it prepare a programmatic environmental impact statement on the site selection process for developing high-level radioactive waste repositories.[15] He asked that the EIS outline the decision process and the alternatives to be considered at each level of the decision process. The Paradox Basin in Utah is one of the prime sites under consideration by USDOE for the development of a test and evaluation facility. He indicated to Energy Secretary James B. Edwards that Utah was ready to accept the possibility of one or more acceptable sites for the geologic disposal of high-level radioactive waste in Utah and that the DOE must also be ready to accept the possibility that Utah does not contain an acceptable site.

Judicial remedies have been pursued in several states. In New Mexico, for example, a lawsuit against the U.S. Department of Energy to stop work on the Waste Isolation Pilot Plant (WIPP) was filed in May 1981 because of USDOE's unwillingness to enter into a legally binding consultation and concurrence agreement with the state. The repository was designed to hold military high-level radioactive waste and thus would not be required to be federally licensed, a major concern to the citizens of New Mexico. An out of court settlement was reached when USDOE agreed to sign an agreement.

There are, of course, legal impediments to state regulation of high-level radioactive waste.[16] First, to the extent

that a state purports to regulate a federal activity carried out on federal property, the federal activity would be beyond the power of the state to regulate under constitutional principles of intergovernmental immunity. Second, if a state statute conflicts with applicable federal law or otherwise operates to frustrate the policies and objectives of Congress, the state legislation may be invalid by virtue of the Supremacy Clause and the judicially refined doctrine of federal preemption. Finally, state statutory provisions which close the borders of the state to interstate commerce originating outside the jurisdiction are subject to challenge under the Commerce Clause.

In light of these impediments, more constructive legislative approaches have also surfaced. These have been in the form of laws and resolutions, and they call for coordination among federal agencies and affected state and local jurisdictions. Several of these are summarized in table III.

NEVADA OPTIONS AND OPPORTUNITIES

The options and opportunities which Nevada may have will be shaped by many variables. Some of the variables will include Nevada's historical involvement in nuclear programs, Congressional policy, and other states' precedents and examples. The attitude of Nevada's political leaders may also play a major part in determining Nevada's role.

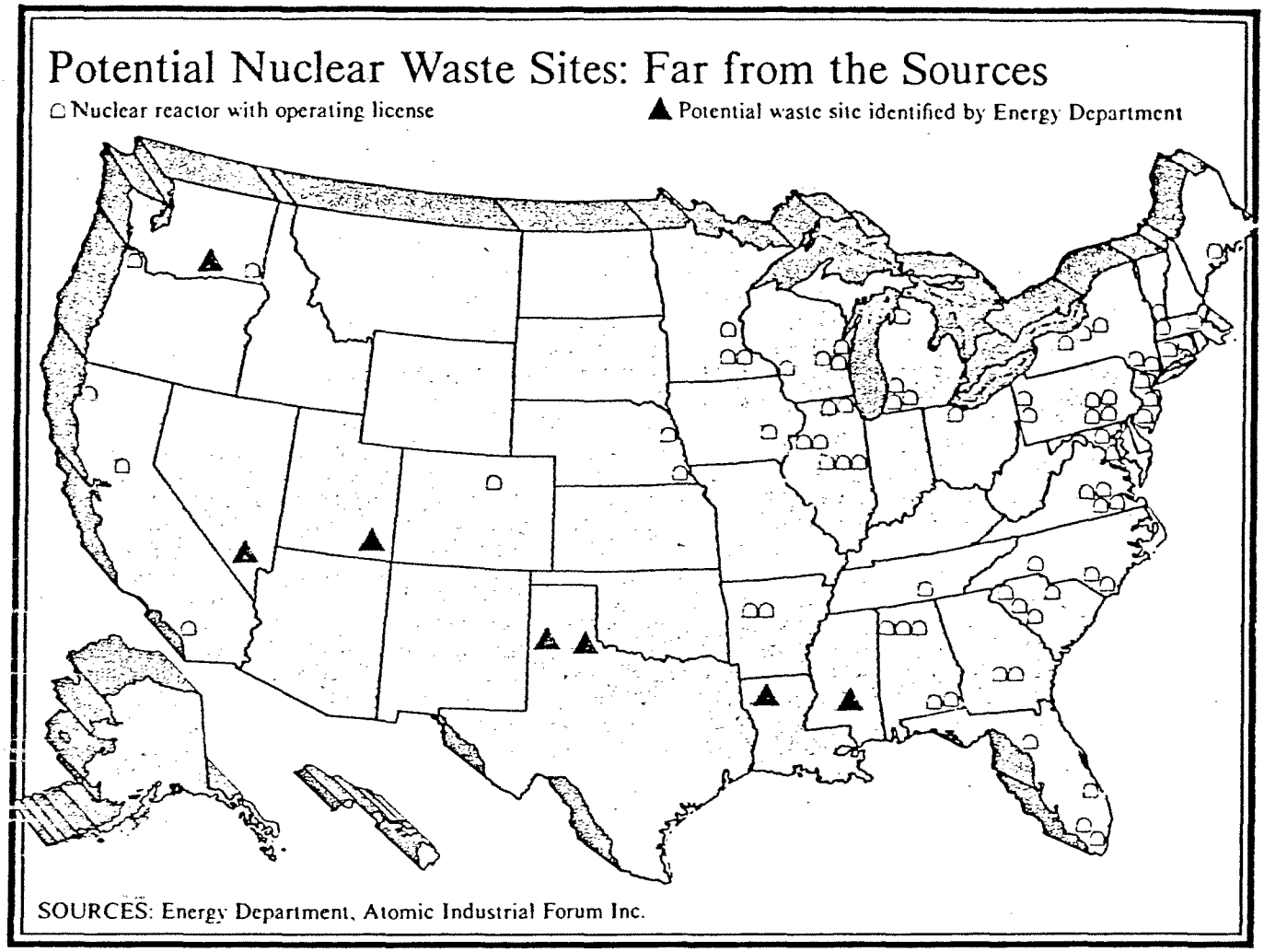
Nevada's acceptance of being designated the host state for a high-level radioactive waste repository has been implied on several occasions. In its 58th session in 1975, the Nevada legislature adopted Assembly Joint Resolution No. 15 (file number 184) which strongly urged the U.S. Energy Research and Development Administration (precursor to USDOE) to choose the Nevada Test Site for storage and processing of nuclear material. Five conditions were stipulated in the resolution: (1) the use of air cooling at the storage facility; (2) establishment of rail transportation to the site avoiding the Las Vegas metropolitan area; (3) cooperation between state and local jurisdictions and the Federal Government in the development of the site-specific environmental impact statement; (4) satisfactory demonstration that adequate radiation safeguards for storage and transportation can be developed and will be implemented; and (5) holding public hearings in at least four counties in Nevada prior to choosing the specific site for the facility.

Furthermore, because President Carter decided to curtail all nuclear explosive testing, a Nevada committee for the utilization of state resources to meet national needs was appointed by the governor and the Nevada congressional delegation in late 1977 to recommend programs and projects to utilize all available resources at the Nevada Test Site.[17] Among its recommendations, the committee recognized as important for Nevada the nuclear waste isolation program for locating a repository for long-term isolation of high-level radioactive waste.

On the other hand, there is clear opposition to Nevada's being designated the host state for a high-level radioactive waste repository. In a letter to Secretary James B. Edwards in May 1981,[18] the governor of Nevada explicitly stated his opposition to expanded radioactive waste storage in Nevada. Shortly thereafter, the Nevada legislature's select committee on public lands adopted a resolution opposing the establishment or enlargement of any existing radioactive waste disposal facilities upon federal lands of Nevada, including the Nevada Test Site. The resolution also indicated the committee's support for Congressional legislation which would give states a measure of control over their own destinies by granting them veto power over federal proposals to place radioactive waste disposal facilities in such states.[19]

There are several concerns with the selection of a site for the Nation's high-level radioactive waste repository. First is the assurance of the health and safety of the citizens and environment of Nevada. Threats to health and safety may occur at the site itself and along the highways used for the transport of high-level radioactive waste. As can be seen in figure 2, potential waste sites, including Nevada, are far from the sources of high-level radioactive waste. Although great distances do not alter the probability of the occurrence of transportation incidents, they would lead to an increase in the number of occurrences. Another concern is that there will be environmental and socioeconomic impacts in construction and development of a site. Economic stimulation (jobs and local purchasing) will have its benefits, but strain on services like water, education, and law enforcement will have attendant costs. Finally, state participation in the decisionmaking process is not guaranteed. This concern was spelled out by the Nevada legislature's select committee on public lands.

FIGURE 2



FROM: Lawrence Mosher, As the Nuclear Garbage Heap Grows, So Does the Dispute Over Storing It, National Journal, September 11, 1982, p. 1541.

Ultimately, there are many options and opportunities for Nevada. There are alternatives to high-level radioactive waste disposal in mined geologic repositories. These include sub-seabed disposal, ice sheet disposal, jettisoning canisters of high-level radioactive waste into space, transmutation, and even delay.[20] Nevada can also encourage the adoption of federal legislation which requires state and local participation in federal decisionmaking on high-level radioactive waste disposal. Creating a mechanism for this participation similar to the examples in several other states may be an important step. Finally, Nevada must demand federal compliance with all applicable federal, state, and local laws, including environmental (National Environmental Policy Act) and transportation regulations, in the development of a national high-level radioactive waste repository.

In summary, the Federal Government has made a heavy commitment to nuclear activities in Nevada at the Nevada Test Site. In spite of this commitment, the Congress has been slow to clearly state its policy for the Nation on the disposal of high-level radioactive waste, and thus Nevada will not necessarily be the host state to a national repository. Many states have tried to make their positions on high-level radioactive waste disposal clear through numerous laws and resolutions, some of which, when challenged in court, are likely to be found unconstitutional. This leaves Nevada with the obligation to sort out its options and opportunities in the matter of its potentially being designated the host to the national high-level radioactive waste repository.

FOOTNOTES

1. See Managing Commercial High-Level Radioactive Waste, Office of Technology Assessment, Congress of the United States, Washington, D.C., April 1982, pp. 13-17.

2. James L. Liverman, Nevada Test Site, Nye County, Nevada, Final Environmental Impact Statement, Energy Research and Development Administration, Washington, D.C., September 1977, pp. 2-12.

3. Elmer B. Staats, The Nation's Nuclear Waste--Proposals for Organization and Siting, EMD-79-77, United States General Accounting Office, Washington, D.C., June 21, 1982, pp. 14-17.

4. Ibid., p. 15.

5. Ibid., p. 16.

6. Harry Smedes, "The National Program for Isolating High-Level Nuclear Waste," Underground Space 6 (4-5), January-April 1982, pp. 223-224.

7. United States Department of Energy, Nevada Nuclear Waste Storage Investigations, Nevada Operations Office, Las Vegas, August 24-28, 1981.

8. Interagency Review Group (IRG), Report to the President by the Interagency Review Group on Nuclear Waste Management, TID-29442, Washington, D.C., 1979.

9. Public Law 96-573, the National Low Level Radioactive Waste Act of 1980.

10. Jeff Grass, "High-Level Radioactive Waste Bills: Comparisons and Contrasts," Western Energy Update Staff Analysis 82-10, September 10, 1982, pp. 1-3.

11. See Congressional Record, December 20, 1982, pp. S15621-S15670.

12. Richard C. Kearney and Robert B. Garey, "American Federalism and the Management of Radioactive Wastes," Public Administration Review, January/February 1982, p. 16.

13. Op cit., footnote 1, pp. 34-35.

14. David E. Warden, "Nuclear Waste Management: What the States Can Do," Virginia Journal of Natural Resources Law 1 (1), Summer 1980, pp. 125-136.

15. Newsletter No. 82-6, Western Energy Update, March 26, 1982, p. 19.

16. E. William Colglazier, The Politics of Nuclear Waste, New York: Pergamon Press, 1982, p. 116.

17. John Hilger and Bernard Menke, Report of the Nevada Committee for the Utilization of State Resources to Meet National Needs, Nevada Committee for the Utilization of State Resources to Meet National Needs, Las Vegas, Nevada, October 1978.

18. Letter from Governor Robert List to the Honorable James B. Edwards, Secretary of the United States Department of Energy, dated May 29, 1981.

19. Senator Howard Cannon (D-Nevada) offered an amendment to S 1662 in the spring of 1982 that would have allowed a state's objection to a site selection stand unless both houses of Congress passed a resolution overriding the state. The Senate tabled his amendment.

20. Bette Hileman, "Nuclear Waste Disposal: A Case of Benign Neglect?" Environmental Science and Technology 16 (5), 1982, p. 274A.

TABLE I

STATE LEGISLATION IMPOSING PROHIBITIONS ON THE DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTE*

Alabama--HB 515 (enacted 1981) amends a law passed in 1979 that prohibits the storage, deposit or dumping of spent nuclear fuel or other radioactive waste generated outside of Alabama to provide an exception for out-of-state spent nuclear fuel and radioactive material or waste that is used in the state.

Kansas--HB 2935 (introduced in 1982) would prohibit the temporary or permanent disposal of transuranic waste, spent fuel or other high-level radioactive waste in bedded salt formations in Kansas.

Maine--LD 1911 (enacted in 1982) limits the on-site storage of spent nuclear fuel to a period of 3 years from the date the fuel is removed from the reactor.

Maryland--SB 572 (enacted 1981) prohibits the establishment or operation of a facility for the permanent storage or disposal of high-level radioactive waste except as otherwise required by federal law. Other provisions relate to low-level radioactive waste.

Massachusetts--SB 344 (introduced in 1982) would prohibit the development of a facility for the deposit, storage, reprocessing or disposal of spent nuclear fuel elements or high-level radioactive waste in the Commonwealth unless the General Court finds that it promotes the "general good of the state."

Minnesota--HF 827 (pending in 1982) would prohibit the disposal or acceptance for disposal of any high-level radioactive waste with the exception of spent nuclear fuel produced or used by a facility in Minnesota.

Minnesota--SF 1965 (enacted 1982) prohibits Minnesota's Waste Management Board from certifying the use of a facility for the disposal of radioactive waste.

New Jersey--SB 1108 (introduced in 1982) would prohibit permanent disposal of radioactive waste in New Jersey or its territorial waters unless the legislature expressly authorizes construction or operation of such a facility.

TABLE I
(Continued)

New Mexico--SB 246 (enacted 1981) changes New Mexico's "Radioactive Waste Consultation Act" to the "Radioactive Materials Act." In doing so, it broadens the scope of the original act which primarily addressed state and public concerns regarding the proposed Waste Isolation Pilot Plant (WIPP) to also address the disposal of commercial low-level waste, the transportation of radioactive materials in New Mexico, the disposition of uranium mine and mill tailings and the need to provide efficient and timely emergency response to accidents or natural disasters involving disposal, storage or transportation of radioactive materials. The powers and duties of the Radioactive Waste Consultation Committee and Task Force, which were created under the original act, are expanded to include required consideration of these matters. The storage or disposal of radioactive materials, waste, or spent fuel is prohibited until New Mexico has concurred in the creation of a disposal facility except as preempted by federal law. An appropriation of $25,000 is made from the state's general fund for the purpose of financing the committee's activities.

Ohio--SB 433 (introduced in 1982) would prohibit the establishment of any radioactive waste disposal site within Ohio. The definition of radioactive waste includes spent fuel. However, a provision would be made for temporarily storing spent fuel for 10 years at the reactor site.

Utah--SB 18 (enacted 1981) places a moratorium on the storage/disposal of high-level radioactive waste in Utah and prohibits any state agency from assisting the Federal Government in siting nuclear waste storage/disposal repositories in Utah until the governor approves and the legislature concurs.

*Source: S. Haber, State Nuclear Legislative Report, prepared for the Atomic Industrial Forum, Inc., Washington, D.C., 1981 and 1982.

TABLE II

STATE LEGISLATIVE RESOLUTIONS OPPOSING DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTE*

California--AJR 113 (introduced in 1982) memorializes the President and Congress to take any and all appropriate actions to expedite the adoption and implemetation of a plan that will systematically meet California's objectives of providing an approved technology or means for the disposal of commercial high-level radioactive waste (in reference to moratorium law).

Hawaii--SCR 33 (adopted in 1981) expresses opposition to all hazardous nuclear activity in the Pacific Ocean including (1) above-ground storage of nuclear spent fuel on a Pacific island; (2) storage or disposal of either high or low-level radioactive waste in the Pacific Ocean; and (3) underground, underwater or atmospheric testing of nuclear devices by any nation within the Pacific Basin.

Iowa--HCR 121 (introduced in 1982) urges Congress to enact legislation requiring continued on-site storage of spent fuel until permanent storage facilities have been established.

Mississippi--HCR 4 (introduced in 1982) would memorialize Congress to disallow the storage of nuclear waste within Mississippi and to prevent Mississippi's port facilities from being used as a port of entry for receipt, transportation and delivery of this waste.

Mississippi--SCR 502 (adopted in 1981) expresses the legislature's opposition to the storage of high-level radioactive waste in Mississippi and the use of Mississippi's air, land and seagoing transportation facilities for the transportation of high-level radioactive waste. It also memorializes Congress to (1) develop and cause to be implemented a technologically conservative, national high-level radioactive waste management policy; (2) legislatively provide for consultation and concurrence policy between the Federal Government and any state being considered as a host state; (3) authorize the states and the Federal Government to enter into consultation and concurrence agreements with provisions for conflict resolutions; (4) allow any affected

TABLE II
(Continued)

state to raise reasonable objections to decisions regarding sociological, economic, environmental, technological or institutional issues; (5) provide for a two-house Congressional override of any reasonable objection raised by an affected state; (6) provide reasonable financial assistance as necessary to state in which area characterization or subsequent phases of study are initiated; (7) provide a legally constricted mechanism by which a state can oversee any activity of the Federal Government and participate in plans regarding the national high-level radioactive waste management program; and (8) adopt legislation that will treat all states equally.

Ohio--SJR 41 (introduced in 1982) expresses Ohio's opposition to the location of a test site or future repository for the terminal storage of high-level radioactive waste within Ohio.

Pennsylvania--SR 225 (adopted in 1982) urges the governor, along with representatives of the General Assembly, to negotiate a regional agreement for the management of low-level radioactive waste. The resolution further urges Pennsylvania's Congressional delegation to immediately address the problems associated with high-level radioactive waste management and take steps to assure its safe and permanent disposal.

Wisconsin--AJR-52 (adopted in 1982) expressed opposition to the siting of a regional or national high-level radioactive waste repository in Wisconsin and demands (1) that the United States Department of Energy inform the legislative and executive branches of state government, as well as appropriate representatives of local government, of any and all actions taken with respect to repository siting in Wisconsin and (2) that all meetings between DOE representatives and state and local officials be open to the public. It also urges Congress and the President to recognize that the state must have the authority to make any final decision as to whether it will be the site of a regional or national high-level radioactive waste repository.

*Source: S. Haber, State Nuclear Legislative Report, prepared for the Atomic Industrial Forum, Inc., Washington, D.C., 1981 and 1982.

TABLE III

STATE LEGISLATION AND RESOLUTIONS CALLING FOR COORDINATION BETWEEN THE FEDERAL GOVERNMENT AND THE STATES*

Maine--LD 1633 (enacted 1981) defines high and low-level radioactive waste and establishes a process by which the state will participate to the maximum extent in the consultation and concurrence process in siting federal high-level radioactive waste repositories. Other provisions relate to regulation and management of low-level radioactive waste.

Mississippi--SB 2751 (enacted 1982) establishes procedures for the control of all activities relating to the temporary storage or permanent disposal of high-level radioactive waste in Mississippi. The Mississippi Energy and Transportation Board will serve as the initial agency to be contacted by any agency of the Federal Government on all matters pertaining to high-level radioactive waste storage/disposal and a Nuclear Waste Policy Advisory Council and Nuclear Waste Siting Review and Technical Advisory Committee will be created within the board to support the board's activities. Procedures for issuing permits and conducting reviews of all previous waste-related activities in Mississippi are also established. Sections of the "Mississippi Code of 1972" that provide (1) a concurrence procedure for Mississippi to authorize the use of geologic structures for the disposal of radioactive waste and (2) penalties for noncompliance are repealed.

Washington--SJM 116 (introduced in 1982) would memorialize Congress and the President to (1) assure full state participation, on a step-by-step basis, in the federal decisionmaking process of high-level radioactive waste repository site selection by including the legislature and the governor in the notification and participation process for joint concurrence and nonconcurrence; (2) permit civilian nuclear power plant owners and operators to expand their on-site spent fuel storage capacity instead of requiring AFRs; (3) proceed with a regional concept of high-level radioactive waste disposal much like the one developed for low-level waste; and (4) provide the necessary fiscal resources for state and local governments to become meaningful participants in the federal decisionmaking process.

TABLE III
(Continued)

Washington--SCR 140 (introduced in 1982) proposes the establishment of a joint select committee on radioactive waste to respond to federal proposals and to evaluate alternatives available to Washington in the establishment of a national system of radioactive waste repositories and waste. The committee will consist of 16 members, with an even number from each political party. It will be chaired jointly by the chairpersons of the standing committees on energy and utilities of both houses of the legislature. A final report is to be made to the legislature by the committee at the 1983 regular session.

Wisconsin--AB 555 (enacted 1981) creates a radioactive waste review board which will act as the main vehicle through which the state will work with the Federal Government on all matters pertaining to the long-term disposal of high-level radioactive waste. It specifies procedures for coordination, negotiating and approving agreements with the U.S. Department of Energy and other federal agencies and clarifies the role of the state on waste disposal matters. A Radioactive Waste Policy Council and Radioactive Waste Technical Council are also created to provide assistance to the board. The board is directed to attempt to finance its expenses from federal funds, gifts and grants, but an initial general program revenue appropriation was provided.

Wisconsin--SB 412 (pending in 1982 session) would specify a procedure for coordinating, negotiating and approving agreements with the U.S. Department of Energy and other federal agencies and specify the role of the state in matters related to long-term disposal of radioactive waste. The Radioactive Waste Review Board is to act as the main vehicle through which the state will work with the Federal Government. Its duties would include (1) serving as the initial contact point in Wisconsin for all activities of USDOE and other federal agencies relating to the disposal of high-level radioactive waste and coordinating Wisconsin's response to these activities when warranted; (2) reviewing all state, local and regional applications for federal funds related to the disposal of high-level radioactive waste; (3) promoting and coordinating educational programs for affected members of the general public on the nature of high-level radioactive waste, the work of the board, the activities of USDOE and other federal agencies and opportunities for the public to participate in procedures and decisions related to

TABLE III
(Continued)

high-level radioactive waste; (4) monitoring the developments in Congress and the Federal Government and making recommendations to Wisconsin's congressional delegation as to actions that should be taken to protect the interests of the state; (5) negotiating written agreements with USDOE which will govern the relationship between Wisconsin and USDOE on matters related to the long-term disposal of high-level radioactive waste; and (6) negotiating written agreements with other federal agencies on matters related to the long-term disposal of high-level radioactive waste. One of the specific terms that must be incorporated in the agreements is a list of reasons for which the board may object to the selection of a site within Wisconsin for the long-term disposal of high-level radioactive waste. All agreements are subject to the approval of the legislature before they can become effective.

*Source: S. Haber, State Nuclear Legislative Report, prepared for the Atomic Industrial Forum, Inc., Washington, D.C., 1981 and 1982.