



July 5, 2016

TO: Members, Subcommittee on Environment and the Economy

FROM: Committee Majority Staff

RE: Hearing entitled “Federal, State, and Local Agreements and Associated Benefits for Spent Nuclear Fuel Disposal.”

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## I. INTRODUCTION

On Thursday, July 7, 2016, at 10:00 a.m. in 2123 Rayburn House Office Building, the Subcommittee on Environment and the Economy will hold a hearing entitled “Federal, State, and Local Agreements and Economic Benefits for Spent Nuclear Fuel Disposal.”

## II. WITNESSES

### Panel 1

- The Honorable Mark E. Amodei (NV);
- The Honorable Dina Titus (NV);
- The Honorable Crescent Hardy (NV); and
- The Honorable Robert J. Dold (IL).

### Panel 2

- Dan Schinhofen, County Commissioner, Nye County, Nevada;
- Joseph Hardy, State Senator, State of Nevada;
- Gene Humphrey, President, International Test Solutions, Inc.; and
- Matt Lydon, Business Manager, UA Local 525.

## III. BACKGROUND

In 1982, the Nuclear Waste Policy Act (NWPA) assigned the Department of Energy (DOE) the responsibility to permanently dispose of high-level radioactive waste (HLW) and spent nuclear fuel (SNF) from commercial power plants. In 1987, Congress amended the NWPA, designating Yucca Mountain, Nevada as the sole site for a deep, geological repository to permanently dispose of HLW and SNF. Congress included mechanisms in both the 1982 Act and 1987 NWPA amendments for collaborative partnerships with State, tribal, and defined affected units of local government (AULG) as part of the disposal program. The partnerships are in two primary forms: funding for technical support activities and economic benefits for hosting a nuclear disposal facility.<sup>1</sup>

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<sup>1</sup> Additional information on these agreements and similar historical experiences is provided in Appendix A.

Sections 116 and 117 of the NWSA directed the Secretary of Energy to make funding available to the State of Nevada and AULG for:

- incurring administrative expenses;
- reviewing costs for potential economic, social, public health and safety, and environmental impacts on the State or AULG;
- requesting impact assistance;
- engaging in monitoring, testing, or evaluation activities with respect to site characterization programs;
- providing information to residents; and
- Informational requests to the Secretary.<sup>23</sup>

Section 171 of the NWSA authorized the State of Nevada to enter into a benefits agreement with the Federal Government.<sup>4</sup> The NWSA also authorized DOE to seek a community to host a “monitored retrievable storage” (MRS) facility and established the Office of the Nuclear Waste Negotiator to find such a site. This position was appointed by the President with the advice and consent of the Senate, but the Negotiator’s authority expired in 1994, just seven years after enactment of the NWSA Amendments of 1987<sup>5</sup> and four years after the Office commenced operation.

When Nevada Governor Guinn formally objected to President Bush’s site recommendation of Yucca Mountain in 2002, the State forfeited the opportunity to receive benefits under the NWSA. Since then, discussion regarding how to reexamine and structure an agreement between the Federal government, the State, AULGs, and tribal governments has continued. In 2003, the Nevada State Legislature debated a bill that would have identified projects related to the development of Yucca Mountain for Federal government support, such as construction of a hospital to be prepared for potential heightened public health risks.<sup>6</sup>

In 2012, the Blue Ribbon Commission on America’s Nuclear Future also addressed the need to enter into serious benefit negotiations, noting “affected states, tribes, and communities will reasonably expect incentives for helping to address the important national issue of nuclear waste management. To be most effective, such incentives must be provided in ways that are generous, creative, and attentive to their symbolic content.”<sup>7</sup>

Legislative proposals have been introduced to provide for “consent” from host States, communities and tribes. Senators Reid (D-NV) and Heller (R-NV) introduced legislation to prohibit spending Nuclear Waste Fund monies on the construction of the Yucca Mountain

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<sup>2</sup> Nuclear Waste Policy Act, P.L. 100-203, Sec. 117.

<sup>3</sup> The House FY16 Energy and Water Appropriations bill included \$5 million in funding for local governments supportive of the Yucca Mountain project.

<sup>4</sup> NWSA Sec. 171.

<sup>5</sup> NWSA Sec. 410.

<sup>6</sup> Waite, Mark, “State Leadership Looks at Benefits: Neth Addresses Nevada Legislature’s Commission on High-Level Radioactive Waste,” *Pahrump Valley Times*, December 12, 2003. Accessible at:

<http://archive.pahrumpvalleytimes.com/2003/12/12/news/yucca.html>

<sup>7</sup> [http://energy.gov/sites/prod/files/2013/04/f0/brc\\_finalreport\\_jan2012.pdf](http://energy.gov/sites/prod/files/2013/04/f0/brc_finalreport_jan2012.pdf)

repository until DOE enters into a legally binding agreement with the host State Governor, AULGs (as defined by the NWPA), AULGs affected by transportation routes, and affected Indian tribes.

There are other examples associated with nuclear waste storage and disposal facilities that provide insight on potential structure of a Federal and State agreement. New Mexico hosts the Waste Isolation Pilot Plant (WIPP), which disposes of transuranic nuclear waste. As part of New Mexico's agreement to host the facility, the State is allowed to inspect containers containing radioactive waste destined for disposal at the WIPP facility at their point of origin or at the New Mexico points of entry.<sup>8</sup> Congress also authorized funding to support associated transportation infrastructure with the WIPP as part of the WIPP Land Withdrawal Act.<sup>9</sup>

DOE currently stores a variety of DOE-owned SNF and HLW in Idaho. The 1995 "Settlement Agreement" entered into between DOE and the State of Idaho governs the Federal government's expectations and responsibilities to remove SNF and HLW from the State. The agreement includes legally enforceable deadlines for the Federal government to meet. The Federal government is subject to financial penalties or Idaho can halt shipment of used fuel from the U.S. Navy into the State if the deadlines and milestones are missed.<sup>10</sup>

DOE has initiated a series of public meetings in an effort to develop a "consent-based siting" process. The meetings have focused on receiving feedback regarding necessary components of a Federal, State, local, and tribal partnership. Key issues that have been raised in panel discussions include financial resource needs, transportation planning, maintaining a defined schedule and milestones, storage alternatives, and disposing of HLW from atomic energy defense activities.<sup>11</sup>

#### IV. ISSUES

The following issues may be examined at the hearing:

- Historical issues associated with benefits and administrative costs authorized by the Nuclear Waste Policy Act;
- Legislative and administrative options for Federal, State, local, and Tribal partnerships to site, license, operate, and oversee a nuclear waste repository (Appendix B); and
- Options for State and local oversight in safety and regulatory issues.

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<sup>8</sup> New Mexico Energy, Minerals, and Natural Resources Department "WIPP Transportation Safety Program." Accessible at: <http://www.emnrd.state.nm.us/wipp/>

<sup>9</sup> Waste Isolation Pilot Plant Land Withdrawal Act. P.L. 102-579.

<sup>10</sup> Idaho Department of Environmental Quality, "1995 Settlement Agreement: Overview and FAQs," Accessible at: <http://www.deq.idaho.gov/inl-oversight/oversight-agreements/1995-settlement-agreement/>

<sup>11</sup> For more information on DOE's public meetings visit <http://www.energy.gov/ne/activities-and-events>

**V. STAFF CONTACTS**

If you have any questions regarding this hearing, please contact Andy Zach or David McCarthy of the Committee staff at (202) 225-2927.

**MEMORANDUM**

June 30, 2016

**To:** House Committee on Energy and Commerce  
Attention: Andy Zach

**From:** Mark Holt, Specialist in Energy Policy, x7-1704

**Subject:** **Siting Benefits for Nuclear Waste Facilities**

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This memorandum responds to your request for a brief description of benefits that have been made available or provided by the federal government to states, localities, and Indian tribes for hosting nuclear waste facilities. In particular, you asked that CRS provide information about waste siting benefits included in the Nuclear Waste Policy Act and certain federal waste sites.

## **Nuclear Waste Policy Act**

The Nuclear Waste Policy Act of 1982 (NWPAct, P.L. 97-425 as amended, 42 U.S.C. 10101 et seq.) authorizes various financial benefits to states, localities, and tribes that host NWPAct-authorized nuclear waste facilities. Some benefits are specified by the act but are subject to agreements with the host government, others are open-ended but do not require agreements, and others would be subject to agreements that would have to be enacted by Congress. As amended in 1987, NWPAct specifies that Yucca Mountain in Nevada is the only authorized candidate site for a permanent repository for spent nuclear fuel and other highly radioactive waste, and that development of a monitored retrievable storage (MRS) nuclear waste facility is tied to progress on the repository (which has not received new appropriations since FY2010).

## **Oversight Assistance**

NWPAct Sec. 116(c)(1) authorizes grants to the State of Nevada and any affected unit of local government to pay for oversight of DOE activities at Yucca Mountain. Such oversight activities include determining potential economic and other impacts of the repository project; monitoring, testing, and evaluating DOE activities at the site; providing information to Nevada residents about the project; and requesting information from DOE and making comments and recommendations to DOE about the project. With certain exceptions, the oversight assistance would end two years after the Yucca Mountain repository is licensed to receive nuclear waste. Similar oversight assistance is authorized by Sec. 118(b)(2) to Indian tribes affected by the Yucca Mountain repository. For states, local governments, and Indian tribes affected by an MRS facility, Sec. 149 authorizes oversight assistance similar to the repository-related assistance in Secs. 116 and 118.

## **Impact Assistance**

NWPA Sec. 116(c)(2) authorizes DOE to provide financial and technical assistance to Nevada and affected units of local government to mitigate the economic, social, public health and safety, and environmental impact of the Yucca Mountain repository project. To request the impact assistance, the state or local governments must submit a report on the impacts (paid for by the oversight assistance above) and enter into a binding agreement with DOE on the amount of assistance and the procedures for disbursement. With certain exceptions, the impact assistance would end two years after the Yucca Mountain repository was licensed to receive nuclear waste. Similar impact assistance is authorized by Sec. 118(b)(3) to Indian tribes affected by the Yucca Mountain repository. For states, local governments, and Indian tribes affected by an MRS facility, Sec. 149 authorizes impact assistance similar to the repository-related assistance in Secs. 116 and 118.

## **Payments Equal to Taxes**

NWPA Sec. 116(c)(3) authorizes annual payments to Nevada and local governments equal to the amount of taxes they would have received at the Yucca Mountain site had the land and activities there been taxable. The payments were authorized to continue until the termination of nuclear waste repository studies, development, and operations at the site. Similar payments equal to taxes are authorized by Sec. 118(b)(4) to Indian Tribes affected by the Yucca Mountain repository. For states, local governments, and Indian tribes affected by an MRS facility, Sec. 149 authorizes payments equal to taxes similar to the repository-related payments in Secs. 116 and 118.

## **Benefits Agreements**

NWPA Sec. 170 authorizes DOE to enter into a benefits agreement with the State of Nevada for hosting the Yucca Mountain repository and with any state or Indian tribe that agrees to host an MRS facility. Sec. 171 provides a specific schedule of payments for states or tribes that enter into such benefits agreements. For hosting the Yucca Mountain repository, the State of Nevada would receive \$10 million per year before the first spent nuclear fuel is received at the repository, a payment of \$20 million upon the initial receipt of spent fuel, and \$20 million annually thereafter until the repository was closed. For hosting an MRS facility, a state or tribe would receive \$5 million per year until the first receipt of spent fuel, \$10 million for the initial receipt, and \$10 million per year thereafter. Any state receiving such benefits would be required to transfer at least one-third to affected units of local government. A benefits agreement would require states or tribes to waive their rights under NWPA to disapprove a repository or MRS site and to waive their rights to receive oversight and impact assistance.

## **Special Consideration in Siting Federal Research Projects**

NWPA Sec. 174 requires DOE to give special consideration to states that have nuclear waste repositories when siting federal research projects.

## **Waste Transportation Training Grants**

NWPA Sec. 180 authorizes DOE to provide financial and technical assistance to state and local governments located along nuclear waste transportation routes. These grants are to be used for training public safety officials in “procedures required for safe routine transportation of these materials, as well as procedures for dealing with emergency response situations.”

## Nuclear Waste Negotiator

NWPA Title IV (Secs. 401-411) established the Office of the Nuclear Waste Negotiator as an independent office in the executive branch. The Waste Negotiator was authorized to reach voluntary agreements with states and Indian tribes specifying the terms and conditions under which they would be willing to host nuclear waste repositories or MRS facilities. No restrictions are imposed on the terms and conditions that the Negotiator can offer, other than that they be “reasonable and appropriate.” However, no agreement reached by the Negotiator could take effect without being enacted into law. The Office of the Waste Negotiator expired on January 21, 1995, after receiving a two-year extension.

## 1995 DOE Nuclear Waste Agreement with Idaho

The State of Idaho reached an agreement with DOE and the U.S. Navy in October 1995 to settle lawsuits related to the storage of DOE and naval spent nuclear fuel in Idaho.<sup>1</sup> Often referred to as the Batt Agreement, for then-Idaho Governor Philip E. Batt, the settlement limited the number of DOE and naval spent fuel shipments that could be sent to Idaho National Laboratory (INL) through 2035, by which time all spent fuel would have to be removed from the site. The settlement agreement also addressed transuranic waste (low-radioactivity waste contaminated with long-lived plutonium) stored at Idaho National Laboratory (INL). Some of the other major milestones and provisions in the settlement related to spent fuel include,

- After December 31, 2000, DOE could not send more than 20 truck shipments of spent fuel per year to INL, with certain exceptions, until an interim spent fuel storage facility or permanent repository began operating.
- DOE was required to move all damaged spent fuel from the Three Mile Island reactor that was stored in pools of water to dry storage by June 1, 2001.
- All spent fuel was required to be removed from pool storage by 2023.
- INL was to be designated as DOE’s lead laboratory for spent nuclear fuel research.
- All transuranic (TRU) waste at INL was required to be shipped to the Waste Isolation Pilot Plant (WIPP) in New Mexico by the end of 2018.

## Waste Isolation Pilot Plant

DOE’s Waste Isolation Pilot Plant is a deep underground repository for the disposal of defense-related transuranic waste near Carlsbad, NM. Primarily because of its plutonium content, TRU waste requires long-term isolation from the environment. WIPP began receiving waste in 2001 but is currently closed for safety improvements following two underground accidents in February 2014.

Disposal of nuclear waste at the WIPP site was initially proposed by Carlsbad-area officials and businesses in the mid-1970s as an economic development measure. However, the idea was strongly opposed by most elected officials in the State of New Mexico, and a compromise was reached when Congress authorized the facility in 1979 to be used solely for defense TRU waste disposal, without being subject to licensing and regulation by the Nuclear Regulatory Commission (NRC). The 1979 authorizing legislation also required DOE to seek to reach a written consultation and cooperation agreement with

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<sup>1</sup> Idaho Department of Environmental Quality, text of 1995 settlement agreement to fully resolve all issues in the actions *Public Service Co. of Colorado v. Batt*, No. CV 91-0035-S-EJL (D. Id.) and *United States v. Batt*, No. CV-91-0065-S-EJL (D. Id.), [http://www.deq.idaho.gov/media/550338-1995\\_Settlement\\_Agreement.pdf](http://www.deq.idaho.gov/media/550338-1995_Settlement_Agreement.pdf). Idaho National Laboratory was called the Idaho National Engineering Laboratory at the time.

New Mexico on how DOE would take action on public health and safety recommendations by the state in relation to the project.<sup>2</sup>

The legislation did not resolve the controversy in New Mexico, however, and the state filed lawsuits to block the project, which resulted in agreements for further DOE cooperation with New Mexico and various highway improvements. DOE and the State of New Mexico also agreed that WIPP must comply with U.S. Environmental Protection Agency (EPA) regulations, and EPA established radioactive waste disposal regulations for WIPP in 1985.<sup>3</sup>

In a necessary step for development of the WIPP repository, Congress transferred the WIPP site to DOE jurisdiction in 1992 with the Waste Isolation Pilot Plant Land Withdrawal Act (P.L. 102-579). The act was amended with additional requirements in Subtitle F of the National Defense Authorization Act for Fiscal Year 1997 (P.L. 104-201). Major provisions of the WIPP Land Withdrawal Act as amended include

- waste disposal limits for WIPP, including the total curies of radioactivity of remote-handled TRU waste and total volume,
- EPA environmental regulatory responsibility for WIPP,
- a ban on high-level waste and spent nuclear fuel at WIPP,
- authorization of \$20 million annual payments to New Mexico for 14 years beginning in 1998,
- requirement that waste shipping containers used for WIPP be certified by NRC,
- prohibition on waste shipments from Los Alamos National Laboratory to WIPP until federal funds were provided for a highway bypass around Santa Fe, and
- a requirement that DOE provide “free and timely access to data relating to health, safety, and environmental issues at WIPP” to the State of New Mexico, the National Academy of Sciences, and the New Mexico Environmental Evaluation Group, which would provide an independent technical evaluation of WIPP.

## Monitored Retrievable Storage Voluntary Siting Effort

DOE strongly supported efforts by the Nuclear Waste Negotiator to find a voluntary site for a monitored retrievable storage facility during the late 1980s and early 1990s. State and local governments and Indian tribes that were interested in negotiating an MRS siting agreement were eligible for feasibility grants from DOE. Phase I grants of up to \$100,000 were available to help an applicant understand the technical aspects of the planned waste management system and the MRS, and to help it determine whether to proceed further. Phase II-A grants of up to \$200,000 were available for public outreach and preparation of a detailed letter of interest in siting an MRS facility. Phase II-B grants of up to \$2.8 million were available for further feasibility studies, environmental assessments, public outreach, and other activities related to negotiation of a siting agreement.<sup>4</sup>

Through January 1994, a dozen Phase I grants were awarded to Indian tribes and local governments. All the local government recipients were blocked from further participation by their state governors or local voters, with only Indian tribes moving to Phase II. DOE awarded Phase II-A grants to the Mescalero Apache Tribe of New Mexico, the Skull Valley Band of Goshutes in Utah, the Ft. McDermitt Paiute-

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<sup>2</sup> Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980, P.L. 96-164, sec. 213, approved December 29, 1979.

<sup>3</sup> U.S. Department of Energy, “WIPP Chronology,” February 5, 2007, <http://www.wipp.energy.gov/fctshts/Chronology.pdf>.

<sup>4</sup> Office of the Nuclear Waste Negotiator, *1992 Annual Report to Congress*, January 1993.



Shoshones of Nevada, and the Tonkawa Tribe of Kay County, Oklahoma. The Mescalero Apaches and the Skull Valley Goshutes each applied for Phase II-B grants.<sup>5</sup> However, the increasingly serious tribal interest in negotiating MRS agreements raised widespread controversy in the affected states, and Congress blocked funding for the Phase II-B grants in the Energy and Water Development Appropriations Act for FY1994 (P.L. 103-126).

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<sup>5</sup> Office of the Nuclear Waste Negotiator, "Status of Department of Energy MRS Grants (as of 1/19/94)."

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## **Appendix B**

### **Options for a Federal Partnership with Nevada on Spent Fuel Management**

Should the Nuclear Regulatory Commission issue a license to construct and operate a permanent repository for spent nuclear fuel at the Yucca Mountain site, the Federal government and the State of Nevada, affected units of local government and tribes should engage in a partnership to provide benefits, as well as assure the technical oversight activities authorized in the Nuclear Waste Policy Act (NWPA) are funded. Among the items for legislative consideration:

#### **Amending the NWPA**

- Remove the provision that disqualifies the State of Nevada from entering into a Benefits Agreement as a result of their previous formal disapproval of the Yucca Mountain site selection. Provide Nevada the ability to qualify for entering into a Benefits Agreement after conclusion of the licensing process.

#### **Administrative and Safety Oversight**

- The NWPA authorized explicit funding to cover:
  - Costs associated with administrating a nuclear waste repository program;
  - Health and environmental monitoring to protect public health and the environment.
- Examine options to replicate other successful State-Federal partnerships with respect to inspection of transportation containers, access to safety information, and emergency preparedness functions.
- Designation of a state-based research entity as a third-party technical expert to verify scientific studies.

#### **Federal Land Transfer**

- Nevada has the highest percentage of land owned by the Federal government in the United States. Some of this land in northern Nevada is a “checkerboard” as a result of antiquated land management policy, while Federal land ownership in southern Nevada limits potential State and local opportunities to better utilize this land. Nevada could be a party to a land exchange to provide more opportunity for local control and economic development.
- Congress could consider applying the model established by “Southern Nevada Public Land Management Act” (SNPLMA) to the entire State.

#### **Transportation**

- The State of Nevada should be consulted on preferred transportation routes for any shipments of spent fuel in order to minimize risk on major population centers;
- The Federal government and the State of Nevada could consider options to connect Las Vegas to Phoenix, and Reno by interstate highway.

#### **Economic Benefits**

- A number of potential benefit features could yield economic value for Nevadans. These may include:
  - value derived from a future reprocessing facility;

- preference for contracting and jobs associated with the project for businesses and workers based in the State of Nevada;
- making a portion of lands currently a part of the Nevada National Security Site available for state, local, or private development;
- a portion of the “one-time fee” payable to the State and affected units of local government upon (1) NRC’s completion of the Yucca Mountain License Application or (2) the arrival of the first shipment of spent nuclear fuel;
- siting new DOE facilities in Nevada, such as the creation of a new National Laboratory; and
- support for the State’s education fund and advanced-education programs in nuclear science.

**Budgetary Reform**

- The NWPA may be amended to provide certainty for State, local and tribal governments that all activities described are fully funded annually.