

ONE HUNDRED FOURTEENTH CONGRESS  
**Congress of the United States**  
**House of Representatives**  
COMMITTEE ON ENERGY AND COMMERCE  
2125 RAYBURN HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515-6115

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**MEMORANDUM**

**July 5, 2016**

**To: Democratic Members of the Subcommittee on Environment and the Economy**

**Fr: Democratic Staff of the Committee on Energy and Commerce**

**Re: Hearing on “Federal, State, and Local Agreements and Economic Benefits for Spent Nuclear Fuel Disposal”**

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

**I. BACKGROUND**

Nuclear power reactors in the United States generate an average of 2,200 metric tons of spent nuclear fuel every year. The inventory of spent nuclear fuel in the United States is now over 72,000 metric tons and is expected to grow to 139,000 metric tons by 2067.<sup>1</sup> Most of the current inventory is stored onsite where it was generated, in wet pools or dry casks.<sup>2</sup> Spent fuel is generally stored in pools for five years, then transferred to dry casks after it has cooled to within the heat limits of the casks.<sup>3</sup> However, in recent years, capacity for storage in wet pools has been exhausted, requiring more fuel to be transferred to dry casks.

The Nuclear Regulatory Commission (NRC) regulates the safety of spent fuel stored in dry storage onsite at nuclear power reactors.<sup>4</sup>

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<sup>1</sup> Government Accountability Office, *Outreach Needed to Help Gain Public Acceptance for Federal Activities that Address Liability*, at 11 (Oct. 2014) (GAO-15-141).

<sup>2</sup> *Id.* at 14.

<sup>3</sup> *Id.* at 7.

<sup>4</sup> *Id.* at 10.

## II. THE NUCLEAR WASTE POLICY ACT

In 1982, Congress passed the Nuclear Waste Policy Act (NWPA) directing the Department of Energy (DOE) to remove spent nuclear fuel from commercial nuclear power plants, in exchange for a fee, and transport it to a permanent geologic repository beginning no later than January 31, 1998.<sup>5</sup> The law also established an objective, scientifically-based process for selecting two repository sites. In the years that followed passage of the NWPA DOE's efforts to identify potential sites were met with strong local opposition. In 1987, Congress amended the NWPA and designated Yucca Mountain, Nevada as the sole site to be considered for a permanent geologic repository.<sup>6</sup> As discussed in previous subcommittee hearings, funding shortfalls, the state of Nevada's strong opposition, and other factors have prevented DOE from completing a nuclear waste repository at Yucca Mountain.

The NWPA established a process for providing a number of benefits to states and tribes that might host a nuclear waste storage facility or, in the case of Nevada, a repository. For example, section 116 of the Act requires the Secretary of Energy to provide grants to the State of Nevada and affected units of local government to fund impact studies, monitoring, and other activities relating to the Yucca Mountain site. Additionally, the section requires DOE to provide payments in lieu of the taxes that would otherwise be collected for development and activities at the site. Sections 170-175 of the Act provide further benefits including in section 171, a schedule of specific monetary amounts to be paid annually to those states and tribes that host a storage or repository.

## III. RECOMMENDATIONS OF THE BLUE RIBBON COMMISSION

The Blue Ribbon Commission on America's Nuclear Future (BRC) was convened in 2010 to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense spent nuclear fuel and high-level waste. Upon creating the BRC, former Energy Secretary Steven Chu indicated the commission would focus on alternatives to the Yucca Mountain nuclear waste repository in an effort to "move beyond the 25 year old stalemate," especially since "technology has advanced significantly during that time, giving us better options both in terms of science and public acceptance."<sup>7</sup>

In January 2013, DOE released a document titled *Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste*, which included a response to the BRC's recommendations and a framework for meeting the government's obligation to dispose of nuclear waste.<sup>8</sup> DOE agreed with the BRC that a consent-based siting process would

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<sup>5</sup> Nuclear Waste Policy Act of 1982, codified at 42 U.S.C. 10101 et seq.

<sup>6</sup> P.L. 100-203.

<sup>7</sup> Letter from Dr. Steven Chu, Secretary of Energy, to Lee Hamilton and Brent Scowcroft, Co-Chairs, Blue Ribbon Commission on America's Nuclear Future (Feb. 11, 2011).

<sup>8</sup> U.S. Department of Energy, *Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste* (Jan. 2013) ([www.energy.gov/sites/prod/files/Strategy%20for%20the%20Management%20and%20Disposal%20of%20Used%20Nuclear%20Fuel%20and%20High-Level%20Radioactive%20Waste.pdf](http://www.energy.gov/sites/prod/files/Strategy%20for%20the%20Management%20and%20Disposal%20of%20Used%20Nuclear%20Fuel%20and%20High-Level%20Radioactive%20Waste.pdf))

be critical to the successful implementation of the agency's waste management strategy. DOE's strategy "endorses the proposition that prospective host jurisdictions must be recognized as partners. Public trust and confidence is a prerequisite to the success of the overall effort."<sup>9</sup>

The BRC report noted that part of convincing a state, local, or tribal government to accept a nuclear waste facility involves demonstrating that such acceptance would bring economic and noneconomic benefits.<sup>10</sup> In addition to these incentives, the BRC specifically noted the need for additional benefits such as local preference in the purchase of goods and services for the waste management facility. Further, the BRC recommended keeping in place the existing framework for benefits outlined in the NWPA and even expanding the eligibility of some provisions to include entities hosting storage facilities as well as repositories.

#### IV. NUCLEAR REGULATORY COMMISSION REVIEW

On January 29, 2015, NRC issued the final volumes of the Safety Evaluation Report, a multi-volume report summarizing the Yucca Mountain application, the technical staff's safety review, and staff findings and recommendations. The report noted that DOE's license application met regulatory requirements, except for certain requirements related to ownership of land and water rights. The report recommended that "the Commission should not authorize construction of the repository because DOE has not met certain land and water rights requirements...and a supplement to DOE's environmental impact statement (EIS) has not yet been completed."<sup>11</sup>

In March 2015, NRC announced that its staff would prepare a supplement to DOE's EIS to address "the impacts of the proposed repository at Yucca Mountain on groundwater as well as the impacts from groundwater discharges to the surface."<sup>12</sup> In May 2016, NRC issued its supplement to the DOE EIS, and found that the estimated radiological doses in the groundwater surrounding the Yucca Mountain site are small because they are a small fraction of the background radiation dose.<sup>13</sup>

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20for%20the%20Management%20and%20Disposal%20of%20Used%20Nuclear%20Fuel%20an  
d%20High%20Level%20Radioactive%20Waste.pdf).

<sup>9</sup> *Id.* at 9.

<sup>10</sup> Blue Ribbon Commission on America's Nuclear Future, *Report to the Secretary of Energy* (Jan. 26, 2012) ([www.energy.gov/sites/prod/files/2013/04/f0/brc\\_finalreport\\_jan2012.pdf](http://www.energy.gov/sites/prod/files/2013/04/f0/brc_finalreport_jan2012.pdf)).

<sup>11</sup> U.S. Nuclear Regulatory Commission (NRC), *NRC Publishes Final Two Volumes of Yucca Mountain Safety Evaluation* (Jan. 29, 2015) ([www.nrc.gov/reading-rm/doc-collections/news/2015/15-005.pdf](http://www.nrc.gov/reading-rm/doc-collections/news/2015/15-005.pdf)).

<sup>12</sup> U.S. NRC Chairman Stephen G. Burns, *Prepared Remarks Before United States Energy Association Meeting, National Press Club* (Apr. 30, 2015) ([pbadupws.nrc.gov/docs/ML1512/ML15121A048.pdf](http://pbadupws.nrc.gov/docs/ML1512/ML15121A048.pdf)).

<sup>13</sup> U.S. NRC, *Supplement to the U.S. Department of Energy's Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level*

**IV. WITNESSES**

**Panel 1**

**The Honorable Mark E. Amodei (R-NV)**

**The Honorable Dina Titus (D-NV)**

**The Honorable Crescent Hardy (R-NV)**

**The Honorable Robert J. Dold (R-IL)**

**Panel 2**

**Mr. Dan Schinhofen**  
County Commissioner  
Nye County, Nevada

**Mr. Joseph Hardy**  
State Senator  
State of Nevada

**Mr. Gene Humphrey**  
President  
International Test Solutions, Inc.

**Mr. Matt Lydon**  
Business Manager  
UA Local 525 Plumbers, Pipefitters and Service Technicians

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*Radioactive Waste at Yucca Mountain, Nye County, Nevada (May 2016) (www.nrc.gov/docs/ML1612/ML16125A032.pdf).*