

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

Majority (202) 225-2927
Minority (202) 225-3641

MEMORANDUM

April 24, 2017

To: Subcommittee on Environment Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing entitled “H. R. _____, the Nuclear Waste Policy Amendments Act of 2017”

On **Wednesday, April 26, 2017, at 10:00 a.m. in room 2123 of the Rayburn House Office Building**, the Subcommittee on Environment will hold a hearing on draft legislation to amend the Nuclear Waste Policy Act of 1982. For a summary of this draft legislation, please see the attached summary.

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 2067.¹ Most of the current inventory is stored onsite where it was generated, in wet pools or dry casks.² Spent fuel is generally stored in pools for five years, and then transferred to dry casks after it has cooled to within the heat limits of the casks.³ However, 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 onsite at nuclear power reactors.⁴

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

² *Id.* at 14.

³ *Id.* at 7.

⁴ *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, 1998.⁵ The law also established an objective, scientifically-based process for selecting two repository sites.

In the years following 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.⁶ As discussed in several hearings on this topic during the 114th Congress, 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 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

In 2010, President Barack Obama established the Blue Ribbon Commission on America's Nuclear Future (BRC) 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. 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.⁷ DOE agreed with the BRC that a consent-based siting process would be critical to the successful implementation of the agency's waste management strategy. On January 12, 2017, DOE

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

⁶ P.L. 100-203.

⁷ 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%20Level%20Radioactive%20Waste.pdf).

released a document outlining a draft consent-based siting process for disposal and storage of nuclear waste.⁸

IV. NUCLEAR REGULATORY COMMISSION REVIEW

On January 29, 2015, NRC issued the final volumes of its Safety Evaluation 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."⁹

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."¹⁰ In May 2016, NRC issued its supplement, finding that the estimated radiological doses in the groundwater surrounding the site are small because they are a small fraction of the background radiation dose.¹¹

V. FISCAL YEAR 2018 BUDGET

On March 16, 2017, President Donald Trump released an outline of his fiscal year 2018 budget. This outline includes \$120 million to "restart licensing activities for the Yucca Mountain nuclear waste repository and initiate a robust interim storage program."¹² This is the first time since 2009 that licensing activities for the Yucca Mountain repository have been funded in a Presidential budget proposal.

⁸ U.S. DOE, *Draft Consent-Based Siting Process for Consolidated Storage and Disposal Facilities for Spent Nuclear Fuel and High-Level Radioactive Waste* (Jan. 12, 2017) (energy.gov/sites/prod/files/2017/01/f34/Draft%20Consent-Based%20Siting%20Process%20and%20Siting%20Considerations.pdf).

⁹ U.S. Nuclear Regulatory Commission, *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).

¹⁰ U.S. Nuclear Regulatory Commission 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).

¹¹ U.S. Nuclear Regulatory Commission, *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 Radioactive Waste at Yucca Mountain, Nye County, Nevada* (May 2016) (www.nrc.gov/docs/ML1612/ML16125A032.pdf).

¹² White House Office of Management and Budget, *America First A Budget Blueprint to Make America Great Again* (Mar. 16, 2017) (www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/2018_blueprint.pdf).

VI. WITNESSES

The following witnesses have been invited to testify:

Panel One:

The Honorable Dean Heller (R-NV)
Senator, U.S. Senate

The Honorable Ruben Kihuen (D-NV)
Member, U.S. House of Representatives

The Honorable Dina Titus (D-NV)
Member, U.S. House of Representatives

The Honorable Jacky Rosen (D-NV)
Member, U.S. House of Representatives

The Honorable Joe Wilson (R-SC)
Member, U.S. House of Representatives

Panel Two:

Edwin Lyman
Senior Scientist, Global Security Program
Union of Concerned Scientists

Mark McManus
General President
United Association; Union of Plumbers, Fitters, Welders, and Service Techs

Steve Nesbit
Director, Nuclear Policy and Support
Duke Energy Corporation
On behalf of the Nuclear Infrastructure Council

Anthony J. O'Donnell
Commissioner
Maryland Public Service Commission
On behalf of the National Association of Regulatory Utility Commissioners

Ward Sproat

Principal Vice President

Bechtel National, Inc.

Former Director, Office of Civilian Radioactive Waste Management, Department of Energy



April 2017

Summary of the “Nuclear Waste Policy Act Amendments of 2017” Committee on Energy and Commerce, Democratic Staff

The Nuclear Waste Policy Act Amendments of 2017 is a discussion draft circulated by Chairman John Shimkus that will be examined at an April 26, 2017 legislative hearing. The bill makes a number of changes to the Nuclear Waste Policy Act (NWPA), which has not been amended significantly since 1987. Following is a brief summary of the major provisions of the draft.

Title I deals with Monitored Retrievable Storage, also known as interim storage.

- Authorizes the Secretary of Energy to site, construct and operate one or more interim storage facilities, either operated by the Department of Energy (DOE) or a private entity. Gives preference to a private entity unless it would be faster and less expensive for an interim storage facility to be publicly operated.
- Prohibits any interim storage project from moving forward until the Nuclear Regulatory Commission (NRC) makes a final decision on a construction authorization for a permanent repository.

Title II addresses issues related to a permanent repository and the current application for the Yucca Mountain site.

- Transfers federal land rights at the site currently under the control of other federal agencies to DOE.
- Declares that construction of a nuclear waste repository constitutes a beneficial use of water, undercutting the basis for the Nevada State Engineer’s denial of water rights for the project.
- Provides that the Energy Secretary may not move forward on a separate defense waste repository until NRC makes a final decision on a construction authorization for a permanent repository.
- Includes a Sense of Congress statement that advocates for avoiding Las Vegas when nuclear waste is transported by rail.

Title III allows the Secretary to negotiate modifications to existing contracts with nuclear waste generators.

Title IV makes certain changes to the section of the NWPA dealing with benefits to host communities.

- Leaves the benefits schedule blank, with amounts to be determined.
- Prohibits affected states and local governments from using benefits payments to directly or indirectly influence legislative action or for litigation.

Title V makes changes to the NWPA’s funding mechanisms.

- No fees shall be collected and deposited into the waste fund until NRC issues a final decision on the construction authorization for a permanent repository.
- Makes certain amounts from the waste fund, to be determined, directly available to the Secretary.

Title VI contains two miscellaneous provisions.

- Two years after NRC makes a final decision on a permanent repository, the Administrator of the Environmental Protection Agency must determine if the Agency’s radiation standards need updating.
- Reconstitutes DOE’s Office of Civilian Radioactive Waste Management, which was disbanded under the Obama Administration.