



May 12, 2015

TO: Members, Subcommittee on Environment and the Economy

FROM: Committee Majority Staff

RE: Hearing entitled “Update on the Current State of Nuclear Waste Management Policy”

I. INTRODUCTION

On Friday, May 15, 2015, at 9:00 a.m. in 2123 Rayburn House Office Building, the Subcommittee on Environment and the Economy will hold a hearing entitled “Update on the Current State of Nuclear Waste Management Policy.”

II. WITNESSES

- Mr. Andrew Fitz, Senior Counsel, Office of the Attorney General, State of Washington;
- Ms. Josephine Piccone, Director, Yucca Mountain Directorate, Nuclear Regulatory Commission;
- The Honorable Greg R. White, Commissioner, Michigan Public Service Commission, on behalf of the National Association of Regulatory Utility Commissioners, Chairman, Subcommittee on Nuclear Issues – Waste Disposal;
- Mr. Stephen Kuczynski, Chairman, President and Chief Executive Officer, Southern Nuclear Operating Company;
- Mr. Geoffrey H. Fettus, Senior Attorney, Natural Resources Defense Council; and,
- Mr. Einar Ronningen, Manager, Rancho Seco Assets, Decommissioning Plant Coalition.

III. BACKGROUND

Since the Manhattan Project, the United States has accumulated high-level radioactive waste that requires permanent disposal. Use of nuclear reactors to power navy ships, as well as activities to maintain a nuclear deterrent has resulted in over 13,000 tons of defense waste located primarily in Washington State, South Carolina, and Idaho. Civilian commercial use of nuclear power to produce electricity has produced over 74,000 tons¹ of spent nuclear fuel (SNF),

¹ Nuclear Energy Institute, “*US State by State Used Fuel and Payments to the Nuclear Waste Fund*,” updated 4/15. <http://www.nei.org/Knowledge-Center/Nuclear-Statistics/On-Site-Storage-of-Nuclear-Waste/US-State-by-State-Used-Fuel-and-Payments-to-the-Nu>.

currently located at seventy-five sites in thirty-three States, and continues to accumulate at a rate of approximately 2,000 tons annually.²

The Federal Government maintains the responsibility to dispose of all high-level radioactive waste. The Nuclear Waste Policy Act (NWPA) established the process to select a site for a permanent geologic disposal facility and obligated DOE to take title of commercially generated SNF by 1998.³ In 1987, Congress amended the NWPA to designate the Yucca Mountain site in Nevada as the sole location for a permanent repository. In the ensuing years, DOE conducted extensive site characterization and related activities to inform the Yucca Mountain license application to authorize construction. The Yucca Mountain license was submitted to the Nuclear Regulatory Commission (NRC) in 2008.

In 2010, the Obama Administration announced its intention to abandon the Yucca Mountain project and made a motion to withdraw the Yucca Mountain license application from the NRC with prejudice. It concurrently terminated all activities to support the repository program.⁴ The States of Washington and South Carolina, in addition to private parties, sued the Federal Government to resume NRC's review of the license.

On August 13, 2013, the D.C. Court of Appeals ruled in favor of the petitioners and issued a writ of mandamus forcing NRC to promptly continue the licensing process for Yucca Mountain.⁵ The court wrote that NRC had "continued to violate the law governing the Yucca Mountain licensing process," and directed the NRC to use appropriated funds to consider the license. In response to the court order, the NRC resumed consideration of the scientific and technical review of the DOE's license application, known as the Safety Evaluation Report (SER), with its remaining Nuclear Waste Fund (NWF) balance.

In January 2015, the NRC issued the fifth and final volume of the SER. The NRC found that DOE's license application met applicable regulatory requirements, including post-closure requirements that the repository could be reasonably expected to safely protect public health for one million years.⁶ However, the NRC staff withheld the recommendation to issue the

² See *Spent Nuclear Fuel: Commercial Reactors Present Storage and Other Challenges*. [GAO 12-797 August 2012](#). In addition, there are research reactors at other DOE sites (such as the National Labs) or non-DOE sites (such as universities) that also produce spent nuclear fuel. In all, DOE reports that there are 121 sites in thirty-nine States that have SNF. See *Commercial Nuclear Waste: Effects of a Termination of the Yucca Mountain Repository Program and Lessons Learned*, [GAO-11-229 April 8, 2011](#), page 7.

³ Nuclear Waste Policy Act, 42 USC 10101.

⁴ For a more detailed description of the history of the NWPA and the Yucca Mountain project, see July 2013 hearing memorandum, located here: <http://docs.house.gov/meetings/IF/IF18/20130731/101226/HHRG-113-IF18-20130731-SD003.pdf>.

⁵ *In re Aiken Cnty.*, 725 F.3d 255 (D.C. Cir. 2013) Accessible at: [http://www.cadc.uscourts.gov/internet/opinions.nsf/BAE0CF34F762EBD985257BC6004DEB18/\\$file/11-1271-1451347.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/BAE0CF34F762EBD985257BC6004DEB18/$file/11-1271-1451347.pdf).

⁶ Nuclear Regulatory Commission, "*Safety Evaluation Report Related to Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada: Repository Safety after Permanent Closure*. NUREG-1949, Volume 3." October 2014.

construction authorization license due to issues relating to the ownership and control of the land where the repository would be located and associated water access.

In February 2015, NRC Chairman Stephen Burns announced the Commission will complete the Supplemental Environmental Impact Statement (SEIS) for Yucca Mountain because the Department of Energy (DOE) informed the NRC it would not update the document.⁷ NRC's actions will exhaust the remainder of its NWF money (approximately \$4 million⁸) previously appropriated by Congress. DOE has approximately \$17.1 million⁹ in the Defense Nuclear Waste Disposal and Nuclear Waste Disposal accounts to support the license application, but is not actively supporting any Yucca Mountain activities.¹⁰

Prior to the Commission making a final decision on the Yucca Mountain license application, DOE and NRC must resolve approximately 300 contentions filed by affected parties associated with the project.

Funding for Yucca Mountain is provided through payment of fees to the NWF by ratepayers who pay for nuclear-generated electricity. In November 2013, the D.C. Court of Appeals ruled in favor of the National Association of Regulatory Utility Commissioners (NARUC) in *NARUC v. DOE*. The court held that the fee may not be collected due to the Federal Government's lack of a nuclear waste management plan as a result of DOE's closure of the Yucca Mountain Project.¹¹ The approximately \$750 million annual collection was suspended by DOE in May 2014. As of September 30, 2014, the NWF maintained a balance of \$36 billion.¹²

Due to the delay in DOE taking title to commercial SNF, the court has ruled Federal Government is in partial breach of contract. Therefore, the Federal Government is responsible for the payment of settlements related to additional costs imposed on utilities. The National Law Journal reports that associated Judgement Fund payments exceeded \$900 million in 2014, totaling approximately one third of all such payments by the Federal government.¹³

⁷ Northey, Hannah. "NRC will complete environmental review of Yucca project – chairman," E&E News Greenwire. February 17, 2015. Accessible at <http://www.eenews.net/greenwire/stories/1060013577/>.

⁸ Letter to the Honorable Fred Upton from NRC Chairman Stephen Burns. April 22, 2015.

⁹ Letter to The Honorable John M. Shimkus from Assistant Secretary for Nuclear Energy Peter B. Lyons. May 1, 2015.

¹⁰ No NWF funding has been provided in recent appropriations process to continue the Yucca licensing for DOE or NRC. In 2014, the House of Representatives voted to provide the funding, but no funds were made available in the final agreement. The Fiscal Year 2016 House bill included NWF monies to DOE and to NRC to complete the Yucca licensing activities. Two amendments were offered and defeated to remove the funding.

¹¹ *Nat'l Ass'n of Regulatory Util. Comm'rs v. United States DOE*, 736 F.3d 517 (D.C. Cir. 2013) Opinion accessible at: [http://www.cadc.uscourts.gov/internet/opinions.nsf/2708C01ECFE3109F85257C280053406E/\\$file/11-1066-1466796.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/2708C01ECFE3109F85257C280053406E/$file/11-1066-1466796.pdf).

¹² Department of Energy, Office of Inspector General, "Audit Report: Department of Energy's Nuclear Waste Fund's Fiscal Year 2014 Financial Statement Audit. OAS-FS-15-03." November 2014. Accessible at: <http://energy.gov/sites/prod/files/2014/12/f19/OAS-FS-15-03.pdf>.

¹³ National Law Journal, "Judgment Fund: Energy Department Pays Out the Most – Again," April 6, 2015. Accessible at: <http://www.nationallawjournal.com/id=1202722657674/Judgment-Fund-Energy-Department-Pays-Out-the-Most--Again?slreturn=20150405143853>.

Multiple private companies recently announced intentions to pursue an NRC license to operate a consolidated interim storage facilities for high-level waste.¹⁴ The NWPA authorized the construction of an interim storage facility by DOE, conditional on the issuance of a construction authorization permit for a permanent repository (Yucca Mountain) prior to any licensing action on interim or “Monitored Retrievable Storage.”¹⁵ DOE’s “Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste” calls for the development of at least one consolidated interim facility, but DOE lacks the legal authority and funding to execute the proposal.

In 1985, a Presidential determination stated that nuclear waste from defense activities and commercial waste should be disposed of together in a geologic repository designed to store all material. Yucca Mountain is designed to serve as the sole repository for all nuclear material, including defense waste. However, on March 24, 2015, President Obama authorized DOE to begin a process to pursue the development of a separate disposal path for DOE-managed high-level radioactive waste, including waste generated by defense activities.¹⁶ The decision departed from a 30-year old national policy to dispose of commercial and defense waste together in a single repository.¹⁷

IV. ISSUES

The following issues may be examined at the hearing:

- Current status of the Federal Government’s efforts relating to the Nuclear Waste Policy Act and nuclear waste management.
- Nuclear waste management policy issues to facilitate the development of one or more disposal options.
- Linkage between a permanent repository and potential interim storage.

V. STAFF CONTACTS

¹⁴ Waste Control Specialists, “Valhi’s WCS Subsidiary to Apply for License to Store Used Nuclear Fuel,” February 7, 2015. Accessible at: http://wcsstorage.com/wp-content/uploads/2015/02/WCS_Press_Release.pdf and Holtec International, “Holtec Partners with ELEA, LLC in New Mexico to Build Consolidated Interim Storage Facility,” April 30, 2015. Accessible at: <http://www.holtecinternational.com/2015/04/holtec-partners-with-elea-llc-in-new-mexico-to-build-consolidated-interim-storage-facility/>.

¹⁵ Nuclear Waste Policy Act, 42 USC 10101 Sec. 148 (d)(1).

¹⁶ President Barack Obama, Presidential Memorandum “Disposal of Defense High-Level Radioactive Waste in a Separate Repository,” March 24, 2015.

¹⁷ Energy and Commerce Committee Chairman Fred Upton and Ranking Member Frank Pallone letter to Secretary of Energy Ernest Moniz. April 14, 2015. Accessible at: <http://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/114/Letters/20150414DOE.pdf>

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