

ISSUE BRIEF

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Yucca Mountain: The Department of Energy Should Take Steps Now While Awaiting Funding

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Congress failed to follow the lead established in President Donald Trump’s “skinny budget” on nuclear waste management in its recent omnibus spending bill. The President’s budget requests \$120 million for the Department of Energy (DOE) “to restart licensing activities for the Yucca Mountain nuclear waste repository and initiate a robust interim storage program.”¹ Yet Congress again provided no funding.

Thirty-four states are currently home to roughly 76,430 metric tons of nuclear waste from reactors that supply 20 percent of Americans’ electricity.² Taxpayers pay roughly \$2 million per day as the DOE delays collection of nuclear waste from these sites, according to a recent Subcommittee on the Environment hearing.³

The Trump Administration needs to move expeditiously on nuclear waste issues after eight years of delay under the Obama Administration. Even as Congress delays funding and works through draft legislation on nuclear waste management, there are some things the DOE can do now to prepare for completing the agreed upon process to review a license for Yucca Mountain.

The Circumstances

According to the Nuclear Waste Policy Act of 1982, as amended, Congress directed the DOE to begin collecting nuclear waste from defense and commercial nuclear power operations by 1998. Congress chose Yucca Mountain as the site for a deep geologic repository, should the Nuclear Regulatory Commission (NRC) grant the DOE a permit. Failure to do so has cost taxpayers over \$6.1 billion in settlements to date, and is projected to cost tens of billions more.⁴

After years of study and roughly \$15 billion spent, the DOE applied for a license to the NRC in 2008 because the Yucca Mountain location “brings together the location, natural barriers, and design elements most likely to protect the health and safety of the public.”⁵ At the time, the DOE believed a repository could begin receiving waste by 2017 should the NRC approve a license.⁶ Regardless of what happens with Yucca Mountain, the scientific community and global experience have supported deep geologic storage as critical to any waste management plan.

Unless Congress directs otherwise, the Trump Administration is required to continue the licensing review of a repository at Yucca Mountain.⁷ This point was further emphasized in another suit recently filed against the DOE, NRC, and associated licensing boards in March 2017 by the State of Texas with the intent to force an up-or-down decision on the license.⁸

Moving Forward

The DOE’s ability to support a license application before the Nuclear Regulatory Commission has atrophied from the Obama Administration’s attempt to withdraw the 2008 license request and cancel the

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program in 2010.⁹ The DOE currently has \$20 million in unobligated funds for nuclear waste, according to a letter to Secretary Perry from the House Committee on Energy Commerce and the relevant Subcommittee on Environment.¹⁰ Even as the DOE waits for further funding from Congress, it can take the following steps to comply with the law and reflect the direction presented in President Trump's draft budget.

1. Nominate an Acting Director for the Office of Civilian Radioactive Waste Management (OCRWM). By law, the Director of OCRWM is “responsible for carrying out the functions of the Secretary under [the Nuclear Waste Policy Act]”¹¹—that is, the study, siting, construction, and operations of a permanent nuclear waste facility. The Director is appointed by the President, approved by the Senate, and reports directly to the Secretary of Energy. The Obama Administration defunded OCRWM, discontinued Yucca Mountain activities in opposition to

the law, and consolidated waste management activities under the Office of Nuclear Energy—namely, conducting the Blue Ribbon Commission, nuclear waste management options from defense-related sources only, and a consent-based siting process.

DOE leadership should nominate an acting director and begin organizing staff to operate the statutorily required OCRWM. The OCRWM does not need to expand on siting and study of a repository at Yucca Mountain, as these have already been completed. However, contentions with the application should not be left unaddressed, and a hearing requires a DOE and NRC that are equipped to complete this part of the licensing process.

Completing the Yucca Mountain licensing process is a marked policy change from the Obama Administration. Consequently, OCRWM should be staffed with individuals committed to efficiently completing the licensing process, not simply shifting staff from

1. Office of Management and Budget, *America First: A Budget Blueprint to Make America Great Again*, 2018, p. 19, https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/2018_blueprint.pdf (accessed May 15, 2017).
2. U.S. Nuclear Regulatory Commission, “U.S. Independent Spent Fuel Storage Installations (ISFSI),” October 6, 2016, <https://www.nrc.gov/docs/ML1628/ML16286A019.pdf> (accessed May 15, 2017); Nuclear Energy Institute, “On-Site Storage of Nuclear Waste,” <https://www.nei.org/Knowledge-Center/Nuclear-Statistics/On-Site-Storage-of-Nuclear-Waste> (accessed May 15, 2017); U.S. Department of Energy, Energy Information Administration, “What Is U.S. Electricity Generation by Energy Source?” April 18, 2017, <https://www.eia.gov/tools/faqs/faq.php?id=427&t=3> (accessed May 15, 2017).
3. Hearing, *H.R. __, the Nuclear Waste Policy Amendments Act of 2017*, Subcommittee on the Environment, Committee on Energy and Commerce, U.S. House of Representatives, April 26, 2017, <http://docs.house.gov/meetings/IF/IF18/20170426/105877/HHRG-115-IF18-Transcript-20170426.pdf> (accessed May 15, 2017).
4. U.S. Department of Energy, *Fiscal Year 2016 Agency Financial Report*, p. 82, November 15, 2016, <https://www.energy.gov/cfo/downloads/fy-2016-doe-agency-financial-report> (accessed May 15, 2017).
5. U.S. Nuclear Regulatory Commission, “DOE’s License Application for a High-Level Waste Geologic Repository at Yucca Mountain,” June 14, 2016, <https://www.nrc.gov/waste/hlw-disposal/yucca-lic-app.html> (accessed May 15, 2017); Senator James M. Inhofe, “Yucca Mountain: The Most Studied Real Estate on the Planet,” *Report to the Chairman*, Committee on Environment and Public Works, U.S. Senate, March 2006, <http://www.epw.senate.gov/repwhitepapers/YuccaMountainEPWReport.pdf> (accessed May 15, 2017).
6. U.S. Department of Energy, “DOE Announces Yucca Mountain License Application Schedule,” June 19, 2006, <https://energy.gov/articles/doe-announces-yucca-mountain-license-application-schedule> (accessed May 15, 2017).
7. In August 2013, the U.S. Court of Appeals for the District of Columbia required the NRC to continue the licensing review “unless and until Congress authoritatively says otherwise or there are no appropriated funds remaining.” Katie Tubb, “Court Kicks Yucca Mountain Review Back in Motion,” *The Daily Signal*, August 13, 2013, <http://dailysignal.com/2013/08/13/court-kicks-yucca-mountain-review-back-in-motion/>.
8. News release, “AG Paxton Challenges Federal Government’s Defiance of the Nuclear Waste Policy Act,” Office of the Texas Attorney General, March 15, 2017, <https://www.texasattorneygeneral.gov/news/releases/ag-paxton-challenges-federal-governments-defiance-of-the-nuclear-waste-poli> (accessed May 15, 2017).
9. Lacking any technical objections, the Obama Administration refused to pursue the DOE’s Yucca Mountain license request with the NRC, stating only that it was “not a workable option.” The NRC’s safety evaluation was nearly complete. Steven Chu, statement before the Committee on the Budget, U.S. Senate, March 11, 2009, <https://energy.gov/articles/statement-steven-chu-secretary-energy-committee-budget> (accessed May 15, 2017), and Jack Spencer and Cornelius Milmo, “Obama Administration: No Confidence in Nuclear Energy,” Heritage Foundation *Backgrounder* No. 2657, March 5, 2012, <http://www.heritage.org/environment/report/obama-administration-no-confidence-nuclear-energy>.
10. Greg Walden and John Shimkus, letter to the Honorable Rick Perry, Secretary of Energy, March 20, 2017, <https://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/documents/114/letters/20170320DOE.pdf> (accessed May 15, 2017).
11. Nuclear Waste Policy Act of 1982, Public Law 97-425, § 304(b).

waste management activities in the Office of Nuclear Energy to a new OCRWM.

2. Begin Reassembling Information Relevant to the License Application. The DOE should use existing funds now to stand up OCRWM and get it ready to hand over to a new director. The DOE should begin reassembling teams and information at the DOE and the legal, national lab, and the management and operations contractor associated with the Yucca Mountain license.¹² With attentive leadership, this could be done now under the auspices of the Office of Nuclear Energy, even as the Administration moves forward to nominate a director for OCRWM. The purpose of the new funding must not be to open up new fact-finding or modeling missions. As the Senate Committee on Environment and Public Works described it in 2006, Yucca Mountain is the most studied piece of real estate in the country.¹³ Rather, the new funding should enable the DOE to complete its role as applicant in the licensing process, including defending the application as contentions with the Yucca Mountain design are adjudicated.

However, funds should be used *exclusively* for the completion of the Yucca Mountain licensing process and for no other DOE nuclear waste management project. Likewise, the DOE's programs and contracts for borehole or consent-based siting activities should be terminated.

3. Clarify the Purpose of OCRWM and Position It for the Future. Should the NRC grant a license, building the Yucca Mountain site does not solve the nuclear waste management challenge. Decades of dysfunction demonstrate the federal government's inability to manage nuclear waste rationally, economically, or at all. The private sector should ultimately take responsibility for managing its own nuclear waste. To this end, OCRWM's initial activities should be limited to overseeing the completion of the Yucca Mountain licensing permit application and initial operation, and then be privatized. The ultimate goal should be to create a competitive market where waste management companies compete to provide services to utilities. The federal government's role should be limited to providing regulatory oversight and taking final title of any waste product upon final disposal.

Conclusion

Funding the DOE's efforts to support the license process is a good first step to solving a decades-long, festering problem, yet Congress missed an opportunity in the omnibus spending bill. Although the DOE can begin some work now, Congress needs to provide enough funding for both the DOE and NRC to complete the Yucca Mountain license review. Finishing the review merely brings all of the information to the table for Congress and others, like Nevada and the nuclear industry, to make prudent and proper decisions about next steps.

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12. John Kotek, Acting Assistant Secretary for Nuclear Energy, letter to John Shimkus, Chairman, Subcommittee on Environment and the Economy, June 14, 2016, <https://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/documents/2016.06.14%20-%20Letter%20-%20Shimkus%20Response%5B1%5D.pdf> (accessed May 16, 2017).

13. Inhofe, "Yucca Mountain."