Nuclear Spent Fuel Policy: Examining Nuclear Lifecycle Innovation Campuses

Additional Responses for the Record
Commissioner Stacey Paradis
National Association of Regulatory Utility Commissioners

The Honorable Bob Latta (R-OH)

1. What are states bringing to the table to ensure workable programs?

It is my understanding that each state has submitted proposals to the Department of Energy which outline what the state is proposing for their campus. The Office of Nuclear Energy has consistently stated that each Nuclear Lifecycle Innovation Campus (NLIC) state has signed a Memorandum of Understanding (MOU) where the states confirm that they will receive nuclear waste from another state. As presented, the idea behind the NLIC program is federal-state cooperative agreements that would include some type of nuclear economic development program (which could be spent fuel reprocessing, SMR development, or other technologies that could utilize components of the nuclear fuel cycle) managed by the state and a spent fuel storage and interim or permanent repository managed by the federal government within the same campus. Allowing any interested state to consider exploring the potential opportunity of the NLIC program which includes accepting nuclear waste from other states creates a new opportunity to break the existing multi-decade impasse related to the federal government's responsibility to transport, store and dispose of the nation's spent commercial nuclear waste. NARUC's resolutions support research into reprocessing but recognize that it "will not eliminate the need for a permanent repository," and support a program to site, license, construct, and operate a second geologic repository. *See* NARUC, Resolution Regarding Guiding Principles for Management and Disposal of High-Level Nuclear Waste, Principle 1 (adopted Feb. 14, 2018); NARUC Resolution EL-2, Resolution Regarding the Urgent Need for a National Nuclear Waste Repository (2025 Summer Policy Summit).

2. You state in your testimony that "NARUC continues to support the concept that beneficiaries of nuclear generated electricity pay for the disposal program, but the fee should not be reinstated until a new Department of Energy fee adequacy study demonstrates the need for reinstatement." Can you explain what progress from DOE would validate restarting the fee?

The first step that must happen before restarting the Nuclear Waste Fund (NWF) fee is either compliance with, or a change to, the Nuclear Waste Policy Act ("NWPA"). Currently, the NWPA identifies Yucca Mountain as the sole site selected for the federal geological waste repository. In 2010, the Administration terminated the Yucca Mountain license proceedings but did not amend the NWPA to allow for exploration of a different site. Before the NWF fee is restarted in any way, DOE must either complete the Yucca Mountain license proceedings or establish a program to site, license, construct, and operate a second permanent geologic repository. *See* NARUC, Resolution Regarding Guiding Principles for Management and Disposal of High-Level Nuclear Waste, Principle 2 (Feb. 14, 2018) ("Under no conditions should

the NWF fee be restarted until the Yucca Mountain License proceeding is complete."); NARUC Resolution EL-2 (2025) (calling for a program to site, license, construct, and operate a second geologic repository).

Additionally, before restarting collection of the NWF fee, a new fee-adequacy study must be completed by DOE. In *National Association of Regulatory Utility Commissioners v. U.S. Department of Energy*, 680 F.3d 819 (D.C. Cir. 2012), the Court held that the Secretary of Energy has a statutory obligation to annually reexamine the adequacy of the fee. Further, the Court held that the fee should remain at zero until DOE complies with the NWPA as written (i.e., moving forward with the Yucca Mountain license proceeding) or until Congress enacts an alternate waste management plan. *Id.* at 7. NARUC asserts that either one of these actions would be necessary before a discussion to restart the NWF fee can occur. *See also* NARUC Resolution (2018), Principle 2 ("A new DOE fee adequacy study that demonstrates the need for reinstatement is a necessary pre-requisite for re-starting the NWF fee.").

Currently, more than $50 billion sits in the Nuclear Waste Fund which requires annual Congressional appropriation. My personal opinion (as NARUC has not taken a position on this topic), as a regulator from the State of Illinois whose ratepayers have contributed the most to the NWF, is that when Congress either moves forward with Yucca Mountain or amends existing law to allow for other federal repositories, only then could increased appropriations be made. Such appropriations could include site studies of additional repository sites, assessment and planning for rail lines to bring spent nuclear fuel to potential repository locations or development of additional rail cars to transport spent nuclear fuel. These, to me, would be appropriate uses of the existing NWF.

Finally, NARUC notes that the above steps to move forward with Yucca Mountain or allow for additional repository sites, are the minimum actions DOE must take before restarting the fee. The DOE fee assessment must consider whether the annually accruing interest of the NWF is adequate to fund expenditures without reinstatement of the fee; the fee should not be reinstated until program expenditures actually exceed annual interest accruing on the corpus of the NWF. To avoid misdirecting NWF fees to unrelated government obligations and provide for the gradual return of the corpus of the fund, Congress should mandate that no NWF fees can be collected in a fiscal year that exceed 90 percent of the Congressional appropriations for the fiscal year during which such fees are collected. *See* NARUC Resolution (2018), Principle 2 (fee assessment must consider annual interest accruing on the NWF; fees collected in a fiscal year should not exceed 90 percent of appropriations).

a. For the money that is already in the NWF, what can DOE use this money for without changes to the NWPA?

Currently, under the NWPA as written and amended, the NWF may only be used for specific expenditures:

> (1) the identification, development, licensing, construction, operation, decommissioning, and post-decommissioning maintenance and monitoring of any repository, monitored, retrievable storage facility or test and evaluation facility constructed under this Act;
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> (2) the conducting of nongeneric research, development, and demonstration activities under this Act;
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> (3) the administrative cost of the radioactive waste disposal program;
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> (4) any costs that may be incurred by the Secretary in connection with the transportation, treating, or packaging of spent nuclear fuel or high-level radioactive waste to be disposed of in a repository, to be stored in a monitored, retrievable storage site or to be used in a test and evaluation facility;
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> (5) the costs associated with acquisition, design, modification, replacement, operation, and construction of facilities at a repository site, a monitored, retrievable storage site or a test and evaluation facility site and necessary or incident to such repository, monitored, retrievable storage facility or test and evaluation facility; and
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> (6) the provision of assistance to States, units of general local government, and Indian tribes under sections 116, 118, and 219.

42 U.S.C. 10222 Sec. 302(d)(1)-(6). The Act continues by stating that no expenditures "for the construction or expansion of any facility" are allowed unless the activity is "expressly authorized by this or subsequent legislation." Id.

Without legislative changes to the NWPA, or further Congressional action, DOE is only authorized to use the NWF for permanent geologic repository development at Yucca Mountain. "The Secretary may not conduct site-specific activities with respect to a second repository [other than Yucca Mountain] unless Congress has specifically authorized and appropriated funds for such activities." 42 U.S.C. 10172(a) Sec. 161(a).

The Honorable Brett Guthrie (R-KY)

1. Six states have voluntarily stepped up with initial interest to host these campuses. Would you agree this should be encouraged? And what should we do to ensure it results in durable agreements?

Yes, NARUC agrees that the voluntary nature of the NLICs should be encouraged and is a vital component of an effective program. By affirmatively raising their hands to host a campus, states were able to develop their proposals in a way that brought the most necessary benefits to their state while also responding to the needs and concerns of their residents. NLICs can also support efforts to locate and site a second permanent repository, which should be done through a collaborative manner alongside states and guided by a negotiated consent agreement. *See*

NARUC Resolution (2018), Principle 4 (engagement with States and local governments "guided by a negotiated consent agreement among the involved parties").

a. What are the roles of Governors and state legislators to ensure success?

NARUC represents the public utility commissions, so we aren't able to speak on behalf of governors or state legislatures, but as noted in the answer above, the fact that the NLIC program is voluntary is important. It is also my understanding that DOE requires the governor to sign the MOUs for each NLIC state and those MOUs from the now five finalists (as West Virginia has dropped out of the program) indicate agreement to accept nuclear spent fuel from other states. NARUC is a strong supporter of the balance of state and federal governments roles and the importance of transparency.

2. Would you agree we must be careful about rushing any policies that could undermine our obligations to ratepayers, who have paid into a fund to ensure permanent disposal of fuel?

Yes, NARUC strongly believes that any federal nuclear waste policies must focus on meeting the federal government's obligations under the NWPA while protecting ratepayers who have already paid into the NWF. The NLIC program is a potential first step to breaking a decades-long impasse where the federal government has not met its obligation under the NWPA. The federal government has been in violation of its commitment to begin accepting spent nuclear fuel for permanent disposal since 1998. While Congress must ensure that any policies protect the ratepayers who have already paid into the NWF, ratepayers also deserve for the government to fulfill its obligation to accept waste for permanent disposal now and not at some unknown time in the future. It is also important for the communities, especially those with decommissioned plants, to have the spent fuel removed to allow the land to be redeveloped for future use. *See* NARUC Resolution (2018) ("ratepayers deserve and expect our government to fulfill its obligation now and not at some unknown time in the future"); *id.*, Principle 2 (DOE, not ratepayers, must remain accountable for its failure to begin accepting waste in 1998).

<u>The Honorable Rick Allen (R-GA)</u>

1. I understand that under the Standard Contracts the date of discharge of spent nuclear fuel is the first thing that determines the order of acceptance rights of the different utilities holding contracts – is that correct?

Yes, that is correct. The order of acceptance of spent nuclear fuel ("SNF") or high-level radioactive waste ("HLW") by DOE is based on the age of the fuel "as calculated from the date of discharge of the material . . . from the civilian nuclear power reactor." 10 C.F.R. Sec. 961.11. "The oldest fuel or waste will have the highest priority for acceptance." Id.

In addition to other specific, limited variances as outlined in the Standard Contract, priority may also be given to SNF/HLW removed from a shutdown reactor without regard to the

age of the fuel or waste. This applies to reactors that have reached end of useful life as well as reactors that have been permanently shutdown "for whatever reason." Id.

2. For the legitimate issues confronted by decommissioned sites, what is the process for enabling a way to expedite fuel off the site?

As noted above, fuel from shutdown or decommissioned reactors is given priority for removal, regardless of the age of the fuel. It then follows that, once DOE begins assuming title of the waste, it will begin with fuel from decommissioned and shutdown sites. This process cannot be expedited any further under the Standard Contracts or the NWPA as currently written. Also note that the federal government is responsible for the transportation, storage and final deposition of all commercial spent nuclear fuel signed under the Standard Contract. DOE is currently, using funds appropriated from the NWF, developing a train car to transport spent fuel and it is my understanding that an initial test run of that train will occur in 2027 with transport to the Idaho National Lab.