



A New Path Forward for Nuclear Waste Disposal? - DOE Releases RFI for Consent-Based Siting

November 30, 2021

Today, the Department of Energy (DOE) released in the Federal Register a [Notice of Request for Information \(RFI\) on Using a Consent-Based Siting Process to Identify Federal Interim Storage Facilities \(CBS\)](#).

Energy Communities Alliance (ECA) has long anticipated this action and we hope it marks the meaningful resumption of the Department's efforts – as it is the federal government's **responsibility** – to manage and dispose of the Country's defense and commercial high-level radioactive nuclear waste (HLW) and spent nuclear fuel (SNF).¹ As *de facto* storage sites for this waste sitting in our communities for decades beyond what was originally envisioned, we urge the Administration and DOE to not only prioritize the disposal of HLW and SNF, but to truly commit to pursuing a solution and taking actions to demonstrate that commitment - for the safety of our frontline communities.

While ECA is still reviewing the RFI, we have some immediate concerns:

1. There is no mention of the government's legacy defense HLW that remains orphaned at the Savannah River Site in South Carolina, the Idaho National Laboratory and the Hanford Site in Washington. DOE is solely responsible for this waste that, like the spent nuclear fuel from commercial reactor sites, was originally destined for Yucca Mountain. Given the emphasis on environmental justice and equity, ECA communities that have long supported the nation's national security mission and currently host the government's nuclear research activities must be prioritized, included in any strategy or timeline, and alternatives like the HLW Interpretation must be fully analyzed.
2. It appears the Department is moving ahead to develop interim storage in the absence of a plan or process for siting a permanent geological repository. ECA has long argued that interim storage must exist alongside a permanent solution and both should be pursued in parallel. Without a legal definition for the term "interim" or demonstration that there is another receiver site for the waste, it will be far more difficult to find volunteer host communities for a nuclear waste facility or to build public support for it.
3. There are companies in the private sector that have been working for years to design and site safe, risk-based interim storage facilities. Some have already built support within specific communities on private land and have already undergone or have plans to submit for Nuclear Regulatory Commission review. Given the difficult history of siting, ECA is concerned that DOE appears only to be considering federal facilities. While there should be parameters and criteria

¹ Spent nuclear fuel is fuel removed from a commercial nuclear power reactor after being used to produce electricity. High-level waste is part of the environmental legacy resulting from five decades of nuclear weapons production and government-sponsored nuclear energy research at sites hosted by and adjacent to ECA's frontline communities.

laid out to facilitate siting (for example, acceptable geologies or geography), it seems very short-sighted not to have all options – government-owned and privately-held – on the table.

ECA fully intends to address these concerns and provide detailed input on each specific question posed in the RFI. However, the questions are not new. The challenges are not new. ECA urges DOE to consider work already done and input already received to more quickly (re)build momentum. Do not start back at square one.

Since the late 1970s, the federal government has been looking at how to guide the siting process for interim storage and permanent geologic disposal of HLW and SNF. We have findings from President Jimmy Carter’s Interagency Review Group report in 1978; tomes of testimony from hearings on bills like the Nuclear Waste Policy Act of 1982, the Nuclear Waste Administration Act(s) of 2013 and 2015, the Nuclear Waste Policy Amendments Act of 2019; and reams of input gleaned from the multi-year work of the Blue Ribbon Commission on America’s Nuclear Future under former President Barack Obama.

We also have tangible, real world examples to consider: Yucca Mountain may have had local support, but it never had State support; Private Fuel Storage, LLC had tribal support and an NRC license, but again, without State support and alongside opposition from other agencies within the federal government, it too failed.² Borehole tests that did not even involve radioactive waste were abandoned in the Dakotas in the absence of meaningful education and outreach. Most recently, we saw how long timelines and political change impacted the experience of Waste Control Specialists in Texas, where in just five years the Commissioners Court in Andrews County – the local government in the proposed host community – went from passing a resolution unanimously supporting a consolidated interim storage site for HLW and SNF in 2015, to passing another resolution unanimously opposing it in 2021.

These failed national efforts, along with our own experiences as hosts of federal nuclear weapons, energy, and research facilities illustrate very basic truths that must be the foundation of any consent-based siting process:

1. **Trust between the parties is paramount.** DOE will need to focus on rebuilding trust after years of fits and starts, after failing to follow the existing Nuclear Waste Policy Act, and in the absence of assured funding or a dedicated entity responsible for HLW and SNF management and disposal.
2. **Decisions must be perceived as fair and based on sound science.** “Risk” (real or perceived) must be addressed and there must be transparency at each step of the process.
3. **There must be early, meaningful and ongoing engagement** with potential host communities as “partners” in the consent-based siting process. Without local support, these projects will fail.
4. **Consent-based siting will require “informed” consent** which can only be reached if affected local governments and their communities fully understand the benefits and risks associated with siting, constructing, operating and hosting a nuclear waste storage or disposal facility. Financial

² In February 2006, the Nuclear Regulatory Commission granted a license for a proposed interim storage facility on 820 acres of the Skull Valley Band of Goshute Indian reservation in Utah. The State quickly filed a challenge and a few months later, the U.S. Department of Interior denied a right-of-way over federal lands, halting construction. The Bureau of Indian Affairs, an office of the Department of Interior, also refused to back the project.

resources must be provided to support outreach and education programs and allow local governments to hire their own third-party experts to undertake independent analyses, develop educational materials for distribution and to create/participate in opportunities for public comment.

5. **There is no one-size fits all model for a consent-based siting agreement**, but any agreement will ultimately need to be legally enforceable and outline specific oversight roles. This can help offset changing political winds at the federal, state and local level, and provide long-term continuity and consistency in leadership and programmatic priorities that, as a GAO report recently noted, is “critical for the success of projects spanning multiple decades.”³

If these five basic assumptions underlie DOE’s latest effort, if DOE builds off lessons already learned, ECA is optimistic the country has a better chance of finally siting, constructing and operating nuclear storage and disposal facilities as part of an integrated nuclear waste management system. In addition, even as we wait for public input to be filed, DOE can set the wheels in motion by developing initial lists of the types of incentives that could be offered to host communities, working now with the NRC and EPA to develop scientifically-based health and environmental standards, or drafting model laws or regulations to guide the siting process.

DOE owes it to frontline communities that have long supported our national security and energy needs to address **both** HLW and SNF safety and disposal issues. By doing so, DOE can accomplish its environmental cleanup mission while providing confidence that the country should pursue new nuclear development to produce clean energy, mitigate the impacts of climate change, create medical isotopes to fight cancer, or propel us further into Space.

There are potential host communities out there. Some may already be hosting nuclear missions, while some may be trying to understand if they are even eligible. Let the past inform the future, address HLW and SNF with the urgency it deserves, and open the door to the benefits of the next generation of nuclear.

We’ve been down this road before – let’s see if we can get to the end this time.

³ GAO-21-603 Commercial Spent Nuclear Fuel, p.24