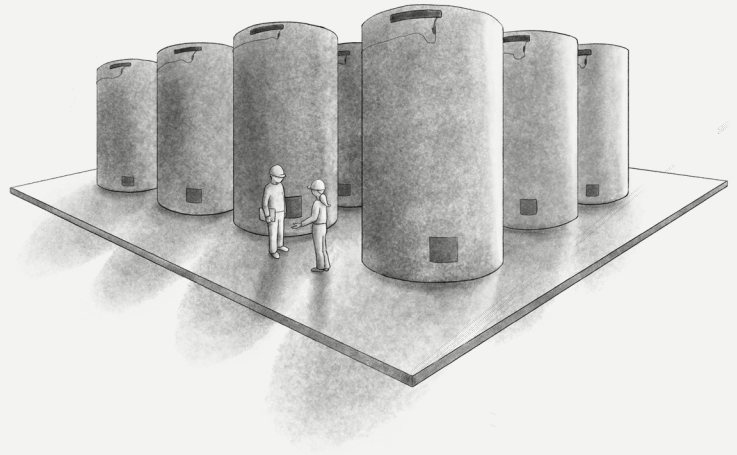




good energy collective

Consent-Based Siting for Interim Storage of Spent Nuclear Fuel

The U.S. Department of Energy is making progress toward moving and safely storing much of the country's commercial spent nuclear fuel for 100 years or longer through a consent-based siting process – the global best practice for siting large infrastructure projects.



THE CONTEXT

- Since the 1950s, U.S. commercial nuclear reactors have produced **over 90,000 metric tons** of spent nuclear fuel stored at over 70 reactor sites in 35 states. By 2075, this number could rise to **~140,000 metric tons**. Constituencies near these reactor sites never agreed to store this spent fuel long-term.
- The **Nuclear Waste Policy Act of 1982** directed DOE to move and dispose of spent nuclear fuel in a deep geologic repository by the mid-1990s. NWPA gave the federal government the legal responsibility – and mandate – to manage commercial nuclear waste. The 1987 NWPA Amendments designated Yucca Mountain as the repository site without using a consent-based process.
- A 2012 federal **Blue Ribbon Commission recommended** that DOE apply a consent-based siting process for spent fuel storage and disposal facilities to construct a consolidated interim storage facility for the spent fuel.
- Since FY2021, Congress has appropriated funding for DOE to execute the interim storage of spent fuel.

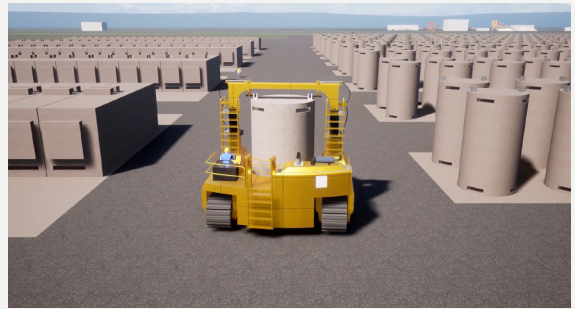
THE CONSENT-BASED SITING PROCESS

- DOE in 2023 outlined a **10- to 15-year process** to successfully site and store spent fuel.
- Phase 1 (**Planning and Capacity Building**): During Phase 1A, DOE sought and incorporated public feedback into a revised consent-based siting process. Now, in Phase 1B, DOE has issued funding to 12 groups of NGOs, universities, companies, and professional societies that are helping to refine the DOE's approach to siting interim storage facilities. In this phase, DOE is not seeking to identify an actual host community.
- After Phase 1B concludes in 2025, pending appropriations, DOE will begin **Site Screening and Assessment**, identifying site selection criteria in Phase 2 and conducting outreach and engagement in volunteer communities in Phase 3. **Communities can decide after each phase whether to continue to the next phase.**

- Phase 4 (**Detailed Assessment**) will evaluate sites for spent fuel storage suitability.
- DOE will then proceed to **Negotiation and Implementation**. Through a funding opportunity announcement in Phase 5, DOE will work to negotiate one or more consent agreements between host communities and DOE. Phase 6A (Licensing and Construction) will result in a facility that is ready to open and operate, as well as eventually to close and decommission, in Phase 6B.

AN INTEGRATED APPROACH

- The consent-based siting process is a core part of an **integrated waste management system** that includes consolidated interim storage facilities, a permanent disposal solution, and the transportation infrastructure needed to move nuclear waste throughout this network.
- Once achieved, this system will **increase public confidence in DOE's ability to manage spent fuel and in the use of civil nuclear energy**.
- The DOE Office of Spent Fuel and Waste Disposition is working toward this system by:
 - Testing a railcar that can transport spent fuel
 - Developing an integrated security and safety monitoring system
 - Evaluating CISF design configurations
 - Analyzing storage cask performance



THE CONSENT-BASED SITING CONSORTIA

In June 2023, DOE selected teams of geographically diverse project awardees for a two-year research effort to gain community insights into how to successfully execute the consent-based siting process for spent fuel storage and enable mutual learning.

Awardees, including Good Energy Collective, are **leveraging their diverse expertise** to execute this work. Some consortia are hosting public dialogues and workshops on spent fuel and consent-based siting. Others are providing seed funding for communities to evaluate their own interest in hosting spent fuel storage.

The consortia meet quarterly with DOE and each other to share their progress. In 2025, the consortia will each report on the results of their engagements to inform Phase 2 – Phase 6 of the consent-based siting process.

