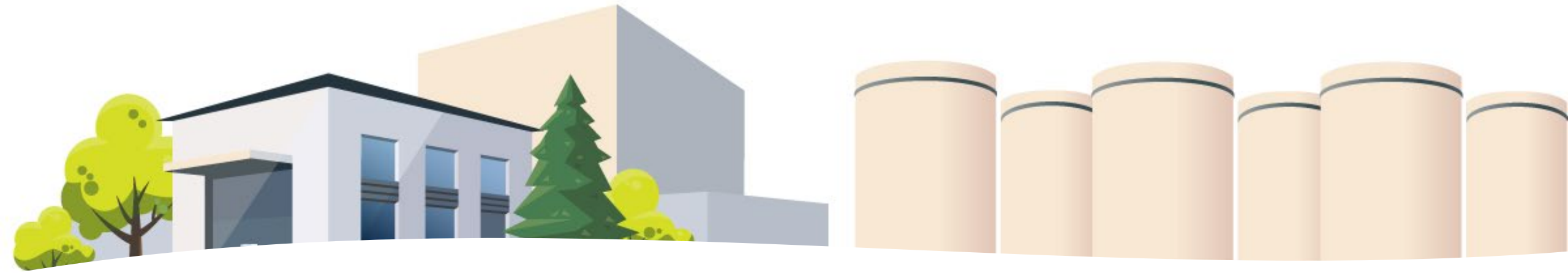


DOE's Office of Spent Fuel & Waste Disposition: New Developments

Natalia Saraeva

Consent-Based Siting Team Lead

U.S. Department of Energy

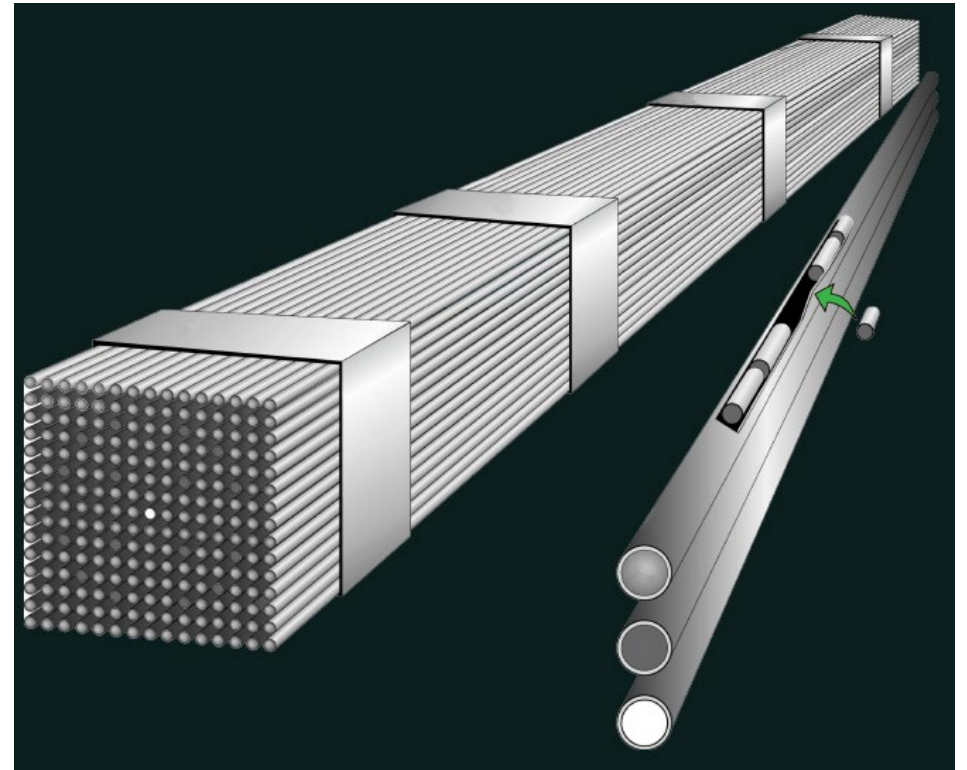


Integrated Waste Management

- As we continue to deploy nuclear energy as a solution for decarbonization, increasing access to energy, and tackling climate change, we need to make progress on the back end of the fuel cycle
- The U.S. Department of Energy is responsible for managing the nation's spent nuclear fuel and high-level radioactive waste, including finding sites to store and dispose of the spent nuclear fuel
- While spent nuclear fuel is stored safely all over the country, the communities that have the spent nuclear fuel never agreed to host the material long term

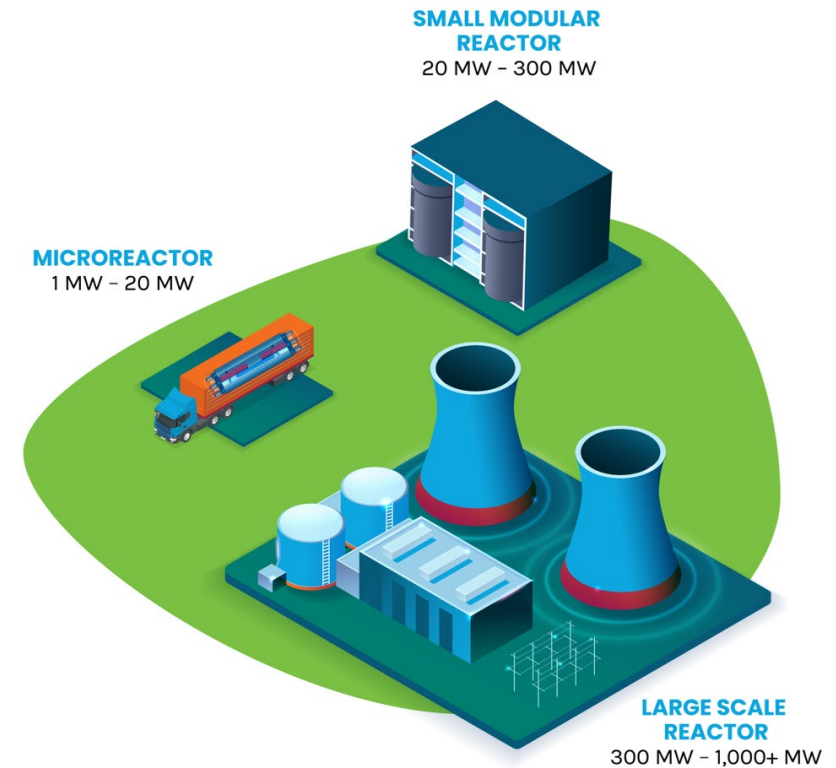
Waste Management R&D

- Conduct R&D for eventual geologic disposal, extended storage, and transport of spent nuclear fuel and high-level radioactive waste
- Investigating different geologies and developing generic disposal concepts
- Leverage international collaboration



Foreseeing Advanced Reactors' Waste Management

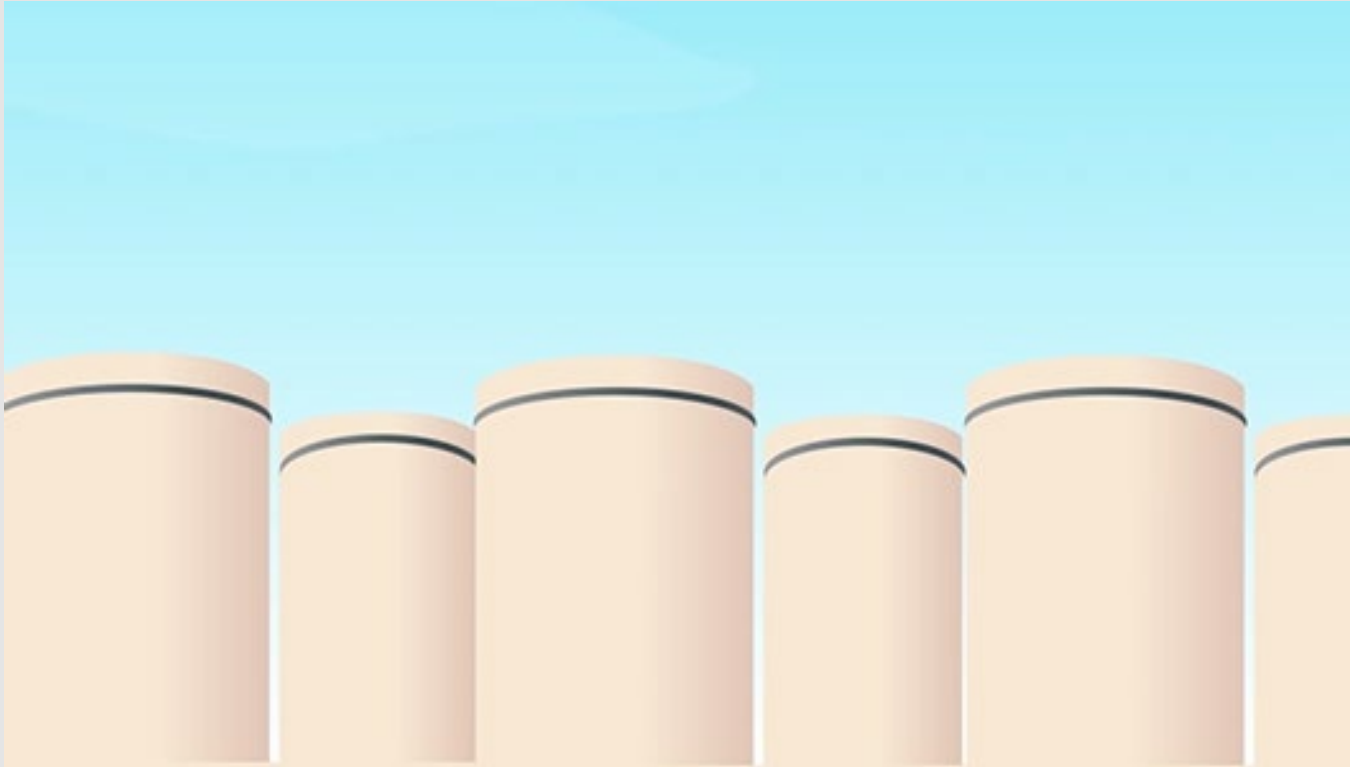
- Conducting R&D
- DOE's Integrated Project Team on Back-End Management of Advanced Reactors
 - consolidating data for
 - technical assessment of storage, transportation, and disposal
 - preliminary cost assessments/comparison
- DOE-NE funded a National Academy of Sciences Study



Integrated Waste Management, Interim Storage & Transportation



- Consent-based siting
- Plan for transportation of spent nuclear fuel
- Perform system analysis and integration
- Generic design of facilities



Interim Storage

- Allow for removal of spent nuclear fuel from reactor sites
- Provide useful research opportunities
- Reduce taxpayer liability
- Build trust and confidence with stakeholders

Consent-Based Siting

- Consent-based siting is an approach to siting facilities that focuses on the needs and concerns of people and communities.
- By prioritizing communities and people, we believe we can find a solution to the decades-long stalemate on managing the nation's spent nuclear.
- A consent-based approach, driven by community well-being and community needs, is both the right thing to do and our best chance for success.

Request for Information

- Questions on:
 - the consent-based siting process itself
 - removing barriers to meaningful participation—especially for groups and communities who have not historically been well-represented in these conversations
 - interim storage as a component of the nation's waste management system
- Special focus on ensuring issues of equity and environmental justice are built into the consent-based siting process, as well as the waste management system as a whole



FEDERAL REGISTER

The Daily Journal of the United States Government



N Notice

Notice of Request for Information (RFI) on Using a Consent-Based Siting Process To Identify Federal Interim Storage Facilities

A Notice by the [Energy Department](#) on 12/01/2021



PUBLISHED DOCUMENT



AGENCY:

Office of Spent Fuel and Waste Disposition, Office of Nuclear Energy,
Department of Energy.



ACTION:

Request for information.



SUMMARY:

The Office of Nuclear Energy (NE), U.S. Department of Energy (DOE), requests information on how to site Federal facilities for the temporary, consolidated storage of spent nuclear fuel using a consent-based approach. DOE anticipates that communities; governments at the local, State, and Tribal levels; members of



DOCUMENT DETAILS

Printed version:

[PDF](#)

Publication Date:

12/01/2021

Agency:

[Department of Energy](#)

Dates:

Responses to the RFI must be received by March 4, 2022 by 5:00 p.m. (ET).

Document Type:

Notice

Document Citation:

88 FR 68244

Summary of Feedback

~225 comments as follows:

- **Tribes:** 3 from Tribal groups, 3 from Tribes
- **States:** 12 State government organizations, 3 State and Regional Groups, and 3 groups representing State governments or their interests
- **Local governments:** 7
- **NGOs:** ~35
- **Environmental Justice organizations:** 2
- **Industry:** ~12
- **Members of Academia:** ~7
- **Labor Union:** 1
- **Private Citizens:** ~132 (including 45 “form” letters)

energy.gov/consent-based-siting

CONSENT-BASED SITING

Request for Information
Comment Summary and Analysis

September 2022

U.S. DEPARTMENT OF
ENERGY

Office of
NUCLEAR ENERGY



Funding Opportunity Informed by Public Feedback

“Funding to Participate: Funding and technical assistance should be provided to Tribes to participate in all stages of the CBS process. Tribes often do not have the same resources, staff capacity, or time as states, so DOE must take proactive steps to ensure that Tribes can participate in the process.”

– Tribal Representatives

“Extensive outreach activities and financial support for interested communities to learn for themselves. Funding should be provided as soon as possible.”

– Private Citizen

Funding Opportunity Announcement

- **\$16 million; 6-8 awards; period of performance is 18-24 months**
- **Eligible awardees include:**
 - Higher-education institutions (colleges, universities, and other institutions of higher learning)
 - Tribal, State, and local governments (municipalities, towns, cities, and counties)
 - Community foundations
 - Non-governmental organizations (trade associations, 501(c)(3) organizations, and other public groups)
- **Geographically and institutionally diverse awardees**
 - Across the continental United States
- **Builds Capacity For Future Engagement**
 - Establishes a community of practice
 - Strengthens involvement and mutual learning aimed at building trust
 - Special focus on environmental justice



Public Feedback is Informing Next Steps in Consent-Based Siting

1

Further developing consent-based siting process

2

Awarding cooperative agreements for interested groups and communities to learn more

3

Clarifying our broader strategy for an integrated waste management system

Looking Ahead



Consent-based siting, addressing societal challenges



Need for a disposal pathway



Extended storage research



Foreseeing waste management from advanced reactors deployment



Knowledge management

The background is a collage of various nuclear energy-related images, including a cooling tower, a reactor core, a person in a hard hat, and a bundle of fuel rods, all overlaid with a blue geometric pattern.

energy.gov/consent-based-siting

U.S. DEPARTMENT OF
ENERGY

Office of
NUCLEAR ENERGY