



#### **U.S. Nuclear Waste Technical Review Board**

Presented to:

**Summer 2023 Board Meeting** 

Presented By:

Dr. Nathan Siu, Chair

#### **Board Members**

- ❖ Nathan Siu, Ph.D., Chair U.S. Nuclear Regulatory Commission (retired)
- Ronald Ballinger, Sc.D. Massachusetts Institute of Technology
- ❖ Steven M. Becker, Ph.D. Old Dominion University
- ❖ Allen G. Croff, Graduate Nuc. Engr. Degree, MBA Vanderbilt University
- Tissa H. Illangasekare, Ph.D., P.E. Colorado School of Mines
- **❖ Kenneth Lee Peddicord, Ph.D.**, **P.E.** Texas A&M University
- ❖ Paul J. Turinsky, Ph.D. North Carolina State University
- Scott Tyler, Ph.D., Deputy Chair University of Nevada, Reno
- Brian Woods, Ph.D. Oregon State University
- (Position vacant)
- (Position vacant)



#### **About the Board**



The U.S. Nuclear Waste Technical Review Board (Board) was established by Congress as an independent federal agency in the 1987 amendments to the Nuclear Waste Policy Act (NWPAA).





## **Board Member Appointment**



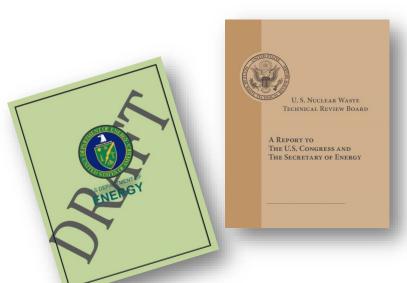
NATIONAL ACADEMY
OF SCIENCES





- At full strength, the Board is composed of eleven members
- Board members are nominated by the National Academy of Sciences and appointed by the President to four-year terms
- Terms are staggered, and Board members may continue to serve until they are reappointed or replaced

#### **About the Board**





#### The Board:

- Conducts independent and objective peer review of U.S. Department of Energy (DOE) activities
- Reports its findings, conclusions, and recommendations to the U.S.
   Congress and the Secretary of Energy
- By law, has access to draft DOE documents—according to the Legislative History of the NWPAA, so that Board recommendations can be made during decision-making, not after the fact
- Provides congressional testimony at the invitation of Congress



## **About the Board (cont.)**



- Holds public meetings each year, normally in different locations in the United States—meetings are webcast
- Provides technical and scientific comments in letters or reports to DOE following public meetings
- Makes all official documents and information (meeting transcripts, archived webcasts, and presentations; reports, correspondence, and congressional testimony) available on its website: <a href="https://www.nwtrb.gov">www.nwtrb.gov</a>



## **Meeting Information**

- Meeting agenda and presentations are available at www.nwtrb.gov
- Two public comment periods (12:15 & 3:40 p.m. MDT)
  - Oral commenters encouraged to sign the public comment register
    - Depending on the number of speakers, a time limit on individual remarks may be set
  - Virtual comments
    - Use "Comment for the Record"
    - Comments submitted online during the meeting will be posted to the Board's website shortly after meeting adjournment
- The meeting is being webcast live (the transcript and archived recording of the meeting will be available at www.nwtrb.gov)



## **Meeting Objective**

- Review the technical and scientific validity of DOE activities related to
  - Consent-based siting, including DOE's preliminary process for consent-based siting and its integration with DOE's integrated waste management efforts
  - Research and development (R&D) efforts on management and disposal of high burnup fuel
  - R&D efforts on disposition of future advanced reactor waste

#### CONSENT-BASED SITING ROADMAP

The U.S. Department of Energy is pursuing one or more federal consolidated interim storage facilities to **store the nation's commercial spent nuclear fuel** in the near-term using a **multi-stage consent-based approach** that puts communities' interests at the forefront.



ENERGY NUCLEAR ENERG



https://www.energy.gov/sites/default/files/2023-05/CBSRoadmap-2023.pdf



## **Meeting Agenda**

8:15 a.m. MDT Update on U.S. Department of Energy's (DOE's) Consent-Based

**Siting Activities** 

Natalia Saraeva and Juan Uribe, DOE, Office of Nuclear Energy (DOE-

NE)

9:20 a.m. MDT Overview of Environmental Justice in Consent-Based Siting

Marissa Bell, DOE-NE

10:15 a.m. MDT Break

10:25 a.m. MDT Incorporating Social Science to Consent-Based Siting

Marissa Bell and Tran Le, DOE-NE

11:20 a.m. MDT Developing Digital Tools for Engagement

Tran Le and Angelica Gheen, DOE-NE

12:15 p.m. MDT Public Comments

12:30 p.m. MDT Lunch



# Meeting Agenda (continued)

1:40 p.m. MDT Update on DOE's Research and Development (R&D) Activities

on High Burnup Spent Nuclear Fuel (SNF)

Ned Larson, DOE-NE

Scott Sanborn and John Bignell, Sandia National Laboratories

2:40 p.m. MDT Advanced Reactor Waste Disposition: Current Advanced

Reactor Activities for Spent Fuel and Planned R&D Activities

for the Future

Ned Larson, DOE-NE

Brady Hanson, Pacific Northwest National Laboratory

3:40 p.m. MDT Public Comments

3:55 p.m. MDT Adjourn Public Meeting

