

## UNITED STATES NUCLEAR WASTE TECHNICAL REVIEW BOARD

2300 Clarendon Boulevard, Suite 1300 Arlington, VA 22201-3367

# AGENDA Summer 2021 Board Meeting

August 24, 2021 Virtual Meeting

https://preconvirtual.com/nwtrb-gov-8-24-21/

11:30 a.m. EDT Call to Order and Introductory Statement

Jean Bahr, Board Chair

11:45 a.m. EDT

U.S. Department of Energy (DOE) Support of Research on Aluminum-clad
Spent Nuclear Fuel (SNF) Packaging, Drying, and Dry Storage

Mark Senderling, DOE, Office of Environmental Management John Shultz, DOE, Office of Environmental Management

#### **OUESTIONS TO BE ADDRESSED:**1

- What are the plans and goals of the DOE program to support research on aluminum-clad SNF?
- On what schedule does DOE plan to move aluminum-clad SNF to dry storage at Idaho National Laboratory and at the Savannah River Site?
- What is the anticipated funding level for this research for fiscal year 2022 and beyond?

12:00 p.m. EDT Questions, discussion

12:10 p.m. EDT Review of the Research Program on Extended Dry Storage of Aluminumclad SNF

Josh Jarrell, Idaho National Laboratory

#### QUESTIONS TO BE ADDRESSED:

- Please explain the overall scope of the program and the integration of the research tasks; please include research tasks that have been completed.
- What significant open questions remain to be resolved?
- What are the overall conclusions regarding long-term dry storage of aluminum-clad SNF based on the research completed to date?

12:30 p.m. EDT Questions, discussion

<sup>1</sup> The questions have been provided to the speakers in advance of the meeting to convey the Board's primary interests in the agenda topics and to aid in focusing the presentations.

### For each of the following presentations, the same questions apply and should be addressed:

- What data have been collected and what are the key findings to date?
- What are the outstanding scientific and technical issues to be resolved?
- What is the path forward and schedule for completing the research?
- What independent reviews have been conducted? What were the results?
- What collaborations have occurred with other countries or with aluminum-related industries in the U.S?
- Who are the principal investigators and collaborators?

• What reports and papers have been published?

12:45 p.m. EDT Drying of Aluminum-clad SNF Surrogates (part of Task 5)

Rebecca Smith, Idaho National Laboratory

1:15 p.m. EDT Questions, discussion

1:30 p.m. EDT Break

1:50 p.m. EDT Radiolytic Gas Generation due to Aluminum-clad SNF Corrosion Layers

(part of Task 2)

Greg Horne, Idaho National Laboratory

2:20 p.m. EDT Questions, discussion

2:35 p.m. EDT Scale-Up Radiolysis Testing of Aluminum-clad SNF and Surrogates in a

**Mini-Canister Environment (part of Task 6)** 

Anna d'Entremont, Savannah River National Laboratory

3:05 p.m. EDT Questions, discussion

3:20 p.m. EDT Modeling and Simulation Results for Aluminum-clad SNF in DOE Standard

Canisters (part of Task 3)

Alex Abboud, Idaho National Laboratory

3:50 p.m. EDT Questions, discussion

4:05 p.m. EDT Development of Wireless Sensors for Dry-Storage of Aluminum-clad SNF

(Instrumented Lid Project)

Evans Kitcher, Idaho National Laboratory

4:35 p.m. EDT Questions, discussion

4:50 p.m. EDT Public Comments

5:10 p.m. EDT Adjourn