

SCHEDULING NOTE

Title: **BRIEFING ON ADVANCED REACTOR PREPAREDNESS THROUGH REGULATORY ENGAGEMENT AND RESEARCH COOPERATION (Public Meeting)**

Purpose: To brief the Commission on agency preparedness activities for advanced reactors, particularly with respect to fuels and materials, through domestic and international regulatory engagement and research partnerships

Scheduled: **April 13, 2021
9:00 am**

Duration: Approximately 3 hours

Location: Commissioners' Conference Room, 1st Floor OWFN

Participants:

Presentations

External Stakeholder Panel

42 mins.*

Dr. Ashely Finan, Director, National Reactor Innovation Center,
Idaho National Laboratory

6 mins.*

Topics:

- Various lab programs for advanced reactor innovations and research
- Support for advanced reactor deployment including small modular reactors and microreactors

J. Clay Sell, Chief Executive Officer, X-energy

6 mins.*

Topics:

- HALEU production and fuel fabrication
- Advanced Reactor Demonstration Project – U.S. Department of Energy (DOE) award for demonstration project
- Approach to fuel qualification and high temperature materials

Simon Irish, Chief Executive Officer, Terrestrial Energy USA, Inc.

6 mins.*

Topics:

- Perspectives on licensing a design in multiple countries
- Participation in the Canadian Nuclear Safety Commission Vendor Design Review process and received funding to further develop their technology (Strategic Innovation Fund)
- Approach to fuel qualification and high temperature materials

Stephen Kuczynski, Chairman, President, and Chief Executive Officer, Southern Nuclear Operating Company 6 mins.*

Topics:

- Utility perspective on advanced reactors
- Advanced Reactor Demonstration Project – DOE award for risk reduction project
- Approach to licensing (Licensing Modernization Project and guidance)

Todd Allen, Senior Visiting Fellow ,Third Way 6 mins.*

Topics:

- Role of advanced reactors in the future of clean energy
- Progress on licensing/regulating advanced reactors

Steven Swilley, Deputy Chief Nuclear Officer and Senior Director, Research and Development Nuclear, Electric Power Research Institute 6 mins.*

Topics:

- Technical preparedness through research and regulatory engagement
- Role of public-private partnerships

Dr. Ed Lyman, Director Nuclear Power Safety, Union of Concerned Scientists 6 mins*

Topic:

- Perspectives on advanced reactors and fuels

Commission Q & A 40 mins.

Break 5 mins.

NRC Staff Panel 45 mins.*

Margie Doane, Executive Director for Operations

Topic:

- Opening Remarks

Robert Taylor, Deputy Office Director for New Reactors, Office of Nuclear Reactor Regulation (NRR)

Topics:

- Advanced reactor program transformation
- Program focus areas to support national advanced reactor priorities
- Domestic and international partnerships

Ray Furstenau, Director, Office of Nuclear Regulatory Research (RES)

Topics:

- Research cooperation with DOE through Nuclear Energy Innovation Capabilities Act
- Research to support agency readiness for advanced reactor licensing
- Innovative approaches to fuels and materials research

Raj Iyengar, Chief, Component Integrity Branch, RES

Topics:

- Advanced materials and manufacturing processes
- International research cooperation

Marilyn Diaz Maldonado, Chemical Engineer, Office of Nuclear Materials Safety and Safeguards

Topics:

- Advanced reactor fuels fabrication and transportation
- Regulatory preparedness for advanced reactor fuels licensing

Michelle Hayes, Chief, Advanced Reactor Technical Branch, NRR

Topics:

- Applying research to advanced reactor licensing
- International regulatory cooperation

Commission Q & A

40 mins.

*For presentation only and does not include time for Commission Q & A's.

Discussion – Wrap-up

5 mins.