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

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

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

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

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

Topic:
- Perspectives on advanced reactors and fuels

Commission Q & A

Break

NRC Staff Panel

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.