## **AGENDA**

Title: BRIEFING ON REGULATORY APPROACHES FOR FUSION

**ENERGY DEVICES (PUBLIC MEETING)** 

**Purpose:** To update the Commission on the development of regulatory

approaches for fusion energy devices and industry progress in

commercializing fusion energy devices.

Scheduled: November 8, 2022

9:00am

**Duration:** Approximately 3.5 hours

**Location:** Commissioners' Conference Room, 1st floor OWFN

External Panel 49 mins.\*

**Dr. Kathryn McCarthy**, Associate Laboratory Director for Fusion and Fission Energy and Science, Oak Ridge National Laboratory (ORNL) Topic:

7 mins.

ORNL activities to support commercial fusion

**Dr. Richard Hawryluk**, Senior Technical Advisor, Office of Science, U.S. Department of Energy (DOE)

7 mins.

Topic:

DOE's vision for commercial fusion energy

**Edward Lewis-Smith**, Head of Domestic Fusion Policy and Programmes 7 mins. UK Government Department of Business, Energy and Industrial Strategy Topic:

• The United Kingdom's approach to fusion regulation

Megan Shober, Nuclear Safety Specialist,

7 mins.

Wisconsin Division of Public Health

Topic:

 Agreement State experience with licensing and oversight of fusion research and development activities

Sachin Desai, General Counsel, Helion Energy

7 mins.

Topic:

• Fusion industry perspective on appropriate regulatory framework

Dr. Bob Mumgaard, Chief Executive Officer,

Commonwealth Fusion Systems (CFS)

Topics:

- CFS progress towards development of a fusion power plant
- Regulatory experience constructing the Affordable, Robust, Compact (ARC) fusion reactor

Dr. Seth Hoedl, President, Post Road Foundation

7 mins.

50 mins.

Topic:

• Engaging communities on health, safety, and environmental risks of fusion

Commission Q & A

Break 5 mins.

Staff Panel 45 mins.\*

**Catherine Haney**, Deputy Executive Director for Materials, Waste, Research, State, Tribal, Compliance, Administration, and Human Capital Programs

Topic:

• Opening remarks on the NRC's fusion efforts

**Andrea Veil,** Director, Office of Nuclear Reactor Regulation Topics:

- Nuclear Energy Innovation and Modernization Act direction to develop a regulatory framework for fusion energy systems
- Background on the regulation of fusion energy systems in the United States

**Duncan White**, Senior Health Physicist, Division of Materials Safety, Security, State, and Tribal Programs; Office of Nuclear Material Safety and Safeguards

Topics:

- Similarities and differences between fusion devices, accelerators, and fission reactors
- Fusion energy system risks and hazard considerations

Andrew Proffitt, Project Manager, Division of Advanced Reactors and Non-Power Production and Utilization Facilities, Office of Nuclear Reactor Regulation <a href="Topic"><u>Topic</u></a>:

 Options for regulating commercial fusion energy systems, including NRC stakeholder engagement during development

7 mins.

Dr. Joseph Staudenmeier, Senior Reactor Systems Engineer,Division of Systems Analysis, Office of Nuclear Regulatory ResearchTopics:

- Current and planned NRC research activities on fusion
- Development of NRC capabilities to license and regulate commercial fusion energy systems

Commission Q & A 50 mins.

**Discussion – Wrap-Up** 

5 mins.

<sup>\*</sup>For presentation only and does not include time for Commission Q & A