

## AGENDA

**Title:** OVERVIEW OF ADVANCED REACTOR FUEL ACTIVITIES  
(Public Meeting)

**Purpose:** To provide the Commission an update on the status and issues associated with the path to licensing advanced reactor fuels.

**Scheduled:** December 8, 2022  
9:00 a.m.

**Duration:** Approx. 3.25 hours

**Location:** Commissioners' Hearing Room, 1<sup>st</sup> floor OWFN

**Participants:** **Presentation**

**External Panel** **42 mins.\***

**Andrew Griffith**, Deputy Assistant Secretary for Nuclear Fuel Cycle and Supply Chain, Office of Nuclear Energy, DOE 6 mins.

Topics:

- Current efforts of the Advanced Fuels Campaign, including high-assay low enriched uranium activities and the advanced gas reactor program
- Near and long-term advanced reactor fuels concepts

**Sander van Til**, Lead Scientist, Nuclear Fuel Research & Innovation, Nuclear Research and Consultancy Group 6 mins.

Topic:

- Nuclear fuel testing capabilities of the Petten High Flux Reactor

**Jennifer Wheeler**, Director of Regulatory Affairs, TRISO-X 6 mins.

Topic:

- Perspectives on fuel fabrication for advanced reactors

**Dr. Christina Back**, Vice President, General Atomics 6 mins.

Topic:

- Overview of General Atomics' EM<sup>2</sup> advanced reactor fuel design and development of its accelerated fuel qualification methodology

**James Vollmer**, Senior Manager Nuclear Design, TerraPower 6 mins.

Topic:

- Development and qualification of advanced fuel designs for the Sodium and Molten Chloride Fast Reactors

**Dr. Rusty Towell**, Director, NEXT Lab, Abilene Christian University 6 mins.  
Topic:

- Perspectives on molten salt fuel design

**Dr. Edwin Lyman**, Director of Nuclear Power Safety, Union of Concerned Scientists 6 mins.  
Topic:

- Perspectives on advanced reactor fuel technologies

**Commission Q & A** 50 mins.

**Break** 5 mins.

**NRC Staff** 40 mins.\*

**Daniel H. Dorman**, Executive Director for Operations  
Topics:

- Introduction
- Opening remarks on the NRC's advanced reactor fuels activities

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

- Strategic overview of advanced reactor fuels activities

**Christopher Van Wert**, Senior Reactor Systems Engineer, Division of Advanced Reactors and Non-Power Production Utilization Facilities, NRR  
Topics:

- Readiness for licensing of fuels for advanced reactors
- Recent licensing activities to support advanced reactor fuels concepts
- Collaboration activities on advanced reactor fuel qualification

**Jason Piotter**, Senior Mechanical Engineer, Division of Fuel Management, Office of Nuclear Material Safety and Safeguards  
Topics:

- Readiness for licensing the enrichment, fabrication, transportation, and storage of advanced reactor fuels
- Front-end and back-end considerations for advanced reactor fuels concepts
- Recent licensing activities to support advanced reactor fuels concepts

**Mirabelle Shoemaker**, International Safeguards Analyst, Division of Fuel Management, Office of Nuclear Material Safety and Safeguards  
Topic:

- International safeguards considerations for advanced reactor fuels

**Dr. Wendy Reed**, Metallurgist, Division of Engineering, Office of Nuclear Regulatory Research

Topics:

- Research activities supporting the entire advanced reactor fuel cycle
- Modelling and simulation tools to prepare for advanced reactor fuels

**Commission Q & A**

**50 mins.**

**Discussion – Wrap-Up**

**5 mins.**

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