



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

July 19, 2023

MEMORANDUM TO: Joseph A. Proffitt, Acting Chief  
Advanced Reactor Licensing Branch 1  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

FROM: Mallecia Sutton, Senior Project Manager  
Advanced Reactor Licensing Branch 1  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

A handwritten signature in cursive script that reads "Mallecia Sutton".

Signed by Sutton, Mallecia  
on 07/19/23

SUBJECT: SUMMARY OF THE AUGUST 23, 2022, OPEN OBSERVATION PUBLIC  
PRE-APPLICATION MEETING WITH TERRAPOWER, LLC, WITH  
TERRAPOWER, LLC TO DISCUSS THE FUEL CYCLE ENVIRONMENTAL  
IMPACTS FOR THE NATRIUM REACTOR (EPID NO. L-2021-LRM-0071)

APPLICANT: TerraPower, LLC (TerraPower)

Docket/Project No.(s): 99902100

Public Meeting Notice Agencywide Documents Access and Management System (ADAMS)  
Accession No.: ML22234A255

Applicant Presentation Slides ADAMS Accession No.: ML22227A204

Meeting Attendees: See the enclosure for a list of meeting attendees.

The U.S. Nuclear Regulatory Commission (NRC) staff conducted the meeting in accordance with NRC Management Directive 3.5, "Attendance at NRC Staff-Sponsored Meetings" (ADAMS Accession No. [ML21180A271](#)).

- On August 23, 2022, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with TerraPower, LLC (TerraPower) to provide the NRC staff with an overview of the Fuel Cycle Environmental Impacts for the Natrium Reactor. Participants included representatives from TerraPower, the U.S. Department of Energy, General Electric Hitachi, Bechtel, Duke Energy, PacifiCorp, and members of the general public. The enclosure provides the list of meeting attendees.

CONTACT: Mallecia Sutton, NRR/DANU  
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- The NRC staff began the public meeting with introductions. During the meeting, TerraPower representatives described how the Sodium design fuel cycle impacts are evaluated against specific criteria in Title 10 of the *Code of Federal Regulations* (10 CFR) 51.51, "Uranium fuel cycle environmental data Table S 3" for LWR designs. TerraPower also discussed how the Transportation of fuel and wastes are to be evaluated against specific criteria in 10 CFR 51.52, "Environmental effects of transportation of fuel and waste Table S 4" for LWR designs.
- At the end of the presentation, the public had an opportunity to ask questions of the NRC staff. TerraPower representatives and the NRC staff discussed the next steps for future interactions regarding the Sodium Reactor design.

Enclosure:

List of Meeting Attendees

SUBJECT: SUMMARY OF THE AUGUST 23, 2022, OPEN OBSERVATION PUBLIC PRE-APPLICATION MEETING WITH TERRAPOWER, LLC, WITH TERRAPOWER, LLC TO DISCUSS THE FUEL CYCLE ENVIRONMENTAL IMPACTS FOR THE NATRIUM REACTOR (EPID NO. L-2021-LRM-0071) DATED: JULY 19, 2023

**DISTRIBUTION:**

- PUBLIC
- RidsNrrDanuUal1 Resource
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- MSutton, NRR
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- DPalmrose, NMSS
- KWagner, NRR
- KErwin, NMSS
- ASiwy, NRR
- PVokoun, NMSS
- DBarnhurst, NMSS
- MHart, NRR

**ADAMS Accession Number: ML23026A338**

**NRC-001**

OFFICE	NRR/DANU/UAL1:PM	NRR/DANU/UAL1:PM	NRR/DANU/UAL2:LA
NAME	CBanks	MSutton	CSmith
DATE	1/30/2023	2/1/2023	7/11/2023
OFFICE	NRR/DANU/UAL1:BC (A)	NRR/DANU/UAL1:PM	
NAME	JProffitt	MSutton	
DATE	7/19/2023	7/19/2023	

**OFFICIAL RECORD COPY**

## List of Meeting Attendees

### Open Observation Public Pre-Application Meeting with TerraPower, LLC to Discuss the Fuel Cycle Environmental Impacts for the Sodium Reactor

August 23, 2022

<u>Name</u>	<u>Organization</u>
Mallecia Sutton	U.S. Nuclear Regulatory Commission (NRC)
Courtney Banks	NRC
Reed Anzalone	NRC
David Palmrose	NRC
Katie Wagner	NRC
Kenneth Erwin	NRC
Alex Siwy	NRC
Patricia Vokoun	NRC
Daniel Barnhurst	NRC
Michele Hart	NRC
Ryan Sprengel	TerraPower, LLC (TerraPower)
Tara Neider	TerraPower
Erin Wisler	TerraPower
Jesse Cheatham	TerraPower
John Truax	TerraPower
Alfred Ho	TerraPower
James Volmer	TerraPower
Marc Hotchkiss	TerraPower
Mike Montecalvo	TerraPower
Nick Kellenberger	TerraPower
Philip Schloss	TerraPower
Trevor McWilliams	TerraPower
Lisa Schichlein	General Electric Hitachi
Alice Carson	Bechtel
Mary Richmond	Bechtel
Steve Kline	Bechtel
Sharad Jha	Bechtel
Lisa Matis	Bechtel
Dan Patton	Bechtel
Lee Grzeck	Duke

Enclosure