



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

May 17, 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

*Mallecia Sutton*

Signed by Sutton, Mallecia  
on 05/17/23

SUBJECT: SUMMARY OF THE FEBRUARY 23, 2023, CLOSED  
PRE-APPLICATION MEETING WITH TERRAPOWER, LLC,  
TO DISCUSS THE PARTIAL FLOW BLOCKAGE FOR THE  
NATRIUM DESIGN (EPID NO. L-2021-LRM-0071)

**Meeting Information:**

Applicant: TerraPower, LLC (TerraPower)

Docket/Project No.(s): 99902100

EPID: L-2021-LRM-0071

Meeting Date: February 23, 2023

Meeting Type: Closed

Public Meeting Notice Agencywide Documents Access and Management System (ADAMS)  
Accession No.: ML23030A040

Applicant Presentation Slides ADAMS Accession No.: ML23040A164

Meeting Attendees: See enclosure for list of meeting attendees.

CONTACT: Mallecia A. Sutton, NRR/DANU  
301-415-0673

### **Meeting Summary:**

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" (ML21180A271). The main points of discussion during the meeting included:

- On February 23, 2023, the NRC staff held a closed meeting with TerraPower to discuss the Partial Flow Blockage Methodology for the Natrium design. Participants included representatives from TerraPower, General Electric Hitachi, Bechtel, and the Department of Energy. The enclosure provides the list of meeting attendees.
- The NRC staff began the public meeting with introductions and explained that the meeting was closed due to proprietary information. During the meeting, TerraPower representatives discussed credible and non-credible types of blockages. TerraPower provided a partial flow blockage experimental data overview, Phenomena Identification and Ranking Table, and the partial flow blockage methodology evaluation model for the Natrium design.
- TerraPower representatives and the NRC staff discussed the next steps for future interactions regarding the Natrium Reactor design.

Project No: 99902100

Enclosure:  
List of Meeting Attendees

SUBJECT: SUMMARY OF FEBRUARY 23, 2023, CLOSED PRE-APPLICATION MEETING WITH TERRAPOWER, LLC, TO DISCUSS THE PARTIAL FLOW BLOCKAGE FOR THE NATRIUM DESIGN (EPID NO. [L-2021-LRM-0071]) DATED: MAY 17, 2023

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**ADAMS Accession Number: ML23072A475****NRC-001**

OFFICE	NRR/DANU/UAL1/PM	NRR/DANU/UAL1/PM	NRR/DANU/UAL1/LA	NRR/DANU/UAL1/BC
NAME	CBanks	MSutton	DGreene	JProffitt
DATE	3/20/2023	4/19/2023	5/16/2023	5/17/2023
OFFICE	NRR/DANU/UAL1/PM			
NAME	MSutton			
DATE	5/17/2023			

**OFFICIAL RECORD COPY**

## **List of Meeting Attendees**

### **Closed Pre-Application Meeting with TerraPower, LLC, to Discuss the Partial Flow Blockage for the Natrium Design**

**February 23, 2023**

<b>Name</b>	<b>Organization</b>
Mallecia Sutton	U.S. Nuclear Regulatory Commission (NRC)
Courtney Banks	NRC
Andrew Bielen	NRC
Candance de Messieres	NRC
Michael Spencer	NRC
Reed Anzalone	NRC
Tarek Zaki	NRC
Jason Thompson	NRC
Ian Gifford	TerraPower LLC (TerraPower)
Brian Johnson	TerraPower
Cole Blakely	TerraPower
Emily Young	TerraPower
Hugh Luo	TerraPower
Jaehyok Lim	TerraPower
Joonhyung Choi	TerraPower
Marc Hotchkiss	TerraPower
Matthew Presson	TerraPower
Michael Montecalvo	TerraPower
Mine Yilmaz	TerraPower
Moonkyu Hwang	TerraPower
Nick Kellenberger	TerraPower
Robert Petroski	TerraPower
Samuel Miller	TerraPower
Tara Neider	TerraPower
George Wilson	TerraPower
Mathieu Martin	TerraPower
Richard Schultz	TerraPower
Tim Guidotti	TerraPower
Sterling Harper	TerraPower
Selim Kuran	TerraPower
Dustin Langewisch	TerraPower
Young-Min Kwon	TerraPower
Tim Enfinger	General Electric Hitachi
Steve Kline	Bechtel
Nathan Howard	Department of Energy (DOE)
Timothy Stuhldreher	DOE

Enclosure