

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 29, 2022

MEMORANDUM TO: William Jessup, Chief

Advanced Reactor Licensing Branch 1

Division of Advanced Reactors and Non-Power

Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Wallecia Sutton Signed by Sutton, Mallecia on 09/29/22

FROM: Mallecia A. 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

SUBJECT: SUMMARY OF THE MAY 23-25, 2022, CLOSED PRE-

APPLICATION PUBLIC MEETING BETWEEN TERRAPOWER, LLC AND THE U.S. NUCLEAR REGULATORY COMMISSION STAFF TO DISCUSS AN OVERVIEW OF THE NATRIUM

REACTOR (EPID NO. L-2021-LRM-0071)

On May 23-25, 2022, a closed meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives from TerraPower, LLC (TerraPower). The meeting was held at 5701 Marinelli Road, North Bethesda, Maryland. The purpose of this closed meeting was for TerraPower to provide the NRC staff with an overview of the Natrium design. Participants included representatives from the NRC, TerraPower, and the U.S. Department of Energy. The meeting notice is available at Agencywide Document Access and Management System (ADAMS) Accession No. ML22137A017. The Enclosure provides the list of meeting attendees.

The NRC staff began the meeting with an introduction and explained that the meeting would be closed due to the discussion of proprietary information. During the meeting, TerraPower provided the NRC staff with an overview of the Natrium design to include the inherent safety features that TerraPower plans to rely on for the safety case for the Natrium Reactor. TerraPower representatives and the NRC staff discussed next steps for future pre-application activities.

Project No. 99902100

Enclosure:

List of Attendees

CONTACT: Mallecia Sutton, NRR/DANU

301-415-0673

W.Jessup 2

SUBJECT: SUMMARY OF THE MAY 23-25, 2022, CLOSED PRE-APPLICATION PUBLIC

MEETING BETWEEN TERRAPOWER, LLC AND THE U.S. NUCLEAR

REGULATORY COMMISSION STAFF TO DISCUSS AN OVERVIEW OF THE

NATRIUM REACTOR (EPID NO. L-2021-LRM-0071)

DATED: SEPTEMBER 29, 2022

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DGreene, NRR CSmith, NRR

ADAMS Accession No.: ML22244A243 NRC-001

OFFICE	NRR/DANU/UAL1:PM	NRR/DANU/UAL1:PM	NRR/DANU/UAL1:LA
NAME	KWagner	MSutton	DGreene
DATE	9/9/2022	9/21/2022	9/26/2022
OFFICE	NRR/DANU/UAL1:BC	NRR/DANU/UAL1:PM	
NAME	WJessup (GOberson for)	MSutton	
DATE	9/28/2022	9/29/2022	

OFFICIAL RECORD COPY

List of Attendees

Closed Meeting with TerraPower, LLC to Discuss an Overview of the Natrium Reactor

Monday, May 23, 2022, 8:30 a.m. – 3:00 p.m.,

Tuesday, May 24, 2022, 8:30 a.m. - 3:00 p.m., and

Wednesday, May 25, 2022, 8:30 a.m. – 11:30 a.m.

<u>Name</u>	<u>Organization</u>
Mallecia Sutton	U.S. Nuclear Regulatory Commission (NRC)
Robert Taylor	NRC
Mike King	NRC
Mohamed Shams	NRC
Jeremy Bowen	NRC
John Segala	NRC
Chris Miller	NRC
Steve Ruffin	NRC
Mike Franovich	NRC
John Tappert	NRC
Susan Vrahoretis	NRC
Michael Spencer	NRC
Todd Smith	NRC
William Jessup	NRC
William Kennedy	NRC
Michelle Hayes	NRC
Candace de Messieres	NRC
Steve Philpott	NRC
Kevin Quinlan	NRC
Brian Green	NRC
David Desaulniers	NRC
Katherine Wagner	NRC
Courtney Banks	NRC
Alex Siwy	NRC
Reed Anzalone	NRC
Michelle Hart	NRC
Hanh Phan	NRC
Jason Schaperow	NRC
Meg Audrain	NRC
Steven Jones	NRC
Vijay Goel	NRC

Ian TsengNRCJohn ParilloNRCBill RautzenNRCJay RobinsonNRCJesse SeymourNRCAdakou FoliNRCCalvin CheungNRCSteve VittoNRCCharles TealNRCRalph CostelloNRCDonald PalmroseNRCPatricia VokounNRCEric WilliamsTerraPowerGeorge WilsonTerraPowerMark WernerTerraPowerRyan SprengelTerraPowerBarry WestreichTerraPowerIan GiffordTerraPowerMike MontecalvoTerraPowerJeffrey CioccoU.S. Department of Energy		
Bill Rautzen NRC Jay Robinson NRC Jesse Seymour NRC Adakou Foli NRC Calvin Cheung NRC Steve Vitto NRC Charles Teal NRC Ralph Costello NRC Donald Palmrose NRC Patricia Vokoun NRC Eric Williams TerraPower George Wilson TerraPower Ryan Sprengel TerraPower Barry Westreich TerraPower In Gifford TerraPower Mike Montecalvo TerraPower Mike Montecalvo TerraPower Mind Mark Werner TerraPower Mike Montecalvo TerraPower Mike Montecalvo TerraPower	lan Tseng	NRC
Jay Robinson NRC Jesse Seymour NRC Adakou Foli NRC Calvin Cheung NRC Steve Vitto NRC Charles Teal NRC Ralph Costello NRC Donald Palmrose NRC Patricia Vokoun NRC Eric Williams TerraPower George Wilson TerraPower Ryan Sprengel TerraPower Barry Westreich TerraPower Mike Montecalvo TerraPower Mike Montecalvo NRC NRC TerraPower TerraPower TerraPower TerraPower	John Parillo	NRC
Jesse Seymour Adakou Foli NRC Calvin Cheung NRC Steve Vitto NRC Charles Teal NRC Ralph Costello NRC Donald Palmrose NRC Patricia Vokoun Rric Williams TerraPower George Wilson TerraPower Ryan Sprengel Barry Westreich In Gifford Mike Montecalvo NRC NRC TRC NRC TerraPower NRC TerraPower TerraPower TerraPower TerraPower TerraPower TerraPower TerraPower TerraPower	Bill Rautzen	NRC
Adakou Foli Calvin Cheung NRC Steve Vitto NRC Charles Teal NRC Ralph Costello NRC Donald Palmrose NRC Patricia Vokoun Eric Williams TerraPower George Wilson TerraPower Ryan Sprengel Barry Westreich Ian Gifford Mike Montecalvo NRC NRC TerraPower NRC TerraPower TerraPower TerraPower TerraPower TerraPower	Jay Robinson	NRC
Calvin Cheung Steve Vitto NRC Charles Teal NRC Ralph Costello NRC Donald Palmrose NRC Patricia Vokoun Eric Williams TerraPower George Wilson TerraPower Mark Werner Ryan Sprengel Barry Westreich Ian Gifford Mike Montecalvo NRC TerraPower NRC TerraPower TerraPower TerraPower TerraPower	Jesse Seymour	NRC
Steve Vitto Charles Teal NRC Ralph Costello NRC Donald Palmrose NRC Patricia Vokoun NRC Eric Williams TerraPower George Wilson Mark Werner TerraPower Ryan Sprengel TerraPower Barry Westreich Ian Gifford Mike Montecalvo NRC TerraPower TerraPower TerraPower TerraPower TerraPower	Adakou Foli	NRC
Charles Teal NRC Ralph Costello NRC Donald Palmrose NRC Patricia Vokoun NRC Eric Williams TerraPower George Wilson TerraPower Mark Werner TerraPower Ryan Sprengel TerraPower Barry Westreich TerraPower Ian Gifford TerraPower Mike Montecalvo TerraPower	Calvin Cheung	NRC
Ralph Costello Donald Palmrose NRC Patricia Vokoun NRC Eric Williams TerraPower George Wilson TerraPower Mark Werner Ryan Sprengel Barry Westreich Ian Gifford Mike Montecalvo NRC TerraPower TerraPower TerraPower TerraPower TerraPower TerraPower	Steve Vitto	NRC
Donald Palmrose Patricia Vokoun NRC Eric Williams TerraPower George Wilson TerraPower Mark Werner Ryan Sprengel TerraPower Barry Westreich Ian Gifford Mike Montecalvo NRC TerraPower TerraPower TerraPower TerraPower TerraPower TerraPower	Charles Teal	NRC
Patricia Vokoun Eric Williams TerraPower George Wilson TerraPower Mark Werner TerraPower Ryan Sprengel TerraPower Barry Westreich TerraPower Ian Gifford TerraPower Mike Montecalvo NRC TerraPower TerraPower TerraPower TerraPower TerraPower TerraPower	Ralph Costello	NRC
Eric Williams George Wilson TerraPower Mark Werner Ryan Sprengel Barry Westreich Ian Gifford Mike Montecalvo TerraPower TerraPower TerraPower TerraPower TerraPower TerraPower TerraPower	Donald Palmrose	NRC
George Wilson TerraPower Mark Werner TerraPower Ryan Sprengel TerraPower Barry Westreich TerraPower Ian Gifford TerraPower Mike Montecalvo TerraPower	Patricia Vokoun	NRC
Mark Werner TerraPower Ryan Sprengel TerraPower Barry Westreich TerraPower Ian Gifford TerraPower Mike Montecalvo TerraPower	Eric Williams	TerraPower
Ryan Sprengel TerraPower Barry Westreich TerraPower Ian Gifford TerraPower Mike Montecalvo TerraPower	George Wilson	TerraPower
Barry Westreich TerraPower Ian Gifford TerraPower Mike Montecalvo TerraPower	Mark Werner	TerraPower
Ian GiffordTerraPowerMike MontecalvoTerraPower	Ryan Sprengel	TerraPower
Mike Montecalvo TerraPower	Barry Westreich	TerraPower
	Ian Gifford	TerraPower
Jeffrey Ciocco U.S. Department of Energy	Mike Montecalvo	TerraPower
	Jeffrey Ciocco	U.S. Department of Energy