



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

June 25, 2024

MEMORANDUM TO: Josh M. Borromeo, Chief
Advanced Reactor Licensing Branch 1
Division of Advanced Reactors and Non-power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

FROM: Roel A. Brusselmans, Project Manager */RA/*
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 NOVEMBER 16, 2023, PARTIALLY
CLOSED MEETING WITH TERRAPOWER, LLC, REGARDING
COMPUTING PLATFORMS – CLOUD SERVICES
CONTROLLED AND QUALIFIED COMPUTING (EPID NO.
L-2021-LRM-0071)

Meeting Information:

Applicant: TerraPower, LLC (TerraPower)

Project No.: 99902100

Meeting Title: Pre-Application Meeting with TerraPower to discuss the Computing Platforms to be utilized for analysis supporting the Construction Permit Application for the Sodium design.

Meeting Date: November 16, 2023

Meeting Type: Partially Closed

Public Meeting Notice Agencywide Documents Access and Management System (ADAMS)
Accession No.: ML23299A128

Applicant Presentation Slides ADAMS Accession No.: ML23307A242

CONTACT: Roel A. Brusselmans, NRR/DANU
(301) 415-0829

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).

On November 16, 2023, the NRC staff held a partially closed public meeting for TerraPower to provide the NRC staff with an overview of their computing platforms including cloud services outlining controlled and qualified computing for the Natrium design. Participants included representatives from the NRC staff, TerraPower, and members of the public.

During the public portion of the meeting, TerraPower representatives provided an overview of the Natrium design, discussed definitions material to their computing approach, and introduced their Compute platform. TerraPower's discussion of the Compute platform included its safety classification, validation of the platform's acceptance, and how the platform is managed with respect to Natrium's quality assurance program.

During the closed portion of the meeting, TerraPower discussed the Compute platform in specific detail, analysis of records process for computing, and change management for computing.

At the end of the meeting, the NRC staff and TerraPower representatives discussed the next steps for future interactions regarding the Natrium reactor design.

No regulatory decisions were made as a result of this meeting. No public comments were received during the public portion of the meeting.

Enclosure:
List of Attendees

cc: TerraPower Natrium via GovDelivery

SUBJECT: SUMMARY OF THE NOVEMBER 16, 2023, PARTIALLY CLOSED MEETING WITH TERRAPOWER, LLC REGARDING COMPUTING PLATFORMS – CLOUD SERVICES CONTROLLED AND QUALIFIED COMPUTING (EPID NO. L-2021-LRM-0071) DATED: JUNE 25, 2024

DISTRIBUTION:

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ADAMS Accession No.: ML24178A032

NRR-001

OFFICE	NRR/DANU/UAL1:PM	NRR/DANU/UAL1:LA	NRR/DANU/UAL1:BC	NRR/DANU/UAL1:PM
NAME	RBrusselmans	DGreene	JBorromeo	RBrusselmans
DATE	6/7/2024	6/11/2024	6/25/2024	6/25/2024

OFFICIAL RECORD COPY

List of Attendees

Summary of November 16, 2023, Partially Closed Pre-Application Meeting with TerraPower, LLC to Discuss Computing Platforms – Cloud Services Controlled and Qualified Computing (EPID No. L-2021-LRM-0071)

November 16, 2023

Name	Organization
Reed Anzalone	U.S. Nuclear Regulatory Commission (NRC)
Aaron Armstrong	NRC
Roel Brusselmans	NRC
Nathanael Hudson	NRC
Candace de Messieres	NRC
Michael Rose	NRC
Mallecia Sutton	NRC
John Brogan	TerraPower, LLC (TerraPower)
John Carroz	TerraPower
Jesse Cheatham	TerraPower
Francesco Deleo	TerraPower
Ian Gifford	TerraPower
Jacob Hader	TerraPower
Matthew Presson	TerraPower
Scott Stevenson	TerraPower
Caroline Tilton	TerraPower
George Wilson	TerraPower