



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, CLOSED MEETING
WITH TERRAPOWER, LLC TO DISCUSS GENERAL AND
FINANCIAL INFORMATION FOR THE NATRIUM DESIGN

Meeting Information:

Applicant: TerraPower, LLC (TerraPower)

Project No.: 99902100

Meeting Title: Pre-Application Meeting with TerraPower to discuss the 10 CFR 50.33(f)(1) requirements associated with the estimated construction and related fuel cycle costs associated with their Sodium design.

Meeting Date: November 16, 2023

Meeting Type: Closed

Public Meeting Notice Agencywide Documents Access and Management System (ADAMS)
Accession No.: ML23307A014

Applicant Presentation Slides ADAMS Accession No.: ML23319A424

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 closed meeting for TerraPower to discuss general and financial information in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.33(f)(1). Specifically, TerraPower provided an overview of financial information related to the first proposed reactor of the Sodium design, Kemmerer Power Station Unit 1 (Kemmerer 1).

The main discussion topics included:

- TerraPower discussed the upcoming submittal of a construction permit application (CPA) for Kemmerer 1. The discussion included the financial components of the construction project including the regulatory requirements and TerraPower's financial position supporting the effort.
- TerraPower discussed the estimated project costs, including those for nuclear plant construction, transmission/distribution, and nuclear fuel inventory for the first core load.
- TerraPower presented precedent to the 10 CFR 50.33(f) exemption they are seeking which relieves the need for detailed funding documentation for entities to support a CPA as part of a CPA submittal. To support this exemption request, TerraPower discussed a proposed license condition which would require that funding details are identified prior to the start of construction. The funding details would include a financial capacity plan and cost estimate which must include adequate information for the NRC to conclude that the applicant appears to be financially qualified with sufficiency of funds.
- TerraPower presented on a proposed financial surety path for Kemmerer 1. This path included reviewing cost estimates with the NRC staff, identification of current financial resources available, proposed fundraising activities, and a proposed increase in the appropriations from the U.S. Department of Energy Advanced Reactor Demonstration Project award.

The NRC staff made no regulatory decisions during or as a result of this meeting.

Enclosure:
List of Attendees

cc: TerraPower Sodium via GovDelivery

SUBJECT: SUMMARY OF THE NOVEMBER 16, 2023, CLOSED MEETING WITH TERRAPOWER, LLC, TO DISCUSS GENERAL AND FINANCIAL INFORMATION FOR THE NATRIUM DESIGN DATED: JUNE 25, 2024

DISTRIBUTION:

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DAtkinson, NRR

JBorromeo, NRR

RBrusselmans, NRR

SDevlin-Gill, NRR

SHarwell, NMSS

MSutton, NRR

DGreene, NRR

ADAMS Accession No.: ML24178A034

NRR-001

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| 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 | 6/12/2024 | 6/25/2024 | 6/25/2024 |

OFFICIAL RECORD COPY

List of Attendees

**Summary of the November 16, 2023, Closed Meeting with TerraPower, LLC, to Discuss
General and Financial Information for the Sodium Design**

November 16, 2023

| Name | Organization |
|------------------|--|
| Roel Brusselmans | U.S. Nuclear Regulatory Commission (NRC) |
| Shawn Harwell | NRC |
| William Jessup | NRC |
| Mallecia Sutton | NRC |
| Patrick Donnelly | TerraPower, LLC (TerraPower) |
| Ian Gifford | TerraPower |
| George Wilson | TerraPower |

Enclosure