



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

April 18, 2022

MEMORANDUM TO: William B. Kennedy, Acting Chief
Advanced Reactor Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

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

Mallecia Sutton

Signed by Sutton,
on 04/18/22

SUBJECT: SUMMARY OF DECEMBER 9, 2021, PUBLIC MEETING WITH
TERRAPOWER, LLC TO DISCUSS THE METHODOLOGY USED
IN IDENTIFYING THE PRINCIPAL DESIGN CRITERIA (EPID
NO. L-2021-LRM-0071)

On December 9, 2021, the U.S. Nuclear Regulatory Commission (NRC) staff held an observation public meeting with TerraPower, LLC (TerraPower) to provide the NRC staff with an overview of the methodology used in identifying the Risk-Informed, Performance-Based (RIPB) Principal Design Criteria (PDC) for the Sodium Reactor. Participants included personnel from the NRC staff, TerraPower, General Electric Hitachi, Bechtel, PacifiCorp, and members of the public.

The public meeting notice, dated November 22, 2021, can be found in the NRC's Agencywide Documents Access and Management System (ADAMS) at Accession No. ML21327A012. The presentation slides can be found in ADAMS at Accession No. ML21340A107. Enclosure 1 provides the list of meeting attendees.

The NRC staff began the public meeting with an introduction and pertaining logistical information. The NRC staff explained that the meeting was an observation meeting and that TerraPower representatives would provide the NRC staff with an overview of the methodology used in identifying the RIPB PDC for the Sodium Reactor. The NRC staff also explained that a portion of the meeting would be closed to the public. During the public portion of the meeting, TerraPower provided an overview of the Sodium Reactor design, the U.S. Department of Energy Advanced Reactor Demonstration Program, modifications to the Sodium Fast Reactor Design Criteria (SFR-DC), and preliminary Sodium PDC. The modifications to the SFR-DC discussed included the use of the wording "safety-significant," the preliminary Sodium PDC relevant to functional containment, and additional PDC considerations. At the end of the presentation, the public had an opportunity to ask questions.

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During the closed portion of the meeting, TerraPower representatives and the NRC staff continued to discuss more detailed observations from Natrium PDC development activities and the next steps for future interactions regarding the Natrium Reactor.

Project No. 99902100

Enclosure:

As stated

SUBJECT: SUMMARY OF DECEMBER 9, 2021, PRE-APPLICATION PUBLIC MEETING WITH TERRAPOWER, LLC TO DISCUSS THE METHODOLOGY USED IN IDENTIFYING THE PRINCIPAL DESIGN CRITERIA (EPID NO. L-2021-LRM-0071) DATED: APRIL 18, 2022

DISTRIBUTION:

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MSutton, NRR

WKennedy, NRR

DGreene, NRR

CSmith, NRR

KWagner, NRR

ASiwy, NRR

IJung, NRR

HPhan, NRR

EOesterle, NRR

JSebrosky, NRR

JSchmidt, NRR

CVanWert, NRR

JSegala, NRR

SPark, NRR

JAshcraft, NRR

AMoreno, OCA

ADAMS Accession Number: ML22082A139**NRC-001**

OFFICE	NRR/DANU/UARL/PM	NRR/DANU/UARL/PM	NRR/DANU/UARL/LA
NAME	KWagner	MSutton	DGreene
DATE	4/5/2022	4/11/2022	4/13/2022
OFFICE	NRR/DANU/UARL/BC(A)	NRR/DANU/UARL/PM	
NAME	WKennedy	MSutton	
DATE	4/18/2022	4/18/2022	

OFFICIAL RECORD COPY

List of Attendees

Public Meeting with TerraPower, LLC to Discuss the Methodology

Used in Identifying the Principal Design Criteria

Thursday, December 9, 2021

1:00 p.m. – 4:00 p.m.

<u>Name</u>	<u>Organization</u>
Mallecia Sutton	U.S. Nuclear Regulatory Commission (NRC)
John Segala	NRC
William Kennedy	NRC
Chris Van Wert	NRC
Katherine Wagner	NRC
Alex Siwy	NRC
Ian Jung	NRC
Hanh Phan	NRC
Eric Oesterle	NRC
Joe Sebrosky	NRC
Jeff Schmidt	NRC
Joseph Ashcraft	NRC
Sunwoo Park	NRC
Angel Moreno	NRC
Ryan Sprengel	TerraPower, LLC (TerraPower)
Tara Neider	TerraPower
Eric Williams	TerraPower
Mark Werner	TerraPower
Bryan Eysers	TerraPower
Ian Gifford	TerraPower
Aaron Martin	TerraPower
Benoit Dionne	TerraPower
Brian Johnson	TerraPower
James Vollmer	TerraPower
Chris Robinson	General Electric Hitachi (GEH)
Shelby Small	GEH
Scott Ingalls	GEH
Lisa Schichlein	GEH
Derek Bass	GEH
Lee Meek	GEH
Chris Robinson	GEH
George Honma	GEH
Denise Brooks	GEH

Enclosure

Steven Kline	Bechtel
Chuck Tack	PacifiCorp
Brandon Hartle	Public Citizen
Charlotte Geiger	Public Citizen
Ingrid Nordby	Public Citizen
Jan Facemire	Public Citizen
Linnea Melbye	Public Citizen
Raymond Wang	Public Citizen
Steve Vaughn	Public Citizen
Esther Wagner	Public Citizen
Lindy Linn	Public Citizen
Brandon Chisholm	Public Citizen
Adam Stein	Public Citizen
Dillon Sanders	Public Citizen