



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

February 14, 2022

MEMORANDUM TO: William 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 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, Mallecia
on 02/14/22

SUBJECT: SUMMARY OF NOVEMBER 17, 2021, PRE-APPLICATION
PUBLIC MEETING WITH TERRAPOWER, LLC TO DISCUSS
THE NATRIUM REACTOR ENERGY ISLAND DECOUPLING
(EPID NO. L-2021-LRM-0071)

On November 17, 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 decoupling concept and its implementation for the Natrium Reactor. The public meeting notice, dated November 2, 2021, can be found in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession No. ML21319A399. The presentation slides can be found in ADAMS under Accession No. ML21319A245. Participants included personnel from the NRC, TerraPower, General Electric Hitachi, Bechtel, Duke Energy, and members of the public. The enclosure to this memorandum provides the list of meeting attendees.

This pre-application interaction provided information on the decoupling strategy, describing how interactions are planned to occur between the Nuclear Island and the Energy Island in regard to the Natrium plant design. Additionally, expected flexibilities gained from this approach were described.

The NRC staff began the public meeting with an introduction and explanation of 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 decoupling concept and its implementation for the Natrium Reactor.

During the meeting, TerraPower provided an overview of the Natrium decoupling strategy, including expected: operational flexibilities, separation of transients, and regulatory separation (e.g., reduction of regulatory review of Energy Island). TerraPower representatives stated that

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they planned on submitting a white paper to the NRC for review on the topic of Energy Island Decoupling in early-2022. At the end of the presentation, the public had an opportunity to ask questions of the NRC staff. The NRC staff asked for feedback, concerns, and any improvements that can be made to the public meeting process at the closure of the meeting.

Project No. 99902100

Enclosure:
List of Attendees

SUBJECT: SUMMARY OF NOVEMBER 17, 2021, PRE-APPLICATION PUBLIC MEETING WITH TERRAPOWER, LLC TO DISCUSS THE NATRIUM REACTOR ENERGY ISLAND DECOUPLING (EPID NO. L-2021-LRM-0071) DATED: FEBRUARY 14, 2022

DISTRIBUTION:

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 BTharakan, NRR
 BAdams, NRR
 JAshcraft, NRR
 KLawson-Jenkins, NSIR
 MGordon, RES
 WOrders, NRR
 WKennedy, NRR
 CVanWert, NRR

ADAMS Accession Number: ML21362A652

NRR-106

OFFICE	NRR/DANU/UARL/PM	NRR/DANU/UARL/PM	NRR/DANU/UARL/LA
NAME	KWagner	MSutton	CSmith (SLent for)
DATE	01/10/2022	01/10/2022	02/10/2022
OFFICE	NRR/DANU/UARL/BC(A)	NRR/DANU/UARL/PM	
NAME	WKennedy	MSutton	
DATE	02/10/2022	02/14/2022	

OFFICIAL RECORD COPY

List of Attendees

Public Meeting between TerraPower and the NRC Staff to Discuss the Natrium Reactor Energy Island Decoupling

Wednesday, November 17, 2021

1:00 p.m. – 3:00 p.m.

<u>Name</u>	<u>Organization</u>
Mallecia Sutton	U.S. Nuclear Regulatory Commission (NRC)
Chris Van Wert	NRC
Katherine Wagner	NRC
Alexandra Siwy	NRC
Ian Jung	NRC
Binesh Tharakan	NRC
Ben Adams	NRC
Joseph Ashcraft	NRC
Kim Lawson-Jenkins	NRC
Matthew Gordon	NRC
William Orders	NRC
Ryan Sprengel	TerraPower, LLC (TerraPower)
Bryan Eysers	TerraPower
Eric Williams	TerraPower
Seth Krueger	TerraPower
Bassem El-Dasher	TerraPower
Aaron Martin	TerraPower
Ian Gifford	TerraPower
Chris Dayton	TerraPower
Mark Werner	TerraPower
Amir Moid	TerraPower
Brian Johnson	TerraPower
Lisa Schichlein	General Electric Hitachi (GEH)
Eric Lowen	GEH
Lee Meek	GEH
Christopher Robinson	GEH
Lynn Van-Derpoel	Bechtel
Steven Kline	Bechtel
Chris Nolan	Duke Energy
Lee Grzeck	Duke Energy
Alexander Ludick	Public Citizen
Barbara Warren	Public Citizen
Bernard van der Watt	Public Citizen
Linda Boenheim	Public Citizen
Bret Randall	Public Citizen

Enclosure

<u>Name</u>	<u>Organization</u>
Mark Ring	Public Citizen
Lisa Matis	Public Citizen
Cammie Cheng	Public Citizen
Tom Seewald	Public Citizen
David Train	Public Citizen
Wiehahn van Wyk	Public Citizen
David Louis Daigle	Public Citizen
Ewa Muzikova	Public Citizen
Frederik Reitsma	Public Citizen
John Fletcher	Public Citizen
John Ruppert	Public Citizen
Juniad Razvi	Public Citizen