



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

February 18, 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 *Mallecia Sutton* Signed by Sutton, Mallecia  
Advanced Reactor Licensing Branch on 02/18/22  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF NOVEMBER 9, 2021, PRE-APPLICATION  
PUBLIC MEETING WITH TERRAPOWER, LLC TO DISCUSS  
THE DIGITAL INSTRUMENTATION AND CONTROL SYSTEM  
FOR THE NATRIUM REACTOR (EPID NO. L-2021-LRM-0071)

On November 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 digital instrumentation and control (I&C) system for the Natrium Reactor. The public meeting notice, dated October 18, 2021, can be found in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession No. ML21291A266. The presentation slides can be found in ADAMS under Accession No. ML21306A316. Participants included personnel from the NRC, TerraPower, General Electric Hitachi, Bechtel, PacifiCorp, Union of Concerned Scientists, and members of the public. The enclosure to this memorandum provides the list of meeting attendees.

This pre-application interaction provided information on digital I&C implications and approaches in regard to the Natrium plant design. Additionally, updates on programs related to I&C selection process were provided.

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 digital I&C for the Natrium Reactor.

During the meeting, TerraPower provided an overview of the Natrium defense-in-depth concept as applied to the Natrium Reactor, the Natrium Plant I&C architecture, the Natrium safety-related I&C vendor selection process, and the Natrium cybersecurity program.

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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 9, 2021, PRE-APPLICATION PUBLIC MEETING WITH TERRAPOWER, LLC TO DISCUSS THE DIGITAL INSTRUMENTATION AND CONTROL SYSTEM FOR THE NATRIUM REACTOR (EPID NO. L-2021-LRM-0071) DATED: FEBRUARY 18, 2022

**DISTRIBUTION:**

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**NRR-106**

<b>OFFICE</b>	NRR/DANU/UARL/PM	NRR/DANU/UARL/PM	NRR/DANU/UARL/LA
<b>NAME</b>	KWagner	MSutton	CSmith (SLent for)
<b>DATE</b>	1/11/2022	1/14/2022	2/9/2022
<b>OFFICE</b>	NRR/DANU/UARL/BC(A)	NRR/DANU/UARL/PM	
<b>NAME</b>	WKennedy	MSutton	
<b>DATE</b>	2/18/2022	2/18/2022	

**OFFICIAL RECORD COPY**

## List of Attendees

### Public Meeting between TerraPower and the NRC Staff to Discuss Digital Instrumentation and Controls for the Sodium Reactor

Tuesday, November 9, 2021

1:00 p.m. – 4:00 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
Joseph Ashcraft	NRC
Paul Rebstock	NRC
Ryan Sprengel	TerraPower, LLC (TerraPower)
Bryan Eysers	TerraPower
Eric Williams	TerraPower
Baofu Lu	TerraPower
Ted Quinn	TerraPower
Christopher Hope	TerraPower
Ian Gifford	TerraPower
Mark Werner	TerraPower
Lisa Schichlein	General Electric Hitachi (GEH)
Shelby Small	GEH
Lee Meek	GEH
Christopher Robinson	GEH
Thomas Walker	GEH
Peter Reibe	GEH
David Hinds	GEH
Steven Kline	Bechtel
Chuck Tack	PacifiCorp
Edwin Lyman	Union of Concerned Scientists
Robin Bagley	Public Citizen
Adam Stein	Public Citizen
Royce Lindengren	Public Citizen
Victor Camacho	Public Citizen
William Catullo	Public Citizen
Edwin Bird	Public Citizen
Ibrahim Ezelarab	Public Citizen
David Jarosh	Public Citizen
Stephen Kimura	Public Citizen
Thomas Walker	Public Citizen
Trushant Shah	Public Citizen

Enclosure

<u>Name</u>	<u>Organization</u>
Margaret Ellenson	Public Citizen
Matt Hertel	Public Citizen
James Mermigos	Public Citizen
Jong Kim	Public Citizen
Deann Raleigh	Public Citizen
Steve Kincaid	Public Citizen
Thomas Tweedle	Public Citizen
Jungwoo Kim	Public Citizen
Michelle Byman	Public Citizen
Sola Talabi	Public Citizen