



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

April 8, 2025

LICENSEE: Constellation Energy Generation, LLC

FACILITY: Peach Bottom Atomic Power Station, Units 2 and 3

SUBJECT: SUMMARY OF FEBRUARY 21, 2025, PARTIALLY CLOSED OBSERVATION MEETING WITH CONSTELLATION ENERGY GENERATION, LLC REGARDING PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 DIGITAL UPGRADE OF THE EMERGENCY CORE COOLING SYSTEM COMPENSATED LEVEL SYSTEM (EPID L-2024-LRM-0009)

On February 21, 2025, the U.S. Nuclear Regulatory Commission (NRC) staff held a partially closed observation meeting with Constellation Energy Generation, LLC (the licensee) at NRC Headquarters in Rockville, Maryland. The purpose of the meeting was to discuss a proposed license amendment request (LAR) to support an emergency core cooling system (ECCS) digital instrumentation and controls (DI&C) upgrade for Peach Bottom Atomic Power Station, Units 2 and 3 (Peach Bottom). The meeting notice and agenda, dated January 31, 2025, are available in the NRC's Agencywide Documents Access and Management System (ADAMS) at Accession No. ML25031A235. Enclosure 1 to this summary contains a list of attendees. The licensee's presentation slides are available in ADAMS at ML25051A229 and ML25076A049. A portion of the meeting was closed to the public so that meeting participants could discuss sensitive information. Enclosure 2 summarizes the closed portion of the meeting.

During the meeting, the licensee discussed its plans to submit its LAR in April 2025 and confirmed that the proposed LAR will not include changes to the control room, operator actions, or technical specifications. The license indicated that it plans to submit supplements to the initial application that will include equipment qualification (EQ) test results and factory acceptance test (FAT) results. The licensee plans to complete EQ testing in the first 3 months of 2026 and FAT between April and June 2026. The supplement for the EQ testing will include a summary qualification report. Due to the need for FAT results, the NRC staff indicated that the LAR should be reviewed under the Tier 1 approach described in DI&C interim staff guidance (DI&C-ISG-06). The license stated that the monitoring and tuning system (MATS) does not impact any of the plant safety systems. The NRC indicated that detailed diagrams would need to be provided to support that statement.

**Enclosure 2 to this summary contains proprietary information.  
When separated from Enclosure 2, this document is DECONTROLLED.**

The NRC staff did not make any regulatory decisions at the meeting. Members of the public were in attendance. Public Meeting Feedback forms were not received.

Please direct any inquiries to me at (301) 415-0805, or Rachael.Davis@nrc.gov.

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Rachael Davis, Project Manager  
Licensing Data Analysis, Tools, and  
Assessments Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

Enclosures:

1. List of Attendees
2. Summary of Closed Meeting Portion

cc: [w/o Enclosure 2:] Listserv

**LIST OF ATTENDEES**  
**FEBRUARY 21, 2025, MEETING WITH CONSTELLATION ENERGY GENERATION, LLC**  
**PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3**

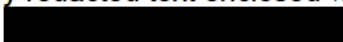
Name	Organization
Aaron Armstrong	U.S Nuclear Regulatory Commission (NRC)
Amy D'Agostino	NRC
Christina Antonescu	NRC
Deanna Zhang	NRC
Eric Nour	NRC
Fanta Sacko	NRC
Hipo Gonzalez	NRC
Jack Zhao	NRC
Jim Anderson	NRC
Kamishan Martin	NRC
Michael Marshall	NRC
Ming Li	NRC
Rachael Davis	NRC
Samir Darbali	NRC
Summer Sun	NRC
Tiffany Lee	NRC
William Roggenbrodt	NRC
Jose Ayllon	Constellation Energy Generation, LLC (Constellation)
Pablo Guardado	Constellation
Preeti Furtado	Constellation
Steve Dragovich	Constellation
Stephen Flickinger	Constellation
Waqas Abdullah	Constellation
Zachariah Shukur	Constellation
Wendi Para	Constellation
Pareez Golub	Sargent Lundy
Richard Paese	Sargent Lundy
Rylee Runyon	Sargent Lundy
Marty Murphy	Curtiss-Wright
Michael Kosman	Curtiss-Wright
Robert Ammon	Curtiss-Wright
Joseph Hanley	Jensen Hughes (member of the public)
Mary Miller	Dominion Energy (member of the public)

**Enclosure 2**

**NON-PROPRIETARY**

**Summary of Closed Portion of Meeting**

Proprietary information pursuant to Title 10 of *Code of Federal Regulations*, Section 2.390 has been redacted from this document.

Proprietary information is identified by redacted text enclosed within double brackets, as shown here: [[  ]].

**SUMMARY OF FEBRUARY 21, 2025, CLOSED PORTION OF MEETING  
WITH CONSTELLATION ENERGY GENERATION, LLC  
PEACH BOTTOM ATOMIC POWER STATION**

During the closed portion of the meeting, Constellation Energy Generation, LLC (licensee) discussed in detail equipment qualification (EQ) testing, monitoring and tuning system (MATS), and common cause failure (CCF). [[REDACTED]

]] The licensee stated that the EQ testing is being completed in a specific configuration and environment to replicate the settings in the plant. For commercial components outside of the RadICS platform, the licensee stated there will be no commercial dedication. The U.S. Nuclear Regulatory Commission (NRC) staff asked if there is any embedded logic in these components and the licensee responded that they would address this concern.

The licensee provided the NRC staff with more information supporting why the MATS does not impact plant safety systems. The licensee indicated that the MATS will be a stand-alone system using one-way communication, so that it can receive data from the other systems but cannot send data back to any system or component.

The licensee stated that rather than performing a detailed defense in depth and diversity (D3) analysis, they intend to credit internal diversity of RadICS platform hardware and perform 100 percent testing of the application logic to demonstrate that the system is not susceptible to a CCF. The NRC staff explained that while the RadICS platform topical report safety evaluation states that the platform diversity features can be credited when performing a plant-specific D3 analysis, this did not mean that the platform is not susceptible to a CCF. The NRC staff asked the licensee to explain what kind of testing will be used. [[REDACTED]

]] Additionally, the licensee plans to test additional functions not reviewed in the supporting topical report. The NRC staff explained that functional testing is not sufficient to conclude that the application logic is not susceptible to a CCF, and that testing to demonstrate the system would not behave in an unintended manner is necessary. The licensee shared the Curtiss-Wright Digital Safety System development methodology testing process which they intend to perform during the FAT. The NRC staff stated that the licensee will need to address CCF in their application and make the argument that there are enough diversity attributes in the application and platform.

The licensee and NRC staff discussed the licensing timeline for the review of the proposed license amendment request. The NRC staff stated that to complete the review by the requested completion and implementation date of October 2026, the EQ and factor acceptance testing results will be needed by April 2026. The NRC and licensee discussed potential in-person and virtual audits to support the review.

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RidsOpaMail Resource	JHernandezMunoz, NRR
RidsRgn1MailCenter Resource	RRuiz, OEDO
MMarshall, NRR	APatz, OEDO
RDavis, NRR	NSheehan, Region I

**ADAMS Accession Nos.:**

**Package: ML25051A234**

**Meeting Summary: ML25083A065 (Prop.)  
ML25083A072(Non-Prop.)**

OFFICE	NRR/DORL/LDATA/PM	NRR/DORL/LPL1/LA	NRR/DORL/LPL1/BC	NRR/DORL/LDATA/PM
NAME	RDavis	KEntz	HGonzález	RDavis
DATE	03/24/2025	3/25/2025	4/7/2025	4/8/2025

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