John Twarog
Manager
Regulatory Assurance
504-739-6747

W3F1-2024-0024 10 CFR 50.4

June 17, 2024

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Special Report SR 2023-004-02
Radiation Monitor Inoperable Greater Than 7 Days

Waterford Steam Electric Station, Unit 3
NRC Docket No. 50-382
Renewed Facility Operating License No. NPF-38

Entergy Operations, Inc. (Entergy) is submitting a second supplement to Special Report SR-2023-004-00, for Waterford Steam Electric Station, Unit 3 (Waterford 3). This supplement includes Plant Stack Wide Range Gas Monitor radiation monitor return to operable status. Special Report SR-2023-004-00 was submitted on September 25, 2023 and later supplemented on February 28, 2024. Special Report, SR-2023-004-00 was submitted as required by Waterford 3 Technical Specification (TS) 3.3.3.1, "Radiation Monitoring Instrumentation," which requires the minimum number of Effluent Accident Monitor channels shown in TS Table 3.3-6 to be operable. If the monitor is not restored to operable status within 7 days after the failure, a Special Report is required to be submitted in accordance with TS 6.9.2 within 14 days after the failure outlining the actions taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

This letter contains no new commitments.

Should you have any questions concerning this issue, please contact me at 504-739-6747.

Respectfully,

John R. Twarog

Digitally signed by John R. Twarog
DN: cn=John R. Twarog, c=US, o=Entergy, ou=Waterford 3 Regulatory Assurance, email=jtwarog@entergy.com
Date: 2024.06.17 12:23:56 -05'00'

John Twarog

JRT / mrp

Enclosure: Waterford 3 Special Report SR-2023-004-02

cc: NRC Region IV Regional Administrator
NRC Senior Resident Inspector – Waterford Steam Electric Station, Unit 3
NRC Project Manager – Waterford Steam Electric Station, Unit 3
Louisiana Department of Environmental Quality

Enclosure

W3F1-2024-0024

Waterford 3 Special Report SR-2023-004-02

Waterford 3 Special Report SR-2023-004-02

DESCRIPTION

The Waterford Steam Electric Station, Unit 3 (Waterford 3) Plant Stack (PS) Wide Range Gas Monitor (WRGM) (PRMIR0110) radiation monitor was declared inoperable on September 11, 2023. Operability was not restored within the required 7-day period as specified in Waterford 3 Technical Specification (TS) 3.3.3.1, "Radiation Monitoring Instrumentation," Table 3.3-6. This Special Report is submitted to the Nuclear Regulatory Commission (NRC) in accordance with TS 6.9.2, "Special Reports," and 10 CFR 50.4, "Written communications," within the next 14 days outlining the actions taken, the cause of the inoperability and the plans and schedule for restoring the system to operable status.

The Plant Stack WRGM monitors air released from the plant stack and measures the radiation released to the environment, if any, during both normal and accident conditions.

ACTIONS TAKEN

On September 11, 2023, during the planned maintenance of PRMIR0110, Plant Stack WRGM process flow probe and corresponding signal conditioning circuit board (SCCB) were found low out of tolerance. The SCCB was adjusted in tolerance and Instrument and Controls (I&C) personnel continued with planned maintenance activities.

On September 14, 2023, I&C technicians attempted to perform flow calibrations and discovered that the mid/high flow loop could not be calibrated.

Maintenance and Engineering conducted initial troubleshooting and discovered a faulty flow measurement probe. Actions were taken to procure a replacement SCCB and corresponding probe. After installing a replacement SCCB and probe, PRMIR0110 remained out of calibration. A second replacement SCCB and probe was procured and installed. The replacement process probe/board required additional testing scope.

Once the process flow loop calibration was satisfactorily completed, PRMIR0110 failed to meet the required tolerances during the sample flow loop calibration on the mid/high range sample flow path. Troubleshooting revealed an unseated aux flow control valve, which is in parallel to the mid/high sample flow path. This configuration induced extra flow through the sample line, resulting in as-found readings out of tolerance. The valve was replaced and PRMIR0110 was successfully calibrated on May 15, 2024.

CAUSE OF INOPERABILITY

The cause of the PRMIR0110 inoperability was determined to be a degraded aux flow control valve.

PLANS AND SCHEDULE FOR RESTORING OPERABLE STATUS

PRMIR0110 was declared operable on May 17, 2024.