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W3F1-2023-0036

10 CFR 50.4

May 4, 2023

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

Subject: Special Report SR-2023-003-01
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 supplement to Special Report SR-2023-003-00 for Waterford Steam Electric Station, Unit 3 (Waterford 3). Special Report 2023-003-00 was previously submitted on March 17, 2023 (ADAMS Accession No. ML23076A075) 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 an inoperable 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.

In Special Report 2023-003-00, the cause of the failure and schedule of repair could not be determined by the required submittal date. This supplement submits the cause determination and restoration of operable status.

This letter contains no new commitments.

Should you have any questions concerning this issue, please contact Leia Milster, Manager, Regulatory Assurance, at 504-739-6250.

Respectfully,



Leia Milster

LM/mrp

Enclosure: Waterford 3 Special Report SR-2023-003-01

Reference: Entergy Operations, Inc. (Entergy) letter to NRC, "Waterford, Unit 3, Submittal of Special Report SR-2023-003-00 Radiation Monitor Inoperable Greater Than 7 Days," (ADAMS Accession No. ML23076A075), dated March 17, 2023

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

W3F1-2023-0036

Special Report SR-2023-003-01

SPECIAL REPORT

SR-2023-003-01

Radiation Monitor Inoperable Greater Than 7 Days

DESCRIPTION

The Waterford Steam Electric Station, Unit 3 (Waterford 3) Condenser Vacuum Pump Discharge Wide Range Gas Monitor (WRGM) (PRMIR0002) radiation monitor was declared inoperable on March 4, 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 Condenser Vacuum Pump WRGM monitors condenser vacuum pump discharge continuously to detect steam generator tube leakage and to quantify release rate.

The operability of the subject WRGM channels ensures that: (1) the radiation levels are continually measured in the areas served by the individual channels; (2) the alarm or automatic action is initiated when the radiation level trip setpoint is exceeded; and (3) sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. The radioactive gaseous effluent WRGM instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous effluents during actual or potential releases of gaseous effluents. The alarm/trip setpoints for these instruments are calculated and adjusted in accordance with the methodology and parameters in the Offsite Dose Calculation Manual (ODCM) to ensure that the alarm (and/or trip, if applicable) will occur prior to exceeding the limits of Title 10 of the Code of Federal Regulations (10 CFR) Part 20.

ACTIONS TAKEN

On March 4, 2022, the Condenser WRGM was found indicating "operate failure" with no pulses received on RM-11, Radiation Monitor System Central Computer. The monitor was declared inoperable, the required actions were taken in accordance with TS 3.3.3.1, Table 3.3-6, and an entry in the Equipment Out of Service log was initiated to track the condition. The Chemistry Department established the pre-planned alternate method of monitoring as required.

Actions were taken to procure a replacement detector and a high voltage power supply for the low range channel. Maintenance could not analyze the low range detector circuitry because the site does not possess an approved calibration source for this detector type.

The site requires a certificate of conformance for use of the replacement calibration source with this detector type which must be obtained from the vendor. The detector and the source were shipped to the vendor for pairing and certificate of calibration count rate.

CAUSE OF INOPERABILITY

The Condenser Vacuum Pump Discharge Wide Range Gas Monitor inoperability occurred due to a failed high voltage power supply.

PLANS AND SCHEDULE FOR RESTORING OPERABLE STATUS

The Condenser Vacuum Pump Discharge Wide Range Gas Monitor was repaired and declared operable on April 6, 2023.