



Post Office Box 2000, Decatur, Alabama 35609-2000

September 20, 2023

10 CFR 50.4

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

Browns Ferry Nuclear Plant, Unit 2  
Renewed Facility Operating License No. DPR-52  
NRC Docket No. 50-260

Subject: **Browns Ferry Nuclear Plant (BFN) Unit 2 - Special Report 260/2023-001 for Inoperable Post Accident Monitoring (PAM) Instrumentation**

In accordance with Technical Specification (TS) 5.6.6, "PAM Report," this letter provides notification of a PAM instrument that was not restored to Operable status within 30 days as required by TS Limiting Condition for Operation (LCO) 3.3.3.1, "Post Accident Monitoring (PAM) Instrumentation."

#### **BACKGROUND INFORMATION:**

On August 8, 2023, Primary Containment Isolation Valve (PCIV) Position Indicators, BFN Unit 2 "A" Outboard Main Steam Isolation Valve (MSIV) Open Indicating Limit Switch 1 (LS1) and Closed Indicating Limit Switch 5 (LS5), were declared inoperable due to lifting wires for hanging clearance on LS1. BFN Unit 2 entered TS LCO 3.3.3.1 Condition A. On September 7, 2023, the 30 day allowed completion time for Condition A was exceeded and BFN Unit 2 entered TS LCO 3.3.3.1 Condition B.

TS LCO 3.3.3.1 requires two channels of PCIV position indication per flow path to be Operable in Modes 1 and 2. With one required channel inoperable, TS 3.3.3.1 Required Action A.1 directs the required channel to be returned to Operable status in 30 days. If the required channel cannot be restored to Operable status in the required time period, TS 3.3.3.1 Required Action B.1 requires actions to be initiated in accordance with TS 5.6.6 to submit a PAM Report within the following 14 days.

#### **CAUSE OF THE INOPERABILITY:**

PAM instruments LS1 and LS5 were declared inoperable due to lifting wires on LS1 (Red Light) and LS5 (Green Light) in order to correct a ground on Battery Board 2. During troubleshooting, it was found that the U2 "A" Outboard MSIV (2-FCV-1-15) open indicating limit switch wiring or the

limit switch itself was the cause of the ground on Battery Board 2. Due to high dose rates in the area around the Outboard MSIV, a Unit outage is required to repair the switch.

**PREPLANNED ALTERNATE MONITORING METHOD:**

TS LCO 3.3.3.1 requires one channel of valve position indication in the control room to be Operable for each active PCIV in a containment penetration flow path, i.e., two total channels of PCIV position indication for a penetration flow path with two active valves, in order to verify the isolation status of each penetration. The indication for each PCIV consists of green and red indicator lights that illuminate to indicate whether the PCIV is fully open, fully closed, or in a mid-position. The PAM specification deals specifically with this portion of the instrument channel.

Position indication for the Unit 2 "A" Inboard MSIV (2-FCV-1-14) remains operable, allowing operators to verify the isolation status of the "A" MS line penetration via the indicated status of the inboard MSIV. Therefore, a preplanned alternate monitoring method is not required at this time.

**PLANS AND SCHEDULE FOR RESTORING THE INSTRUMENT CHANNEL:**

Work Order 123638803 is being planned to replace the limit switch during the next Unit 2 refueling outage in 2025.

There are no new regulatory commitments contained in this letter. Should you have any questions concerning this submittal, please contact David J. Renn, Nuclear Site Licensing Manager, at (256) 729-2636.

Respectfully,



Manu Sivaraman  
BFN Site Vice President

cc:

NRC Regional Administrator - Region II  
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant