TENNESSEE VALLEY AUTHORITY

Post Office Box 2000, Spring City, Tennessee 37381

WBL-22-017

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10 CFR 50.4

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

Watts Bar Nuclear Plant, Unit 1
Facility Operating License No. NPF-90
NRC Docket No. 50-390

Subject: **Technical Specification (TS) 5.9.8 - Post Accident Monitoring System (PAMS) Report**

The program requirements for the Watts Bar Nuclear Plant (WBN) Post Accident Monitoring System (PAMS) requires a report to be submitted within 14 days when Condition B of Technical Specification (TS) Limiting Condition for Operation 3.3.3, "Post Accident Monitoring (PAM) Instrumentation," is entered. On February 7, 2022, Unit 1 Steam Generator (SG) Number 2 Auxiliary Feedwater (AFW) Flow Loop instrument 1-LPF-3-155B-B was taken out of service to perform a Surveillance Instruction (SI). During the performance of this SI, it was observed there was no output from Unit 1 SG Number 2 AFW Flow Modifier, 1-FM-003-0155BD-B and required replacement. On March 9, 2022, WBN entered TS 3.3.3 Condition B for this event when the inoperable condition had been present for 30 days, requiring a special report to the Nuclear Regulatory Commission (NRC). This special report is provided in the Enclosure.

There are no new regulatory commitments in this letter. Please direct any questions concerning this matter to Jonathan Johnson, WBN Licensing Manager, at jtjohnson0@tva.gov.

Respectfully,

Anthony L. Williams IV
Site Vice President
Watts Bar Nuclear Plant

Enclosure
Technical Specification 5.9.8 PAMS Report

cc: (w/ enclosure)
NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Watts Bar Nuclear Plant
NRC Project Manager - Watts Bar Nuclear Plant

Enclosure
Technical Specification 5.9.8 PAMS Report

Background

The Watts Bar Nuclear Plant (WBN) Technical Specification (TS) 3.3.3, "Post Accident Monitoring (PAM) Instrumentation," specifies the operability requirements for PAM instrumentation. TS Table 3.3.3-1, Function 21, "Auxiliary Feedwater Flow" requires two channels for each Steam Generator (SG). On February 7, 2022, 1-LPF-3-155B-B, one of the two Unit 1 SG Number 2 Auxiliary Feedwater (AFW) Flow Loop instruments was declared inoperable when the instrument was taken out of service to perform a normal channel calibration via a Surveillance Instruction (SI). During the performance of this SI, it was observed there was no output from Unit 1 SG Number 2 AFW Flow Modifier, 1-FM-003-0155BD-B, and required replacement.

TS 3.3.3 Limiting Condition for Operation (LCO) Condition A allows a single indication channel to be inoperable for 30 days. If the indication channel is not restored within 30 days, LCO Condition B is entered, which requires action in accordance with TS 5.9.8 to be taken immediately. TS 5.9.8 requires a report to be submitted to the Nuclear Regulatory Commission (NRC) within 14 days.

This report outlines the preplanned alternate method of monitoring, the cause of inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

Preplanned Alternate Method of Monitoring

With 1-LPF-3-155B out of service, redundant channel 1-LPF-3-155A-A remains operable and capable of providing indication.

Cause of inoperability

During the performance of the normal channel calibration of AFW Flow loop 1-LPF-3-155B-B, it was observed that the indication in the Main Control Room (MCR) was not moving in response to the inputs at the transmitter. Investigation of this issue found the associated flow modifier for this loop did not have any output. All other loop components functioned properly.

Plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status

No replacement for the failed flow modifier was available in the TVA system. Repairs to 1-LPF-3-155B-B are targeted to be performed in August of 2022.