



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-17-052

May 26, 2017

10 CFR 50.4

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

Browns Ferry Nuclear Plant, Units 1, 2, and 3
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68
NRC Docket Nos. 50-259, 50-260, and 50-296

Subject: **Browns Ferry Nuclear Plant, Units 1, 2, and 3 - Second Update on Progress of Facility Modifications for MSIV Leak Rate**

- References:
1. TVA letter to NRC, CNL-15-070, "Browns Ferry Nuclear Plant, Units 1, 2, and 3 - Withdrawal of Proposed Technical Specification Change to Revise the Leakage Rate Through MSIVs - TS-485," dated May 29, 2015 (ML15159B009)
 2. TVA letter to NRC, CNL-15-123, "Updated Reply to Notice of Violation; EA-11-252; and Follow-up to 10 CFR 50.9, 'Completeness and accuracy of information,' Notification," dated July 15, 2015 (ML15198A353)
 3. TVA Letter to NRC, CNL-16-008, "Browns Ferry Nuclear Plant, Units 1, 2, and 3 - Update on Progress of Facility Modifications for MSIV Leak Rate," dated May 26, 2016 (ML16148A108)

In Reference 1, Tennessee Valley Authority (TVA) withdrew a license amendment request (LAR) for the Browns Ferry Nuclear Plant (BFN) Units 1, 2, and 3. The LAR had proposed making the primary alternate leakage (ALT) pathway become the secondary pathway and the secondary pathway would become the credited primary ALT pathway. Additionally, the individual leakage and combined leakage rates through each MSIV would be decreased.

Reference 1 was submitted to the NRC to resolve a non-conforming/degraded condition related to the ALT pathway. In Reference 2, TVA informed the Nuclear Regulatory Commission (NRC) that to resolve the non-conforming/degraded condition, TVA would perform facility and licensing basis modifications such that the current licensing basis dose calculations would remain valid. Additionally, in Reference 1, TVA committed to provide the NRC with an annual status of the progress towards resolving the non-conformance beginning one year from the date of Reference 1 and continuing until the non-conformance has been resolved. The first annual update was provided in Reference 3.

Accordingly, the second annual update of progress of facility modifications is provided below.

An update to the proposed facility modifications described in Reference 3 is as follows:

1. The main steam line (MSL) drain valves FCV-1-168, -1-169, -1-170, and 1-171 will ~~either be replaced with fail-open Air Operated Valves (AOVs) with the same valve open control logic for turbine speed < 1700 rpm or the motor-operated valve (MOV) breakers will be locked in the open position or these drain valves will be removed.~~ Thus, an open 2" flow path will be assured.
2. MOV FCV-1-58 will be replaced with a fail-open flow control valve. A second **fail-open** valve will be added in a parallel line around FCV-1-58 ~~to avoid single point vulnerability (SPV) for defense-in-depth~~ in the event that offsite power is not lost during the LOCA.
3. TVA will ensure, by design output, that FCV-1-57 is open and that the motive power is removed when the Unit is in Modes 1, 2 or 3.

For BFN Unit 3, engineering analyses and creation of the associated design change packages are complete. For BFN Units 1 and 2, the associated design change packages are in progress to support installation in the next respective refueling outages.

Date When Full Compliance Will be Achieved

The schedule for modifying each of the BFN units is as follows:

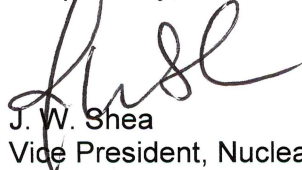
Unit 3: Refueling Outage 18 - Spring 2018
Unit 1: Refueling Outage 12 - Fall 2018
Unit 2: Refueling Outage 20 - Spring 2019

The modification of each BFN unit will be completed prior to that unit going above 3458 MWt. There are no changes to the existing compensatory measures described in Reference 2.

Therefore, full compliance will be achieved following the refueling outage scheduled for Unit 2 in Spring 2019.

Should you have any questions concerning this submittal, please contact M. W. Oliver, Nuclear Site Licensing Manager, at (256) 729-2636.

Respectfully,



J. W. Shea
Vice President, Nuclear Licensing

cc: See Page 3

U.S. Nuclear Regulatory Commission
CNL-17-052
Page 3
May 26, 2017

cc:

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