**Tennessee Valley Authority**, Post Office Box 2000, Decatur, Alabama 35609-2000

May 9, 2014

10 CFR 21.21

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

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

Subject: **10 CFR Part 21 Interim Report – Limitorque Valve Motor – Motor Operator of SMB-0 Valve Actuator**

The Tennessee Valley Authority (TVA) recently identified that the outboard bearing for the motor operator of Limitorque SMB-0 Valve Actuator was found to be degraded on the Residual Heat Removal (RHR) Pump 3C Shutdown Cooling Suction Valve Flow Control Valve. A Corrective Action Program document was written to document the failure of the motor operator valve actuator bearing and to require performance of an engineering evaluation of the condition. It was concluded that this condition has the potential to constitute a reportable condition pursuant to Title 10 of the Code of Federal Regulations (10 CFR) Part 21, "Reporting of Defects and Noncompliance," and as such, requires additional evaluation.

TVA is working with Flowserve – Limitorque to determine the cause of the failure of the SMB-0 valve actuator bearing. If Flowserve – Limitorque determines that a defect or misalignment during manufacturing exists, they will perform a 10 CFR Part 21 evaluation within 60 days of their determination. The enclosure to this letter provides information required by 10 CFR Part 21.21(a)(2) for the interim report of this condition.

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

Respectfully,

K. J. Polson
Vice President

IE19
NRR

Enclosure: 10 CFR Part 21 Interim Report – Limitorque Valve Motor – Motor Operator of SMB-0 Valve Actuator

cc (w/ Enclosure):

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

**Enclosure**

**Browns Ferry Nuclear Plant,**
**Units 1, 2, and 3**

**10 CFR Part 21 Interim Report**
**Limitorque Valve Motor –**
**Motor Operator of SMB-0 Valve Actuator**

**10 CFR Part 21 Interim Report - Limitorque Valve Motor – Motor Operator of SMB-0 Valve Actuator**

Name and Address of the Individual Making the Interim Report

Mr. K. J. Polson
Vice President
Browns Ferry Nuclear Plant
Tennessee Valley Authority
Post Office Box 2000
Decatur, Alabama 35609-2000

Identification of the facility, the activity, or basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect (under evaluation)

On April 22, 2014, Browns Ferry Nuclear Plant (BFN) determined that the outboard bearing of the motor operator for the Limitorque SMB-0 Valve Actuator was degraded because of a possible misalignment of the bearing on the RHR Pump 3C Shutdown Cooling Suction Valve Flow Control Valve during manufacturing. The problem was discovered during testing of the Residual Heat Removal (RHR) Pump 3C Shutdown Cooling Suction Valve Flow Control Valve. Subsequent to the testing, the sealed outboard bearing for the SMB-0 Valve Actuator was sent to SKF USA, Inc. for evaluation.

Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect (under evaluation)

Flowserve – Limitorque
2801 T Hutchison McDonald Road
Charlotte, NC 28269

Description of the Deviation or Failure to Comply that is being Evaluated

The sealed outboard bearing for the motor operator of Limitorque SMB-0 Valve Actuator was found to be degraded on the RHR Pump 3C Shutdown Cooling Suction Valve Flow Control Valve.

Evaluation Status

The TVA is working with Flowserve – Limitorque to determine the cause of the failure of the SMB-0 valve actuator bearing.

Date on which Evaluation will be Completed

If Flowserve – Limitorque determines that the motor operation valve actuator bearing is defective or was misaligned during manufacturing, they will perform a 10 CFR Part 21 evaluation before July 7, 2014.