

ENCLOSURE 1

NOTICE OF VIOLATION

Tennessee Valley Authority
Browns Ferry 1, 2, and 3

Docket Nos. 50-259, 50-260, and 50-296
License Nos. DPR-33, DPR-52 and DPR-68

During the Nuclear Regulatory Commission (NRC) inspection conducted on January 30 - February 3 and February 14 - March 10, 1989, two violations of NRC requirements were identified. The violations involved failure to comply with and have adequate procedures for controlling the conduct of surveillance instructions and instrument calibrations and failure to maintain quality assurance records. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988), the violations are listed below:

- A. Technical Specification (TS) Section 6.8.1.1.c., requires that written procedures shall be established, implemented and maintained covering surveillance and test activities for safety-related equipment.

Site Director's Standard Practice (SDSP) 2.1, "Site Procedures and Instructions," requires that the site shall be operated and maintained in accordance with written, approved procedures and instructions which have been formally issued and distributed for use. SDSP 2.1 also states that personnel shall not give directions, guidance, recommendations or clarifications which conflict with approved procedures.

1. Contrary to the above, during the performance of surveillance instructions and instrument calibrations, procedures were not properly implemented in the following examples:
 - a. On January 30, 1989, surveillance procedure 2-SI-4.1B-6(A), "Reactor Protection and Primary Containment Isolation Systems Low Water Level Instrument Channel A1 Calibration," was not properly implemented in that contrary to step 7.56 the unit operator reset each half scram after it occurred. Step 7.56 requires the half scram to be reset only after all calibration work was completed and just prior to returning the channel to service. As a result, Unit 2 received several unexpected half scram actuations throughout the performance of 2-SI-4.1B-6(A).
 - b. On September 12, 1988, surveillance procedure 2-SI-4.1B-17(A), "Reactor Protection System CRD Scram Pilot Air Header Low Pressure Calibration," step 7.6.22, was signed off as "N/A" (not applicable) and (procedure) steps 7.6.23 through 7.33 were used to change a transmitter gasket without the use of a maintenance request to provide the SI step numbers to follow in changing the gasket. This is contrary to SDSP 7.6, "Maintenance Request and Tracking," Revision 2, Section 6.0,



- c. On January 30, 1989, the licensee failed to follow PMI-17.1 "Conduct of Testing" in that an unanticipated fuel oil pressure alarm received during the performance of surveillance procedure O-SI-4.9.A.1.a(A), "Diesel Generator "A" Monthly Operability Test," was not documented as a test deficiency.
- d. On February 2, 1989, the licensee failed to follow SDSP-2.11, "Implementation and Change of Site Procedures and Instructions," in that an Immediate Temporary Change (ITC) was not issued for a typographical error identified by a licensee QC inspector which affected the performance of surveillance procedure O-SI-4.2.D.1, "Liquid Radwaste Monitor Calibration/Functional Test."
- e. On January 30, 1989, the licensee failed to follow calibration procedure LCI-2-L-63-1, "Loop Calibration Instruction Standby Liquid Control System Tank Level Instrumentation," Step 7.41.3, in that technicians did not insert the full 11 feet of copper tubing into the sensing line of the standby liquid control tank to clean out boric acid crystals as required by the procedure.
- f. On February 2, 1989, the licensee failed to follow SDSP-2.11, "Implementation and Change of Site Procedures and Instructions," in that during the performance of standard calibration instruction SCI-504.0, "Differential Pressure Transmitter GE Type 555," an operator performed valve manipulations without changing SCI-504.0 to include the required valve manipulations.
- g. On February 1, 1989, during the calibration of "A" Standby Gas Treatment HEPA Filter Pressure Differential Gauge per Standard Calibration Instruction, SCI-527, "Calibration of "A" Standby Gas Treatment HEPA Filter Pressure Differential Dryer Magnehelic DP Gauge," the technicians performed valve manipulations without changing SCI-527 to include valve manipulations needed to isolate and restore the tested DP gauge as required by SDSP-2.11, "Implementation and Change of Site Procedures and Instructions."
- h. On July 18, 1988, procedure SCI-204, "Differential Pressure Transmitter, GE Type 555, (Range 0-200 inches water)," Step 7.2, was not followed in that configuration control forms were not completed for isolation and return to service of 2-LT-3-206 as required by the procedure. Since this documentation does not exist, there is no confirmation that second person verification of the isolation and return to service was performed.
- i. On February 1, 1989, the licensee failed to follow SPSP-2.1, "Site Procedures and Instructions," in that during performance of standard calibration instruction SCI-511, "Standard EECW System Calibration," technicians failed to verify the appropriate revision to be used and recorded information on the calibration card by utilizing Revision 2 of procedure SIMI-67, "Emergency Equipment Cooling Water System," when Revision 3 should have



been used. Revision 2 of SIMI-67 had a 2% instrument accuracy and Revision 3 had a 1.5% instrument accuracy which was more conservative.

2. Contrary to the above, during the performance of SIs and instrument calibration that had been validated by the licensee, procedures were not adequately established in the following examples:
 - a. On January 30, 1989, surveillance procedure 2-SI-4.1B-6(A), "Reactor Protection and Primary Containment Isolation Systems Low Water Level Instrument Channel A1 Calibration," was not adequate in that during the performance of steps 7.40.2, the Gross Fail Latch LED was not illuminated and the step was initialled as being N/A (not applicable); however, after completion of steps 7.40.3 and 7.40.4, the Gross Fail Latch LED was illuminated and step 7.40.5 could not be performed as written. Additional actions, which were required to perform step 7.40.5 by resetting the Gross Fail Latch (LED) and continue the SI, were not included in the approved procedure.
 - b. On January 30, 1989, calibration procedure LCI-2-L-63-1, "Loop Calibration Instruction Standby Liquid Control System Tank Level Instrumentation," step 7.41.3, which requires inserting of 11 feet of copper tubing into the sensing line in the standby liquid control tank, was not adequate in that as-constructed drawing 47W600-56 shows that the sensing line is 11 feet long inside the tanks with approximately 8 inches of piping extending above the tank where the cleanout tubing is inserted. This resulted in failure to completely rod out the sensing line to clean out any boric acid crystal buildup.
 - c. On February 2, 1989, during the performance of calibration instruction SCI-504.0, "Standard Calibration Instruction Differential Transmitter GE Type 555, (Range 0-391 inches water)," the procedure was determined to be inadequate for the performance of the calibration of 0-FT-67-3A in that root valve manipulations required for satisfactory procedure completion were not addressed in the procedure.
 - d. Calibration procedure SCI-527, "Calibration of "A" Standby Gas Treatment HEPA Filter Pressure Differential Gauge," did not address isolation valve manipulations required to isolate and place back in service the tested DP gauge from the two other DP gauges.

The above examples constitute a Severity Level IV Violation (Supplement I) which is applicable to Unit 2.

- B. 10 CFR 50, Appendix B, Criterion XVII, Quality Assurance Records, requires that sufficient records shall be maintained to furnish evidence of activities affecting quality. The records shall include



at least the following: operating logs and the results of reviews, inspections, tests, audits, monitoring of work performance, and materials analyses. The records shall also include closely-related data such as qualifications of personnel, procedures and equipment.

Contrary to the above, calibration cards used to record vital instrument information and calibration results were not controlled by plant administrative procedures as QA records.

This is a Severity Level V violation (Supplement I) and is applicable to Unit 2.

Pursuant to the provisions of 10 CFR 2.201, you are hereby required to submit a written statement or explanation to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Associate Director for Special Projects, Office of Nuclear Reactor Regulation and a copy to the NRC Resident Inspector, Browns Ferry, within 30 days of the date of the letter transmitting this Notice. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) admission or denial of the violations, (2) the reason for the violations if admitted, (3) the corrective steps which have been taken and the results achieved, (4) the corrective steps which will be taken to avoid further violations, and (5) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

FOR THE NUCLEAR REGULATORY COMMISSION

Linda J. Watson for
Bruce A. Wilson, Assistant Director
for Inspection Programs
TVA Projects Division
Office of Nuclear Reactor Regulation

Dated at Atlanta, Georgia
this *8th* day of May 1989

