TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

February 8, 1984

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U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 - NRC-OIE REGION II INSPECTION REPORT 50-327/83-29 AND 50-328/83-29

The subject OIE inspection report dated January 10, 1984 from you to H. G. Parris cited TVA with four Severity Level IV Violations. Enclosed is the response to the items of violation in the subject inspection report.

If you have any questions, please get in touch with R. H. Shell at FTS 858-2688.

To the best of my knowledge, I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Licensing

Enclosure
cc (Enclosure):
Mr. Richard C. DeYoung, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Records Center
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

ENCLOSURE

RESPONSE - NRC INSPECTION REPORT NOS.
50-327/83-29 AND 50-328/83-29
JAMES P. O'REILLY'S LETTER TO H. G. PARRIS
DATED JANUARY 10, 1984

Item 1 (327, 328/83-29-02)

10 CFR 50, Appendix B, Criterion X and the licensee's accepted Quality Assurance Program (Topical Report TVA-TR75-1) Section 17.2.10 require that inspection shall be performed during modification affecting the quality of Critical Systems, Structures and Components (CSSC) items at TVA plants. Modification and Addition Instruction (M&AI)-12 "Interconnecting Cable Termination and Insulation Inspection", Section 5.0, further requires that QA inspectors shall be responsible for inspecting per this procedure on CSSC equipment.

Contrary to the above, inspection was not performed on CSSC equipment as required by M&AI-12 Section 5 in that during the performance of Work Plan WP10260, which rerouted signal cables from radiation monitors 1-119, 1-120, 1-121, 2-120 and 2-121, the inspection of the cable termination per M&AI-12 was performed by the cognizant engineer instead of a QA inspector. The affected radiation monitors are CSSC equipment.

This is a Severity Level IV Violation (Supplement I). This violation applies to both units.

1. Admission or Denial of the Alleged Violation

   TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

   Work Plan WP10260 was worked as non-CSSC due to the fact that the cognizant engineer did not identify the equipment correctly as being a CSSC component. The cognizant engineer then signed off the work plan as he would any other non-CSSC work plan.

3. Corrective Steps Which Have Been Taken and the Results Achieved

   Work Plan WP10260 has been reworked per CSSC requirements in coordination with the Field Quality Engineering Staff inspectors.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations

   Personnel have been re-instructed to verify CSSC and non-CSSC components as future work plans are written.

5. Date When Full Compliance Will Be Achieved

   Full compliance was achieved on February 7, 1984.

Item 2 (327, 328/83-29-01)

Technical Specification 6.8.1.a requires that written procedures shall be implemented covering the activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, including discharging liquid radioactive waste as effluents. System Operating Instruction (SOI)-14.3 "Condensate Demineralizer Waste Disposal" provides requirements, conditions, precautions and instructions for releasing the High Crud Tanks (HCT).

Contrary to the above, procedure SOI-14.3 was not implemented in that on October 15, 1983, during a planned release from HCT "B" to cooling tower blowdown, the tank was partially released to the turbine building sump because the valve alignment was not properly completed in accordance with the procedure. When the error was discovered, the release was stopped, the valve alignment corrected and the release properly completed. The activity levels in the tank were less than 10 CFR 20, Appendix B, Table II limits, therefore, Technical Specification release limits were not exceeded.

This is a Severity Level IV Violation (Supplement IV). This violation applies to both units.

1. Admission or Denial of the Alleged Violation

   TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

   The proper valve lineup was not properly verified prior to the release. Personnel failed to completely follow the system operating instruction in aligning the system for release.

3. Corrective Steps Which Have Been Taken and the Results Achieved

   The release was terminated upon discovery. Appropriate disciplinary action was taken on the personnel involved. Retraining was conducted to reinforce the importance of following procedures and paying attention to detail. This training will also ensure that personnel understand the methods of independent (double-person) verification.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations

   The procedure, SOI-14.3, is being revised to include double verification. This will be done by March 16, 1984.

5. Date When Full Compliance Will Be Achieved

   Full compliance was achieved October 15, 1983.

Item 3 (328/83-29-03)

Technical Specification 3.5.1.2 requires that the Upper Head Injection Accumulator System shall be operable with the unit in Mode 3 above 1900 psig. Technical Specification 3.0.4 requires that entry into an Operational Mode or other specified condition shall not be made unless the conditions for the Limiting Condition for Operation are met without reliance on provisions contained in the Action requirements.

Contrary to the above, Unit 2 was in Mode 3 and went above 1900 psig on November 7, 1983, without the Upper Head Injection Accumulator System operable in that reactor coolant system pressure was allowed to increase prior to placing the system in service. The condition for LCO 3.5.1.2 was not met without reliance on provisions contained in the action requirements. Reactor coolant system pressure was quickly reduced to less than 1900 psig when the error was discovered. Pressure was above 1900 psig for approximately one hour.

This is a Severity Level IV Violation (Supplement I). This violation applies to Unit 2 only.

1. Admission or Denial of the Alleged Violation

   TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

   The event of November 7, 1983, was caused by a personnel error in that the operator inadvertently failed to follow procedures. During the startup phase, the operator had become involved in several other jobs at the same time and failed to notice the reactor coolant system (RCS) pressure increase and to open the upper head injection (UHI) isolation valves. Immediately upon event discovery, the operator decreased RCS pressure to less than 1900 psig by opening the pressurizer sprays and turning off the pressurizer heaters.

3. Corrective Steps Which Have Been Taken and the Results Achieved

   The operator was counseled and disciplinary action initiated to reinforce the importance of following procedures and observance of plant parameters.

4. Corrective Steps Which Will Be Taken to Avoid Further Violations

   All plant personnel have been given training to ensure that they understand the importance of paying attention to detail and following procedures.

5. Date When Full Compliance Will Be Achieved

   Full compliance was achieved on November 7, 1983, when the operator reduced pressure less than 1900 psig.

Item 4 (328/83-29-04)

Unit 2 License Condition 2.C.(16)c. requires that procedures shall be available to verify the adequacy of operating activities in accordance with paragraph I.C.6 of NUREG 0737. Paragraph I.C.6 references section 5.2.6 of ANSI Standard N18.7 which requires that temporary modifications such as lifting of leads be controlled by approved procedures which shall include a requirement for independent verification.

Contrary to the above, adequate procedures were not available to verify the adequacy of operating activities in that on November 1, 1983, leads were lifted from Unit 2 Upper Head Injection level switches (L/S) 87-23 and 87-24 to support calibration per SI-196.2. The lead lifting was not controlled by SI-196.2 and there was no requirement for independent verification of the retermination. The wires were reterminated incorrectly and caused equipment inoperability. The error on L/S 87-23 was identified and corrected on November 8. The error on L/S 87-24 was identified and corrected on November 15.

This is a Severity Level IV Violation (Supplement I). This violation applies to Unit 2 only.

1. Admission or Denial of the Alleged Violation

   TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

   On November 1, 1983, while the unit was in mode 1 at 100 percent power, the instrumentation mechanics calibrated UHI level switches 2-LS-87-23 and -24. These level switches contain a microswitch which has two sets of contacts, one for closing the associated valve using the control room handswitch and the other for actuating the dump solenoid to fast close the isolation valve on an accumulator low level. The internal wiring to the level switches was lifted to better facilitate the test equipment setup; however, the calibration procedure (SI-196.2) did not contain steps to lift wiring. Following calibration, the wiring was incorrectly reterminated and the unit condition did not allow for post-maintenance testing of the valves. Therefore, the error was not noted at this time.

   On November 2, 1983, with unit 2 shut down for a scheduled outage and while trying to close the UHI isolation valves in mode 3 before going below 1200 psig, valve 2-FCV-87-23 would not close by the control room handswitch. Initial troubleshooting did not reveal the problem and the valve was fast closed by jumpering the dump solenoid at the level switch. The problem was thought to be in the control room handswitch, and troubleshooting between November 3, 1983, and November 7, 1983, did not reveal the problem.

3. Corrective Steps Which Have Been Taken and the Results Achieved

Plant management initiated an investigation into all problems associated with the UHI system. At this time, the wiring errors were noted. Valve 2-FCV-87-23 was found such that it would have closed on a low-level signal if required, but not from the control room handswitch. Valve 2-FCV-87-24 would not have closed on a low-level signal and, therefore, did not comply with LCO 3.5.1.2 requirements. However, the valve would operate from the control room handswitch.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations

Maintenance personnel will be given training on the use of configuration control forms. This will be reinforced periodically on an annual basis. The UHI level switch procedure (SI-196.2) was revised to add the necessary steps to use configuration control forms if leads are lifted.

The configuration log and system status file shall be maintained such that any outages or deviations shall be documented in either file. Also, these files may be relied on for system operability and alignment.

5. Date When Full Compliance Will Be Achieved

Full compliance was achieved on November 25, 1983, when SI-196.2 was revised.