

DME

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

DEC 05 1986

06 DEC 9  
A 8:33

U.S. Nuclear Regulatory Commission  
Region II  
ATTN: Dr. J. Nelson Grace, Regional Administrator  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

Dear Dr. Grace:

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 - NRC-OIE REGION II INSPECTION REPORT  
NOS. 50-327/86-46 AND 50-328/86-46 - RESPONSE TO VIOLATIONS

Enclosed is our response to Gary G. Zech's letter to S. A. White which transmitted NRC Inspection Report Nos. 50-327/86-46 and 50-328/86-46 for our Sequoyah Nuclear Plant. This report cited TVA with five violations: 327, 328/86-46-01, Severity Level IV; 327, 328/86-46-03, Severity Level V; 327, 328/86-46-07, Severity Level IV; 327, 328/86-46-08, Severity Level IV; and 327, 328/86-46-09, Severity Level IV. Our response to each of these violations is contained in the enclosure.

We were requested to include as part of the corrective actions to violation 327, 328/86-46-08, a resolution as to whether or not the Hydrogen Recombiner and Iodine Cleanup Systems are listed in unit 1 technical specification (TS) 6.8.5 incorrectly. It has been determined that the unit 1 TS is incorrect and a change will be submitted before April 30, 1987. This information has been provided here because the enclosed response contains a denial of violation 327, 328/86-46-08 and therefore contains no corrective actions.

If you have any questions, please get in touch with M. R. Harding at 615/870-6549.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*R. Gridley*  
R. Gridley, Director  
Nuclear Safety and Licensing

8612160054 861205  
PDR ADOCK 05000327  
Q PDR

Enclosure

cc (Enclosure):

Mr. James Taylor, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Mr. G. G. Zech  
Director, TVA Projects  
U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

TE01 11

ENCLOSURE  
RESPONSE - NRC OIE INSPECTION REPORT  
NOS. 50-327/86-46 AND 50-328/86-46  
GARY G. ZECH'S LETTER TO S. A. WHITE  
DATED NOVEMBER 5, 1986

VIOLATION 50-327, 328/86-46-01

TS 6.12 states that in lieu of the control device or alarm signal required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a special Radiation Work Permit (RWP).

Sequoyah Nuclear Plant Radiological Control Instruction RCI-1, Radiological Hygiene Program, states that each high radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: DANGER or CAUTION HIGH RADIATION AREA and RWP required.

Contrary to the above, on September 3, 1986, two maintenance personnel entered a high radiation area and failed to return either of the two available entry barriers to a position which barricaded access to the high radiation area thus removing the postings.

This is a Severity Level IV violation (Supplement IV).

1. Admission Or Denial Of The Alleged Violation

TVA admits the violation occurred as stated.

2. Reason For The Violation

The violation occurred as a result of personnel error in that the individuals failed to ensure that the barriers were returned to their proper positions.

3. Corrective Steps Taken And Results Achieved

The fact that the barricades had not been returned to their proper position was immediately brought to the attention of the individuals involved by the resident inspector who was conducting a conversation with one of the individuals at the time of the incident. The barricades were returned to their proper position at that time.

4. Corrective Steps Taken To Avoid Further Violations

Two letters were written by the Superintendent, Radiological Controls. One letter was addressed to the Radiological Field Operations (RFO) personnel and included a discussion of the subject violation. Instructions were provided to minimize a recurrence.

The second letter was sent to plant supervisors. The letter provided a brief description of the violation, gave the requirement for the gates, and requested assistance in observing the gates for compliance requirements.

5. Date When Full Compliance Will Be Achieved

This item was completed November 14, 1986.

Violation 50-327, 328/86-46-03

TS 4.4.5.5.a states that, following each inservice inspection of steam generator tubes, the number of tubes plugged in each steam generator shall be reported to the Commission within 15 days.

Contrary to the above, on October 12, 1985, the licensee completed tube plugging activities on Unit 1 and failed to submit the required report. Additionally, twice before this outage the licensee plugged steam generator tubes and failed to submit the appropriate report.

This is a Severity Level V violation (Supplement I).

1. Admission Or Denial Of The Alleged Violation

TVA admits the violation occurred as stated.

2. Reason For The Violation

The violation occurred as a result of procedural inadequacy. Procedures in place at the time did not ensure that a 15-day report be submitted to NRC.

3. Corrective Steps Taken And Results Achieved

All steam generator tubes that were plugged at Sequoyah and not reported to NRC in a 15-day report have subsequently been reported in annual reports.

4. Corrective Steps Taken To Avoid Further Violations

Maintenance Instruction 3.2 will be revised to ensure the 15-day reporting requirement is met for all subsequent steam generator tube plugging done at Sequoyah. This revision effort will be completed by January 15, 1987.

5. Date When Full Compliance Will Be Achieved

Full compliance will be achieved when Maintenance Instruction 3.2 has been revised.

Violation 327, 328/86-46-07

TS 6.5.1 addresses the Plant Operations Review Committee (PORC).

1. TS 6.5.1.6 requires that PORC shall be responsible for review of those items listed in sub paragraphs 6.5.1.6.a through m.

Contrary to the above, the review of the items addressed in sub paragraphs 6.5.1.6.a through m has been informally delegated to subordinates by the permanent PORC members over the last two years. The permanent members subsequently base their decision for approval on memoranda from the subordinates and/or their initials on the informal PORC document routing sheets. Consequently, due to the limited discussion format of the PORC meetings and the informal routing process, the members do not achieve full personal knowledge of the issues being addressed. Additionally, temporary PORC members are further removed from the review process.

2. TS 6.5.1.5 states that the minimum quorum of the PORC necessary for the performance of the PORC responsibility and authority provisions of these TSs shall consist of the Chairman or his designated alternate and four members including alternates.

Contrary to the above SQA 21, Section 5.3, is inadequate in that it allows an alternative means of establishing a quorum after consultation with the licensee's appropriate central office supervisor.

This is a Severity Level IV violation (Supplement I).

1. Admission Or Denial Of The Alleged Violation

TVA admits the violation as stated.

2. Reason For The Violation

This violation is a result of interpretation nuances of technical specification 6.5.1 concerning PORC review. Consequently, the procedure implementing the technical specification requirements for PORC review was inadequate.

The responsibilities of PORC are delineated in Sequoyah Standard Practice SQA-21, "Onsite Independent Review (Plant Operations Review Committee)." This procedure did not clearly document that delegation of reviews to subordinates by PORC members was an acceptable practice. This process was being used at Sequoyah; however, it was not administratively controlled in SQA-21.

Technical specification 6.5.1.5 for minimum quorum was inadequately implemented in SQA-21 in that the procedure incorrectly allowed for an alternate method for establishing a quorum which was not permitted. There has been no evidence that this method was ever used by PORC; however, the standard practice failed to properly ensure that the technical specification allowable methods for establishing a quorum was maintained.

3. Corrective Steps Which Have Been Taken and Results Achieved

Standard Practice SQA-21 has been completely rewritten to accurately implement the requirements for PORC as delineated in the technical specifications. The use of qualified individuals in the PORC review process has been clearly incorporated in SQA-21. Further, a list of qualified individuals has been included as a part of the standard practice.

The step which allowed for consulting with central office supervisors for establishing a PORC quorum has been deleted from the standard practice.

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

See item (3) above.

5. Date When Full Compliance Will Be Achieved

The standard practice was revised and approved on October 31, 1986, and has now been implemented.

VIOLATION 50-327, 328/86-46-08

TS 6.8.5.a(i) requires that a program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids be implemented. The TS states that the program shall include preventive maintenance and periodic visual inspection requirements.

Contrary to the above the licensee's program intended to meet TS 6.8.5 does not include preventive maintenance, but is composed only of the SI-632 series visual inspections and random vibration analysis of specific pumps. The maintenance performed as a result of a SI-632 (series) visual inspection is viewed by the NRC to be corrective and not preventive maintenance.

This is a Severity Level IV violation (Supplement I).

1. Admission or Denial Of The Alleged Violation

TVA denies the violation as stated.

2. Reason For The Denial

The program in use at Sequoyah to ". . . reduce leakage from systems outside containment that would or could contain highly radioactive fluids . . ." was submitted to NRC in our response to NUREG-0578, Section 2.1.6.a. Our NUREG-0578 submittal and revisions included copies of the procedures (SI-632 series and SI-656) to be used for Sequoyah's leakage reduction program as well as a discussion of the guidelines used to write these procedures.

NUREG-0694, June 1980, stated that the requirement for a leakage reduction program (section III.D.1.1) would be satisfied by response to paragraph 2.1.6.a of NUREG-0578. NRC stated in the Sequoyah Safety Evaluation Report (SER), Supplement No. 2, August 1980, that ". . . Section III.D.1.1 full-power requirements of NUREG-0694 have been met." NRC also stated in SER Supplement No. 5, May 1981, that as stated in SER supplement No. 2, ". . . TVA had submitted acceptable procedures which are applicable for both units . . ." for Sequoyah's leakage reduction program.

Based on NRC statements in SER supplements 2 and 5 it can be concluded that the program developed and implemented at Sequoyah, which is based on visual inspection, quantification of leakage, reduction of identified leakage through maintenance, and periodic integrated leak tests, met both the immediate and continuing leak reduction requirements for a leakage reduction program as set forth in NUREG-0578, NUREG-0694, and NUREG-0737. TS 6.8.5.a is an administrative control required by NRC to ensure implementation of the "continuing leak reduction" portion of the required leak reduction program. Inasmuch as TVA submitted for NRC review the program implemented at Sequoyah and, as stated above, received subsequent approval, we believe that the requirements of TS 6.8.5.a have been met.

TVA realizes the philosophy as to what constitutes preventive maintenance (PM) has evolved over the years. It has become evident throughout the industry that tracking and trending should be included in a PM program. In Sequoyah's ongoing effort to improve its overall maintenance program through implementation of a tracking and trending process, the results of the visual inspections and leak tests will be recorded and reviewed to determine the need for more frequent maintenance and/or testing. The procedures used to implement the leak reduction program will be revised to incorporate this requirement before April 1, 1987.

Violation 50-327, 328/86-46-09

TS 6.8.1.a requires the licensee to establish, implement and maintain written procedures covering the applicable activities in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

Regulatory Guide 1.33, Revision 2, February 1978, recommends procedures for contamination control and access control to radiation areas including a radiation work permit (RWP) system. Plant procedure RCI-1 states that protective clothing requirements are specified on a RWP time sheet and that the protective clothing shall be worn as required.

Contrary to the above, the requirement that protective clothing be worn as required by the RWP was not met in that on September 3, 1986, three persons were observed to be in nonconformance with the protective clothing dress requirements specified in RWP 86-2-216-117, time sheet 3, in that none of the three individuals wore a protective hood.

This is a Severity Level IV violation (Supplement IV).

1. Admission Or Denial Of The Alleged Violation

TVA admits the violation occurred in that the three individuals wore the canvas hoods improperly, as stated in paragraph 5.c.(2) of the inspection report, as opposed to not having worn the hoods as stated in the Notice of Violation.

2. Reason For The Violation

The violation occurred as a result of personnel error in that the individuals did not follow proper dressout procedure (i.e., hoods were not closed properly while in the C-zone).

3. Corrective Steps Taken And Results Achieved

When the fact that their hoods were not being worn properly was brought to their attention, the three individuals secured the Velcro strips to comply with the dressout requirements.

4. Corrective Steps Taken To Avoid Further Violations

Radiological Control Instruction RCI-1 has been revised to impress upon workers the importance of following good radiological work practices and adhering to the instructions specified on RWPs when working in radiological controlled areas of the plant.

5. Date When Full Compliance Will Be Achieved

Full compliance was achieved on October 10, 1986, when RCI-1, Revision 31 was approved and issued.