

TENNESSEE VALLEY AUTHORITY

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NOV 21 1988

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

Gentlemen:

In the Matter of)
Tennessee Valley Authority) Docket Nos. 50-327
50-328

SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2 - NRC INSPECTION REPORT
NOS. 50-327/88-29 AND 50-328/88-29 - REPLY TO NOTICE OF VIOLATION

Enclosed is TVA's response to S. D. Richardson's letter to S. A. White dated
October 20, 1988, that transmitted violations 50-327, 328/88-29-01, 02, 03,
and 04.

Enclosure 1 provides TVA's response to the notice of violation. Summary
statements of commitments contained in this submittal are provided in
enclosure 2.

If you have any questions, please telephone M. A. Cooper at (615) 870-6549.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

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R. Gridley, Manager
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Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

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ENCLOSURE 1

RESPONSE TO NRC INSPECTION REPORT
NOS. 50-327/88-29 AND 50-328/88-29
S. D. RICHARDSON'S LETTER TO S. A. WHITE
DATED OCTOBER 20, 1988

Violation 50-327, 328/88-29-01

"A. 10 CFR Part 50, Appendix A, General Design Criteria for Nuclear Power Plants requires under Criterion 38 that a containment heat removal system be provided to remove heat from the reactor containment. Sequoyah FSAR Section 6.2.2 describes the containment heat removal systems and defines the separate systems which provide this capability. TVA has provided, in part, for such a heat removal system through the design and use of the containment spray system. TVA, in SQN-DC-V-27.5, established the design criteria for the containment spray system. Section 1.1.2 of that document describes the design concept of the system as an energy/heat removal system for the reactor containment. Section 1.1 of the document establishes this system as being an engineered safety feature. Section 3.8.1 states that the containment spray system is an essential system.

10 CFR Part 50, Appendix B is defined to apply to all activities affecting the safety-related functions of those systems associated with nuclear power plants including such activities as design. Criterion III, Design Control, of 10 CFR 50, Appendix B requires in part that measures be established to assure that the design basis for systems under Appendix B be correctly translated into specifications and drawings and further that design control measures shall be applied to such items as the following: reactor physics, stress, thermal hydraulic and accident analysis.

TVA in Nuclear Engineering Procedure (NEP) 3.1, Calculations, Section 2.2 defines, essential calculations as those which address plant systems whose failure could result in the loss of the ability to place the plant in the appropriate shutdown mode. Further in Section 3.0. it is stated that each release of drawings shall be accompanied or preceded [sic] by approved calculations and analyses.

Contrary to the above, TVA did not have hydraulic and thermal design calculations for the containment spray system, an essential safety system, which established the design basis for the pressure and temperature boundaries shown on TVA drawing 47W612-1, Flow Diagram Containment Spray System Drawing, Revision 16, dated February 16, 1988.

This is a severity level IV violation (Supplement I)"

Admission or Denial of the Alleged Violation

TVA admits the violation.

Reason for the Violation

The root cause of this violation has been determined to be the documentation practices at the time of initial system design and the assumption that this system was part of the nuclear steam supply system (NSSS) package (which was the case in early contract negotiations). This resulted in the following:

1. No retrievable design calculations or other documentation that justified the design conditions for the system.
2. The calculation regeneration program assumed these design calculations were generated by Westinghouse Electric Corporation.

In addition, the Mechanical Engineering Branch procedure, MEB-1-23.2, for design calculations, did not identify the inclusion of design pressure and temperature calculations on its checklist until revision 2, which was issued November 6, 1987.

Corrective Steps That Have Been Taken and Results Achieved

Condition adverse to quality report (CAQR) SQP880387, revision 1, was issued to address this concern; and the following corrective actions have been taken.

1. Calculations have been issued to document the design conditions.
2. The containment spray system piping components have been reviewed and verified, and they are adequate for design pressures and temperatures required by the calculations.
3. The design pressure and temperature calculations for TVA-designed safety systems have been identified. The Westinghouse documentation for the upper head injection (UHI) system was reviewed in order to bound the problem to the containment spray system because the UHI and containment spray systems were TVA and Westinghouse design interface systems. This review ensured that all the systems had required design pressure and temperature calculations.
4. The containment spray system calculations have been reviewed, and the essential calculations (after issuance of the pressure and temperature calculations) exist.

Corrective Steps That Will Be Taken to Avoid Further Violations

The Calculation Regeneration Program has addressed the corrective steps necessary to compile and maintain the essential calculations for each system. Because this violation has been isolated to the calculations for this system, no further corrective steps are necessary.

A design change notice (DCN) will be issued for each unit to revise flow drawing 47W812-1. This revision will reflect the correct design parameters. The DCN and drawings will be issued by January 31, 1989. Hydrostatic testing of the affected portions of the containment spray system has been completed by workplan (WP) 6674-01.

Date When Full Compliance Will Be Achieved

TVA is in full compliance.

Violation 50-327, 328/88-29-03

"B. Technical Specification 6.8.1 requires that procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, be established, implemented and maintained, including administrative procedures. The Technical Specifications are implemented, in part, by the Sequoyah procedures listed below:

1. Drawing 48N1231 and TVA Modification and Additions Instruction (M and AI) - 9, Tightening, Inspection, and Documentation of Bolted Connections, establish the bolting, configuration and member size for the containment spray heat exchanger 1B.

Contrary to the above, between June 20, 1988 to July 1, 1988, NRC inspectors determined that six of eight fasteners on containment spray heat exchanger 1B were loose with two having only one half nut engagement; one assembly had no washer; and seven fasteners had flat washers instead of the beveled washers prescribed by M and AI-7. In addition the mounting feet were fitted with three quarter inch bolts instead of one inch bolts.

2. Drawing H21-417 and H21-402 specifies size 12 and 11 spring can for supports 1-CSH-408 and 1-CSH-402 [sic], respectively.

Contrary to the above, a size 9 spring can was installed in each case.

3. Drawing UE 032-12.50-2 specifies one and one-eighth inch diameter holes for the containment spray pump mounting bracket.

Contrary to the above, prior to June 20, 1988, the mounting bracket on the vendor supplied pump assembly was enlarged (slotted) apparently to allow alignment with anchor bolts embedded in the concrete foundation pad.

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

Admission or Denial of the Alleged Violation (Example 1)

TVA admits the violation.

Reason for the Violation (Example 1)

SQN has not been able to conclusively identify the cause of the identified bolted connection deficiencies on the containment spray heat exchanger. The probable root cause of the bolted connection deficiencies appears to be inadequate implementation of applicable inspection procedures.

Corrective Steps That Have Been Taken and Results Achieved (Example 1)

CAQR SQP880400, revision 1, was issued to document the deficiencies identified by the NRC findings on the bolts of the unit 1 containment spray heat exchanger upper supports. Inspection of the upper support connections for the unit 2 containment spray heat exchangers identified similar deficiencies. Calculation No. SCG1S220 was performed to qualify all four containment spray heat exchangers on units 1 and 2 for the as-installed condition at all top support connections. It was determined that operability of the unit 2 heat exchanger was not affected by the as-found condition. Proper bolted connections in accordance with drawing requirements for the unit 1 containment spray heat exchangers have already been installed in accordance with work request (WR) B-270861.

Corrective Steps That Will Be Taken to Avoid Further Violations (Example 1)

The unit 2 bolts will be installed in accordance with modification and addition instruction (M&AI) 9 as required by Drawing No. 48N1231 for the upper supports of containment spray heat exchangers 2A and 2B during the next unit 2 refueling outage (unit 2 cycle 3).

The design for all category I and I(L) heat exchangers was examined for the attributes identified as deficient by CAQR SQP880400. It has been determined that, in addition to the upper supports for containment spray heat exchangers, the following heat exchanger to support connections shall be reinspected for those attributes using the requirements of M&AI-9: letdown, seal water, residual heat removal, and the lower supports for containment spray heat exchangers. These reinspections will be performed during the unit 2 cycle 3 refueling outage and the unit 1 cycle 4 refueling outage. These connections have been evaluated with regard to the deficiencies identified in CAQR SQP880400, revision 1; and it was determined that operability of the various heat exchangers was not affected. The review of the connection design for all category I and I(L) heat exchangers, as well as the operability evaluation, is contained in calculation No. SCG1S227.

M&AI-9 adequately implements tightening, inspection, and documentation requirements for bolted connections. Therefore, no further recurrence control is necessary concerning implementation of inspection procedures.

Date When Full Compliance Will Be Achieved (Example 1)

Bolts will be replaced in accordance with the requirements of M&AI-9 for the unit 2 containment spray heat exchanger upper supports during the next unit 2 refueling outage (unit 2 cycle 3). Inspection of the additional heat exchanger supports will be completed for unit 2 during the unit 2 cycle 3 refueling outage and for unit 1 during the unit 1 cycle 4 refueling outage.

Admission or Denial of the Alleged Violation (Example 2)

TVA admits the violation.

Reason for the Violation (Example 2)

The root cause of this violation example was failure to adequately implement the engineering change notice (ECN). During the performance of ECN L5277 for replacing the existing spring cans for supports 1-CSH-401 and 1-CSH-408, these spring cans were erroneously added to WP 9911, which was a "documentation only" WP.

Corrective Steps That Have Been Taken and Results Achieved (Example 2)

CAQR SQN880406 was initiated to address the spring can deficiencies for pipe supports 1-CSH-401 and 408. As part of the restart program for SQN, TVA initiated the unit 1 rigorous analysis program and a closure program for Inspection and Enforcement Bulletin (IEB) 79-14. A major function of this program required a verification that the seismic analysis of category I rigorously analyzed piping be reconciled with the as-built piping/support configuration. One of the pipe support attributes verified by this programmatic reconciliation was verification of correct spring can size installations.

The discrepancy between the as-installed and the as-designed spring can size for pipe support 1-CSH-408 was previously identified by TVA in a field verification walkdown. The initial design resolution of this discrepancy was to replace the No. 9 spring can with the as-designed No. 12 spring can. To accomplish this resolution, a request for information (RFI) form, utilized internally by the contractor performing the unit 1 IEB 79-14 reconciliation, was initiated. The RFI requested that a field WR be issued to correct the spring can size. The WR was not released by Nuclear Engineering (NE).

To assess the effects of the incorrect spring size, piping analysis calculation N2-72-1A, 2A was revised (B25 880719 831). This analysis revision addressed the effects of the load variation on the piping analysis and determined that the pipe stress met design requirements. The pipe support calculation and the configuration drawing for 1-CSH-408 have been revised to indicate a No. 12 spring can size. A No. 12 spring can has been installed on support 1-CSH-408.

The information necessary to identify the discrepancy between the as-installed and the as-designed spring can for pipe support 1-CSH-401 was provided as part of the field walkdown. The functional verification of the spring size (utilizing the Maintenance Instruction [MI] 6.17, "Instructions for the Implementation of NRC IE Bulletin 79-14," inspection) identified a No. 9 spring can as installed. However, the walkdown package also included an as-built drawing identifying the installed spring can to be a size No. 11. The design review of support 1-CSH-401 incorrectly utilized the as-built drawing as a baseline for the support qualification calculation rather than the functionally verified MI-6.17 inspection drawing.

Piping analysis calculation N2-72-1A, 2A has been revised to assess the impact of the smaller spring can on the analysis. This analysis revision confirmed that the pipe stresses meet restart design requirements. Pipe support calculation 1-CSH-401 (B25 880805 839) has been revised to indicate the as-installed spring size.

Corrective Steps That Will Be Taken to Avoid Further Violations (Example 2)

To determine the programmatic implication of the failure to release a WR requested by an RFI, a generic review of RFIs, originated by the contractor, was performed. Based on this generic review, it has been concluded that this condition is an isolated occurrence; and no further action is required.

The spring can for pipe support 1-CSH-401 will be reset postrestart under DCN M00555 to ensure that the piping analysis meets design basis requirements.

To determine the generic implication of this condition on the unit 1 rigorous analysis and IEB 79-14 program, a comprehensive review of field verification packages was performed. Any package that contained both functional verification drawings, as well as as-constructed drawings, was reviewed in detail. Although additional discrepancies were found, the as-installed condition was found to meet design criteria requirements; thus, no resulting support modifications were required. To prevent further recurrence, Special Maintenance Instruction O-317-69, "Performance of Walkdowns for Verification of Plant As-Installed Configuration," was revised to allow only one verification drawing in the walkdown package.

Additionally, the new DCN/Plant Modification Package (DCN/PMP) procedures developed at SQN will ensure that the work required to implement and close design changes is kept to small, manageable levels by controlling the scope of the DCN/PMP. This will enable the modifications group to make an exact determination of work required with less chance for error. Before close of the WPs for the DCN/PMP, NE personnel are required to verify physical work completion.

The spring can for pipe support 1-CSH-401 will be reset during unit 1 cycle 4 refueling outage.

Date When Full Compliance Will Be Achieved (Example 2)

With the resetting of the No. 9 spring can for pipe support 1-CSH-401, TVA will be in full compliance.

Admission or Denial of the Alleged Violation (Example 3)

TVA admits the violation.

Reason for the Violation (Example 3)

The containment spray pump 1B-B embedded bolts were of the nonsleeved type; therefore, adjustments for bolt hole tolerances were not possible. This subsequently resulted in slotted holes being installed in the base pad of the pump. The root cause of this violation was failure to control and document the as-constructed condition.

Corrective Steps That Have Been Taken and Results Achieved (Example 3)

CAQR SQP880393 was initiated to address the deficiencies for the containment spray pump supports. Calculation No. SCG1S218 was performed to qualify the containment spray pumps for the in-place, slotted hole condition.

A generic review was performed as part of recurrence control for CAQR SQN880393 to investigate all equipment anchorages that used nonsleeved, embedded bolts. This review showed that all category I safety-related equipment that used nonsleeved, embedded bolts was acceptable. No other category I equipment anchorages were found with slotted holes (unless slots were called for in the drawings). The generic review is contained in Calculation No. SCG1S221.

Administrative Instruction 19 (Part VI), "Modifications: Permanent Design Change Control Program," implements controls and documentation requirements for the as-constructed configuration for future installations or changes to installation. No other corrective steps are required.

Corrective Steps That Will Be Taken to Avoid Further Violations (Example 3)

The containment spray pump base drawing 41N353-1 will be revised to document the condition of the slotted holes by March 28, 1989.

Date When Full Compliance Will Be Achieved (Example 3)

TVA will be in full compliance when drawing 41N353-1 is revised.

Violation 50-327, 328/88-29-02

"C. Technical Specification 6.8.1 requires that procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, be established, implemented and maintained, including administrative procedures. The Technical Specifications are implemented, in part, by the Sequoyah procedures listed below:

1. Modification and Additions Instruction (M and AI) - 7, Cable Terminations, Splicing, and Repairing of Damaged Cables implements this Technical Specification requirement for the termination and repair of safety-related electrical components. Section 3.4 of M and AI-7 addresses the minimum training radius values for splices and terminations through the use of outside diameter measurements and appropriate calculation data. Section 5.2 of M and AI-7 addresses the repair of damaged cables.

Contrary to the above, prior to June 20, 1988, motor lead T1 on flow control valve 1-FCV-72-13 was not trained in accordance with the above referenced calculational method. In addition, motor leads T1 and T2, and white conductor wire 25 of cable 1A5335 had cable repairs using electrical tape.

2. Drawing 45N1749-15 implements this Technical Specification requirement for the landing of green wire 53 and red wire 55 on 1-FCV-72-40.

Contrary to the above, prior to June 20, 1988, both referenced wires were landed incorrectly on terminal 16 of rotor 4 rather than rotor 15.

3. Standard Practice SQA-66, Plant Housekeeping, implements this Technical Specification requirement in addition to the requirements of the Nuclear Quality Assurance Manual Part II, Section 1.2, Requirements for Housekeeping in Nuclear Power Plants. Section 5.3.2 of SQA-66 states that if work extends beyond one shift, and is not continuously worked (work will not be resumed for one shift or more) the craftsman shall ensure the work area is left clean. Tools, parts, and equipment must be properly identified with area barrier tag or individual pink tags. It also states that special care shall be taken when opening or disassembling sensitive electrical equipment which may be damaged by dust or moisture.

Contrary to the above, from June 20 to July 1, 1988, the components of valves 1-FCV-72-2 and 1-FCV-72-39 were not tagged correctly, nor covered. These components were stored in an area where penetration seal work was being conducted directly overhead.

4. Maintenance Instruction MI-6.20, Configuration Control During Maintenance Activities, implements this Technical Specification requirement for the controlled reassembly of safety-related components. MI-6.20 states that when a configuration change is returned to normal the accuracy shall be verified and documented.

Contrary to the above, from June 20, 1988, to July 1, 1988, during an internal inspection of the limit switch component of valves 1-FCV-72-41 and 1-FCV-72-22, loose extraneous material was identified. The material could interfere with the proper operation of the component during normal and accident situations.

This is a severity level IV violation (Supplement I)."

Admission or Denial of the Alleged Violation (Example 1)

TVA admits the violation.

Root Cause of the Violation (Example 1)

The root cause of the violation was improper work practices.

Corrective Steps That Have Been Taken and Results Achieved (Example 1)

The repair of motor leads T1 and T2 and the white conductor wire 25 of cable 1A5335 was completed on WR B261005. The bend radius problem on the T1 motor lead was corrected by WR B262740.

Corrective Steps That Will Be Taken to Avoid Further Violations (Example 1)

There is no further corrective action required.

Date When Full Compliance Will Be Achieved (Example 1)

SN is in full compliance.

Admission or Denial of the Alleged Violation (Example 2)

TVA admits the violation.

Reason for the Violation (Example 2)

The root cause of this example is inattention to detail. During implementation of a recent modification, conductors 53 and 55 of cable 1V2748A were inadvertently terminated on incorrect terminal points. The terminal points on which the conductors were terminated are associated contacts; i.e., they operate exactly like the correct contacts on which the conductors should have been terminated. This resulted in the successful completion of the postmodification test portion of the modification WP.

Corrective Steps That Have Been Taken and Results Achieved (Example 2)

Drawing deviation 88DD3821 was submitted to document this discrepancy. The conductors have been reterminated correctly by WR B261005. A training memorandum has been issued to Electrical Maintenance employees describing this issue and alerting employees to be aware of this situation.

Corrective Steps That Will Be Taken to Avoid Further Violations (Example 2)

There is no further corrective action required.

Date When Full Compliance Will Be Achieved (Example 2)

SN is in full compliance.

Admission or Denial of the Alleged Violation (Example 3)

TVA admits the violation.

Reason for the Violation (Example 3)

The root cause of the violation was improper work practices.

Corrective Steps That Have Been Taken and Results Achieved (Example 3)

The components for 1-FCV-72-41 and 1-FCV-72-22 were examined and found to be acceptable for use. The valve components were reassembled, and postmaintenance testing was completed. Lockable sheet metal boxes have been fabricated and are now being used to store equipment subcomponents when disassembly is required for motor-operated valve analysis test system (MOVATS) tests and other situations (as determined necessary in a case-by-case basis).

The box will be marked with a "pink tag," which will provide information concerning the associated work document. This issue has been discussed with personnel involved, and they are aware of the new boxes to be used during MOVATS testing.

Corrective Steps That Will Be Taken to Avoid Further Violations (Example 3)

There is no further corrective action required.

Date When Full Compliance Will Be Achieved (Example 3)

TVA is in full compliance.

Admission or Denial of the Alleged Violation (Example 4)

TVA admits the violation.

Reason for the Violation (Example 4)

The extraneous material (jumper wire, nuts, washers, cut cable ties, etc.) found inside the limit switch compartment of various actuators is not contrary to MI-6.20, "Configuration Control During Maintenance Activities." This material was contrary to Standard Practice SQA66 and was the result of poor housekeeping following work activities. Because of environment qualification requirements, all internal wiring on 10 CFR 50.49 Limitorque actuators was replaced. During these activities, bundles of conductors were loosened by cutting the cable ties; and nuts and washers were removed to allow replacement of conductors (jumpers). These items were inadvertently dropped during the rewiring effort and were not recovered.

Corrective Steps That Have Been Taken and Results Achieved (Example 4)

The extraneous material identified has been removed; any material identified in the future will be removed as it is identified. NE, Civil Engineering Branch, has performed calculation SCG-4M-00498 to provide supporting documentation that this type of loose material does not and did not pose a safety concern from a seismic consideration.

Corrective Steps That Will Be Taken to Avoid Further Violations (Example 4)

There is no further corrective action required.

Date When Full Compliance Will Be Achieved (Example 4)

TVA is in full compliance.

Violation 50-327, 328/88-29-04

"D. Technical Specification 6.8.1 requires that procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, be established, implemented and maintained, including administrative procedures. General Specification G-29, Radiographic Examination of Welded Joints, implements the Technical Specification requirement for weld inspections. Technical Instruction TI-89, Inservice Testing, required by ASME Section XI, implements ASME Section XI valve testing requirements.

1. Contrary to the above, TVA procedure G-29 failed to implement ANSI B31.7 weld standard inspection requirements for wall thickness reduction during the qualification of field piping welds.
2. Contrary to the above, TI-89 failed to implement ASME Section XI testing requirements for relief valves 72-512 and 72-513.

This is a severity level IV violation (Supplement I)."

Admission or Denial of the Alleged Violation (Example 1)

TVA admits the violation.

Reason for the Violation (Example 1)

The root cause of this violation is lack of documentation for inspections performed. TVA did consider the minimum wall thickness requirements during fabrication of field piping welds. Weld inspection personnel performed physical measurements or ultrasonic thickness checks as required by SNP Construction Procedure No. M-7, "Erection and Documentation Requirements for Piping Systems," and Procedure No. W-4, "Base Metal Repair." These inspection attributes were performed during the final weld inspection process in accordance with Procedure No. M-7 that states, "The surface finish of welds shall be suitable for proper interpretation of required nondestructive examination. If grinding has been performed for surface finishing operations, the weld and adjacent surfaces shall be examined for thinning to below minimum design thickness. . . ." and by Procedure No. W-4 that states, "If the depth of the excavation exceeds 3/8 inch or 10 percent of the section thickness (whichever is less), repair work shall be halted and the Welding Engineering Unit notified for radiography requirements. Unacceptable surface defects may be removed without the addition of weld metal if: A. The base metal thickness is not reduced below the minimum required."

Additionally, if radiographic evaluations had indicated a violation of minimum wall requirements or a substantial wall reduction had occurred, then minimum wall thickness checks would have been performed to resolve the Level III radiographer's evaluation concerns. The measured thickness would then be discussed with site mechanical system engineering personnel and compared with the system minimum wall thickness. If the wall thickness reduction violated minimum wall requirements, the system engineer would have the weld or base metal cut out or repaired as necessary. The results of these measurements

were not normally documented in the weld installation records but, as evidenced by the results detailed in the NRC inspection report, met minimum wall design requirements. The measured wall thickness of 0.246 inch is greater than the calculated design wall thickness of 0.151 inch.

Corrective Steps That Have Been Taken and Results Achieved (Example 1)

TVA currently documents the results of wall or weld thickness measurements in the individual work package as prescribed in Standard Practice SQM17, "General Requirements for Welding, Heat Treatment, and Allied Field Operations at Sequoyah."

Corrective Steps That Will Be Taken to Avoid Further Violations (Example 1)

TVA currently conforms to the requirements of American National Standards Institute (ANSI) B31.7. TVA will verify past conformance of minimum wall design requirements by performing an inspection of 10 similar welds. This inspection will be completed by February 10, 1989.

Date When Full Compliance Will Be Achieved (Example 1)

TVA is in full compliance.

Admission or Denial of the Alleged Violation (Example 2)

TVA admits the violation.

Reason for the Violation

The contractor that developed the pump and valve test program in 1981 for SQN was apparently unaware of the function of valves 72-512 and 72-513 (to provide overpressurization protection of the containment spray system piping because of interconnection with the residual heat removal system).

Corrective Steps That Have Been Taken and Results Achieved (Example 2)

All pressure relief valves, which are not currently in the pump and valve test program and are installed in American Society of Mechanical Engineers code, class 1, 2, or 3 systems, have been reviewed to determine their specific safety function. Valves 72-512 and 72-513 have been added to the pump and valve test program by Instruction Change Form 88-1130 to surveillance instruction 164. Valves 1-72-513 and 1-72-513 were tested on September 9, 1988, by WP 6813-01. Valves 2-72-512 and 2-72-513 were tested on February 20, 1987, by WP 12309.

Corrective Steps That Will Be Taken to Avoid Further Violations (Example 2)

There is no further corrective action required.

Date When Full Compliance Will Be Achieved (Example 2)

TVA is in full compliance.

ENCLOSURE 2

List of Commitments

1. A DCN and drawings will be issued for each unit to update the flow drawings by January 31, 1989.
2. Bolts will be replaced in accordance with the requirements of M&AI-9 for the unit 2 containment spray heat exchanger upper supports during the unit 2 cycle 3 refueling outage.
3. Inspection of the letdown, seal water, residual heat removal, and the lower supports for containment spray heat exchangers will be performed during the unit 2 cycle 3 refueling outage for unit 2 and the unit 1 cycle 4 refueling outage for unit 1.
4. The spring can for pipe support 1-CSH-401 will be reset during the unit 1 cycle 4 refueling outage.
5. The containment spray pump base drawing 41N353-1 will be revised to document the condition of the slotted holes by March 28, 1989.
6. TVA will inspect 10 welds to verify compliance with ANSI B31.7 by February 10, 1989.