UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-259/94-12, 50-260/94-12, and 50-296/94-12

Licensee: Tennessee Valley Authority
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1101 Market Street
Chattanooga, TN 37402-2801

Docket Nos.: 50-259, 50-260, and 50-296

License Nos.: DPR-33, DPR-52, and DPR-68

Facility Name: Browns Ferry Units 1, 2, and 3

Inspection at Browns Ferry Site near Decatur, Alabama

Inspection Conducted: May 18 - June 17, 1994

Inspector: John W. Thorpe for C. A. Patterson, Senior Resident Inspector — 7/11/94 Date Signed

Accompanied by: J. Munday, Resident Inspector
R. Musser, Resident Inspector
G. Schnebli, Resident Inspector

Approved by: M. Lesser — 7/12/94 Date Signed
Mark S. Lesser, Acing Branch Chief
Reactor Projects, Section 4A
Division of Reactor Projects

SUMMARY

Scope:

This routine resident inspection included maintenance observation, operational safety assessment, fire protection audit, Unit Three restart activities, deficiencies in the design process, self-assessment, reportable occurrences and action on previous inspection findings.

One hour of backshift coverage was routinely worked during the work week. Deep backshift inspections were conducted on May 22 and June 5, 1994.

Results:

In the area of plant support, additional weaknesses in the fire protection group were identified during a licensee audit, paragraph four. Due to recent NRC violations and concerns the licensee conducted an audit and identified more weaknesses in this area. A corrective action plan was being developed. This will be reviewed once developed and implemented.

In the area of engineering, an inspector followup item was identified concerning corrective action to prevent reoccurrence of problems in the design control process, paragraph five. Because of licensee identified problems and an NRC violation, the licensee conducted an incident investigation to review all problems during 1993-1994 and concluded additional steps were necessary to correct the problems.

In the area of maintenance, an inspection followup was identified concerning drifting of Rosemount transmitters, paragraph two. The licensee is evaluating a recent problem with the reactor core isolation cooling system and a re[illegible] Part 21 on these transmitters.

In the area of operations, the Nuclear Safety Review Board continues to provide effective oversight of plant activities, paragraph seven. They remain current on site problems, current on industry events and experience, and provide challenging questions to the plant staff.

REPORT DETAILS

1. Persons Contacted

Licensee Employees:

R. Machon, Site Vice President, Browns Ferry
E. Preston, Plant Manager
R. Moll, Plant Operations Manager
*J. Rupert, Engineering and Materials Manager
T. Shriver, Licensing and Quality Assurance Manager
*D. Stinson, Recovery Manager
S. Rudge, Site Support Manager
*J. Maddox, Maintenance and Modifications Manager
*T. Abney, Technical Support Manager
*A. Sorrell, Chemistry and Radiological Controls Manager
C. Crane, Business and Work Performance Manager
*P. Salas, Licensing Manager
*R. Wells, Compliance Manager
*J. Corey, Radiological Control Manager
J. Brazell, Site Security Manager

Other licensee employees or contractors contacted included licensed reactor operators, auxiliary operators, craftsmen, technicians, and public safety officers; and quality assurance, design, and engineering personnel.

NRC Personnel:

M. Lesser, Section Chief
*C. Patterson, Senior Resident Inspector
J. Munday, Resident Inspector
*R. Musser, Resident Inspector
*G. Schnebli, Resident Inspector

*Attended exit interview

Acronyms and initialisms used throughout this report are listed in the last paragraph.

2. Maintenance Observation (62703)

Plant maintenance activities were observed and/or reviewed for selected safety-related systems and components to ascertain that they were conducted in accordance with requirements. The following items were considered during these reviews: LCOs maintained, use of approved procedures, functional testing and/or calibrations were performed prior to returning components or systems to service, QC records maintained, activities accomplished by qualified personnel, use of properly certified parts and materials, proper use of clearance procedures, and implementation of radiological controls as required.

Work documents were reviewed to determine the status of outstanding jobs and to assure that priority was assigned to safety-related equipment maintenance which might affect plant safety. The inspectors observed the following maintenance activities during this reporting period:

a. RHRSW Pump Breaker Failure

During review of the POD handout for May 23, 1994, the inspector learned of an RHRSW pump breaker failure. The A1 RHRSW pump breaker had failed to close and WR C 233838 was initiated. The inspector discussed this problem with the SOS. The breaker was tested and found to operate correctly. When the breaker was reinstalled it would not operate. On one attempt to remove the breaker from the cabinet it tried to actuate. The breaker was thought to be defective with a possible bent shaft. A spare breaker was installed and the defective breaker installed in a spare location with a "do not use" tag.

Maintenance in coordination with Engineering determined that the problem was not a bent shaft but was due to a missing nut on the jackscrew shutter mechanism. The shutter is normally closed but is opened to insert the jackscrew so the breaker can be racked into a different position. When the shutter is opened an interlock switch is made through a series of mechanical linkages which prevents the charging spring motor from energizing or the breaker from closing. This prevents operation of the breaker while it is being racked in or out. The shutter is held in place by two bolts. With the nut from one of the bolts missing the shutter was cocked and was binding, resulting in misoperation of the interlock switch. Maintenance disassembled and cleaned the shutter mechanism. In addition, the clearance between the interlock switch operating paddle and the switch mounting bracket was found out of tolerance. This too was repaired. Following completion of these activities, the breaker was successfully tested and returned to service.

Discussions with the licensee indicated that no preventative maintenance of the shutter and interlock switch linkages had previously been performed. The inspector reviewed the vendor manual and noted it did not discuss preventative maintenance with the shutter and linkage. The licensee intends to revise EPI-0-000-BRK002, Maintenance of GE (Magne-Blast) Switchgear and Circuit Breakers, which is performed every 18 months on 4kv breakers, to include a verification that this mechanism is operating properly.

On June 13, 1994, the inspector witnessed this procedure being performed on the 3D DG output breaker and noted that the shutter linkage and interlock switch checks had not yet been incorporated into the procedure. A review of the WO, 93-11478-00, indicated that it didn't require a check of these components either. When questioned, the personnel performing the work stated that they had not been informed of any additional component checks that needed

to be made to this breaker. The inspector discussed this with the Technical Support Manager who agreed that it was an opportune time to perform these inspections and stated that they would be performed while the breaker is out of service.

The inspector questioned the licensee if this type of failure has been identified before. These results are forthcoming. The inspector will continue to follow this issue.

b. DG Redundant Start Test

During a review of the control room operator logs on May 23, 1994, the inspector questioned an entry which stated that one attempt to start the A DG was prevented by failure of a visicorder.

On May 24, 1994, the inspector reviewed the test on the B DG and noted that the inputs to the visicorder were made by alligator clips at the DG panels. There were no leads lifted and no apparent correlation between the visicorder failure and the engine start failure. The procedure in progress was EPI-0-082-DGZ004, Diesel Generator B Redundant Start Test. The procedure did not have any correlation to a TS required surveillance. The procedure tests the redundant start circuits and timing of the DG. This was discussed with the Plant Manager and Maintenance and Modifications Manager on May 24, 1994. It was not clear to the inspector why the engine failed to start. At the end of the period discussion continued with Technical Support and Maintenance Manager for resolution of the issue.

c. Equipment Rigging Program And Training Requirements

The inspector reviewed the licensees program and procedures for rigging and moving heavy loads. Rigging equipment is controlled by Mechanical Maintenance Instruction, MMI-102, Rigging Equipment And Portable Hoist Program. This procedure describes the different ways of rigging and lifting, testing required of the rigging equipment, and the training requirements of the personnel performing the rigging. The procedure states that rigging inspectors will be trained by a comprehensive program and required to pass an examination upon completion. The qualification cards for a rigger consist of classroom training, hand signal training, and on-the-job training. Successful completion of the classroom portion requires scoring an 80% or better on a written exam while the hand signal portion requires a grade of 100%.

The inspector reviewed the training records of six individuals qualified to perform rigging activities. Although all were fully qualified, only two of the individuals had actually completed all the required training. The remaining four individuals were waived of various training requirements based on previous experience or personal observation by the individual's supervisor.

Discussions with the Site Safety Manager indicated that no serious problems associated with rigging activities have been identified during plant walkdowns. A walkdown conducted by plant Safety identified only one minor incident involving a hoist hook which was not being used but had not been properly secured. The problem was corrected on the spot. No further issues were raised.

d. RCIC Flow Transmitter Replacement

On May 20, 1994, the inspector observed portions of a maintenance effort to replace RCIC flow transmitter 2-FT-71-36. The work was performed in accordance with WO 94-07847-00 and procedure LCI-2-F-71-36. The transmitter was being replaced due to a drifting problem noted on the control room ICS display. More specifically, a flow value of -52 gpm was displayed on the RCIC system mimic while the system was in a standby condition. Following replacement of the transmitter, the indicated flow with the system in standby has been consistently in 0 gpm range.

Previously, on May 4, 1994, the RCIC flow transmitter had been replaced with a Rosemount transmitter (model number 1153DF5TB) during a large scale obsolete equipment design change in accordance with DCN W17433. From May 7 - May 16, plant operators noticed a drift in the instrument. During this time frame, the licensee determined that the transmitter zero had shifted. On May 7, a calibration of the instrument was performed satisfactorily. On May 16, the operators again noticed a drift in the instrument. At this point the decision was made to replace the instrument on May 20. During bench checks of the replacement transmitters (two instruments were bench checked) one was noted to have a similar zero drift problem. Since the instrument was replaced on May 20, no problems have been noted in the plant. The licensee, however, has initiated PER 94-175 to resolve and track the drift problem with model number 1153DF5TB Rosemount transmitters. Additionally, on May 27, 1994, a Part 21 Notification was made by Rosemount to TVA concerning model 1153 series F transmitters. This notification describes an anomaly in which the transmitters output is affected when its low side is overpressurized. Rosemount is currently evaluating this condition and plans to provide TVA some form of corrective action within 120 days. The RCIC flow transmitters discussed above were listed on the Part 21. Pending the licensee's resolution of these problems, this matter will be tracked as IFI 259, 260, 296/94-12-01, Rosemount Transmitter Drift Problem.

e. Minor Maintenance Practice

When a component is identified as requiring repair, the licensee's process directs employees to initiate a work request. The work request is the "launching point" for a maintenance activity.

Following the initiation of a work request, the item to be worked is evaluated for classification as "minor maintenance." This classification is performed based on whether or not the work item meets the licensee's definition of minor maintenance delineated in SSP-6.2, Maintenance Management System. Criteria for meeting this definition are in part as follows; The maintenance activity is minor in nature, is within the skill of the craft, requires little coordination and where all of the following conditions are met:

- The component is non-quality-related, or if the component is quality-related, the portion or part being worked on is not complex and does not affect automatic control function.
- The component or part does not perform an EQ function.
- Material substitution will not be involved.
- Disassembly of the component is not complex, would not require a detailed procedure, and is considered to be commensurate with craft qualifications.
- Welding will not be performed on a component or part that is safety related, treated as safety related, or seismically mounted.
- Welding will not be performed on a pressure vessel.
- Welding will not be performed on system piping.
- Tag outs should be of a simple nature, able to be out of service without affecting unit operation in such ways as reduced load, LCOs or direct increased safety or reliability risk.
- The work performed is of such a minor nature that a written procedure for actual work steps is not required, however, procedures used to give information such as lube specification or general guidance are permissible.
- Post-maintenance testing requires only visual inspection (e.g., leak test at operating conditions, comparison of instrument indication to a redundant instrument) or operation that is part of the normal return to service for the plant condition. These would be specified by the SRO when the job is approved to work and specified on the work document.
- The work is of such a simple nature that detailed planning is not required.

Additionally, SSP-6.2 provides several lists of activities which qualify and do not qualify as minor maintenance. This classification is performed by the SSS.

Once an item is determined to meet the definition of minor maintenance, the licensee's work control group inputs the work item into the computer tracking system. The item is then ready to be worked by the maintenance department. Documentation for a minor maintenance activity is held to a minimum in that a completed WR card generally serves as the entire work document. Once maintenance is assigned the minor maintenance activity, the task is completed and documented on the WR card. If a PMT is required, it is assigned at this time. Once the entire task is completed, the documentation is transmitted to document control for history purposes. The inspector reviewed numerous minor maintenance activities completed during the first half of 1994 and noted no discrepancies.

In addition to the minor maintenance process, the licensee is in the process of developing a Fix-It-Now or FIN team. The FIN team will consist of a group of dedicated individuals from various departments. The team will be headed by a SRO and will also consist of an operator, a radiation control technician, a planner, a maintenance foreman and craftsmen from the mechanical, electrical, and instrumentation disciplines. The team will be assigned high priority tasks that are required to be completed in an expeditious manner. With the establishment of the FIN team, the licensee envisions a process that will allow the completion of a task from beginning to end all within the purview of the FIN team. When established, the inspectors will review this process during future inspections.

No violations or deviations were identified in the Maintenance Observation area.

3. Operational Safety Verification (71707)

The NRC inspectors followed the overall plant status and any significant safety matters related to plant operations. Daily discussions were held with plant management and various members of the plant operating staff. The inspectors made routine visits to the control rooms. Inspection observations included instrument readings, setpoints and recordings, status of operating systems, status and alignments of emergency standby systems, verification of onsite and offsite power supplies, emergency power sources available for automatic operation, the purpose of temporary tags on equipment controls and switches, annunciator alarm status, adherence to procedures, adherence to LCOs, nuclear instruments operability, temporary alterations in effect, daily journals and logs, stack monitor recorder traces, and control room manning. This inspection activity also included numerous informal discussions with operators and supervisors.

General plant tours were conducted. Portions of the turbine buildings, each reactor building, and general plant areas were visited. Observations included valve position and system alignment, snubber and hanger conditions, containment isolation alignments, instrument readings, housekeeping, power supply and breaker alignments, radiation and contaminated area controls, tag controls on equipment, work activities in progress, and radiological protection controls. Informal discussions were held with selected plant personnel in their functional areas during these tours.

a. Unit Status

Unit 2 operated continuously during this period without any significant problems. At the end of the period the unit had been on-line 57 days.

b. Operability Determinations

In March 1994, TI 313, Engineering Evaluations For Operability Determination, was approved for use. The purpose of the procedure is to provide guidelines for the performance of engineering evaluations in support of operability determinations. The output document is referred to as a Technical Operability Evaluation, TOE, and may be generated as a result of a PER, WR or other document at the direction of the SOS when a question of operability arises. Upon completion of the TOE by Engineering, the SOS would determine operability and take any actions required by TS.

The procedure states that the primary focus of TOEs should be in determining whether an SSC can perform its intended function. Additionally, it states that the issue of operability and qualification should be treated separately, but in both cases the determination should be made promptly, with a timeliness that is commensurate with the potential safety significance of the issue. The procedure did not place specific time limits on completing an operability determination but left that up to the discretion of site management. The inspector noted that the procedure was written using much of the guidance provided in GL 91-18.

The inspector reviewed the following TOEs:

- 2-94-074-9001, Operability Evaluation of RHR Loop During Calibration of Minimum Flow Switch.

- 2-94-085-0115, Evaluation for BFPER940115, 2-PIC-85-66 Setpoint.

- 2-94-075-0085, Unit 2 Piping Supports That Did Not Receive An Inservice Inspection In Accordance With ASME XI 1974 Edition Summer 1975 Addenda.

No discrepancies were identified.

c. Main Steam Line Radiation Alarm

On June 8, 1994, the annunciator for High Main Steam Line Radiation alarmed repeatedly due to channel D exceeding the alarm setpoint. A review of the main steam line radiation chart recorder indicated that channels A, B, and C have been indicating approximately 400 mr/hr while D has been indicating approximately 580 mr/hr. Surveillance 2-SI-4.1.B-10(D), Main Steam Line Radiation Monitoring Channel Alignment and Functional Test 2-RM-90-139 (channel D), which had been previously scheduled as a routine surveillance, was performed and completed satisfactorily. The inspector witnessed the performance of the SI and noted no discrepancies.

Further discussions with Maintenance and Operations indicated that the gain on channel D was high but in tolerance and was the cause of it indicating higher than the other three channels. This resulted in channel D operating closer to and occasionally exceeding the alarm setpoint. To adjust the gain would require removal of the detector causing the channel to be inoperable. TS would require the channel to be placed in a tripped condition which would result in a half-scram and half-MSIV isolation signal being generated. The duration of the work is estimated to be six to eight hours. The licensee, not wanting to risk a possible full scram, decided to postpone this maintenance until the unit is shut down.

d. Fuel Pool Liner Leakage

During inspection of spent fuel pool liner leakage problems, the inspector noted that leakage of the unit 1 spent fuel pool had been identified by Operations but had never been quantified. The inspector noted that leakage was also present from the Units 2 and 3 pools but to a lesser degree. It was determined that during routine rounds, Operations opens a fuel pool liner drain valve to check for leakage, however, the procedure doesn't require a value for the amount of leakage, but simply if leakage was found or not found. Engineering determined that the volume surrounding the pool which would contain liner leakage could hold approximately 400 gallons of water and assumed that this volume, never having been completely drained, was full. Until this volume is completely drained, the amount of liner leakage cannot be accurately determined.

The licensee is developing a procedure to drain, collect, and quantify the leakage from the unit one fuel pool. Actions already taken include collecting water samples from the fuel pool and liner drain and performing an analysis to determine what isotopes are contained in the water. Smear samples were also taken at various locations in the plant where moisture had collected and analyzed. A comparison of the two sets of samples was performed in an attempt to identify any liner leakage that was not contained

within the surrounding volume. A favorable comparison of the fuel pool water was made with water located on the floor under the torus at the 519 foot elevation. The inspector discussed these findings with the licensee and while the evidence is not conclusive, it would appear that at least some fuel pool water has leaked from the liner leakage volume into the lower elevations of the reactor building.

PER 94-0174 was initiated by the licensee to track fuel pool leakage problems. Corrective actions are currently being evaluated. The inspector will continue to follow the progress of this issue.

No violations were identified in the Operational Safety Verification area.

4. Fire Protection Audit (64704)

As a result of recent violations in the fire protection area (94-01-04, Missed Firewatch; 94-06-01, Inadequate PMT DG Fire Pump) and past history, the inspector discussed with the Site V.P. and NSRB Chairman weaknesses in this area (IR 94-07). An audit was conducted by Nuclear Assurance. This was performed April 4 - April 22, 1994, and documented in report NA-BF-94-046.

This report observed the activities of the Fire Protection Operations Organization and Technical Support Fire Protection group.

The assessment team concluded communications between organizations were weak and inaccurate, an excessive backlog exists in Technical Support, and Technical Support does not provide timely support. In addition, Fire Protection Operations "has a lack of ownership for their equipment, are willing to accept the unacceptable, and did not follow site procedures concerning maintenance activities." The inspector concluded the audit identified the root cause for the recent violations and problems in fire protection. This audit was a first broad step by management to correct these problems. The inspector discussed that the corrective action plan to address these issues should be timely.

5. Unit 3 Restart Activities (30702, 37828, 61726, 62703, 71707)

The inspector reviewed and observed the licensee's activities involved with the Unit 3 restart. This included reviews of procedures, post-job activities, and completed field work; observation of pre-job field work, in-progress field work, and QA/QC activities; attendance at restart progress meetings, and management meetings; and periodic discussions with both TVA and contractor personnel, skilled craftsmen, supervisors, and managers.

The major licensee activities occurring during this inspection period which were followed by the NRC included:

- Preparation for and the inspection of the Unit 3 reactor vessel shroud. The inspection is being conducted by GE and should be complete by the end of June. The shroud inspection is being monitored by Region II personnel and the details will be documented in IR 94-16.

- CRDR modifications are almost complete in the Unit 3 control room. This modification should be field complete by the end of July.

- Main turbine reassembly is ongoing in preparation of reaching the turbine on turning gear milestone currently scheduled for the middle of September.

- The inspectors reviewed the licensee's breaker rebuild program and schedule concerning the replacement of RMS-9 trip devices with EC devices. The inspectors raised a concern that the current schedule may require multiple tests of the same breaker after previously tested systems were returned to operations prior to the system breakers being refurbished. The licensee is currently modifying the schedule to prevent this.

- A tour of Unit 3 torus was conducted by the inspectors to observe the coatings in the torus as related to the issue concerning Unit 2 as discussed in IR 94-09. The stainless steel T-spargers are also painted with unqualified coatings in Unit 3. The licensee stated the coating would be removed prior to Unit 3 restart.

- Other Unit 3 activities observed included installation of drywell steel, fire protection system upgrades, CCW system maintenance, and the HPCI system lube oil flush.

- Several meetings were held between the licensee and the NRC concerning Unit 3 restart activities during this period. Two meetings were in the Region II office, May 10 and 24, and the third was at the site on June 8. The main topic of discussion at the May 10 meeting concerned performing modifications on Unit 3 that required entry into a Unit 2 LCO. This issue is discussed in detail in IR 94-14.

6. Deficiencies in the Design Change Process (37551)

The inspector reviewed II-B-94-012, Deficiencies in the Design Change Process. A group of adverse conditions associated with the DCN process occurred at the site during 1993-1994. These conditions were documented as PERs or NRC violations. The licensee conducted this II to review the problems. Phase A of the II reviewed 9 PERs and 1 NOV and determined that the associated corrective actions were adequate to prevent reoccurrence.

Phase B utilized the information from Phase A and interviews of personnel. The review concluded that there is a compartmentalized understanding of the DCN process by all groups. The process to ensure

proper fuse installations that result from modifications has not been clearly defined. Several of the lessons learned from the events had not been included in any site procedure to preclude recurrence of the events. There was a lack of understanding of the use of back circles utilized to indicate changes. The methods utilized to indicate Documentation Only changes were not understood by everyone. It was determined that DCCM does not tie change paper (DCAs and F-DCNs) to the DCN stages.

Although, specific issues and corrective action related to problems in the design change process have been identified by PERs or NOVs, this II documents further action is necessary to prelude reoccurrence. The additional corrective action for the problems with the design change process will be tracked as IFI 259, 260, 296/94-12-02, Correction of Design Change Process Problems.

7. Self Assessment (40500)

On June 16, 1994, the inspector attended a portion of the on-site NSRB meeting. This was a full member meeting covering a wide variety of topics. The inspector's observation concluded that the NSRB continues to provide effective oversight of plant activities. They remain current on site problems, current on industry events and experience, and provide challenging questions to the plant staff.

Of particular interest during the meeting was the discussion of the recent fire protection audit discussed in this report. Also, discussed was that the safe shutdown procedures would have different actions on Unit 3 than Unit 2. This was because of less operator actions required on Unit 3. A review of this difference was ongoing and a resolution was still pending. In addition, the SER for Unit 3 Appendix R Program has not been approved by the NRC.

8. Reportable Occurrences (92700)

The LERs listed below were reviewed to determine if the information provided met NRC requirements. The determinations included the verification of compliance with TS and regulatory requirements, and addressed the adequacy of the event description, the corrective actions taken, the existence of potential generic problems, compliance with reporting requirements, and the relative safety significance of each event. Additional in-plant reviews and discussions with plant personnel, as appropriate, were conducted.

(CLOSED) LER 260/93-008, LCO for a Turbine Stop Valve Was Exceeded Due to Personnel Error Resulting in a Condition Prohibited by TS.

This matter was cited as a violation of TS (Violation 260/93-25-01) and the corrective actions for that matter have been reviewed by the inspector and found to be satisfactory (see paragraph, nine b.). Based on that review, this LER is closed.

9. Action on Previous Inspection Findings (92701, 92702)

a. (CLOSED) URI 260/93-39-04, Unfinished Conduit Modification

This issue was that the inspector observed, in the Unit 2 reactor building, a conduit modification that was unfinished. The licensee reviewed this problem and initiated PER 930149 to correct the problem. The original design for this modification called for installation of two cables in a cable tray. Due to difficulty of routing them in a cable tray, a field design change was made to install both cables in conduit. The actual installation was that one cable was installed in conduit and another in the cable tray as originally designed. This left an open conduit with no cable installed. The licensee covered the conduit with covers and updated the design package. A safety assessment revision (SABFEDCN 90083, R3) was performed and concluded that the installed design was acceptable and no field work was required. The inspector reviewed the licensee's closure package for th concluded this issue was of minor significance and is closed.

b. (CLOSED) Violation 260/ 93-25-01, Failure to Perform TS Action Within the Required Timeframe.

This violation of TS was cited for the licensee's failure to comply with an action statement within the required time frame. More specifically, during the performance of a TS required surveillance for the number 1 turbine stop valve closure RPS trip, an anticipated half scram signal was not received when the valve was closed to the 90 percent full open position. TS requires that if the minimum number of instrument channels per trip system cannot be met for one trip system, the inoperable channels on the entire trip system shall be placed in the tripped condition within one hour. The licensee complied with this requirement for the stop valves input to the 'B1' train of RPS logic by tripping the channel within one hour. However, subsequent to this action the inspector determined that the licensee had not completed all of the required TS actions, in that the 'A1' train of RPS logic had not been placed in a tripped condition. Following their review of the inspector's determination, the licensee placed the channel in the tripped condition 55 minutes in excess of the allowable TS timeframe.

The licensee's corrective actions for this matter were reviewed by the inspector. These corrective actions included briefing all operations personnel on this event, revising RPS functional SIs for the turbine stop valves and main steam isolation valves to include checks of the relays not being tested in the opposite RPS division, and to develop procedures that specify the appropriate actions when implementing TS required action statements for RPS and PCIS components. While reviewing illustration 3 to 2-OI-99, Reactor Protection System, the procedure prepared to provide operators the appropriate actions to place RPS instruments in the

tripped condition, the inspector identified a few minor procedural discrepancies. These discrepancies included referencing the incorrect fuse numbers for turbine stop valve 2-FCV-1-88 and turbine control valve 2-FCV-1-89. This information was relayed to the licensee's operations department. The licensee corrected the errors the next day by revising the procedure. No other discrepancies were noted. Based on this review, this matter is closed.

10. Exit Interview (30703)

The inspection scope and findings were summarized on June 17, 1994, with those persons indicated in paragraph 1 above. The inspectors described the areas inspected and discussed in detail the inspection findings listed below. The licensee did not identify as proprietary any of the material provided to or reviewed by the inspectors during this inspection. Dissenting comments were not received from the licensee.

Item Number	Description and Reference
259, 260, 296/94-12-01	IFI, Rosemount Transmitter Drift Problems, paragraph two.
259, 260, 296/94-12-02	IFI, Correction of Design Change Process Problems, paragraph six.

Licensee management was informed that 1 LER, 1 URI, and 1 VIO were closed.

11. Acronyms and Initialisms

ASME	American Society of Mechanical Engineers
CCW	Condenser Circulating Water
CFR	Code of Federal Regulation
CRDR	Control Room Design Review
DCA	Drawing Change Authorization
DCCM	Document Control Change Management
DCN	Design Change Notice
DG	Diesel Generator
FCV	Flow Control Valve
F-DCN	Field Design Change Notice
FIN	Fix-It-Now
EQ	Environmental Qualification
GE	General Electric
GL	Generic Letter
GPM	Gallons Per Minute
HPCI	High Pressure Coolant Injection
ICS	Integrated Computer System
IFI	Inspector Followup Item
II	Incident Investigation

IR	Inspection Report
KV	Kilovolt
LCI	Loop Calibration Instruction
LCO	Limiting Condition of Operation
LER	Licensee Event Report
MMI	Mechanical Maintenance Instruction
MSIV	Main Steam Isolation Valve
NA	Nuclear Assurance
NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
NSRB	Nuclear Safety Review Board
PCIS	Primary Containment Isolation System
PER	Problem Evaluation Report
POD	Plan of the Day
PMT	Post Maintenance/Modification Test
QA	Quality Assurance
QC	Quality Control
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
RHRSW	Residual Heat Removal Service Water
RPS	Reactor Protection System
SER	Safety Evaluation Report
SI	Surveillance Instruction
SOS	Shift Operations Supervisor
SRO	Senior Reactor Operator
SSC	Systems, Structures, or Components
SSP	Site Standard Practice
SSS	Shift Support Supervisor
TI	Technical Instruction
TOE	Technical Operability Evaluation
TS	Technical Specification
TVA	Tennessee Valley Authority
URI	Unresolved Item
VIO	Violation
WO	Work Order
WR	Work Request