UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

Report Nos.: 50-327/95-20 and 50-328/95-20

Licensee: Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Docket Nos.: 50-327 and 50-328 License Nos.: DPR-77 and DPR-79

Facility Name: Sequoyah Units 1 and 2

Inspection Conducted: September 3 through September 30, 1995

Lead Inspector: _____ 10-25-95
W. E. Holland, Senior Resident Inspector Date Signed

Inspectors: R. D. Starkey, Resident Inspector
D. A. Seymour, Resident Inspector
S. E. Sparks, Project Engineer

Approved by: _____ 10/25/95
Mark S. Lesser, Chief, Branch 6 Date Signed
Division of Reactor Projects

SUMMARY

Scope:

Routine resident inspection was conducted in the areas of plant operations, maintenance observations, surveillance observations, plant support, and licensee event report closeout. During the performance of this inspection, the resident inspectors conducted several reviews of the licensee's backshift and weekend activities at the plant.

Enclosure 2

Results:

One violation was identified for failure to follow procedure and/or provide adequate controls for the clearance process described in SSP-12.3 (paragraph 3.c).

In the area of Operations, mixed performance was observed. Good performance was noted during Unit 1 plant shutdown and preparation for outage related activities. One excellent example of nuclear safety sensitivity was the licensee's outage schedule which allowed core offload prior to going into reduced RCS inventory to install SG nozzle dams. In addition, sensitivity to RHR pump operation during testing was good. However, weaker performance was indicated by several clearance related issues resulting in a violation. In addition, operator weaknesses in logkeeping were also noted (paragraph 3).

In the area of Maintenance, reviews of radiation monitor problems and the use of M&TE identified two issues needing additional attention. A long-standing equipment problem associated with accumulation of moisture in the sample lines of important radiation monitors for Unit 2 was placing an additional burden on operators and chemistry personnel. In addition, a weakness was identified regarding excessive review time for operability impacts for test equipment found out of tolerance during post calibration checks (paragraph 4). Reviews of testing of Unit 1 AFW pumps and Unit 1 Main Steam Safety Valves indicated these tests were accomplished in a good manner (paragraph 5).

In the area of Plant Support, positive indicators of the licensee's radwaste reduction and environmental initiatives were noted. They included continued reductions in generation of radwaste by elimination of taping requirements for anti-C clothing, processing of condensate resins as non-radioactive waste, and recycling of other waste materials including wood, paper, and batteries (paragraph 6).

REPORT DETAILS

1. **PERSONS CONTACTED**

Licensee Employees

* R. Adney, Site Vice President
* J. Baumstark, Plant Manager
L. Bergen, Site Vice President Program Manager
* D. Brock, Maintenance Manager
L. Bryant, Outage Manager
* M. Burzynski, Engineering & Materials Manager
D. Clift, Planning and Technical Manager
M. Cooper, Technical Support Manager
* R. Driscoll, Nuclear Assurance & Licensing Manager
* F. Fink, Business and Work Performance Manager
* T. Flippo, Site Support Manager
G. Enterline, Operations Manager
O. Hayes, Operations Program Manager
C. Kent, Radcon/Chemistry Manager
* B. Lagergren, Manager of Projects
D. Lundy, Engineering & Materials Program Manager
K. Meade, Compliance Manager
* L. Pogue, Site Quality Assurance Manager
R. Rausch, Maintenance and Modifications Manager
J. Reynolds, Acting Operations Superintendent
G. Rich, Chemistry Manager
* J. Robertson, Independent Analysis Manager
* R. Shell, Site Licensing Manager
J. Smith, Regulatory Licensing Manager
N. Welch, Operations Superintendent

NRC Employees

M. Lesser, Chief, Branch 4, DRP
* W. Holland, Senior Resident Inspector
* D. Seymour, Resident Inspector
* R. Starkey, Resident Inspector

* Attended exit interview.

Other licensee employees contacted included control room operators, shift technical advisors, shift supervisors and other plant personnel.

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

On September 6 and 7, 1995, Mr. Mark S. Lesser, Acting Chief, Branch 4, DRP, Region II, NRC visited the Sequoyah Plant. Mr. Lesser met with the resident inspectors, toured the plant, and reviewed plant issues and activities with the Senior Resident Inspector as part of preparation for

the plant performance evaluation meeting. Mr. Lesser also discussed items of mutual interest with the Nuclear Assurance & Licensing Manager.

2. **PLANT STATUS**

Unit 1 began the inspection period in power operation (coastdown to Unit 1 Cycle 7 outage/approximately 71 percent power). The unit commenced a routine shutdown from approximately 68 percent power on September 8, 1995, to commence the Cycle 7 refueling outage. MODE 3 was entered on September 9, and MODE 5 was entered on September 10, 1995. Core offload was completed on September 22, 1995. Unit 1 was defueled (day 22 of the Cycle 7 refueling outage) when the inspection period ended.

Unit 2 began the inspection period in power operation. The unit operated at power for the duration of the inspection period.

3. **PLANT OPERATIONS** (71707 and 92901)

a. Daily Inspections

The inspectors conducted selective examinations, on a day-to-day basis which involved control room tours, plant tours, and management meetings. The following activities were specifically reviewed:

(1) During an Operations shift turnover on September 13, 1995, the inspectors became aware of a response time test, 1-SI-IRT-099-603B, RESPONSE TIME TEST OF ESFAS SLAVE RELAY K603 AND ACTUATED DEVICES (SAFETY INJECTION) TRAIN B, Revision 1, which had been conducted on the Unit 1, B TRAIN, RHR system on September 12. Prior to the test, both A and B TRAINS of RHR were operating in the shutdown cooling mode of operation with the RCS temperature at 107 °F. A TRAIN RHR remained in operation throughout the test. During the test, the B TRAIN RHR pump was stopped for approximately five minutes during which time the RCS heated up two degrees to 109 °F.

The inspectors questioned whether Operations had considered the risk involved in shutting down one of the two RHR pumps. The inspectors were informed that the test had originally been scheduled for performance when the RCS was at a temperature of 180-200 °F, which would have involved a higher degree of risk. The inspectors were also informed that a pre-job briefing had taken place, that the activity was conducted as a sensitive activity, and that an abort temperature of 110 °F was established at which point the test would have been terminated and the pump restarted. Following discussions with Operations supervision, the inspectors concluded that the risk aspects of the test had been carefully considered and that appropriate measures had been taken to restart the B TRAIN RHR pump immediately

following the test, or sooner if problems arose during the test.

The inspectors also noted that neither the Unit 1 UO nor the ASOS log book had any entries related to this test evolution. Operators subsequently made a late log book entry documenting the stopping and starting of the B TRAIN RHR pump, the temperature increase of the RCS, and other facts related to the response time test. The inspectors concluded that the lack of a log book entry related to the stopping/restarting of an RHR pump during the time when Unit 1 was in shutdown cooling represented a weakness in the adequacy of log keeping by licensed operators.

(2) On September 27, the inspectors reviewed the Unit 2 UO daily logs specifically looking for information related to the CS CCS pump which had developed a severe packing leak and had to be stopped on September 26. The inspectors found it difficult to follow the sequence of events as written in the operator's log. Operators on shift at the time of the review, when questioned by the inspectors about the log book entries, also had difficulty explaining the written sequence of events related to the CS CCS pump. Operators subsequently made late log book entries which more adequately explained the sequence of events.

This issue was a second example of weak log keeping by licensed operators noted by the inspectors during this report period (see paragraph 3.a.(1) above).

(3) While Unit 1 was in Mode 5, the inspectors reviewed procedure O-TI-OXX-068-001.0, BREACHING CONTAINMENT OR THE REACTOR COOLANT SYSTEM DURING UNIT OUTAGES, Revision 6. Specifically, the inspectors verified that the licensee had taken steps to ensure timely closure of containment penetrations in the event of a loss of shutdown cooling. The inspectors also verified that specific individuals are assigned the responsibility of ensuring closure of various containment penetrations. Those responsible individuals were listed in Appendix B of the TI, which was updated daily. Furthermore, the inspectors questioned several of those responsible for the penetrations and concluded that they were aware of their responsibilities and were knowledgeable on steps to be taken to ensure closure of their particular containment penetration. The inspectors concluded that the licensee has a process in place which should ensure timely closure of the containment following a loss of shutdown cooling.

b. Biweekly Inspections

The inspectors conducted biweekly inspections, using the licensee's IPE information, to verify operability of the following ESF trains.

During this period, the inspectors walked down the 480 volt safety-related MOV and ventilation boards for Unit 2. They determined that required alignments existed for components receiving power from these boards. The reviews included verifications that power was removed from ESF MOVs identified in the TS requiring deenergization for Unit 2 power operation.

c. Monthly Inspections

On September 22, 1995, during the inspectors' weekly debrief to the licensee, the inspectors expressed concern regarding the licensee's equipment clearance process due to several problems which had recently occurred related to clearances. The inspectors reviewed SSP-12.3, EQUIPMENT CLEARANCE PROCEDURE, Revision 10, and noted that the purpose of the procedure was to establish a process to provide protection for personnel and plant equipment during operation, maintenance, and modification activities through the use of clearances. The following four examples of clearance problems, documented by the licensee in PERs, were noted by the inspectors as representing deficiencies in implementation of the equipment clearance process.

(1) (SQ951411PER) On September 9, 1995, a sample sink cooler, for the main steam loop 4 sample, ruptured. A maintenance technician was working in the immediate area and was injured. The cause of the rupture was over pressurization of the shell side of the sample cooler. The rupture resulted when the shell side (water side) of the sample cooler was isolated at both its inlet and outlet valves (there was no relief valve on the cooler), while there was steam flow through a leaking inlet isolation valve on the tube side of the cooler.

A primary cause of this event was the perception that organizations (Chemistry and I&C) other than OPS could isolate systems in order for work to be performed. In this example, maintenance personnel and the cognizant engineer, believing that Chemistry had provided an isolation boundary, started a scheduled maintenance activity on the sample sink without an equipment clearance. SSP-12.3 required them to establish a clearance prior to commencing work.

(2) (SQ951509PER). On September 17, 1995, during the release of hold order 1-HO-95-1700, which had been established for SIS test header maintenance, several accumulator makeup and SIS test valves opened when power was restored to the valves.

Approximately 1300 gallons of borated water was unintentionally injected into the Unit 1 RCS from CLAs #1 and #3.

When the SIS test header clearance was issued, operators removed the control power fuses to the CLA makeup and SIS test header valves which caused the valves to fail closed as designed. However, the corresponding MCR handswitches were not repositioned to the closed position, but remained in the open position. When the fuses were reinstalled during the clearance release, the valves reopened since the MCR handswitches were still in the open position. SSP-12.3 requires evaluation and necessary actions to prevent inadvertent operation.

(3) (SQ951518PER). On September 17, 1995, during MOVATS testing, 1-FCV-63-156 (SIS pump 1A-A discharge FCV) was manually cranked off its seat to set limit switches. When the FCV was cranked open, a flow path was established from the RWST to the RCS which resulted in approximately 500 gallons of RWST water unintentionally gravity draining into the RCS.

The licensee determined that there was not a mechanical clearance boundary in place at the time the FCV was cranked open. A mechanical clearance, which MOVATS personnel were not on, but which had previously isolated FCV-63-156, was released prior to the valve stroke.

(4) (SQ951583PER). On September 25, 1995, the licensee identified four EGTS flow switches which were inadvertently deenergized as part of hold order 1-HO-95-1962. The HO was only intended to tag out Unit 1 lower compartment coolers temperature indicating controllers. Operations personnel who issued the HO apparently neglected to use available controlled secondary drawings to identify all the loads associated with the breakers being deenergized. This represents on inadequate review to determine the clearance boundary.

The inspectors concluded, after discussions with the licensee's engineering staff, that the deenergized EGTS flow switches did not affect the operability of the EGTS; however, the system was degraded due to the potential for incorrect low flow annunciation.

The inspectors concluded that each of the above examples indicated a deficiency in the licensee's implementation of the equipment clearance process. The inspectors were concerned that in example (1), serious personnel injury could have occurred when the sample sink cooler ruptured and that there was an incorrect perception regarding equipment clearances which had not been adequately

addressed by management. Examples (2) and (3) were also significant in that they resulted in unplanned changes in RCS level with fuel in the reactor. Finally, example (4) could have resulted in both trains of a safety related system being placed in an inoperable condition. Failure to follow procedure and/or provide adequate controls for the clearance process described in SSP-12.3 is identified as a Violation (327, 328/95-20-01). On September 26, the licensee initiated PER SQ951226PER to document the potential negative trend regarding the equipment clearance process.

d. Outage Inspections

During this period, the licensee conducted preparations evolutions for refueling of the Unit 1 reactor. These evolutions included plant shutdown, establishment of clearances for allowing outage maintenance activities to commence, removal of the reactor head and defueling of the reactor. All evolutions, with the exception of clearance issues discussed in paragraph 3.c were conducted in a very good manner. Of particular note was the licensee's schedule which did not go into reduced inventory to install SG nozzle dams prior to fuel offload. This decision was considered to be excellent from a safety perspective.

The inspectors reviewed licensee activities associated reactor water level instrumentation during refueling. The licensee accomplishes activities with procedure O-GO-13, Rev. 1, Reactor Coolant System Drain and Fill Operations. In particular, the inspectors reviewed features associated with new primary reactor water level instrumentation, identified as the Mansell level monitor. This level instrumentation is installed using two pairs of pressure transducers, tapped off the RCS flow transmitter isolation valve and the pressurizer PORVs. This level instrumentation range is from the 694 elevation (center line of the hot and cold legs is elevation 695) to approximately the top of the pressurizer (elevation 764). Information on RCS level is provided to the MCR operators through a large digital readout of level, and a real time computer graphic of level, change in level over time, and rate of change in level. All of these displays can be seen from the Unit 1 MCR. Preliminary indications are this level instrumentation has operated well to date. The inspectors questioned several operators regarding the operation of the system, various alarms and setpoints, and verified that personnel had received appropriate training regarding the use of this equipment. The inspectors consider this instrumentation for RCS water level to be a good operator aid, in that it provides online data of actual level, and changes in level.

e. Licensee NRC Notifications

On September 11, 1995, the licensee made a call to the NRC as required by 10 CFR 50.72. The issue involved potentially under

torqued head bolts on all four emergency diesel generators due to the use of what was thought to be an out-of-calibration hydraulic torque wrench. This suspected under-torquing resulted in a condition which placed the EDGs outside of design basis. All four EDGs were declared inoperable and action was promptly initiated to ensure proper torquing of the EDG head bolts. Subsequent investigation by the licensee at the calibration laboratory revealed that the torque wrench used on the EDGs had been incorrectly evaluated in August of 1995 as being out of calibration and that the EDGs had been correctly torqued in May-June of 1995. The licensee retracted the notification later in the day on September 11. This issued is further discussed in paragraph 4.b.

f. Followup reviews were accomplished during the inspection period for the following items:

(1) (Closed) VIO 237/94-18-02, Failure to Perform a Clearance as Described on Switching Order SQ-94-49 Resulting in a Trip of the Unit 1, #4 RCP, and Subsequent Manual Trip of the Reactor. The issue involved a operator removing the wrong fuses on a 6.9 KV unit board, and subsequent trip of an operating reactor coolant pump. The licensee responded to the violation in a letter dated September 14, 1994. Corrective actions included appropriate discussions and other actions with the involved individual.

The inspectors reviewed the licensee's corrective actions and also noted increased emphasis placed on both operators and their supervision to improve performance during 1995. Personnel are being held more accountable for their actions which has resulted in a decrease in significant events.

(2) (Closed) VIO 327, 328/94-41-01, Failure to Follow Procedure SSP-12.1 and the Inadequacy of Procedure FHI-3 During Conduct of Fuel Movement Evolutions. The issue involved operator weaknesses in spent fuel handling evolutions resulting in damage to fuel handling equipment. The licensee responded to the violation in letters dated January 30, and April 21, 1995. Corrective actions included review of standing orders which may conflict with other requirements, more supervision attention was required during fuel handling evolutions in the spent fuel pit, and increased AUO awareness of evolutions was emphasized.

The inspectors reviewed the licensee's corrective actions, and monitored subsequent fuel handling evolutions to evaluate the corrective action effectiveness. Increased attention to detail and accountability for actions performed was observed.

Within the areas inspected, one violation was identified.

4. **MAINTENANCE OBSERVATIONS** (62703 and 92902)

During the reporting period, the inspectors verified by making observations, conducting reviews, and interviewing maintenance personnel, that the licensee's maintenance activities result in reliable operation of plant safety systems and components, and are performed in accordance with regulatory requirements. Inspection areas included the following:

a. Early in the period, the inspectors noted that Radiation Monitors 2-RE-90-106, UNIT 2 CONTAINMENT BUILDING LOWER COMPARTMENT AIR MONITOR; and 2-RE-90-112, UNIT 2 CONTAINMENT BUILDING UPPER COMPARTMENT AIR MONITOR, were identified frequently in operations shift turnovers as having water in the sampling lines. WR C201899 was written to address the issue on 2-RE-90-112. The issue was associated with uninsulated sample line runs in the auxiliary building allowing the high humidity air sample from containment to cool and moisture to accumulate in the line. Technical Support provided direction to the operators and chemistry in order to address the issue in an interim manner. Interim actions included frequent draining of the instrument line to keep the instrument in operation. The inspectors conducted walkdowns of the radiation monitor equipment and lines and observed the uninsulated line runs and equipment in place to allow for draining of moisture from the lines.

The inspectors met with Technical Support and Licensing personnel on September 8, 1995 and discussed the status of ODCM and Technical Specification required radiation monitoring equipment. The lower containment monitor was one of the instruments used to monitor for RCS leakage into containment during operation. They were informed that the moisture problem in the sample lines for these monitors was a long standing problem and corrective actions to move the monitor closer to containment or some other solution to reduce the moisture was being reviewed. The problem continued throughout the period. Near the end of the period, the inspectors walked down the sample lines and noted insulation installed on the lines. The inspectors will review the effectiveness of this action during the next inspection period.

The inspectors concluded that a long-standing equipment problem associated with accumulation of moisture in the sample lines of important radiation monitors was placing an additional burden on operators and chemistry during this period.

b. On September 10, 1995, during a review of a M&TE out-of-tolerance report, the licensee became aware of the potential operational impact of an out of calibration hydraulic torque wrench used to torque emergency diesel generator head bolts. The torque wrench, which received its required six month calibration on August 3, 1995 by an off-site licensee laboratory, was found set at

approximately 1270 ft.lbs. rather than the required 1800 ft.lbs. Maintenance records indicated that this torque wrench had been used to torque head bolts on all four EDGs in May-June of 1995. The licensee, after consulting the EDG vendor, declared all four EDGs inoperable and Unit 2, which was in Mode 1 (Unit 1 was in Mode 5), entered the action statement of TS 3.8.1.1.e which requires that the unit begin a shutdown if at least one train of EDGs (1A-A and 2A-A or 1B-B and 2B-B) is not restored to operable status within two hours. The licensee made a 1 hour non-emergency notification to the NRC and initiated SQ951413PER. The licensee also initiated immediate action to ensure proper torquing of the EDG head bolts.

After re-torquing the 2A-A and 1A-A EDGs on September 11, using a different torque wrench on each EDG (the second torque wrench was borrowed from Watts bar), and reviewing the conflicting results of that re-torquing effort, the licensee began to question whether there was still a problem with accurate calibration of the torque wrenches. The torque wrenches were returned to the laboratory for re-calibration. Subsequently, the licensee determined that the Sequoyah torque wrench had been incorrectly calibrated on August 3, 1995 and had, in fact, been within acceptable calibration limits when the four EDGs were torqued during May-June, 1995. Because of the improper calibration method used by the lab on August 3, the Sequoyah torque wrench was actually set at approximately 2200 ft.lbs rather than the required 1800 ft.lbs. Thus, EDG 2A-A was unintentionally over-torqued on September 11, during the torquing verification process. The 1A-A EDG torque was checked using the correctly calibrated Watts Bar torque wrench and therefore was not over-torqued. The EDG vendor stated that over-torquing of the EDG 2A-A did not constitute an operability concern, but recommended that at the next refueling outage that the head bolts be re-torqued to 1800 ft.lbs.

The inspectors discussed this issue with licensee maintenance, engineering, and licensing personnel and concluded that the licensee initiated appropriate corrective actions when it was determined that the out of calibration torque wrench potentially affected EDG operability. Additionally, the licensee took necessary steps to resolve the questions related to improper calibration of the torque wrench. In addition, the calibration lab conducted its own investigation into the root cause of the calibration error. However, the inspectors were concerned that procedure SSP-6.7, CONTROL OF MEASURING AND TEST EQUIPMENT, Revision 3, allows 30 calendar days from the receipt of the out-of-calibration report from the calibration lab to complete an "out of tolerance investigation". With respect to tools or instruments which may have been used on safety-related equipment, the 30 day period appears to be excessive. In the case of the torque wrench discussed above, the out of calibration report on the torque wrench was received on site on August 10 and an "out-of-tolerance" investigation was initiated; however, it was not until September

10, while reviewing the "out-of-tolerance" for closure, that the operational impact was recognized. Although this met the 30 day procedure requirement for review, a potentially significant problem went uncorrected during that 30 day period. The inspectors concluded that a weakness existed regarding excessive review time for operability impacts for M&TE found out of tolerance during post calibration checks.

In addition, further review of the M&TE process for other test equipment identified a lack of control of issuance of test equipment based on safety train usage. The inspectors were concerned that test equipment found out of calibration during post calibration checks could potentially make inoperable both trains of a safety system if the same test equipment was used on different trains or channels prior to post calibration checks. This concern was communicated to the licensee and they agreed with the issue. The licensee was reviewing this concern as part of the PER corrective actions when the period ended.

Within the areas inspected, no violations were identified.

5. **SURVEILLANCE OBSERVATIONS** (61726 and 92902)

During the reporting period, the inspectors ascertained, by direct observation of licensee activities, whether surveillances of safety significant systems and components were being conducted in accordance with technical specifications and other requirements. The inspection included a review of the following procedures and observation of surveillance:

a. During this period, the licensee conducted testing of the Unit 1 main steam safety valves in accordance with O-SI-SXV-001-759.0, TESTING AND SETTING OF MAIN STEAM SAFETY VALVES, Revision 0. The purpose of the procedure was to test and adjust the lift setting of the subject valves using the Trevitest device with the unit steam generator pressure at approximately 850 psig. The testing was accomplished prior to the Unit 1 shutdown.

The inspectors reviewed the completed test package and specifically reviewed results for 5 of the 10 MSSVs tested. Two valves, 1-RV-1-512 and 1-RV-1-528, were identified as exceeding the TS limit of plus or minus 1 percent of the setpoint. Both valves were adjusted to within TS limits at that time. The inspectors discussed test results with engineering and concluded that testing was accomplished as required by TS. In addition, test results indicated good valve performance regarding minimal drifting of setpoints and leakage.

b. During this period, the licensee conducted testing of the Unit 1 AFW pumps during shutdown of the unit for refueling. 1-PI-SFT-003-001.A, MOTOR DRIVEN AUXILIARY FEEDWATER PUMP 1A-A FULL FLOW

TEST, Revision 2; 1-PI-SFT-003-001.B, MOTOR DRIVEN AUXILIARY FEEDWATER PUMP 1B-B FULL FLOW TEST, Revision 3; and 1-PI-SFT-003-001.C, TDAFW PUMP FULL FLOW TEST, Revision 0 were used to conduct full flow testing of the A Train, B Train, and turbine driven AFW pumps respectively.

The inspectors reviewed the test results after testing was completed and concluded that testing was accomplished as specified. Test results for each pump indicated that required flow rates were met for each pumps design function.

c. Followup reviews were accomplished during the inspection period for the following item:

(Closed) VIO 327, 328/94-25-02, Failure to Promptly Identify and Correct a Condition Adverse to Quality Regarding Missed TS Surveillances. The issue involved the failure by management to provide proper guidance and expectations for the review of Operations' surveillance procedures, which resulted in additional missed surveillances. A contributing factor to the missed surveillance was that verbal communication of the review performed by Operations did not clearly identify the depth of the review to PORC members. The missed surveillances resulted from enhancement revisions in 1991.

Licensee corrective actions included a review of all Operations department surveillances by the Site Quality Organization. A technical review of an additional 10 percent of Operations' SIs was performed to ensure that instructions enhanced during 1991 did not contain similar TS surveillance requirement deficiencies. No discrepancies associated with technical specification operability or compliance were discovered. The inspectors discussed this review with licensee personnel, and considered the licensee's actions to be satisfactory.

Within the areas inspected, no violations were identified.

6. **PLANT SUPPORT** (64704, 71750, 82301 and 92904)

During the reporting period, the inspectors conducted reviews to ensure that selected activities of the following licensee programs are implemented in conformance with the facility policies and procedures and in compliance with regulatory requirements.

Radiological Effluent, Waste Treatment, and Environmental Monitoring

During this period, the inspectors reviewed the licensee's activities in the area of radwaste and environmental controls. The licensee continued to take actions to reduce radwaste including elimination of the use of tape to secure anti-contamination clothing. The use of washable arm and leg bands made this reduction possible. In addition, disposal of

condensate demineralizer resin as special waste instead of radioactive waste further helped radwaste reduction. Also, several environmental accomplishments including controlling water inventory in the low volume waste treatment pond and recycling of wood, paper, and batteries has helped to better manage waste disposal for the environment. The inspectors concluded the licensee's radwaste and environmental initiatives were positive indicators in these areas.

Within the areas inspected, no violations were identified.

7. **LICENSEE EVENT REPORT REVIEW** (92700)

The inspectors reviewed the LERs listed below to ascertain whether NRC reporting requirements were being met and to evaluate initial adequacy of the corrective actions. The inspector's review also included followup on implementation of corrective action and/or review of licensee documentation that all required corrective action(s) were either complete or identified in the licensee's program for tracking of outstanding actions.

a. (Closed) LER 327/94-03, Rev. 1, Two Inadequate Surveillance Instructions Resulted in a Failure to Comply With Technical Specifications. The licensee submitted a revision to the original LER because the corrective actions outlined in the original submittal were not correct, in that a technical review of the surveillance instructions was not performed. This issue was reviewed and discussed in NRC IR 327,328/94-25, in which violation 327,328/94-25-02 was issued. As such, no additional inspection of this issue is needed, and this item will be closed.

b. (Closed) LER 328/95-01, Turbine and Reactor Trips Caused from an Electrical Short Tripping the Main Transformer. The issue involved an automatic reactor trip due to a turbine trip on Unit 2 while operating at 100% power. Unit response to the trip, and operator action for the transient was good. This event was previously reviewed and discussed in inspection report 327, 328/94-45. The cause of turbine and reactor trips was determined to be pressure surges in the C phase main transformer cooling oil, which actuated a gas operated overpressure relay, which tripped the main transformer. The transformer oil pressure surge was determined to have been caused by the energization of both transformer cooler groups simultaneously from shorting of a CR light socket. At the time of the event, an operator was attempting to replace a control panel indicating lamp when the light socket rotated causing a short in the control power for the main bank transformer cooler group. Licensee corrective actions discussed in the LER were reviewed by the inspectors. These included the issuing of a standing order to inform operators of the event and to caution operators regarding changing out of light bulbs. An evaluation was also performed to determine if a barrier to prevent similar problems should be incorporated into the lamp

socket design. Possibilities reviewed included the addition of fuses, incorporation of anti-rotational devices for the sockets, and other potential lamp designs. The licensee's evaluation concluded that due to the lack of similar events resulting from loose light sockets, no hardware modifications were warranted. However, a PM was developed to be performed to ensure the tightness of the indicating lamp mounting nuts on a periodic basis. Based on the review, the inspectors determined that the licensee's corrective actions taken for the event were adequate.

Within the areas inspected, no violations were identified.

8. EXIT INTERVIEW

The inspection scope and results were summarized on October 2, 1995, with those individuals identified by an asterisk in paragraph 1 above. The inspectors described the areas inspected and discussed in detail the inspection findings listed below. Proprietary information is not contained in this report. During the exit discussion on the violation, TVA had dissenting comments. On October 11, 1995, the licensee provided the following comments regarding the issue:

"SQN identified, as part of our corrective action process, the cited examples, and we agree they represent a problem or problems at SQN. A Problem Evaluation Report (PER) was written to determine if an adverse trend exists in this area. SQN has identified additional problems associated with the process and is currently performing a root cause analysis to determine actions to prevent recurrence."

Item Number	Status	Description and Reference
VIO 327, 328/95-20-01	OPEN	Failure to Follow Procedure and/or Provide Adequate Controls for the Clearance Process Described in SSP-12.3.
VIO 327/94-18-02	CLOSED	Failure to Perform a Clearance as Described on Switching Order SQ-94-49 Resulting in a Trip of the Unit 1, #4 RCP, and Subsequent Manual Trip of the Reactor.
VIO 327, 328/94-41-01	CLOSED	Failure to Follow Procedure SSP-12.1 and the Inadequacy of Procedure FHI-3 During Conduct of Fuel Movement Evolutions.

VIO 327, 328/94-25-02	CLOSED	Failure to Promptly Identify and Correct a Condition Adverse to Quality Regarding Missed TS Surveillances.
LER 327/94-03, Rev. 1	CLOSED	Two Inadequate Surveillance Instructions Resulted in a Failure to Comply With Technical Specifications.
LER 328/95-01	CLOSED	Turbine and Reactor Trips Caused from an Electrical Short Tripping the Main Transformer.

Strengths and weaknesses summarized in the results paragraph were discussed in detail.

Licensee management was informed of the items closed in paragraphs 3, 5, and 7.

9. ACRONYMS AND ABBREVIATIONS

AFW	-	Auxiliary Feedwater
ASOS	-	Assistant Shift Operations Supervisor
AUO	-	Assistant Unit Operator
CCS	-	Component Coolant System
CFR	-	Code of Federal Regulations
CLA	-	Cold Leg Accumulator
CR	-	Control Room
DRP	-	Division of Reactor Projects
EDG	-	Emergency Diesel Generator
EGTS	-	Emergency Gas Treatment System
ESF	-	Engineered Safety Feature
ESFAS	-	Engineered Safety Features Actuation System
FCV	-	Flow Control Valve
FHI	-	Fuel Handling Instruction
HO	-	Hold Order
I&C	-	Instrumentation and Control
IPE	-	Individual Plant Evaluation
IR	-	Inspection Report
LER	-	Licensee Event Report
M&TE	-	Measuring and Test Equipment
MCR	-	Main Control Room
MOV	-	Motor Operated Valve
MOVATS	-	Motor Operated Valve Actuation Test System
MSSV	-	Main Steam Safety Valve
NRC	-	Nuclear Regulatory Commission
ODCM	-	Offsite Dose Calculation Manual
OPS	-	Operations
PER	-	Problem Evaluation Report
PM	-	Periodic Maintenance

PORC	-	Plant Operations Review Committee
PORV	-	Power Operated Relief Valve
RCP	-	Reactor Coolant Pump
RCS	-	Reactor Coolant System
RHR	-	Residual Heat Removal
RWST	-	Refueling Water Storage Tank
SG	-	Steam Generator
SI	-	Surveillance Instruction
SIS	-	Safety Injection System
SQN	-	Sequoyah
SSP	-	Site Standard Practice
TDAFW	-	Turbine Driven Auxiliary Feedwater
TI	-	Technical Instruction
TS	-	Technical Specifications
TVA	-	Tennessee Valley Authority
UO	-	Unit Operator
VIO	-	Violation
WR	-	Work Request