UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report Nos.: 50-327/83-16 and 50-328/83-16

Licensee: Tennessee Valley Authority
500A Chestnut Street
Chattanooga, TN 37401

Docket Nos.: 50-327 and 50-328

License Nos.: DPR-77 and DPR-79

Facility Name: Sequoyah 1 and 2

Inspection at Sequoyah site near Chattanooga, Tennessee

Inspectors: L J Watson for E. J. Ford — 9/13/83 Date Signed

L J Watson for S. D. Butler — 9/13/83 Date Signed

Approved by: M M Dever for C. A. Julian, Section Chief — 9/13/83 Date Signed
Project Branch No. 1A
Division of Project and Resident Programs

SUMMARY

Inspection on July 6 through August 5, 1983

Areas Inspected

This routine, inspection involved 165 inspector-hours on site in the areas of Operational Safety Verification, LER Review, IE Bulletin Closeout and Independent Inspection Effort.

Results

Of the four areas inspected, no violations or deviations were identified in three areas; two violations were found in one area Failure to follow SOI-30.6 for ABGTS paragraph, 5; Bypassing QC Holdpoint in MI-6.4, paragraph 5)

REPORT DETAILS

1. Persons Contacted

Licensee Employees

C. C. Mason, Plant Manager
L. M. Nobles, Assistant Plant Superintendent
P. R. Wallace, Assistant Plant Superintendent
J. B. Krell, Assistant Plant Superintendent
D. H. Tullis, Acting Maintenance Supervisor (M)
H. D. Elkins, Acting Maintenance Supervisor (I)
M. A. Skarzinski, Acting Maintenance Supervisor (E)
J. M. Anthony, Operating Supervisor
R. W. Fortenberry, Engineering Supervisor
D. E. Crawley, Health Physics Supervisor
J. T. Crittenden, Public Safety Service Supervisor
J. E. Law, Quality Assurance Supervisor
W. M. Halley, Acting Compliance Supervisor
J. Robinson, Field Services Group Director

Other licensee employees contacted included field services craftsmen, technicians, operators, shift engineers, security force members, engineers, maintenance personnel, contractor personnel and corporate office personnel.

2. Exit Interview

The inspection scope and findings were summarized with the Plant Superintendent and/or members of his staff on August 5, 1983. The violations concerning SOI-30.6 and the QC Holdpoint in MI-6.4 were discussed and the licensee acknowledged the inspection findings.

During the reporting period, frequent discussions were held with the Plant Superintendent and his assistants concerning inspection findings.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. One new unresolved item identified during this inspection is discussed in paragraph five.

5. Operational Safety Verification

The inspector toured areas of the plant on a routine basis throughout the reporting period. The following activities were reviewed/verified:

a. Adherence to limiting conditions for operation which were directly observable from the control room panels.

b. Control board instrumentation and recorder traces.

c. Proper control room and shift manning.

d. The use of approved operating procedures.

e. Unit operator and shift engineer logs.

f. General shift operating practices.

g. Housekeeping practices.

h. Posting of hold tags, caution tags and temporary alteration tags.

i. Personnel, package, and vehicle access control for the plant protected area.

j. General shift security practices on post manning, vital area access control and security force response to alarms.

k. Surveillance testing in progress.

l. Maintenance activities in progress.

m. Health Physics Practices.

During a routine tour of the main control room on July 8, 1983, the inspector noted the handswitches for the Auxiliary Building Gas Treatment System (ABGTS) fans in the "Standby" position rather than "A-Auto". Both units were in mode 1 and ABGTS is required to be operable by Technical Specifications. System Operating Instruction (SOI)-30.6 specifies that when the ABGTS is shutdown and is required to be operable, the handswitches are to be placed in "A-Auto". The discrepancy was discussed with the Unit 1 Assistant Shift Engineer who did not know why the switches were in "Standby." He immediately returned them to "A-Auto". A review of the applicable logic drawing (47W611-30-6) revealed that the fans were not inoperable in that each fan would have started from an automatic initiation signal if a low flow signal was present from the opposite train.

Further discussions with Operations' personnel revealed that when the system was shutdown from an inadvertent initiation on July 6, 1983, apparently the switches were left in the wrong position. In that failure to follow SOI-30.6 is a violation of Technical Specification requirements to implement operating procedures for safety-related equipment, a Notice of Violation will be issued (327, 328/83-16-01).

On July 11, 1983, Unit 1 tripped from 100% power. While attempting to find the cause of a low turbine EHC oil level alarm an operator bumped the level switch and activated the lo-lo EHC oil level turbine trip. The turbine trip tripped the reactor. The inspector reviewed the trip to determine if safety-related equipment operated properly, if approved procedures were being used to control and restart the unit and if a post-trip evaluation was properly performed prior to restarting the unit. Safety-related equipment was reported to have operated properly with only a few minor items which were corrected prior to restart. The post-trip evaluation required by AOI-1 "Reactor Trip" was completed and the unit was returned to service on July 12.

Following the Unit 1 trip, the Unit 1 reactor trip breakers were timed as requested by the inspector (see IE Report 327, 328/83-07). The "A" train breaker opened in 0.12 seconds and the "B" train breaker opened in 0.08 seconds. Subsequent to the Unit 2 trip on July 18, 1983, the Unit 2 reactor trip breakers were also timed with "A" opening in 0.19 seconds and "B" opening in 0.12 seconds. The inspector informed Region II management of the breaker response times. Inspector followup items 327, 328/83-07-01 are closed.

On July 13, 1983, the inspectors participated in the licensee's annual Radiological Emergency Plan Drill. The inspectors findings are contained in IE report 327, 328/83-13.

On August 2, 1983, the inspector observed work in progress on the 2B-B centrifugal charging pump. The outboard shaft seal was being replaced during scheduled maintenance. The inspector reviewed applicable documentation which included Maintenance Request MR-A104775 and Maintenance Instruction MI-6.4 "Removal, Inspection and Replacement of Centrifugal Charging Pump Seals". The inspector noted that the QC holdpoint at step 5.4.3.1.6 had not been signed verifying the outboard bearing clearance. Work had actually proceeded to step 5.4.17.4, check of thrust bearing clearance. The missed hold point was discussed with the cognizant engineer who stated that he had made the measurement but overlooked the holdpoint. The inspector observed the disassembly of the bearing so that a Mechanical QC inspector could verify the bearing clearance and sign the holdpoint. Apparently the upper bearing half was being cocked by the housing because one end of the bearing did not have the minimum clearance required. The proper clearance was obtained after additional work and the holdpoint signed. In that proceeding with work beyond a QC holdpoint without permission is a violation of 10 CFR 50, Appendix B, Criteria X and the licensee's approved Quality Assurance program, a Notice of Violation will be issued (328/83-16-02).

On August 3, 1983, the inspector observed a portion of Surveillance Instruction SI-207 and Instrument Maintenance Instruction IMI-3, "Periodic Calibration of Main and Auxiliary Feedwater". The portion in progress was Unit 2 flow loop F-3-142 for the turbine driven auxiliary feedwater pump. The inspector had several areas of concern regarding the adequacy of the calibration procedure, the use of sketches, diagrams and vendor manuals, and the lifting of leads to install test equipment. These concerns were discussed with the Instrument Mechanic during the work and identified to the Instrument Section Supervisor. Until the items can be further reviewed to determine compliance with regulatory requirements, this matter remains unresolved (327/83-16-02, 328/83-16-03).

During the reporting period, the inspector performed a detailed operability review of Unit 1 and Unit 2 containment spray system. Unit 1 is operating at power and Unit 2 is in a refueling outage. The review included system walkdowns, valve alignment verifications and power availability to various components. Emphasis was placed on motive power and control power alignments at the electrical boards and control panels. Both trains of equipment were checked and no significant discrepancies were noted.

No other violations or deviations were identified.

6. Licensee Event Report (LER) Review

During the reporting period, LERs were reviewed on a routine basis as they were received from the licensee. Each LER was reviewed to determine that:

a. The report accurately described the event

b. The report cause was accurate and the LER form reflected the proper cause

c. The report satisfied the Technical Specification reporting requirement with respect to information provided and timing of submittal

d. Corrective action was appropriate to correct the cause of the event

e. Corrective action has been or is being taken

f. Generic implications if identified were incorporated in corrective action

g. Corrective action taken or to be taken was adequate, particularly to prevent recurrences

h. The event did not involve continued operation in violation of regulatory requirmeents or license conditions.

7. IE Bulletin Closeout

The inspector reviewed the licensee's response to the IE Bulletin 83-05, "Hayward Tyler Pumps", dated July 22, 1983. The licensee responded that they did not use or plan to use any of the subject pumps at Sequoyah. The bulletin is closed for both Units 1 and 2 based on this negative response.

The inspector reviewed the licensee's response to the IE Bulletin 83-03, "Check Valve Failure in Raw Cooling Water Systems of Diesel Generators", dated March 10, 1983. The licensee's response adequately addresses the subject valves including the testing and testing schedule for the valves. The bulletin requires the results of the check valve testing to be forwarded to the NRC after the valves are tested. Tests are scheduled to be complete by the end of the current Unit 2 refueling outage. The bulletin will remain open for both units until the test results are received from the licensee and evaluated.

No violations or deviations were identified.

8. Independent Inspection Effort

The inspector routinely attended the morning staff meetings during the reporting period. These meetings provide a daily status report on operational and maintenance activities in progress as well as a discussion of significant problems or incidents associated with the plant.

No violations or deviations were identified.