



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA ST., N.W., SUITE 3100
 ATLANTA, GEORGIA 30303

Report No.: 50-395/83-02

Licensee: South Carolina Electric and Gas Company
 Columbia, SC 29218

Docket No.: 50-395

License No.: NPF-12

Facility Name: Summer

Inspection at Summer site near Jenkinsville, South Carolina

Inspector: *P. T. Burnett* 9/7/83
 P. T. Burnett Date Signed

Approved by: *F. Jape* 2/10/83
 for F. Jape, Section Chief Date Signed
 Engineering Program Branch
 Division of Engineering and Operational Programs

SUMMARY

Inspection on January 11-14, 1983

Areas Inspected

This routine, unannounced inspection involved thirty inspector-hours on site in the areas of review of completed power operations tests and review of surveillance test procedures.

Results

No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *W. A. Williams, Jr., General Manager - Nuclear Operations
- *O. S. Bradham, Station Manager
- *M. D. Quinton, Assistant manager - Maintenance
- L. F. Storz, Assistant Manager - Operations
- *S. F. Fipps, Director of Technical Services
- *F. J. Leach, Director of Site Engineering
- *G. J. Taylor, Technical Support Engineer
- *A. R. Koon, Jr., Technical Service Coordinator

Other licensee employees contacted included two shift supervisors, three control room foremen, two operators, two shift technical advisors, and three office personnel.

Other Organizations

L. A. Wooldridge, Westinghouse

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on January 14, 1983, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection findings.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Power Operation Tests

a. Review of Completed Tests (72600, 72608)

The following completed power operations tests were reviewed:

- POT-1, Dynamic Automatic Steam Dump Control, Revision 0, including changes 1, 2 and 3. The acceptance criteria were met and the results have been accepted by the Plant Safety Review Committee (PSRC).

- POT-2, Automatic Steam Generator Level Control Test, Revision 0, including changes 1, 2, 3, 4 and 5. Apparently acceptable results were obtained, but the test has not been reviewed by the PSRC.
- POT-4, Automatic Reactor Control Test, Revision 0, including changes 1, 2 and 3. The acceptance criteria were met, and the test has been reviewed and accepted by the PSRC.
- POT-5, Pseudo Rod Ejection at Power, Revision 0. The acceptance criteria were met, but the test has not been reviewed by the PSRC.
- POT-6.2, Power Coefficient Determination at 50% Power, Revision 0, including changes 1, 2 and 3. Data reduction for this test was not complete.
- POT-16, Calibration of Steam and Feedwater Flow Instrument. This test will continue through 100% power. Results through 50% power appear to be acceptable.

These tests were discussed with members of the technical support staff. They noted that final review of test results by the PSRC is not required for power escalation. Hence PSRC review had not been given a high priority. In all cases test supervisors had determined that acceptable results would be obtained from all tests including POT-6.2. The inspector had no further questions.

b. Review of Test Procedure (72578)

Amendment 33 to the FSAR in July 1982 authorized a change in test procedure for the rod drop test. Revision 1 to POT-9, Rod Drop Test, Rods D-4 and D-12, was issued on November 17, 1982. The procedure, including changes 1 and 2, was reviewed and found to conform to the FSAR (Table 14.1-75) test description.

c. Test Program Status

POT-9 is the only test remaining to be performed at the 50% power plateau. This test has been scheduled to be performed in the near future.

The operating license for the VC Summer facility limits operation to not more than 50% power. This restriction will remain until after the steam generator modifications have been completed. Normally, it is expected that a licensee complete the power escalation test program from 0% to 100% power without lengthy interruptions. Since Summer is restricted to 50% power, the test program will be interrupted for several months.

The inspector reviewed the power escalation test program to determine if there are any tests scheduled for the next power plateau, that should be performed at the current reduced power plateau.

The review revealed one test POT-7.2, Load Swing at 75% Power, that has not been done at 50% power. All other tests to be performed at 75% power, were already done at 50% power. POT-7.2 was previously completed at 38% power and re-running this test at 50% power would not significantly contribute to the overall power escalation test program. Therefore, it is concluded that no additional tests need to be performed, while interrupting the test program at 50% power.

This matter was discussed with licensee management, by phone on 1/31/83.

6. Review of Surveillance Test Procedures

a. Core Thermal Power Evaluation (61706)

The licensee's procedure STP-102.002, NIS Power Range Heat Balance, Revision 1 (issued December 21, 1982), was reviewed. The procedure describes a technically correct and acceptable method of obtaining reactor thermal power level from secondary system instruments. Within the procedure some of the main control board (MCB) instruments to be read were identified as channels II, III, IV, or V. None of the MCB instruments are so labeled. Instead the displays are identified by indicator numbers such as PI-476 or FI-496. This inconsistency was identified to management as a possible source of error in performing the procedure.

To date the surveillance required by technical specification 4.3.1, item 2 has been performed using POT-20, Thermal Power Measurement and Statepoint Data Acquisition and test instrumentation specially installed in the secondary system for POT-16 and POT-20.

b. Reactor Shutdown Margin (61707)

In inspecting the licensee's compliance with technical specifications 3.1.1.1 and 3.1.1.2 the following documents were reviewed:

- STP-134.001, Shutdown Margin Calculation, Revision 2,
- General Operating Procedure, Appendix B, Reference Critical Data, Revision 2 (GOP-B),
- The Plant Curve Book (PCB), and
- Operator at the Controls 8-Hour Log (OATCL).

During power operation, confirmation of an adequate shutdown margin is performed each shift in response to the OATCL by verifying that all rods are within twelve steps of the demand position (technical specification 3.1.3.1) and that the bank insertion limit alarm (technical specification 3.1.3.6) is not activated.

In other modes, STP-134.001 is performed using data from GOP-B and the PCB. In working through the procedure it was found that step B.1.3 implied that the xenon contribution was always negative. However, in the convention being used equilibrium xenon was treated as a null effect (PCB figure II-2), and, hence, the xenon correction could be of either sign. In reviewing completed copies of STP-134.001 (for December, 1982) it was found that the proper sign was being used even in the cases where the procedure was misleading. Management's attention was directed to the potential for error in the procedure.

STP-201.001, Core Reactivity Balance, Revision 0, was also reviewed. It was found to be adequate for the surveillance presented by technical specification 4.1.1.1.2.

c. Core Power Distribution Monitoring (61702, 61711)

The following surveillance procedures were reviewed, the technical specification addressed is shown in parentheses:

- STP-133.001, Axial Flux Difference Calculation, Revision 1, issued 6/22/82 (4.2.1.1 and 4.2.1.2),
- STP-202.001, Target Axial Flux Difference Measurement, Revision 0, issued 7/24/81 (4.2.1.3),
- STP-203.001, Target Axial Flux Difference Update, Revision 0, issued 10/21/81 (4.2.1.4),
- STP-204.001, Hot Channel Factor Tests, Revision 0, issued 6/24/81 (4.2.2.2 and 4.2.2.3), and
- STP-205.001, RCS Flow Rate and R Determination, Revision 1, issued 2/23/82 (4.2.3.2).

These procedures adequately address the surveillance requirements referenced in them.

No violations or deviations were identified.

7. Independent Inspection

In the absence of the senior resident inspector some time was spent each day in reviewing the operator's logbook and in discussing plant status with the control room foreman or shift supervisor.

No violations or deviations were identified.