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

Report No. 50-281/79-79

Licensee: Virginia Electric Power Co.
P. O. Box 26666
Richmond, Virginia 23261

Facility: Surry Power Station, Unit 2

Docket No. 50-281

License No. DPR-37

Inspection at Surry Site near Williamsburg, Virginia

Inspectors: Herbert L Whitener — H. L. Whitener — 11/6/79 Date Signed

E H Brooks — E. H. Brooks — 11/7/79 Date Signed

Approved by: P T Burnett — P. T. Burnett, Acting Section Chief, RONS Branch — 11-7-79 Date Signed

SUMMARY

Inspection on October 15-19, 1979

Areas Inspected:

This announced inspection involved 58 inspector hours onsite in the areas of containment leakage rate testing and pipe support and restraint systems.

Results:

Of the areas inspected, no apparent items of noncompliance or deviations were identified.

353

DETAILS

1. Persons Contacted

Licensee Employees

*W. Stewart, Plant Manager
R. Blount, Test Coordinator (CILRT)
M. Kansler, Associate Engineer

Other licensee employees contacted included two operators.

NRC Resident Inspector

*D. Burke

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on October 19, 1979, with those persons indicated in Paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Containment Leakage Rate Testing

The following procedures relating to leakage rate testing were provided by the licensee and were reviewed by the inspectors:

16.1 - Containment Leak Monitoring System

16.2 - Containment Penetration Local Leakage

16.3 - Containment Leakage Rate (Class A Test at 39.2 PS1G)

16.4 - Containment Isolation Valve Leakage

16.5 - Containment Personnel Air Lock Test

16.6 - Equipment Hatch Leak Test

16.7 - "After Opening " Personnel Airlock Test

Procedure 16.1, Containment Leak Monitoring System, is used in conjunction with containment leakage rate testing utilizing the reference vessel system. This system of testing was used initially at Surry Power Station, but will be replaced with the absolute method and accordingly Procedure 16.1 will be eliminated.

Procedure 16.3, Containment Leak Rate (Class A Test at 39.2 PSIG), is in the process of revision. This procedure will be submitted to Region II for review prior to initiation of containment leakage rate testing which is tentatively scheduled for December 14, 1979.

Proposed changes to appendix J to 10 CFR 50 that are presently under consideration by NRR were discussed with the licensee. Those changes which appear to be immediately pertinent to the Surry Plant are:

1. Personnel airlock testing.

2. Definition of integrated Leakage Rate Test (I.L.R.T.) failure.

3. Venting and draining requirements.

4. Hydrostatic testing of isolation valves.

5. Administrative control and periodic surveillance over test, vent and drain (TVD) connections.

The purpose of the discussion was to alert the licensee to potential areas of concern so that leakage rate testing, both integrated and local, will be conducted within the intent of the proposed changes to appendix J. The licensee indicated that no problems were anticipated in meeting appendix J or the intent of the proposed changes as discussed.

By the letter of September 22, 1978, the licensee submitted to NRR a proposed change to technical specifications which would permit airlock testing every 4 months instead of after each opening as required by appendix J. The proposed change was not approved by NRR. However, the NRR position which provides an alternate method of testing airlock door seals within 72 hours of the first series of openings was transmitted to the licensee by NRR on November 29, 1978. The licensee advised the inspectors that airlock door seals will be tested in accordance with the NRR position to meet the intent of appendix J.

During the period of this inspection, the licensee had completed approximately 50% of Unit 2 containment isolation valve (Type C) leakage rate tests as scheduled. No testing was being conducted during the inspectors visit. The results of previous isolation valve tests were reviewed along with preliminary review of schematics and drawings depicting containment isolation valve lineup. Due to the complexity involved, a more detailed review of the Surry Power Station isolation valve testing procedure will be conducted to provide assurance that all valves that constitute containment boundary are tested in accordance with the requirements of appendix J.

6. Hydraulic Snubber Functional Tests

Due to a 50% failure rate the licensee functionally tested all snubbers in Unit 2 which are subject to the technical specification functional test surveillance requirement (i.e. 50,000 pound design load or less). Review of these data show that 61 of the 65 failures were due to lock up or bleed velocities which were less than the procedure minimum velocity requirement. Two snubbers failed on high bleed velocity and two appeared to be in lock-up as found. All snubbers were reset within the procedure velocity specifications.

The licensee said that the snubber problem in Unit 2 appears to be the same as that identified in Unit 1. Specifically, the licensee believes that either a velocity set point drift is occurring or a test machine problem is yielding inconsistent velocity readings. Investigation of the cause of failure is in progress.