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

Report No. 50-280/78-29 and 50-281/78-29

Docket No. 50-280 and 50-281

License No. DPR-32 and DPR-37

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

Facility Name: Surry Units 1 and 2

Inspection at: Surry, Virginia

Inspection conducted: October 2-6, 1978

Inspector: J. E. Ouzts

Accompanying Personnel: None

Approved by: ______________________ Date ________
P. J. Kellogg, Chief
Nuclear Support Section No. 2
Reactor Operations and Nuclear Support Branch

Inspection Summary

Inspection on October 2-6, 1978 (Report No. 50-280/78-29 and 50-281/78-29)

Areas Inspected: Routine, unannounced inspection of procedures, follow-up on LERs and review of licensee action on previous inspection findings. The inspection involved 27 inspector-hours on site by one NRC inspector.

Results: Within the three areas inspected, no items of noncompliance or deviations were identified.

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DETAILS I

Prepared by: [illegible] [illegible]
J. E. Ouzts, Reactor Inspector
Nuclear Support Section No. 2
Reactor Operations and
Nuclear Support Branch
Date

Dates of Inspection: October 2-6, 1978

Reviewed by: [illegible] [illegible]
P. J. ~~Kellogg, Chief~~
Nuclear Support Branch No. 2
Reactor Operations and
Nuclear Support Branch
Date

1. Persons Contacted

*T. L. Baucom, Station Manager
*E. P. Dewandel, Administrative Assistant
*L. A. Johnson, Supervisor Engineering Services
*R. E. Nicholls, Supervisor, Electrical Maintenance
*F. L. Rentz, President QC Supervisor
*D. S. Taylor, Supervisor, Mechnical Maintenance
*M. D. Tower, Corporate Staff Engineer (QA)
*J. L. Wilson, Operating Supervisor

Two Document Control Room personnel were also contacted.

*Denotes those attending exit interview.

2. Licensee Action On Previous Inspection Findings

(Closed) Noncompliance (50-280/281-78-13-01) Failure to properly approve changes to periodic test.

(Closed) Noncompliance (50-280/281-78-13-02) Failure to follow procedure when reviewing abnormal results of periodic tests. Through discussions with licensee management, review of revised procedures and memorandums issued, the inspector verified that corrective action stated in the Licensee's letter of July 11, 1978, had been accomplished. There were no further questions on these items.

3. Unresolved Items

No new unresolved items were identified during this inspection.

4. Exit Interview

The inspector met with Licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on October 6, 1978. The inspector summarized the scope as discussed in paragraphs 5 and 6. The licensee acknowledge these inspection findings and reported planned corrective action as discussed in paragraph 6.

5. Procedures Review

The inspector reviewed the following procedures to verify that reviews and procedure changes covering the activities were in accordance with technical specifications, and that safety evaulations had been made and documented:

(Operating Procedures)

-OP-58.2 - Rod Control System Manual Operation
-OP-51.1 - Component Cooling Water Subsystem
-OP-28.0 - Main Steam System
-OP-8.6 - Volume Control Tank Operation
-OP-52.2 - Fire Protection System
-OP-62.0 - Radiation Monitoring
-OP-56.1 - Visual - Video Count Rate Channel

(Abnormal (Alarm) Procedures)

-1G-22 - Rod Control MG's Tripped
-1K-14 - Component Cooling Surge Tank Hi-Lo Level
-1F-4b - Main Steam Line 1A LoPressure
-10-33 - Volume Control Tank Hi-Lo Pressure
-1A-10 - Fire Water System Trouble
-1G-1 - Rod Monitor Panel Hi
-1G-3 - NIS Source Range Loss of Detector Voltage

(Emergency Procedures)

-EP-5 - Loss of Reactor Coolant Flow
-EP-2 - Loss of Reactor Coolant
-EP-6 - Non-Recoverable Loss of Instrument Air
-EP-1 - Reactor Trip

(Maintenance Procedures)

-EMP-P-R7-78 - Preventative Maintenance Rod Drive MG Sets Units 1 and 2
-MMP-P-CC-002 - Component Cooling Water Pumps
-EMP-C-MS-32 - 3° Stroke Test of Main Steam Trip Valves
-MMP-P-CH-009 - Changing and High Head Pumps
-MMP-P-FP-024 - Preventative Maintenance Procedure
-IMP-C-NI-18 - Replacement of Power Range Detector NI

(Administrative Procedures)

-13.0 - Review of Procedures
-51.0 - Control of Procedures
-38.0 - Guidelines, Procedures and Limitations for Containment Entry

The procedures were reviewed to verify:

- Procedure changes were in accordance with technical specifications
- Temporary changes did not conflict with technical specifications and were documented
- Changes were adequate to control safety related operations (for selected procedures reviewed)
- Changes were made to conform with 10CFR50.59 requirements and were documented
- Provisions were provided for assuring that safety related systems and components exposed to freezing environment remained operational following such exposure (only performed for specific systems, none of which were found to be susceptible).
- Procedure changes were made to reflect technical specifications for selected procedures as follows:

  (a) Change 45 of October 19, 1978 (Amendments 32 and 33) Editorial Changes

  (b) Changes 46 of December 6, 1977 (Amendments 33 and 34) Establishment of Limiting Conditions for Operation; Surveillance Requirements and Administrative Controls for Fire Protection System

  (c) Change 47 of December 12, 1977 (Amendments 34 and 35) Approval of Steam Generator Tube Plugging to 25%

  (d) Change 48 of January 30, 1978 (Amendments 35 and 36) Revisions to Reporting Requirements

(e) Change 49 of April 4, 1978 (Amendments 36 and 37) Spent Fuel Pit Capacity Increase to 1044 Assemblies and Fuel Cask not to be moved into Fuel Building until NRC approval of Drop Evaluation

(f) Change 50 of April 6, 1978 (Amendments 37 and 38) Deletion of Quarterly Requirements for Main Steam Trip Valve Testing

(g) Change 51 of April 12, 1978 (Amendments 38 and 39) Reduction of $\Delta \underline{I}$ Band to +5% to Accommodate Steam Generator Plugging - Unit 2

(h) Change 52 of April 20, 1978 (Amendments 39 and 40) Exemption of ESS Monthly Testing During Shutdown; Health Physics Supervision Qualification Added; Deletion of Requirements to Measure Flow Rate Through Containment Spray Nozzles and Increase in Review Time for Procedure Deviations

(i) Change 53 of May 17, 1978 (Amendments 40 and 41) Additions of Limiting Conditions for Operation and Testing Frequencies for Diesel Engine Batteries

(j) Change 54 of July 10, 1978 (Amendments 41 and 42) Reduction of Axial Flux Difference to +5%; Change in Control Rod Insertion Limits; Exemption From 10CFR50.46(a)(1) Requirements; FQ Limit Changed to 1.94 and Accumulator Volume Decreased to 975 ft^3.

The inspector used one or more of the following acceptance criteria for evaluating the above items in the procedure review:

- VEPCO - NPS - Quality Assurance Manual - Section 5.0
- Technical Specifications - Section 6.4
- 10 CFR 50.59
- Regulatory Guide 1.33
- ANSI N 18.7 (1972)
- Inspector Judgement.

Within the areas inspected no items of noncompliance or deviations were identified.

6. Licensee Event Report (LER) Reviews

The Licensee's corrective action for the following LER's were reviewed by the inspector:

(a) LER-78-002/03L-0 - Power Rampdown due to Reactor Coolant System Leak

(b) LER-78-012/017-0 - Unplanned Boron Dilution During Cold Shutdown Due to Flow Controller FC-2-114 Malfunction

(c) LER-78-012/03L-0 - Heat Tracing Circuit 7A Failure in Paired Redundant Circuits.

Per LER-78-002/03L-0, the Licensee has identified a program to be completed during the steam generator replacement outage, to replace the carbon steel studs with studs of a material more compatible with boric acid, for valves subject to boric acid corrossion. He is actively searching for heat tracing material that would be less susceptible to failure, particularly material less vulnerable to failure from attack by boric acid. Valve stem seal material for valves in boric acid system, and other component seals in these systems, will be inspected for leaks. Due to material aging, the valve steam seals are particularly suspected of leaking. In addition, the Licensee is investigating a circuit modification to the charging flow control system to prevent the malfunction of the flow controller simultaneously with failure of the flow deviation alarm to activate, as a result of a single component failure.

(Closed) As a result of the review of the above reports and discussions with the Licensee, the above reports meet reporting requirements and no questions remain at this time regarding corrective action taken and planned.