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

Report Nos. 50-280/80-13 and 50-281/80-14

Licensee: Virginia Electric and Power Company
Richmond, Virginia 23261

Facility Name: Surry Units 1 and 2

Docket Nos. 50-280 and 50-281

License Nos. DPR-32 and DPR-37

Inspection at Surry site near Surry, Virginia

Inspector: _____ 4/23/80
D. J. Burke Date Signed

Approved by: _____ 4/23/80
P. J. Kellogg, Acting Section Chief, RONS Branch Date Signed

SUMMARY

Inspection on February 27-March 4 and March 10-April 4, 1980

Areas Inspected

This routine inspection by the resident inspector involved 130 inspector-hours on site in the areas of plant operations and operating records, plant modification and maintenance, followup of IE Bulletins, plant security, and previously identified items.

Results

Of the five areas inspected, no apparent items of noncompliance or deviations were found in three areas; one apparent deviation was found in the plant modification area (the facility not built as described in FSAR-paragraph 5.a) and one apparent item of noncompliance was found in the area of plant security (2.790).

DETAILS

1. Persons Contacted

   Licensee Employees

   Virginia Electric and Power Company (VEPCO)

   *W. L. Stewart, Station Manager (Through 3/31/80)
   *J. L. Wilson, Station Manager (From 4/1/80)
   G. Kane, Superintendent , Operations
   *T. A. Peebles, Superintendent, Technical Services
   *R. F. Saunders, Superintendent, Maintenance
   R. M. Smith, Supervisor, Health Physics
   *F. L. Rentz, Resident QC Engineer
   M. R. Kansler. Acting Engineering Supervisor

   Other licensee employees contacted during this inspection included control room operators, shift supervisors, QC, HP, plant maintenance, security, engineering, chemistry, and administrative personnel.

   *Attended exit interview.

2. Management Interviews

   The scope and findings were summarized on a biweekly basis with those persons indicated in paragraph 1 above. The items of noncompliance were discussed specifically to resolve questions concerning interpretation of requirements.

3. Licensee Action on Previous Findings

   a. (Closed) Noncompliance (280/79-62-01) Failure to follow annunciator alarm procedure IB-26(D-2). The safeguards valve pits are being more closely monitored and controlled. A design change has been approved to install new pumps and systems to assure water does not accumulate in these areas. In addition, operations personnel were reinstructed on adherence to procedures and proper documentation of plant conditions and corrective actions; the use of the Annunciator Log has been been implemented.

   b. (Closed) Noncompliance (280/79-62-02) Exceeded RCS cooldown rate limit of 50 degrees Fahrenheit per hour. Operators have been reinstructed on the cooldown rates and procedures, and review of the data and ASME Boiler and Pressure Vessel Code, Section III, determined that the 60 degrees Fahrenheit (max) cooldown rate for one hour was not detrimental based on the 100 degrees Fahrenheit per hour Code limit.

c. (Closed) Noncompliance (280/79-62-03) Radiation monitor RM-CC-105 and 106 alarm setpoint too high. The periodic test has been revised to check the setpoints daily and adjust as required to assure compliance with TS 3.7.

d. (Closed) Deviation (280/79-62-04 and 281/79-82-01) Portable fire extinguishers not inspected monthly in safeguards bulding. The fire extinguishers (94 and 131) were inspected and added to the monthly PT.

e. (Closed) Noncompliance (280/79-67-01) Failure to follow corrective maintenance procedures for reinsulating heat-traced, borated lines. Reinstruction and coordination for the removal and replacement of insulation during maintenance activities has been accomplished; certain additional areas around valves and piping were reinsulated.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Unit 1 Operations

Unit 1 was shutdown on February 19, 1980, when pipe stress reanalysis determined that an overstress condition, during the design basis earthquake would exist on containment piping penetrations for the three inch reactor cavity purification system (used during refueling) and the seal return piping. Prior to shutdown, the licensee noted an increase in turbine vibration, and subsequently disassembled the low pressure turbine for inspection. Three rotating blades were found off the L-3 rows. A full inspection and repair of the LP turbine is in progress; no significant cracking or indications have been found in the disc or keyway areas. Additional maintenance and testing, such as the SG tube inspections, are also being conducted during the shutdown. During the shutdown, the inspector routinely toured the Unit 1 control room and other plant areas to verify that the operations and maintenance were being conducted in accordance with the Technical Specifications (TS) and facility procedures. Specific areas of inspection and review included the following:

a. While in the Unit 1 (and the Unit 2) safeguards valve pit area, the inspector noted that certain components described in Section 6.3.1.4 of the FSAR to detect and control leaks into these areas, were not installed. The components were the valve pit baffles in each unit to isolate LHSI or outside recirculation spray subsystem leakage from independent trains of flow, and the independent pit liquid level detectors which would monitor the baffle separated pits in each unit. (One level detector was installed in each unit). The inspector could not find records of design changes or written safety evaluations for the above changes to the systems as described in the FSAR, indicating that these components were never installed. The commitment in FSAR Section 6.3.1.4 is contrary and is a deviation (280/80-13-01 and 281/80-14-01).

b. After monitoring and inspecting the fluid leakage on the Unit 1 large bore B-P hydralulic snubbers, the licensee decided to replace both snubbers in the C cubicle. (See IE Rpt. 50-280/80-01, para. 5.b).

6. Unit 2 SGRP

The Unit 2 steam generator replacement project was completed on December 31, 1979; testing of various Unit 2 systems is in progress. The inspector is reviewing certain test procedures such as ST-78, Engineered Safeguards Functional Test, and discussing his comments with the licensee. The Unit 2 Type A integrated leak rate test was not successful and will be performed again following fuel loading. On April 3, 1980, smoke was observed from the ZJ 480V breaker cubicle in the emergency switchgear room and the fire alarm was initiated. A small control transformer overheated during troubleshooting of instrument air compressor Z-1A-C-1; repairs are in progress. The inspector had no further questions at this time.

7. IE Bulletins

The licensee responded to IE Bulletin 79-24, Frozen Lines, on November 1, 1979 (one day late). The licensee reviewed the facility to assure that adequate protective measures had been taken to prevent freezing during extremely cold weather (which is rare in the area). PT-52, Cold Weather Protection, was completed on December 3, 1979, and preventative measures were taken to prevent freezing. The freezing temperatures of tanks such as the RWST and chemical addition tank (CAT), which are insulated and recirculated, are lowered by the boric acid and sodium hydroxide solutions. IE Bulletin 79-24 is closed.

8. Emergency Planning

The inspector attended and participated in the site Emergency Planning public meeting in Williamsburg, Virginia on March 26, 1980.