

Approved by:

# UNITED STATES NUCLEAR REGULATORY COMMISSION REGION II 101 MARIETTA STREET, N.W.

101 MARIETTA STREET, N.W. ATLANTA, GEORGIA 30323

Report Nos.: 50-280/85-26 and 50-281/85-26

Licensee: Virginia Electric and Power Company

Richmond, VA 23261

Docket Nos.: 50-280 and 50-281

License Nos.: DPR-32 and DPR-37

Facility Name: Surry 1 and 2

Inspection Conducted; August 6 - September 2, 1985

Inspectors: /////UG/ D. J. Burkel Senior Resident Inspector

MW7d 9/17/86

M. J. Davis, Resident Inspector

S. Elrod, Section Chief

7/17/85
Date Signed

Division of Reactor Projects

# SUMMARY

Scope: This inspection entailed 160 inspector-hours on-site in the areas of plant operations and operating records, plant maintenance and surveillance, plant security, follow-up of events, licensee actions on previous enforcement items and Licensee Event Reports.

Results: In the areas inspected, no violations or deviations were identified.

#### REPORT DETAILS

#### 1. Persons Contacted

#### Licensee Employees

- R. F. Saunders, Station Manager
- D. L. Benson, Assistant Station Manager
- H. L. Miller, Assistant Station Manager
- D. A. Christian, Superintendent of Operations
- E. S. Grecheck, Superintendent of Technical Services
- J. W. Patrick, Superintendent of Maintenance
- D. Rickeard, Supervisor, Safety Engineering Staff
- S. Sarver, Superintendent of Health Physics
- R. Johnson, Operations Supervisor
- D. Driscoll, Site Quality Assurance Manager
- W. R. Runner, Supervisor, Administrative Services

Other licensee employees contacted included control room operators, shift technical advisors, shift supervisors, chemistry, health physics, plant maintenance, security, engineering, administrative, records, contractor personnel and supervisors.

#### 2. Exit Interview

The inspection scope and findings were summarized on a biweekly basis with certain individuals in paragraph 1. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection.

3. Licensee Action on Previous Enforcement Matters

(Closed) Violation (280/81-22-04), Inadequate Calibration Procedures for Chemical Addition Tank (CAT) Level Instrumentation. The calibration procedures were corrected for the proper fluid densities following identification of the problem.

4. Unresolved Items

Unresolved items were not identified during this inspection.

## 5. Operations

a. Units 1 and 2 were inspected and reviewed during the inspection period. The inspectors routinely toured the control room and other plant areas to verify that plant operations, testing and maintenance were being conducted in accordance with the facility Technical Specifications (TS) and procedures. The inspectors verified that monitoring equipment was recording as required, that equipment was properly tagged, and that

plant housekeeping efforts were adequate. The inspectors also determined that appropriate radiation controls were properly established, that clean areas were being controlled in accordance with procedures, that excess material or equipment was stored properly, and that combustible material and debris were disposed of expeditiously. During tours, the inspectors monitored the plant for unusual fluid leaks, piping vibrations, piping hanger and seismic restraint settings, various valve and breaker positions, equipment caution and danger tags, component positions, adequacy of fire fighting equipment and instrument calibration dates.

Certain tours were conducted on backshifts. Inspections included areas in the Units 1 and 2 cable vaults, vital battery rooms, diesel generator rooms, fire pump house, switchgear rooms, control rooms, auxiliary building, containment and cable penetration areas to verify certain breaker and equipment conditions and positions for safety-related components. The inspectors routinely conducted partial walk-downs of emergency core cooling systems and engineered safety features systems to verify operability and observe maintenance and testing of certain equipment and components in these systems.

- b. The Unit 1 reactor was shutdown early in the reporting period and placed in a cold shutdown condition for a two week maintenance and snubber inspection outage. The unit was restarted on August 20, 1985, and operated at power for the remainder of the reporting period.
- Unit 2 operated at power for the duration of the reporting period. c. reactor trips or shutdowns occurred. On August 13, 1985, a Nuclear Instrumentation system dropped rod runback to 50 percent power occurred due to the loss of Vital Bus I caused by the opening of a 480 volt breaker on the 2Hl bus. The Vital Bus (VB) was restored in approximately four minutes by cross-tieing it to VB III. The breaker appeared to have opened on overload, but the reason for the overload could not be determined. The breaker was reclosed and the systems were returned to normal operation and alignment. The breaker will be replaced during the next outage, and inspected. The inspectors verified that the penalty minutes accumulated when the delta flux was out of the band were restored in accordance with TS 3.12.B prior to returning to full-power operation.

### 6. Follow-up of Open Items

- a. (Closed) Open Item 280/81-17-02, Rainwater Leaks. The licensee has had new roofs installed on the majority of buildings on-site, and has repaired several sump systems.
- b. (Closed) Open Item 280/83-37-01, Cold Weather Protection Procedures. The licensee has reviewed and upgraded the cold weather protection procedures. Verification of proper implementation of the procedures will continue under Open Item 280/85-01-06.

## 7. Licensee Event Report (LER) Review

The inspectors reviewed the LERs listed below to ascertain that NRC reporting requirements were being met and to determine the appropriateness of corrective actions taken and planned.

Certain LERs were reviewed in greater detail to verify corrective action and to determine compliance with TS and other regulatory requirements. The review included an examination of logbooks and internal correspondence, a review of Station Nuclear Safety and Operating Committee meeting minutes and discussions with various staff members.

(Closed) LER 280/85-01 concerned a test signal left in place in "B" loop RPS channel 2 of overtemperature delta T without the cognizance of operations or instrumentation personnel. This event was discussed in Inspection Report 280, 281/84-36.

(Closed) LER 280/83-21 concerned time delays for emergency bus separation and diesel start for a degraded voltage condition during a Consequence Limiting System (CLS) or Safety Injection (SI) condition. The cause was determined to be component drift of the time delay relays which were subsequently reset.

(Closed) LER 280/83-26 concerned containment partial air pressure being slightly greater than that stipulated in TS due to rapidly increasing service water temperature. Pressure was reduced and additional guidance was provided to operations personnel.

## 8. Plant Physical Protection

The inspectors verified the following by observation:

- a. Gates and doors in Protected and Vital Area barriers were closed and locked when not attended.
- b. Isolation zones described in the physical security plans were not compromised or obstructed.
- c. Personnel were properly identified, searched, authorized, badged and escorted as necessary for plant access control.