



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

Report Nos.: 50-280/78-30 and 50-281/78-30

Docket Nos.: 50-280 and 50-281

License Nos.: DPR-32 and DPR-37

Licensee: Virginia Electric and Power Company
P. O. Box 2666
Richmond, Virginia 23261

Facility Name: Surry Power Station

Inspection at: Surry, Virginia

Inspection conducted: October 10-13, 1978

Inspector: D. J. Burke

Approved by:

R. C. Lewis

R. C. Lewis, Chief

Reactor Projects Section No. 2

Reactor Operations and Nuclear Support Branch

11/13/78
Date

Inspection Summary

Inspection on October 10-13, 1978 (Report Nos. 50-280/78-30 and 50-281/78-30)

Areas Inspected: Routine, unannounced inspection of plant operations, plant cleanliness control, IE Bulletins and Circulars, and followup of LER's, previously identified unresolved and open items. The inspection involved 27 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified in the four areas inspected.

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DETAILS I

Prepared by:

John Sholes for
D. J. Burke, Reactor Inspector
Reactor Projects Section No. 2
Reactor Operations and Nuclear
Support Branch

11/9/78
Date

Dates of Inspection: October 10-13, 1978

Reviewed by:

R. C. Lewis
R. C. Lewis, Chief
Reactor Projects Section No. 2
Reactor Operations and Nuclear
Support Branch

11/13/78
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1. Persons Contacted

Virginia Electric and Power Company (VEPCO)

*T. L. Baucom, Station Manager
*W. L. Stewart, Superintendent, Station Operations
*J. L. Wilson, Operating Supervisor
*E. P. Dewandel, Administrative Assistant
*L. A. Johnson, Supervisor, Engineering Services
*D. S. Taylor, Supervisor, Mechanical Maintenance
*F. L. Rentz, Resident QC Engineer
R. E. Nicholls, Supervisor, Electrical Maintenance
*M. R. Kansler, Assistant Engineer, Engineering Services
S. Eisenhart, Engineering QA Staff
J. Pickworth, Senior Engineering Technician, QC
D. H. Rickeard, Engineering Technician

Several Control Room Operators, Shift Supervisors,
QA Stores, Maintenance and records personnel.

*Denotes those present at the exit interview.

2. Licensee Actions on Previous Inspection Findings

Unresolved Items

(Closed) Unresolved Item (78-16-07): Operability of large bore snubbers. The inspector reviewed records and examined certain snubber seals to determine operability of the large bore suppressors used on the pressurizers, reactor coolant pumps, and steam generators in Units 1 and 2. The licensee determined that the majority of Pathon snubber leakage occurred during shutdown and appeared to be a result of movement of the piston shaft and of interference of the

shaft with its mount when the reactor was not at temperature. The interference was corrected by the licensee. The licensee continues to monitor the Pathon snubbers, but has noted no leakage during reactor operation. In addition, prior to plant startup, the licensee performed an engineering study which verified snubber operability. The licensee also disassembled the worst-leaking Pathon and Bergen-Patterson (B-P) snubbers on Unit 2 and a Pathon snubber on Unit 1 to examine the seals. The Buna-N and polyurethane seals were found intact and resilient. The Pathon wiper rings were found embrittled, but do not affect snubber operability. The licensee stated that the B-P seal leakage appeared to be a result of physical damage to a seal ring. Environmentally induced damage or deterioration was not evident. The licensee rebuilt the above snubbers with new seals and is performing more quantitative examination of the seals removed. The snubber inspection intervals are in accordance with Technical Specification 4.17.

(Closed) Unresolved Item (78-05-01): Service Water Valve Pit Flooding Modifications. The inspector verified that a two foot metal dike surrounded each SW valve pit, that the pits were covered with gratings for visual inspections, and that water level alarms were installed in the pits of each unit. Concrete dikes were also constructed at certain entrances to prevent flooding of the turbine building rooms or areas. No standing water was observed in the valve pits or isolated areas.

(Closed) Unresolved Item (77-30-01): Fully retracted hydraulic snubbers attached to feedwater piping. The licensee modified the snubber attached on snubbers 2-WFPD-HSS-10 and 11 to return the snubbers to midspan in the cold condition. Also, an evaluation by the licensee determined that design stress limits in the feedwater piping were not exceeded due to the retracted snubbers.

3. Unresolved Items

No new unresolved items were identified.

4. Exit Interview

The inspector met with licensee representatives as indicated in Paragraph 1 at the conclusion of the inspection on October 13, 1978. The inspector summarized the scope and findings of the inspection.

5. Review of Reportable Occurrence

In the office, the inspector reviewed the Reportable Occurrence (RO) reports listed below to ascertain that NRC reporting require-

ments were being met and to determine the appropriateness of corrective action taken and planned. Certain reports were reviewed at the site to verify corrective action and determine compliance with the Technical Specifications and other regulatory requirements. The review included examination of log books, internal correspondence and records, review of SNSOC meeting minutes, and discussions with various staff members.

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

- a. License Event Report (LER) 280/78-13, dated July 7, 1978, concerned six hydraulic snubbers which did not meet the snubber functional test requirements due to the apparent drift to adjustment settings during unit operation. The bleed or the lock-up rate was adjusted and the snubbers retested prior to reinstallation and service.
- b. LER 280/78-14, dated July 7, 1978, concerned an inadequate mounting plate attachment for hydraulic snubber 1-WFPD-HSS-10. A new attachment plate was fabricated and properly attached to the crane wall. The inspector noted an error on the LER form; docket number 05000338 was incorrectly typed in Item 7. The inspector had the NRC files corrected.
- c. LER 280/78-15, dated June 27, 1978, addressed the discovery of foreign material on certain valve seating surfaces. Procedures have been revised and administrative memoranda issued to prohibit the use of foreign materials in valves which are leak-tested. Evaluations have been conducted and certain valves have been opened and inspected to assure that all such valves are free of foreign materials.
- d. LER 280/78-20, dated July 28, 1978, concerned a possibly inoperative hydraulic snubber due to the observation of some air bubbles suspended in the reservoir fluid. Although the snubber was considered operable, it was replaced as a conservative measure. No bubbles have been observed in any other snubber reservoirs.
- e. LER 281/78-18, dated June 23, 1978, concerned the discovery that two snubbers required on the Unit 2 steam generator blowdown piping had never been installed. The two snubbers (2-WGCB-HSS- 002 and 003) have been installed. The three snubbers on Unit 1 were evaluated by the licensee and determined to be adequate.

- f. LER 281/78-17, LER 281/78-19 and LER 281/78-20 dated June 23, 1978 and LER 281/78-27 dated August 16, 1978, concerned certain inoperable Unit 2 snubbers and their reportability per TS 6.6. The licensee has taken adequate corrective action and continues to review plant snubber operability.

6. Licensee Actions on IE Bulletins and Circulars

- a. IE Bulletin 78-10, Bergen-Patterson Hydraulic Shock Suppressor Accumulator Spring Coils, dated June 27, 1978, discussed the need for licensees to determine if the subject suppressors are installed at their facilities, and if so, to describe what action will be taken to assure that snubber operability is not impaired. The licensee's response describes the location of the snubbers (RCP motors) and his plans to inspect same and replace the spring coils, if necessary, during the next extended outage. To this date, no problems have been noted. This item remains open pending inspection and replacement of the spring coils as necessary.
- b. IE Circular 78-05, Inadvertent Safety Injection (SI) During Cooldown, dated May 25, 1978, was received and reviewed by appropriate licensee personnel. The licensee has precautions in his operating procedures which minimize the occurrence of inadvertent SI's. This item is closed.
- c. IE Circular 78-07, Damaged Components of a B-P Series 25000 Hydraulic Test Stand, dated May 31, 1978, was received and reviewed by appropriate licensee personnel. The licensee and vendor (ITT) verified that the Grinnell Tester used in not susceptible to similar damage. This item is closed.
- d. IE Circular 78-09, Arcing of GE NEMA Size 2 Contactors, dated June 9, 1978, was received and reviewed by appropriate licensee personnel. A preliminary review by the licensee has determined that no such GE contactors are used at Surry. A review of spare parts and purchase orders is in progress. This item is closed.
- e. IE Circular 78-13, Operability of Service Water Pumps, dated July 10, 1978, was received and reviewed by appropriate licensee personnel. A river water ice protection project, removal of silt from the service water system, and dredging have been initiated by the licensee. This item is closed.

7. Plant Cleanliness

The inspector reviewed plant procedures and toured certain plant areas to verify that appropriate plant cleanliness controls have been established in accordance with ANSI N18.7-1972, N45.2.3, and Reg Guide 1.39. ADM-29, "Conduct of Operations", and ADM-40, "Station Housekeeping", are used by the licensee to assure adequate plant housekeeping and cleanliness. By direct questioning, the inspector verified that plant operations and maintenance personnel were cognizant of and used the above procedures. The licensee is reviewing ADM-40 to determine if more specific assignment of housekeeping responsibilities is necessary. In the areas inspected, no items of noncompliance were identified.

8. Inspector Followup of Open Items

- a. The inspector verified that pressurizer sample valves (TV-SS-202A) are now Nupro valves with an extended operating range. LER 281/77-19 and open item (78-01-04) are closed.
- b. The inspector verified that the service water valve pits have been modified as required. LER 281/77-15 and open item (78-01-03) are closed.
- c. The inspector has reviewed periodic test procedures with respect to snubber tests and inspection; the reviewed program appears adequate. LER 281/77-12 and open item (78-01-02) are closed.
- d. The inspector verified that the licensee is taking action on the item identified in the Surry Fire Protection Systems Review. Open item (77-32-01) is closed.
- e. The inspector verified that "No Smoking" signs have been posted on each control room vertical board walk-in area. Open Item (77-32-03) is closed.

9. Plant Operations

The inspector toured the Unit 1 and Unit 2 control rooms and certain plant areas to observe that monitoring equipment and plant instrumentation was functioning as required, and that the facility operations were in accordance with the Technical Specifications. Within the areas inspected, no items of noncompliance or deviations were identified.