



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

Report Nos.: 50-280/84-29 and 50-281/84-29

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

Inspection Conducted: September 24 - 27, 1984

Inspector: George H. Girard for
E. H. Girard

10/10/84
Date Signed

Approved by: W. P. Aug for
J. J. Blake, Section Chief
Engineering Branch
Division of Reactor Safety

10-10-84
Date Signed

SUMMARY

Scope: This routine, unannounced inspection involved 25 inspector-hours, in NRC and licensee offices in the areas of previous enforcement matters, inservice testing program for pumps and valves, hydrostatic testing of main steam piping, inservice inspection program, and inspector followup items.

Results: No violations or deviations were identified.

8411140546 841011
PDR ADOCK 05000280
Q PDR

REPORT DETAILS

1. Licensee Employees Contacted

- *R. J. Hardwick, Manager, Nuclear Programs and Licensing
- *E. W. Throckmorton, Director, NDE Services
- #*D. L. Smith, Inservice Inspection Supervisor
- *H. L. Travis, Supervisor, NDE Services
- R. Tegethoff, Staff Engineer
- C. R. Gordon, Senior Technician
- #H. L. Miller, Assistant Station Manager, Surry
- #M. Kansler, Superintendent - Technical Services, Surry
- #R. H. Blount, Shift Technical Advisor, Surry
- #A. McNeil, Engineer, Surry

Other Organizations

- #H. Rockhold, EG and G Idaho, Incorporated (NRC Contractor)
- #C. Ransom, EG and G Idaho, Incorporated (NRC Contractor)
- #J. Page, Mechanical Engineer, Office of Nuclear Reactor Regulation, NRC
- #E. C. Cherny, Section Chief, Office of Nuclear Reactor Regulation, NRC
- #D. Neighbors, Project Manager, Office of Nuclear Reactor Regulation, NRC

*Attended exit interview

#Attended Inservice Testing Program Meeting, September 24 and 25, 1984,
see paragraph 5.

2. Exit Interview

The inspection scope and findings were summarized on September 27, 1984, with those persons indicated in paragraph 1 above. The licensee was informed of the inspection findings listed below. The licensee acknowledged the inspection findings with no dissenting comments.

Inspector Followup Item 280, 281/84-29-01, Hydrostatic Testing Results for Main Steam Piping, paragraph 5.b.

3. Licensee Action on Previous Enforcement Matters

(Open) Unresolved Item (280, 281/83-06-01): Verification of Check Valve Exercising to Open Position. This item was opened to express an inspector's concern that the flow test procedure used by licensee to verify the opening function of three safety injection system check valves was not entirely satisfactory. During the current inspection this matter was discussed with licensee personnel. They indicated that the subject valves are already being partially disassembled to perform another valve test and that they

would assure the verification of the proper functioning of these valves during the disassembly. This item will remain open pending Region II's verification of adequate disassembly examination of these valves in a subsequent inspection.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Independent Inspection (92706) - Units 1 and 2

a. Inservice Testing Program for Pumps and Valves

The inspector attended and participated in a meeting of NRC (including contractor) and licensee personnel held at NRC offices in Bethesda, Maryland on September 24 and 25, 1984. The principal meeting attendee's are indicated in paragraph 1 above. The meeting was held primarily to aide in resolving questions and comments pursuant to completion of an NRC safety evaluation of the licensee's program for inservice testing of pumps and valves and of the licensee's requests for relief from certain of the test requirements.

A further purpose of the inspector's attendance at the meeting was to assure a mutual understanding of the testing requirements and relief requests for NRC regional inspection and enforcement activities.

b. Hydrostatic Testing of Main Steam System Piping (92706) - Units 1 and 2

In the last two years several requests for relief from ASME Section XI hydrostatic test requirements for main steam system valve replacements have been submitted to the NRC for Surry Units 1 and 2. Examples include a relief request submitted December 9, 1983, for Unit 2 and one submitted March 26, 1984, for Unit 1. The replacement of valves and difficulties with valve leakage noted in these requests suggests deterioration of valves in the system. The inspector discussed this matter with cognizant inservice testing personnel, including the Shift Technical Advisor. The inspector informed the licensee that he would review the results of hydrostatic tests and examinations performed on this piping for further evidence and evaluation of the condition of the system in a subsequent inspection. The inspector identified this as inspector followup item 280, 281/84-29-01, Hydrostatic Testing Results for Main Steam Piping. The inspector was informed that a full ASME Section XI hydrostatic test would be performed on the Unit 2 main steam system at the next (Unit 2) refueling outage.

Within the areas examined, no violations or deviations were identified.

6. Inservice Inspection - Review of Program (73051) - Units 1 and 2

The inspector reviewed procedures for the licensee's inservice inspection (ISI) program to determine whether selected aspects of the program were complete and in conformance with licensee commitments and regulatory requirements - including the requirements of the currently applicable code, ASME Section XI (80W80). The inspector conducted his review through interviews with the licensee's Inservice Inspection Supervisor and Station ISI Supervisor and through examination of the following program related manuals of procedures:

- a. VEPCO Nuclear Operations Inservice Inspection Manual, Revision 0 with Distribution Memo (change) No.1
- b. VEPCO Nondestructive Examination Manual, Revision 0 with Distribution Nos. (changes) 1 through 15

The review was conducted to specifically ascertain the adequacy of the program relative to the following:

- (1) Organizational Structure and Personnel
 - (a) Qualification, responsibilities and duties
 - (b) Training
- (2) General Requirements
 - (a) Quality requirements, including appropriate examination reports, acceptance criteria, and required documentation are specified in ISI program.
 - (b) Deviation from previously established ISI programs and procedures are controlled and reviewed by cognizant personnel.
 - (c) Quality documentation, including material certifications, examination reports, evaluations, and auditing results are generated and maintained to indicate whether ISI quality requirements have been met.
 - (d) Identification of components, and systems covered by the ISI program.
- (3) Corrective Action
 - Procedures are established for identification and correction of conditions adverse to quality as detected during examination, including provisions to preclude repetition of such adverse activities.

(4) Document Control (Corporate Documents)

- (a) Documents relating to ISI activities are adequately controlled.
- (b) ISI related documents are reviewed by cognizant personnel for adequacy.
- (c) Provisions to assure appropriate identification/listing and control of aggregate collection of instructions and procedures, including future revisions.
- (d) Provisions to assure periodic review of the adequacy of document control procedures.

(5) Examination Control and Control of Examination Equipment

- (a) Procedures to assure that acceptance criteria are specified, examination requirements (including prerequisites) have been met, evaluation of results documented and deficiencies detected and reported to the appropriate level of management.
- (b) Procedures to assure adequate control, calibration, and adjustment of measuring and examination equipment.

(6) Qualification of Personnel for Examinations

Within the areas examined, no violations or deviations were identified.

7. Inspector Followup Item (92701)

(Closed) Inspector Followup Item (280, 281/84-05-05): Boric Acid Return Piping Stress Corrosion Cracking

This item was opened to address an inspector's interest in stress corrosion cracking identified by the licensee in their boric acid return system piping. During the current inspection, the inspector examined the status of the licensee's investigation and plans for this piping through discussions with cognizant site personnel and review of the following licensee reports:

- a. Surry Boric Acid Transfer System Pipe Cracking Evaluation, Results and Conclusions From Pipe Crack Monitoring, by J. M. McAvoy, July 30, 1984.
- b. Surry Boric Acid Transfer System Pipe Cracking Evaluation, by J. M. McAvoy and A. McNeill, Final Report, April 1984.
- c. Fracture Analysis of Flaws Detected in Surry Boric Acid Storage Tank, by J. M. McAvoy, undated.

The licensee informed the inspector that they planned to replace the Unit 1 and 2 piping in the affected systems in the forthcoming refueling and maintenance outages. Based on his review the inspector determined that it would not be necessary to single out the licensee's activity in this area for specific followup and the item is considered closed. Further licensee activity in this area may be addressed through routine inspection by Region II.