

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

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9/22/78

Report No.: 50-339/78-23 Docket No.: 50-339 License No.: CPPR-78 Category: A2 Licensee: Virginia Electric and Power Company Post Office Box 26666 Richmond, Virginia 23261 Facility Name: North Anna Power Station, Unit 2 Inspection at: Louisa County, Virginia Inspection conducted: August 22-25, 1978 Inspector: E. J. Vallish unit 12 J. C. Bryant, Chief Reviewed by: Engineering Support Section No. 1 Reactor Construction and Engineering Support Branch

Inspection Summary

78/03/0082

Inspection on August 22-25, 1978 (Report No. 50-339/78+23) <u>Areas Inspected</u>: Progress of installation of safety related mechanical components, safety related pipe support and restraint systems, and the disposition of unresolved items (339/77-35-04) Missing Shear Pins and Mounting Bolts (50.55(e), closed; (339/78-10-13) Orifice Materials Unacceptable, closed; (339/77-35-03) High Head Safety Injection Pump Shafts, closed (Details 1, paragraph 2). The inspection involved 23 inspector-hours on site by one NRC inspector. Results: No items of noncompliance or deviations were identified. RII Report No. 50-339/78-23

DETAILS I

Prepared by:

Vallish, Mechanical Engineer Engineering Support Section No. 1

9-22-71

Support Branch Dates of Inspection: August 22-25, 1978

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T.h. Juffens for Reviewed by: -

J. C. Bryant, /Chief Engineering Support Section No. 1 Reactor Construction and Engineering Support Branch

Reactor Construction and Engineering

Persons Contacted 1.

> Virginia Electric and Power Company (VEPCO) а.

- *E. R. Bane, QA Construction Supervisor
- *J. E. Wroniewicz, QA Engineer M. A. Harrison, QC Engineer
- J. Eastwood, Suppressor Supervisor
- b. Stone and Webster Company (S&W)
 - P. R. Bone, Head of Boston Field Engineering Office
 - R. Whitley, QC Inspector

*Denotes attendance at exit interview.

Licensee Action on Previous Inspection Findings (Closed) Unresolved 2. Item (339/77-35-04) Missing Shear Pins and Mounting Bolts (50.55(e))

The licensee's final report on the resolution of this item dated November 4, 1977 and the documentation verifying corrective action were reviewed. There were no further questions on this item.

(Closed) Unresolved Items (339/78-10-13) Orifice Material Unacceptable

The licensee's final report dated May 12, 1978 was reviewed and documentation was examined which recorded the completed action on this item. There are no further questions.

(Closed) Unresolved Item (339/77-35-03) High Head Safety Injection Pump Shafts

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Records were reviewed which documented the replacement of the Unit 2 rotating elements in the pumps. This completed the licensee's action on this item as reported in his final report dated December 19, 1977. There are no further questions.

3. Unresolved Items

No unresolved items were identified during this inspection.

4. Independent Inspection Effort

This effort consisted of an inspection of the progress of installation of the major mechanical components in the reactor building including the pressurizer, the control rod drive cooling system, incore neutron instrumentation system, thermal insulation on the reactor coolant pressure boundary and the hardware installation and seismic design concerning valve HCV-2256-C on the 2" CH 409 1502-Q1 line. S&W Drawing CH-205 B was reviewed and used to determine location and orientation of this valve. S&W drawing 12050-SA13-103AE-1 titled, "Prob 704 CVCS Loop Fill System NC Code Analysis Model" was also reviewed which reflected as-built seismic loading parameters. No items of noncompliance were identified.

5. I. E. Bulletins (IEB)

(Closed) IE Bulletin (339/78-B-10) Bergen - Paterson Hydraulic Shock Suppressor Accumulator Spring Coils

The licensee's letter dated August 16, 1978 was reviewed and stated that none of these items were to be used in the Unit 2 facility. This item is closed.

(Closed) IE Bulletin (339/78B-06) Defective Cutler-Hammer, Type M Relays with DC Coils.

The licensee's letter dated August 4, 1978 was reviewed and stated that none of these items will be used in the Unit 2 facility. This item is closed.

6. Safety Related Pipe Support and Restraint Systems

The following documents were reviewed to determine licensee commitments for the installation of these systems:

- a. "Field Procedure for Design, Installation, Inspection, and Accep----tance of Pipe Hangers and Ventilation and Air Conditioning Duct Supports", POP-506 R6
- b. "Inspection of Pipe Hangers", QC -11.4 RB.
- c. VEPCO Audit Report No. 592 entitled, "Control of Pipe Hanger Installation" of December 19, 1977.
- d. E & DCR No. 25647-A-2 with action being taken by the vendor for a design to lock snubber support fasteners.

The following installed hydraulic snubbers of four different sizes were inspected for signs of deterioration, secureness of fittings, signs of damage, maintenance, bearing lubrication, adequate installation and cleanliness protection:

RC-113	WFPD-201
RC-114	WFPD-202
RC-121	WFPD-203
RC-122	WFPD-204
RC-128	WFPD-205
RC-129	WFPD-231
WFPD-210	WFPD-231
WFPD-211	

Prior to installation these snubbers are adjusted and tested for bleed rate and lock-up, in both directions of piston travel. The test shop was observed to be equipped with the standard ITT Grinnell Model 5434-3 tester, serial number 023. Snubbers are installed and peridodically inspected thereafter by personnel assigned to this shop.

The following installed spring hangers of three different sizes were inspected for adquate installation, hanger rod size, provisions to indicate approximate hot and cold settings and for cleanliness:

WFPD-SH-42	SHP-48 (A PAIR)
WFPD-38	SHP-SH 4 (A PAIR)
WFPD-41	SHP-SH 46 (A PAIR)
WFPD-SH-31	FP-SH-30
WFPD-SH-32	

The following installed fixed supports of different sizes and various degrees of accessibility were inspected for adequate installation,

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signs of deterioration or corrosion, shear lugs where appropriate, clearance and cleanliness:

FPH-CH-773-19	FPH-CH-401-20
	FPH-CH-401-12
FPH-RC-569-15	FPH-CH-401-27
FPH-CC-407-4	
FPH-RC-600-2	CC-R-226
FPH-CH-492-38	SI-R-97
	RC-R-16
FPH-RC-571-44	NO IN TO

No items of noncompliance were identified.

7. Exit Interview

A meeting was held with the licensee's representatives identified in paragraph 1 and others, at the end of this inspection to discuss the findings of the inspection. Items discussed included the safety related pipe support and restraint systems, the unresolved items which were closed during this inspection, and the progress of the overall installation of safety related mechanical components in the reactor building. The licensee was informed that no items of noncompliance or new unresolved items were identified. The licensee acknowleged these findings.