

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-338, 50-339
License Nos: NPF-4, NPF-7

Report Nos: 50-338/96-09, 50-339/96-09

Licensee: Virginia Electric and Power Company (VEPCO)

Facility: North Anna Power Station, Units 1 & 2

Location: 1022 Haley Drive
Mineral, Virginia 23117

Dates: August 11 through September 21, 1996

Inspectors: R. McWhorter, Senior Resident Inspector
D. Taylor, Resident Inspector
P. VanDoorn, Senior Resident Inspector (Section 01.6)
L. Garner, Project Engineer (Sections 02.2, M1.1, M1.2,
M1.3, M4.1, and S1.1)

Approved by: G. Belisle, Chief, Reactor Projects Branch 5
Division of Reactor Projects

ENCLOSURE 2

EXECUTIVE SUMMARY

North Anna Power Station, Units 1 & 2
NRC Inspection Report Nos. 50-338/96-09, 50-339/96-09

This integrated inspection included aspects of licensee operations, engineering, maintenance, and plant support. The report covers a six-week period of resident inspection; in addition, it includes the results of announced inspections by a regional projects inspector.

Operations

- Daily operations were generally conducted in accordance with regulatory requirements and plant procedures (Section 01.1).
- Unit 1 tripped from full power due to a rod control system electrical failure. Safety system and operator response was proper following the trip. Actions to correct the cause and operator performance during startup were appropriate. A conservative decision was made to perform rod drop timing tests prior to unit restart (Sections 01.2 and 01.3).
- The licensee properly prepared for and responded to severe weather caused by Tropical Storm Fran (Section 01.4).
- Operator control of Unit 2 shutdown activities was good, and the licensee complied with commitments made in response to NRC Bulletin 96-01. Reactor Coolant System drain down was well coordinated and personnel exhibited a good sensitivity to risk. Refueling core off load activities were properly conducted by operators (Sections 01.5, 01.6, and 01.7).
- The Station Nuclear Safety and Operating Committee ensured that adequate corrective actions were completed prior to restart of Unit 1 following a reactor trip. However, several review process problems were identified during committee deliberations (Section 02.1).
- Safety systems in the Unit 2 containment were in good overall condition immediately following shutdown. Later during the refueling outage, activities inside Unit 2 containment did not promote good housekeeping practices (Section 02.2).
- Five NRC notifications required by 10 CFR 50.72 were properly made by the licensee (Section 02.3).
- A non-cited violation was identified for an operator's failure to follow procedures when racking in a charging pump breaker. As a result, the only available Unit 2 charging pump was unknowingly inoperable for approximately seven hours during shutdown conditions (Section 04.1).
- The Oversight organization continued to assess station performance effectively (Section 07.1).
- A non-cited violation was identified concerning the fact that no licensed operator was present at the Unit 2 controls for a short time

period. One unresolved item and one Licensee Event Report were closed (Sections 08.1 and 08.2).

Maintenance

- The 2H emergency diesel generator post-maintenance inspections and testing were adequate to demonstrate that the new compression rings on the number seven lower piston were functioning correctly (Section M1.1).
- Rod drop timing tests were properly performed following shutdown on both units. Unit 2 control rod drag testing results were well within the acceptance criteria (Section M1.2).
- An URI was identified to review anomalies in large bore snubber test data taken early in this refueling outage and during previous outages (Section M1.3).
- Following a Unit 1 reactor trip, five secondary plant equipment problems occurred requiring operator compensatory actions (Section M2.1).
- Leaving a valve actuator limit switch compartment unprotected with grinding and welding activities in the area indicated a lack of sensitivity to foreign material exclusion issues and represented a potential for equipment degradation (Section M4.1).

Engineering

- A violation was identified concerning an inadequate abnormal procedure for a fuel handling accident. The procedure did not contain direction for operators to initiate the control room bottled air system as assumed in the bases for a Technical Specifications amendment allowing refueling with the containment personnel hatches open (Section E2.1).

Plant Support

- A non-cited violation was identified for a Health Physics Technician's failure to follow procedures for foreign material exclusion control during refueling (Section R1).
- Problems with emergency sirens due to severe weather were properly resolved (Section P1).
- An unresolved item was identified to review occurrences of unescorted visitors (Section S1.1).