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MAR 6 1984

TL 1011

Docket Nos. 50-338  
and 50-339

Mr. W. L. Stewart  
Vice President - Nuclear Operations  
Virginia Electric and Power Company  
Post Office Box 26666  
Richmond, Virginia 23261

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Dear Mr. Stewart:

On February 28, 1984, the Commission issued Amendment Nos. 51 and 35 to Facility Operating License Nos. NPF-4 and NPF-7 for the North Anna Power Station, Units No. 1 and No. 2. The amendments were issued in response to your application dated October 7, 1983, as supplemented, and revised the Technical Specifications to reflect the addition and installation of new fire protection systems.

In Amendment No. 51 to NPF-4, new amendment numbers were inadvertently included on two pages which were not changed. Pages 3/4 3-54 and 3/4 7-84 were overleaf pages to maintain document completeness and should not have reflected the new numbers. Enclosed are corrected pages 3/4 3-54 and 3/4 7-83b with 3/4 7-84 overleaf.

In Amendment No. 35 to Unit 2, all of the pages were overleafed incorrectly. Enclosed are corrected pages VIII, 3/4 3-50, 3/4 3-50a, 3/4 7-69, 3/4 7-69a, and 3/4 7-69b with their proper overleaf pages.

Please accept our apologies for any inconvenience these clerical errors may have caused.

Sincerely,

Original signed by:

Leon B. Engle, Project Manager  
Operating Reactors Branch #3  
Division of Licensing

Enclosures:

TS pages as stated

cc: See next page

\*See previous concurrence page

OFFICE	ORB#3 Dly	ORB#3 Dly	ORB#3 Dly			
SURNAME	PKreutzer	LBEngle:dd	JRMI/ler			
DATE	3/6/84	3/6/84	3/6/84			

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PDR ADOCK 05000338  
P PDR

## INSTRUMENTATION

### AXIAL POWER DISTRIBUTION MONITORING SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.3.3.8 The axial power distribution monitoring system (APDMS) shall be OPERABLE with:

- a. At least two detector thimbles available for which  $\bar{R}$  has been determined from full incore flux maps. These two thimbles shall be those having the lowest uncertainty,  $\sigma$ , covering the full configuration of permissible rod patterns permitted at RATED THERMAL POWER.
- b. At least two movable detectors, with associated devices and readout equipment, available for mapping  $F_j(Z)$  in the above required thimbles.

APPLICABILITY: When the APDMS is used for monitoring the axial power distribution\*#.

ACTION: With the APDMS inoperable, do not use the system for determining the Axial Power Distribution. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.3.3.8.1 The full incore flux maps used to determine  $\bar{R}$  and for monitoring  $F_j(Z)$  shall be updated at least once per 31 days. The continued accuracy and representativeness of the selected thimbles shall be verified by using their latest flux maps to update the  $\bar{R}$  for each representative thimble. The original uncertainty,  $\sigma$ , shall not be updated, except as follows:

\*Except as provided in Specification 4.2.6.1.b.

#The APDMS may be out of service when surveillance for determining power distribution maps is being performed.

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PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

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- b. At least once per 18 months:
  - 1. By performing a system functional test which includes simulated automatic actuation of the system and verifying that the automatic valves in the flow path actuate to their correct positions.
  - 2. By inspection of spray headers to verify their integrity.
  - 3. By inspection of each nozzle to verify no blockage.
- c. At least once per 3 years by an air flow test of the open head spray and/or sprinkler system.

## PLANT SYSTEMS

### 3/4.7.15 PENETRATION FIRE BARRIERS

#### LIMITING CONDITIONS FOR OPERATION

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3.7.15 All penetration fire barriers protecting safety related areas shall be functional.

APPLICABILITY: At all times.

ACTION:

- a. With one or more of the above required penetration fire barriers non-functional, establish a continuous fire watch on at least one side of the affected penetration within 1 hour.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.15 Each of the above required penetration fire barriers shall be verified to be functional by a visual inspection:

- a. At least once per 18 months, and
- b. Prior to declaring a penetration fire barrier functional following repairs or maintenance.

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## INSTRUMENTATION

### FIRE DETECTION INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.3.7 As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.3-11 shall be OPERABLE.

APPLICABILITY: Whenever equipment in that fire detection zone is required to be OPERABLE.

#### ACTION:

With one or more of the fire detection instrument(s) shown in Table 3.3-11 inoperable:

- a. Within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, and
- b. Restore the inoperable instrument(s) to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to OPERABLE status.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.3.3.7.1 Each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months by performance of a CHANNEL FUNCTIONAL TEST.

4.3.3.7.2 The NFPA Code 72D supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months.

4.3.3.7.3 The non-supervised circuits between the local panels in Specification 4.3.3.7.2 and the control room shall be demonstrated OPERABLE at least once per 31 days.

TABLE 3.3-11

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM DETECTORS REQUIRED</u>	
	<u>HEAT</u>	<u>SMOKE</u>
1. Reactor Containment		
a. Reactor Coolant Pumps	1/pump*	
b. Residual Heat Removal Pump Area	3	
c. Cable Penetration Area	7	8
d. Recirculation Air System		2
2. Control Room		
a. Under Floor - Loop 1	2	2
b. Under Floor - Loop 2	2	
c. Normal Air Supply#		1
d. Emergency Air Supply		1
e. Ceiling Area		10
f. Return Air Duct		1
3. Cable Spreading Room	3	4
4. Primary Cable Vault and Tunnel	2	3
5. Service Building Cable Vault and Tunnel	5	4
6. Emergency Switchgear Rooms		
a. Emergency Air Supply		1
b. Emergency Switchgear and Air Conditioning Rooms		7
7. Station Battery Room		1/room
8. Diesel Generators	2/room	
9. Fuel Oil Pump House#		
a. Room 1	1	1
b. Room 2	1	1
c. Motor Control Center Room		1
10. Rod Control Equipment and Motor Control Center Room (Elevation 280.0)		2
11. Auxiliary Building		
a. Charging Pump Cubicles		1/cubicle
b. Exhaust Duct (Northeast-Cubicles)#		1
c. Exhaust Duct (South Central-Cubicles)#		1
d. Exhaust Duct (Northwest-Cubicles)#		1



TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENTATION LOCATION</u>	<u>MINIMUM DETECTORS REQUIRED</u>	
	<u>HEAT</u>	<u>SMOKE</u>
Auxiliary Building (cont'd)		
e. General Area Elevation 244' #		1
f. General Area Elevation 259' #		4
g. General Area Elevation 274' #		14
h. General Area Elevation 281' #		4
i. Charcoal Filters		
1. Intake Side#	3/room	
2. Outlet Side#	3/room	
12. Service Water Pump House#		8
13. Auxiliary Service Water Pump House#		1
14. Auxiliary Feed Water Pump House		
a. Turbine Pump Room		1
b. Motor Pump Room		3
15. Quench Spray Pump House		
a. Main Floor		2
b. Basement		4
16. Safeguards Area Ventilation		
a. System Exhaust Duct		1
17. Main Steam Valve House		1
18. Fuel Building#		10
19. Casing Cooling Pump House		1
20. Post Accident Hydrogen Recombiner Vault#		1
21. Fire Pump House#		1
22. Control Room Air Conditioning Chiller Room		1

\*A RCP bearing or motor temperature may be substituted for an inoperable RCP heat detector provided the bearing or motor temperature(s) is monitored at least once per hour when the RCP is in operation.

#Common to Units 1 and 2.

TABLE 3.7-7  
FIRE HOSE STATIONS

HOSE RACK IDENTIFICATION

AB-H-1  
AB-H-4  
AB-H-6  
  
AB-H-8  
AB-H-12  
AB-H-13  
AB-H-15  
AB-H-18A  
AB-H-19  
AB-H-22  
AB-H-24  
AB-H-27  
AB-H-29  
AB-H-30  
AB-H-32  
AB-H-33  
F-H-1  
F-H-3  
T-H-7  
T-H-25  
T-H-21  
T-H-22D  
T-H-33  
T-H-34  
HP-H-5  
BLR-H-2  
\*RC-H-1  
\*RC-H-2  
\*RC-H-3  
\*RC-H-4  
\*RC-H-5  
\*RC-H-6  
CT-H-1  
ESW-H-1

\*Dry standpipes in containment are considered operable when normally isolated by valves 1-FP-274 and 1-FP-275. Hose rack stations are located at the containment entrance.

## PLANT SYSTEMS

### SPRAY AND/OR SPRINKLER SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.14.6 The spray and/or sprinkler systems located in the following areas shall be OPERABLE:

- a. Auxiliary Building, Component Cooling Pump Area, Elev. 244'6" (common to Units 1 and 2)
- b. Auxiliary Building, Component Cooling Pump Area, Elev. 259'6" (common to Units 1 and 2)
- c. Service Building Cable Vault, High Bay Area (manual system, open heads).
- d. Service Building Cable Tunnel (manual system, closed head).

APPLICABILITY: All modes.

#### ACTION:

With a spray and/or sprinkler system inoperable establish a continuous fire watch and backup water fire suppression equipment in the unprotected area(s) within 1 hour, and

- a. In MODES 1, 2, 3 or 4 restore the system to OPERABLE status within 7 days or be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. In MODES 5 or 6 restore the system to OPERABLE status within 7 days or submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of inoperability and the plans for restoring the system to OPERABLE status.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.14.6 The spray and/or sprinkler systems shall be demonstrated to be OPERABLE:

- a. At least once per 92 days by cycling each testable valve through one complete cycle. Not applicable to the dry pipe systems in 3.7.14.6.-c. and d.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS

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- b. At least once per 18 months:
  - 1. By performing a system functional test which includes simulated automatic actuation of the system and verifying that the automatic valves in the flow path actuate to their correct positions.
  - 2. By inspection of spray headers to verify their integrity.
  - 3. By inspection of each nozzle to verify no blockage.
- c. At least once per 3 years by an air flow test of the open head spray and/or sprinkler system.

## PLANT SYSTEMS

### 3/4.7.15 PENETRATION FIRE BARRIERS

#### LIMITING CONDITIONS FOR OPERATION

---

3.7.15 All fire barrier penetrations (including cable penetration barriers, fire doors and fire dampers), in fire zone boundaries, protecting safety related areas shall be functional.

APPLICABILITY: At all times.

#### ACTION:

- a. With one or more of the above required fire barrier penetrations non-functional, within one hour, either establish a continuous fire watch on at least one side of the affected penetration, or verify the OPERABILITY of fire detectors on at least one side of the non-functional fire barrier and establish an hourly fire watch patrol. Restore the non-functional fire barrier penetration(s) to functional status within 7 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the non-functional penetration and plans and schedule for restoring the fire barrier penetration(s) to functional status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.15 Each of the above required penetration fire barriers shall be verified to be functional:

- a. At least once per 18 months, by a visual inspection, and
- b. Prior to declaring a penetration fire barrier functional following repairs or maintenance by a visual inspection of the affected penetration fire barrier(s).