

April 4, 1986

Docket No. 50-339

DISTRIBUTION

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Dear Mr. Stewart:

The Commission has issued the enclosed Amendment No. 63 to Facility Operating License No. NPF-7 for the North Anna Power Station, Unit No. 2 (NA-2). The amendment revises the Technical Specifications (TS) in response to your letter dated February 6, 1986. The amendment is effective as of the date of issuance.

The amendment revises the NA-2 TS Table 3.6.1, "Containment Isolation Valves," to reflect the installation of a new containment isolation valve in the letdown line for NA-2.

A copy of the Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's next bi-weekly Federal Register notice.

Sincerely,

/s/

Leon B. Engle, Project Manager  
PWR Project Directorate #2  
Division of PWR Licensing-A

Enclosures:

1. Amendment No. 63 to NPF-7
2. Safety Evaluation

cc w/enclosures:

See next page

LA: PBD#8  
PKreutzer  
3/20/86

PM: PBD#8  
LEngle:hc  
3/20/86

D: PAD#2  
LRubenstein  
3/27/86

OELD  
3/27/86

*No legal objection  
McGreen*

Mr. W. L. Stewart  
Virginia Electric & Power Company

North Anna Power Station  
Units 1 and 2

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

DOCKET NO. 50-339

NORTH ANNA POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 63  
License No. NPF-7

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Virginia Electric and Power Company, et al., (the licensee) dated February 6, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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P PDR

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-7 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 63, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*B.C. Buckley for*

Lester S. Rubenstein, Director  
PWR Project Directorate #2  
Division of PWR Licensing-A

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 4, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 63

TO FACILITY OPERATING LICENSE NO. NPF-7

DOCKET NO. 50-339

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

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## CONTAINMENT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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4.6.3.1.2 Each isolation valve specified in Table 3.6-1 shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per 18 months by:

- a. Verifying that on a Phase A containment isolation test signal, each Phase A isolation valve actuates to its isolation position.
- b. Verifying that on a Phase B containment isolation test signal, each Phase B isolation valve actuates to its isolation position.
- c. Verifying that on a Containment Purge and Exhaust isolation signal, each Purge and Exhaust valve actuates to its isolation position.
- d. Cycling each weight or spring loaded check valve not testable during plant operation, through one complete cycle of full travel and verifying that each check valve remains closed when the differential pressure in the direction of flow is less than 1.2 psid and opens when the differential pressure in the direction of flow is greater than or equal to 1.2 psid but less than or equal to 5.0 psid.

4.6.3.1.3 The isolation time of each power operated or automatic valve of Table 3.6-1 shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

TABLE 3.6-1

CONTAINMENT ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC.)</u>
A. PHASE "A" ISOLATION		
1. MOV-2380	Reactor Coolant Pump Seal Water Return	10
2. MOV-2381	Reactor Coolant Pump Seal Water Return	10
3. Deleted		
4. Deleted		
5. TV-2204A	Reactor Coolant Letdown Line	10
6. TV-2204B	Reactor Coolant Letdown Line	10
7. TV-S1200	Nitrogen to Pressurizer Relief Tank and SI Accumulators	60
8. TV-DG200A	Primary Drains Transfer Tank Pump Discharge	60
9. TV-DG200B	Primary Drains Transfer Tank Pump Discharge	60
10. TV-DA200A	Containment Sump Pump Discharge to Waste Drain Tanks	60
11. TV-DA200B	Containment Sump Pump Discharge to Waste Drain Tanks	60
12. TV-BD200A	Steam Generator Blowdown	60
13. TV-BD200B	Steam Generator Blowdown	60
14. TV-BD200C	Steam Generator Blowdown	60

TABLE 3.6-1 (Cont.)

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC.)</u>
31. 2-WT-447*	Steam Generator Wet Layout	NA
32. 2-WT-448*	Steam Generator Wet Layout	NA
33. 2-SI-83*	High Head Safety Injection, (Boron Injection Tank Bypass)	NA
34. NA*	Fire Protection Supply (Penetration 34)	NA
E. REMOTE MANUAL		
1. MOV-QS201A*	Quench Spray Pump Discharge	NA
2. MOV-QS201B*	Quench Spray Pump Discharge	NA
3. MOV-RS255A#*	Recirc. Spray Pump Suction	NA
4. MOV-RS255B#*	Recirc. Spray Pump Suction	NA
5. MOV-2860A#*	LHSI Pump Suction From Containment Sump	NA
6. MOV-2860B#*	LHSI Pump Suction From Containment Sump	NA
7. MOV-RS256A*	Recirculation Spray Pump Discharge	NA
8. MOV-RS256B*	Recirculation Spray Pump Discharge	NA
9. MOV-SW203A*	Service Water to Recirculation Spray Coolers	NA
10. MOV-SW203B*	Service Water to Recirculation Spary Coolers	NA
11. MOV-SW203C*	Service Water to Recirculation Spray Coolers	NA
12. MOV-SW203D*	Service Water to Recirculation Spray Coolers	NA
13. MOV-SW204A*	Service Water from Recirculation Spray Coolers	NA



NORTH ANNA - UNIT 2

3/4 6-26

Amendment No. 25, 63

TABLE 3.6-1 (Con't.)

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
14. MOV-SW204B*	Service Water from Recirculation Spray Coolers	NA
15. MOV-SW204C*	Service Water from Recirculation Spray Coolers	NA
16. MOV-SW204D*	Service Water from Recirculation Spray Coolers	NA
17. TV-CV200*	Containment Air Ejector Suction	NA
18. MOV-2869A*	High Head Safety Injection to RCS Except Boron Injection Line	NA
19. MOV-2836*	High Head Safety Injection to RCS Except Boron Injection Line	NA
20. MOV-2869B*	High Head Safety Injection to RCS Except Boron Injection Line	NA
21. Deleted		
22. Deleted		
23. Deleted		
24. MOV-2890A*	LHSI Pump Discharge to Reactor Coolant System Hot Legs	NA
25. MOV-2890B*	LHSI Pump Discharge to Reactor Coolant System Hot Legs	NA
26. MOV-2890C*	LHSI Pump Discharge to Reactor Coolant System Cold Legs	NA

TABLE 3.6-1 (Cont.)

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC.)</u>
37. 2-FW-94#	Feedwater to Steam Generators	NA
38. 2-FW-126#	Feedwater to Steam Generators	NA
39. 2-WT-41#	Chemical Feed Lines	NA
40. 2-WT-53#	Chemical Feed Lines	NA
41. 2-WT-69#	Chemical Feed Lines	NA
42. 2-FW-70#	Auxiliary Feedwater to Steam Generator	NA
43. 2-FW-102#	Auxiliary Feedwater to Steam Generator	NA
44. 2-FW-134#	Auxiliary Feedwater to Steam Generator	NA
45. 2-RS-103#	Casing Cooling to Outside Recirculation Spray Pump	NA
46. 2-RS-118#	Casing Cooling to Outside Recirculation Spray Pump	NA
47. NA	Fire Protection Supply (Penetration 34)	NA

TABLE 3.6-1 (Con't.)

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
G. STEAM LINE ISOLATION		
1. TV-MS201A#	Main Steam Line Trip Valve	5
2. TV-MS201B#	Main Steam Line Trip Valve	5
3. TV-MS201C#	Main Steam Line Trip Valve	5

H. RELIEF

None

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# Valve not subject to Type "C" leakage test

\* Valve position maintained by administrative control

NA - Not applicable

\*\* - Requires testing per Technical Specifications 4.6.3.1.1a. or 4.6.3.1.2d.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.63 TO

FACILITY OPERATING LICENSE NO. NPF-7

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

NORTH ANNA POWER STATION, UNIT NO. 2

DOCKET NO. 50-339

Introduction:

By letter dated February 6, 1986, the Virginia Electric and Power Company (the licensee) proposed changes to the Technical Specifications (TS) for the North Anna Power Station, Units No. 1 and No. 2 (NA-1&2). Specifically, the changes pertain to Section 3/4.6.3, Table 3.6-1, "Containment Isolation Valves," for the NA-1&2 TS. The changes reflect a design modification for the installation of a new containment isolation valve in the letdown line of NA-1&2.

Discussion:

The existing three parallel valves (HCV-1200A, HCV-1200B and HCV-1200C for NA-1 and HCV-2200A, HCV-2200B, and HCV-2200C for NA-2) in the letdown line were designated as containment isolation valves inside containment. These valves are located at an elevation that is below the maximum flood level in the containment and, therefore, do not meet the guidelines of Regulatory Guide 1.97 concerning environmental qualification. Moreover, these valves have experienced leakage problems relative to meeting the leak testing requirements of Appendix J to 10 CFR Part 50.

The licensee's proposed resolution is to add a new valve in the letdown line of each unit that will serve as the containment isolation valve inside containment. The new valve will be located above the maximum flood level and will meet the design criteria of containment isolation valves. Also, this single valve will provide greater assurance of leakage integrity of the line. The existing outboard containment isolation valve will remain unchanged.

The staff finds this design modification acceptable and to be in compliance with Standard Review Plan Section 6.2.4, "Containment Isolation System," and 6.2.6, "Containment Leakage Testing."

In conjunction with the above design modification, the licensee has proposed to change the TS Table 3.6-1, "Containment Isolation Valves," to reflect the change. The containment isolation function of the valves (TV 1204A for

NA-1 and TV 2204A for NA-2) negates this function previously assigned to the following valves in the letdown line: the three parallel valves identified above, a relief valve (RV-1203 for NA-1 and RV-2203 for NA-2), and a manual valve (HCV-1142 for NA-1 and HCV-2142 for NA-2). The relief valve discharges to the pressurizer relief tank, and the manual valve is in a line which connects the letdown line to the Reactor Heat Removal heat exchanger. The existing valves will not be physically removed but will no longer provide a containment isolation function.

#### Evaluation:

Based on the above, the staff finds the proposed changes to appropriately meet the provisions for the containment isolation letdown line and, therefore, finds the change to be acceptable.

Finally, while this Safety Evaluation (SE) is applicable for both NA-1&2, the instant amendment supported by this SE is applicable at this time for only NA-2. The installation of the new containment isolation valve for NA-1 will not be installed until the forthcoming NA-1 refueling outage which is approximately 15 months hence. We will issue a similar amendment for NA-1 at that time.

#### Environmental Consideration

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR §51.22(c)(9). Pursuant to 10 CFR §51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### Conclusion

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: April 4, 1986

Principal Contributors: C. Li and L. Engle