DISTRIBUTION Docket No. 50-338 PMKretuzer-3 Docket File LEnale NRC PDR Gray File +4 I PDR LTremper SECY RDiggs PAD-2 Rdg Mr. W. L. Stewart OPA, CMiles HThompson Vice President - Nuclear Operations ACRS-10 OELD Virginia Electric and Power Company DBrinkman LJHarmon Post Office Box 26666 **WJones** EJordan Richmond, Virginia 23261 TBarnhart-8 JPartlow.

Dear Mr. Stewart:

The Commission has issued the enclosed Amendment No.90 to Facility Operating License No. NPF-4 for the North Anna Power Station, Unit No. 1 (NA-1). The amendment revises the Technical Specifications (TS) in response to your letter dated February 6, 1986. The amendment is effective prior to restart after the forthcoming cycle 6 refueling outage.

This amendment revises the NA-1 TS Table 3.6.1, "Containment Isolation Valves," to reflect the installation of a new containment isolation valve in the letdown line for NA-1.

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

Sincerely,

/s/

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

Enclosures:

1. Amendment No. 90 to NPF-4

Safety Evaluation

cc w/enclosures:
See next page

PAYPAD#2 DM11.Yer 2/24/87 PM PAD#2 LEngle 2/14/87

PD: PAD#2 LRubenstein 3/9/87 OGC Mibrian 2/2/87

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

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Atomic Safety and Licensing Appeal Board Panel U.S. Nuclear Regulatory Commission Washington, DC 20555

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

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

DOCKET NO. 50-338

NORTH ANNA POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 90 License No. NPF-4

- 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.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.D.(2) of Facility Operating License No. NPF-4 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 90, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective prior to restart after the forthcoming cycle 6 refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: March 10, 1987

TO FACILITY OPERATING LICENSE NO. NPF-4 DOCKET NO. 50-338

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.

Page 3/4 6-17 3/4 6-27 3/4 6-31 3/4 6-32

TABLE 3.6-1

Z			TABLE 3.6-1	
NORTH				
ANNA	VALVE NUMBER		FUNCTION	ISOLATION TIME (SEC.)
· ·	A. PHAS	SE "A" ISOLATION		
TINU	1.	MOV-1380	Reactor Coolant Pump Seal Water Return	10
	2.	MOV-1381	Reactor Coolant Pump Seal Water Return	10
	3.	Deleted		
	4.	Deleted		
	5.	TV-1204A	Reactor Coolant Letdown Line	10
	6.	TV-1204B	Reactor Coolant Letdown Line	10
3/4 6-17	7.	TV-S 100	Nitrogen to Pressurizer Relief Tank and SI Accumulators	60
	8.	TV-DG100A	Primary Drains Transfer Tank Pump Discharge	60
	9.	TV-DG100B	Primary Drains Transfer Tank Pump Discharge	60
	10.	TV-DA100A	Containment Sump Pump Discharge to Waste Drain Tanks	60
	11.	TV-DA100B	Containment Sump Pump Discharge to Waste Drain Tanks	60
Amendment No. 90	12.	TV-BD100A	Steam Generator Blowdown	60
	13.	TV-BD100B	Steam Generator Blowdown	60
	14.	TV-BD100C	Steam Generator Blowdown	60
	15.	TV-BD100D	Steam Generator Blowdown	60
	16.	TV-BD100E	Steam Generator Blowdown	60
	17.	TV-BD100F	Steam Generator Blowdown	60

<u>TABLE 3.6-1</u> (Cont.)

NORTH	VALVE NUMBER	FUNCTION	ISOLATION TIME (SEC.)
	18. TV-RM100A	Air Radiation Monitor Return	60
ANNA-UNIT	19. TV-RM100D	Air Radiation Monitor Return	60
TI	20. TV-RM100B	Air Radiation Monitor Supply	. 60
	21. TV-RM100C	Air Radiation Monitor Supply	60
	22. TV-1519A	Primary Grade Water to Pressurizer Relief Tank	10
	23. TV-VG100A	Primary Vent Header	60
3/4	24. TV-VG100B	Primary Vent Header	60
1 6-18	25. TV-SI101	Safety Injection Accumulators to Waste Gas Charcoal Filters	60
	26. HCV-1936	Safety Injection Accumulators to Waste Gas Charcoal Filters	10
	27. TV-SS104A	Pressurizer Relief Tank Sample	60
	28. TV-SS104B	Pressurizer Relief Tank Sample	60
	29. TV-SS100A	Pressurizer Liquid Space Sample	60
	30. TV-SS100B	Pressurizer Liquid Space Sample	60
	31. TV-SS106A	Primary Coolant Hot Leg Sample	60
	32. TV-SS106B	Primary Coolant Hot Leg Sample	60
	33. TV-SS102A	Primary Coolant Cold Leg Sample	60
	34. TV-SS102B	Primary Coolant Cold Leg Sample	60

<u>TABLE 3.6-1</u> (Cont.)

z	VALVE NUMBER		ISOLATION TIME (SEC.)	
NORTH ANNA -	19.	MOV-1836*	High Head Safety Injection to RCS Except Boron Injection Line	NA
	20.	MOV-1869B*	High Head Safety Injection to RCS Except Boron Injection Line	NA
UNIT	21.	Deleted		
فسد	22.	Deleted		
	23.	Deleted		
	24.	MOV-1890A*	LHSI Pump Discharge to Reactor Coolant System Hot Legs	NA
	25.	MOV-1890B*	LHSI Pump Discharge to Reactor Coolant System Hot Legs	AA
3/4 6	26.	MOV-1890C*	LHSI Pump Discharge to Reactor Coolant System Cold Legs	NA
6-27	27.	MOV-1890D*	LHSI Pump Discharge to Reactor Coolant System Cold Legs	NA
	28.	FCV-1160*	Loop Fill Header	NA
	29.	MOV-1289A*	Charging Line	NA
Amendment	30.	MOV-1867C*	High Head Safety Injection, Boron Injection Tank	NA
dmer	31.	MOV-1867D*	High Head Safety Injection, Boron Injection Tank	NA
nt No.	32.	MOV-RS-100A*	Casing Cooling to Outside Recirculation Spray Pump	NA
. A8	33.	MOV-RS-100B*	Casing Cooling to Outside Recirculation Spray Pump	NA
• 90	34.	MOV-RS-101A*	Casing Cooling to Outside Recirculation Spray Pump	NA

TABL	E 3	.6-1	(Cont.))

NO	VALVE NUMBER	,	ISOLATION TIME (SEC.)	
NORTH ANNA	35.	MOV-RS-101B*	Casing Cooling to Outside Recirculation Spray Pump	NA
	36.	36. TV-HC-108A* Containment Atmosphere Sample Line		NA
ا <u>ج</u>	37.	TV-HC-108B*	Containment Atmosphere Sample Line	NA
TINU.	38.	TV-HC-100A	Suction Hydrogen Analyzer	NA
	39.	TV-HC-100B	Suction Hydrogen Analyzer	NA
	40.	TV-HC-101A	Discharge Hydrogen Analyzer	NA
	41.	TV-HC-101B	Discharge Hydrogen Analyzer	NA
	42.	TV-HC-102A	Suction Hydrogen Analyzer	NA
ω	43.	TV-HC=102B	Suction Hydrogen Analyzer	NA
3/4 6-	44.	TV-HC-103A	Discharge Hydrogen Analyzer	NA
6-28	45.	TV-HC-103B	Discharge Hydrogen Analyzer	NA
	46.	TV-HC-104A	Suction Hydrogen Recombiner	NA
	47.	TV-HC-104B	Suction Hydrogen Recombiner	NA
Ame	48.	TV-HC-105A	Discharge Hydrogen Recombiner	NA
Amendment	49.	TV-HC-105B	Discharge Hydrogen Recombiner	NA ·
it No.	50.	TV-HC-106A	Suction Hydrogen Recombiner	NA
50	51.	TV-HC-106B	Suction Hydrogen Recombiner	NA
8 , 43	52.	TV-HC-107A	Discharge Hydrogen Recombiner	ΝA
~	53.	TV-HC-107B	Discharge Hydrogen Recombiner	NA

TARI	F	3	6-	1 ((Cont.)
IADL	. C.	э.	U-		(COHC -)

NORTH ANNA - UNIT 1	VALVE NUMBER			FUNCTION	ISOLATION TIME (SEC.)
	G٠	G. STEAM LINE ISOLATION			
		1.	TV-MS-101A#	Main Steam Line Trip Valve	5
		2.	TV-MS-101B#	Main Steam Line Trip Valve	5
		3.	TV-MS-101C#	Main Steam Line Trip Valve	5
	н.	REL	IEF		
		Non	e		

[#] 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.la. or 4.6.3.1.2d.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 90

FACILITY OPERATING LICENSE NO. NPF-4

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

NORTH ANNA POWER STATION, UNIT NO. 1

DOCKET NO. 50-338

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.

On April 4, 1986, Amendment No. 63 was issued for NA-2 which addressed the proposed changes as requested in the licensee's above noted letter dated February 6, 1986. The safety evaluation supporting Amendment No. 63 addressed the proposed changes for both NA-1&2. It was stated in the safety evaluation that an amendment for NA-1 would not be issued until the new NA-1 containment isolation valve was installed in the forthcoming cycle 6 refueling outage. With the passage of time, this appropriate NA-1 refueling outage is now imminent. The discussion and evaluation provided below are identical to the previously issued safety evaluation supporting Amendment No. 63 for NA-2. However, references to NA-2 in the previous safety evaluation have been deleted below.

DISCUSSION:

The existing three parallel valves (HCV-1200A, HCV-1200B and HCV-1200C for NA-1) 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 for NA-1 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 Sections 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 valve (TV 1204A for NA-1) 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 a manual valve (HCV-1142 for NA-1). 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.

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: March 10, 1987

Principal Contributors:

C. Li L. Engle