August 2, 1989

Docket Nos. 50-338
and 50-339

DISTRIBUTION
See attached sheet

Mr. W. R. Cartwright
Vice President - Nuclear
Virginia Electric and Power Company
5000 Dominion Blvd.
Glen Allen, Virginia 23060

Dear Mr. Cartwright:

SUBJECT: NORTH ANNA UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: AUXILIARY SHUTDOWN PANEL MONITORING INSTRUMENTATION (TAC NOS. 73387 AND 73388)

The Commission has issued the enclosed Amendment Nos. 121 and 105 to Facility Operating License Nos. NPF-4 and NPF-7 for the North Anna Power Station, Units No. 1 and No. 2 (NA-1&2). The amendments revise the Technical Specifications (TS) in response to your letter dated June 8, 1989.

The amendments revise TS 3.3.3.5, Table 3.3-9, which addresses the auxiliary shutdown panel monitoring instrumentation. The measurement range of the charging flow instrumentation is changed from 0-150 gpm to 0-180 gpm, and the format of Table 3.3-9 and Table 4.3-6 is changed from horizontal to vertical.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by

Leon B. Engle, Project Manager
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 121 to NPF-4
2. Amendment No. 105 to NPF-7
3. Safety Evaluation

cc w/enclosures:
See next page

[NA-1&2 AMEND 73387/73388]

LA:PDII-2	PM:PDII-2	D:PDII-2	OGC
DMiller	LEngle:bd	HBerkow	RBachmann
07/20/89	07/20/89	07/20/89	07/27/89

Mr. W. R. Cartwright
Virginia Electric & Power Company

North Anna Power Station
Units 1 and 2

cc:
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Mr. G. E. Kane
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Mineral, Virginia 23117

DATED: August 2, 1989

AMENDMENT NO. 121 TO FACILITY OPERATING LICENSE NO. NPF-4-NORTH ANNA UNIT 1
AMENDMENT NO. 105 TO FACILITY OPERATING LICENSE NO. NPF-7-NORTH ANNA UNIT 2

Docket File
NRC & Local PDRs
PDII-2 Reading
S. Varga, 14/E/4
G. Lainas, 14/H/3
H. Berkow
D. Miller
L. Engle
OGC-WF
D. Hagan, 3302 MNBB
E. Jordan, 3302 MNBB
B. Grimes, 9/A/2
T. Meek (8), P1-137
Wanda Jones, P-130A
J. Calvo, 11/F/23
ACRS (10)
GPA/PA
OC/LFMB
B. Sinkule, R-II

cc: Plant Service list

DF01
1/1

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. 121
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 June 8, 1989, 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. 121 , 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 issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 2, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 121

TO FACILITY OPERATING LICENSE NO. NPF-4

DOCKET NO. 50-338

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

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TABLE 3.3-9

AUXILIARY SHUTDOWN PANEL MONITORING INSTRUMENTATION*

	INSTRUMENT	MEASUREMENT RANGE	MINIMUM CHANNELS OPERABLE
1.	Reactor Coolant Temperature - Average	530 - 630°F	1
2.	Pressurizer Pressure	1700 - 2500 psig	1
3.	Pressurizer Level	0 - 100%	1
4.	Auxiliary Feed Pump Discharge Header Pressure	500 - 1500 psig	1
5.	Emergency Condensate Storage Tank Level	0 - 100%	1
6.	Charging Flow	0 - 180 gpm	1
7.	Main Steam Line Pressure	0 - 1400 psig	1
8.	Steam Generator Level	0 - 100%	1
9.	Relay Room Positive Ventilation	0 - 0.50 inches H_2O	1

*Located at Elevation 254' in the Emergency Switchgear and Relay Room.

TABLE 4.3-6

AUXILIARY SHUTDOWN PANEL MONITORING INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

	INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1.	Reactor Coolant Temperature - Average	M	R
2.	Pressurizer Pressure	M	R
3.	Pressurizer Level	M	R
4.	Auxiliary Feed Pump Discharge Header Pressure	M	R
5.	Emergency Condensate Storage Tank Level	M	R
6.	Charging Flow	M	R
7.	Main Steam Line Pressure	M	R
8.	Steam Generator Level	M	R
9.	Relay Room Positive Ventilation	M	R

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. 105
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 June 8, 1989, 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.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. 104 , 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 issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 2, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 105

TO FACILITY OPERATING LICENSE NO. NPF-7

DOCKET NO. 50-339

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed page 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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AUXILIARY SHUTDOWN PANEL MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.5 The auxiliary shutdown panel monitoring instrumentation channels shown in Table 3.3-9 shall be OPERABLE with readouts displayed external to the control room.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With the number of OPERABLE auxiliary shutdown panel monitoring channels less than required by Table 3.3-9, either restore the inoperable channel(s) to OPERABLE status within 7 days, or be in HOT SHUTDOWN within the next 12 hours.

b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.5 Each auxiliary shutdown panel monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3-6.

TABLE 3.3-9

AUXILIARY SHUTDOWN PANEL MONITORING INSTRUMENTATION*

	INSTRUMENT	MEASUREMENT RANGE	MINIMUM CHANNELS OPERABLE
1.	Reactor Coolant Temperature - Average	530 - 630°F	1
2.	Pressurizer Pressure	1700 - 2500 psig	1
3.	Pressurizer Level	0 - 100%	1
4.	Auxiliary Feed Pump Discharge Header Pressure	500 - 1500 psig	1
5.	Emergency Condensate Storage Tank Level	0 - 100%	1
6.	Charging Flow	0 - 180 gpm	1
7.	Main Steam Line Pressure	0 - 1400 psig	1
8.	Steam Generator Level	0 - 100%	1
9.	Relay Room Positive Ventilation	0 - 0.50 inches H_2O	1

*Located at Elevation 254' in the Emergency Switchgear and Relay Room.

TABLE 4.3-6

AUXILIARY SHUTDOWN PANEL MONITORING INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

	INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1.	Reactor Coolant Temperature - Average	M	R
2.	Pressurizer Pressure	M	R
3.	Pressurizer Level	M	R
4.	Auxiliary Feed Pump Discharge Header Pressure	M	R
5.	Emergency Condensate Storage Tank Level	M	R
6.	Charging Flow	M	R
7.	Main Steam Line Pressure	M	R
8.	Steam Generator Level	M	R
9.	Relay Room Positive Ventilation	M	R

ACCIDENT MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.6 The accident monitoring instrumentation channels shown in Table 3.3-10 shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With the number of OPERABLE accident monitoring instrumentation channels less than the total number of channels shown in Table 3.3-10, either restore the inoperable channel(s) to OPERABLE status within 7 days, or be in at least HOT SHUTDOWN within the next 12 hours.

b. With the number of OPERABLE accident monitoring instrumentation channels less than the MINIMUM CHANNELS OPERABLE requirements of Table 3.3-10, either restore the inoperable channel(s) to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours.

c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.6 Each accident monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3-7.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 121 AND 105 TO

FACILITY OPERATING LICENSE NOS. NPF-4 AND NPF-7

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

NORTH ANNA POWER STATION, UNITS NO. 1 AND NO. 2

DOCKET NOS. 50-338 AND 50-339

INTRODUCTION

By letter dated June 8, 1989, the Virginia Electric and Power Company (the licensee) requested changes to the Technical Specifications (TS) for the North Anna Power Station, Units No. 1 and No. 2 (NA-1&2). One proposed change would modify TS 3.3.3.5, Table 3.3-9, which addresses the Auxiliary Shutdown Panel Monitoring Instrumentation. The measurement range of the charging flow instrumentation would be changed from "0-150 gpm" to "0-180 gpm," and the format of Tables 3.3-9 and 4.3-6 would be changed from horizontal to vertical.

DISCUSSION

During the performance of the Control Room Design Review (CRDR) for NA-1&2, various indicators were cited as requiring modification, including charging flow. The CRDR identified that the existing square root scale of the charging flow instrumentation would make it difficult to read flow accurately and that the range of 0-150 gpm was too narrow. To relieve these problems, the charging flow instrumentation would be changed to a linear output indication and the range expanded to 0-180 gpm.

Expanding the display range and providing the indication in a linear scale would allow the operator to more accurately determine the charging flow rate during high or low flow rate conditions without decreasing accuracy during middle-of-scale operations. This would provide for a more accurate determination of the charging flow rate during abnormal as well as normal plant conditions.
TS 3.3.3.5, Table 3.3-9, identifies the instrumentation and ranges required in the auxiliary shutdown panel. The charging flow is presently specified as 0-150 gpm and would be changed to 0-180 gpm as required by the CRDR finding.

EVALUATION

Based on the above, the change will allow for more accurate determination of the charging flow rate during abnormal as well as normal plant conditions and will enhance safety. The requirements of Specification 3.3.3.5 are not changed nor are the Surveillance Requirements of 4.3.3.5. Only the "Measurement Range" of Table 3.3-9 is affected. Based on the above, the staff finds the proposed change to be acceptable.

The licensee's proposed change to Tables 3.3-9 and 4.3-6 from a horizontal format to a vertical format is administrative in nature and is therefore acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve 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 amendments involve 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 amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet 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 amendments.

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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: August 2, 1989

Principal Contributor:

Leon B. Engle