Docket Nos. 50-338 and 50-339 DISTRIBUTION See attached sheet

Mr. W. L. Stewart Senior Vice President - Nuclear Virginia Electric and Power Company 5000 Dominion Blvd. Glen Allen, Virginia 23060

Dear Mr. Stewart:

SUBJECT:

NORTH ANNA UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: TECHNICAL SPECIFICATION 3.7.4.1.a, "SERVICE WATER SYSTEM - OPERATING" (TAC NOS. M83547 AND M83548)

The Commission has issued the enclosed Amendment Nos. 163 and 142 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 May 1, 1992.

The amendments revise the NA-1&2 TS to permit mode changes while in Action Statement 3.7.4.1.a by stating that TS 3.0.4 is not applicable once service water flows to the component cooling heat exchangers are throttled.

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

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- Amendment No. 163 to NPF-4
 Amendment No. 142 to NPF-7
- 3. Safety Evaluation

cc w/enclosures: See next page

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OFFICIAL RECORD COPY Document Name: NA83547.AMD	

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

cc: Mr. William C. Porter, Jr. County Administrator Louisa County P.O. Box 160 Louisa, Virginia 23093

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Mr. G. E. Kane, Manager North Anna Power Station P.O. Box 402 Mineral, Virginia 23117

Mr. J. P. O'Hanlon Vice President - Nuclear Operations Virginia Electric and Power Company 5000 Dominion Blvd. Glen Allen, Virginia 23060

Mr. Martin Bowling
Manager - Nuclear Licensing
Virginia Electric and Power Co.
5000 Dominion Blvd.
Glen Allen, Virginia 23060

DATED: August 4, 1992

AMENDMENT NO.163 TO FACILITY OPERATING LICENSE NO. NPF-4-NORTH ANNA UNIT 1 AMENDMENT NO.142 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
D. Hagan, 3302 MNBB
G. Hill (8), P-137
Wanda Jones, MNBB-7103
C. Grimes, 11/F/23
ACRS (10)
OPA
OC/LFMB
M. Sinkule, R-II



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. 163 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 May 1, 1992, 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 163, 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 its 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 4, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 163

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.

Remove Page

Insert Page

3/4 7-18

3/4 7-18

3/4.7.4 SERVICE WATER SYSTEM

3/4.7.4.1 SERVICE WATER SYSTEM - OPERATING

LIMITING CONDITION FOR OPERATION

- 3.7.4.1 Two service water loops (shared with Unit 2) shall be OPERABLE with each loop consisting of:
 - a. Two OPERABLE service water pumps (excluding auxiliary service water pumps) with their associated normal and emergency power supplies, and
 - b. An OPERABLE flow path capable of providing cooling for OPERABLE plant components and transferring heat to the service water reservoir.

APPLICABILITY: Either Unit in MODES 1, 2, 3 or 4.

ACTION:

- a. With one service water pump inoperable, within 72 hours throttle component cooling water heat exchanger flows, in accordance with approved operating procedures, to ensure the remaining service water pumps are capable of providing adequate flow to the recirculation spray heat exchangers. The provisions of Specification 3.0.4 are not applicable once component cooling heat exchangers flows are throttled.
- b. With two service water pumps inoperable, perform ACTION 3.7.4.1.a within 1 hour and restore at least one service water pump to OPERABLE status within 72 hours, or place both units in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With one service water loop inoperable, except as provided in ACTION 3.7.4.1.a, restore the inoperable loop to OPERABLE status within 72 hours, or place both units in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. The allowable time that one of the two service water loops can be inoperable as specified in ACTION 3.7.4.1.c may be extended beyond 72 hours up to 168 hours as part of service water system upgrades* provided 3 out of 4 service water pumps (the third pump does not require auto start capability) and 2 out of 2 auxiliary service water pumps have been OPERABLE since initial entry into the action statement and remain OPERABLE during the extended action statement or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

^{*}Isolation of one service water loop for up to 168 hours is permitted only as part of service water system upgrades. System upgrades include modification and maintenance activities associated with the installation of new discharge headers and spray arrays, mechanical and chemical cleaning of service water piping and valves, pipe repair and replacement, valve repair and replacement, installation of corrosion mitigation measures and inspection of and repairs to buried piping interior coatings and pump or valve house components.



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. 142 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 May 1, 1992, 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 142, 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 its 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 4, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 142

TO FACILITY OPERATING LICENSE NO. NPF-7

DOCKET NO. 50-339

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.

Remove Page

Insert Page

3/4 7-15

3/4 7-15

3/4.7.4 SERVICE WATER SYSTEM

3/4.7.4.1 SERVICE WATER SYSTEM - OPERATING

LIMITING CONDITION FOR OPERATION

- 3.7.4.1 Two service water loops (shared with Unit 1) shall be OPERABLE with each loop consisting of:
 - a. Two OPERABLE service water pumps (excluding auxiliary service water pumps) with their associated normal and emergency power supplies, and
 - b. An OPERABLE flow path capable of providing cooling for OPERABLE plant components and transferring heat to the service water reservoir.

APPLICABILITY: Either Unit in MODES 1, 2, 3 or 4.

- ACTION:

 a. With one service water pump inoperable, within 72 hours throttle component cooling water heat exchanger flows, in accordance with approved operating procedures, to ensure the remaining service water pumps are capable of providing adequate flow to the recirculation spray heat exchangers. The provisions of Specification 3.0.4 are not applicable once component cooling heat exchangers flows are throttled.
 - b. With two service water pumps inoperable, perform ACTION 3.7.4.1.a within 1 hour and restore at least one service water pump to OPERABLE status within 72 hours, or place both units in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
 - c. With one service water loop inoperable, except as provided in ACTION 3.7.4.1.a, restore the inoperable loop to OPERABLE status within 72 hours, or place both units in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
 - d. The allowable time that one of the two service water loops can be inoperable as specified in ACTION 3.7.4.1.c may be extended beyond 72 hours up to 168 hours as part of service water system upgrades* provided 3 out of 4 service water pumps (the third pump does not require auto start capability) and 2 out of 2 auxiliary service water pumps have been OPERABLE since initial entry into the action statement and remain OPERABLE during the extended action statement or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- *Isolation of one service water loop for up to 168 hours is permitted only as part of service water system upgrades. System upgrades include modification and maintenance activities associated with the installation of new discharge headers and spray arrays, mechanical and chemical cleaning of service water piping and valves, pipe repair and replacement, valve repair and replacement, installation of corrosion mitigation measures and inspection of and repairs to buried piping interior coatings and pump or valve house components.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 163 AND 142 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

1.0 INTRODUCTION

By letter dated May 1, 1992, the Virginia Electric and Power Company (the licensee) proposed a change to the North Anna Power Station, Units Nos. 1&2 (NA-1&2) Technical Specifications (TS). The proposed change would revise NA-1&2 TS 3.7.4.1.a, "Service Water System - Operating," to permit progression through modes upon meeting the design basis for the service water system (SWS).

2.0 DISCUSSION

The current NA-1&2 TS 3.7.4.1.a action statement permits operation with one service water (SW) pump inoperable provided flows to the component cooling water (CCW) heat exchangers are throttled to ensure the remaining SW pumps deliver design basis flows to the recirculation spray heat exchangers. Since design basis flows are met upon completion of throttling the CCW heat exchanger flows, progression through modes would not be outside the design basis. However, the current NA-1&2 TS 3.0.4 does not permit mode changes once an action statement is entered. Therefore, the proposed change would allow progression through modes once throttling of the CCW heat exchanger flows had been completed by specifying that the NA-1&2 TS 3.0.4 is not applicable.

NRC Generic Letter (GL) 89-07, "Sections 3.0 and 4.0 of the Standard Technical Specifications on the Applicability of Limiting Conditions for Operation and Surveillance Requirements," was issued to address TS improvements. One issue addressed in the GL involved the unnecessary restrictions on mode changes by TS 3.0.4. In GL 89-07, the NRC states that TS 3.0.4 unduly restricts operation when conformance to the action statement provides an acceptable level of safety for continued operation. Therefore, making the NA-1&2 TS 3.0.4 not applicable in the NA-1&2 action statement 3.7.4.1.a would be consistent with the NRC position stated in GL 89-07. The proposed change would permit mode changes while in action statement 3.7.4.1.a by stating that TS 3.0.4 is not applicable once SW flows to the CCW heat exchangers are throttled.

3.0 EVALUATION

Action statement 3.7.4.1.a requires component cooling heat exchanger SW flows to be throttled, within 72 hours, if one of the four required normal SW pumps becomes inoperable. This action ensures that the normal SW pumps remain capable of providing design basis flows to the recirculation spray heat exchangers and allows design basis flows to be delivered by two normal SW pumps with the failure of the third operable normal SW pump. In addition, the proposed change is consistent with a stated position in NRC GL 89-07. Based on all of the above, the staff finds the proposed change to be acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Virginia State official was notified of the proposed issuance of the amendment. The State official had no comment.

5.0 ENVIRONMENTAL CONSIDERATION

These amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding (57 FR 28207). 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.

6.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Leon B. Engle

Date: August 4, 1992