

August 10, 1992

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 3.0.5 (TAC NOS. M83750 AND M83751)

The Commission has issued the enclosed Amendment Nos. 164 and 144 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, 1992.

The amendments revise the time frames in TS 3.0.5 for conducting a shutdown in a controlled and orderly manner which is consistent with the time frames in TS 3.0.3.

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,

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

Enclosures:

1. Amendment No. 164 to NPF-4
2. Amendment No. 144 to NPF-7
3. Safety Evaluation

cc w/enclosures:  
See next page

OFC	:LA:PDII-2	:PM:PDII-2	:D:PDII-2	:OGC	: <i>AB</i>	:
NAME	:D: <i>M</i>	:L: <i>Engle</i>	:H: <i>Be</i>	: <i>Now</i>	: <i>Buchanan</i>	:
DATE	:7/2/92	:7/7/92	:7/7/92	:7/10/92	:	:

OFFICIAL RECORD COPY  
Document Name: NA83750.AMD

9208170172 920810  
PDR ADOCK 05000338  
PDR

NRG FILE CENTER COPY

*CP-1*  
*DFOI*

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

North Anna Power Station  
Units 1 and 2

cc:

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

C.M.G. Buttery, M.D., M.P.H.  
State Health Commissioner  
Office of the Commissioner  
Virginia Department of Health  
P.O. Box 2448  
Richmond, Virginia 23218

Michael W. Maupin, Esq.  
Hunton and Williams  
P.O. Box 1535  
Richmond, Virginia 23212

Regional Administrator, RII  
U.S. Nuclear Regulatory Commission  
101 Marietta Street, N.W., Suite 2900  
Atlanta, Georgia 30323

Dr. W. T. Lough  
Virginia State Corporation Commission  
Division of Energy Regulation  
P.O. Box 1197  
Richmond, Virginia 23209

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

Old Dominion Electric Cooperative  
4201 Dominion Blvd.  
Glen Allen, Virginia 23060

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

Mr. E. Wayne Harrell  
Vice President - Nuclear Services  
Virginia Electric and Power Co.  
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

Office of the Attorney General  
Supreme Court Building  
101 North 8th Street  
Richmond, Virginia 23219

Senior Resident Inspector  
North Anna Power Station  
U.S. Nuclear Regulatory Commission  
Route 2, Box 78  
Mineral, Virginia 231172

DATED: August 10, 1992

AMENDMENT NO. 164 TO FACILITY OPERATING LICENSE NO. NPF-4-NORTH ANNA UNIT 1  
AMENDMENT NO. 144 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. 164  
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, 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) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 164, 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 10, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 164

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.

Remove Page

3/4 0-1

Insert Page

3/4 0-1

### 3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

#### 3/4.0 APPLICABILITY

##### LIMITING CONDITION FOR OPERATION

---

3.0.1 Limiting Conditions for Operation and ACTION requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for each Specification.

3.0.2 Adherence to the requirements of the Limiting Condition for Operation and/or associated ACTION within the specified time interval shall constitute compliance with the Specification. In the event the Limiting Condition for Operation is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.

3.0.3 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour ACTION shall be initiated to place the unit in a MODE in which the Specification does not apply by placing it, as applicable, in :

1. At least HOT STANDBY within 6 hours,
2. At least HOT SHUTDOWN within the next 6 hours, and
3. At least COLD SHUTDOWN within the following 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual Specifications. This specification is not applicable in MODES 5 or 6.

3.0.4 Entry into an OPERATIONAL MODE or other specified applicability condition shall not be made unless the conditions of the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION statements unless otherwise excepted. This provision shall not prevent passage through OPERATIONAL MODES as required to comply with ACTION statements.

3.0.5 When a system, subsystem, train, component, or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided:

1. Its corresponding normal or emergency power source is OPERABLE, and
2. All of its redundant system(s), subsystem(s), train(s), component(s), and device(s) are OPERABLE, or likewise satisfy the requirements of this Specification.

Unless both conditions 1. and 2. above are satisfied, within one hour ACTION shall be initiated to place the unit in a MODE in which the Specification does not apply by placing it, as applicable, in:

1. At least HOT STANDBY within 6 hours,
2. At least HOT SHUTDOWN within the next 6 hours, and
3. At least COLD SHUTDOWN within the following 24 hours.

Exceptions to these requirements are stated in the individual Specifications. This Specification is not applicable in MODES 5 or 6.

APPLICABILITY

SURVEILLANCE REQUIREMENTS

---

- 4.0.1 Surveillance Requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.
- 4.0.2 Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the surveillance interval.
- 4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the operability requirements for a Limiting Condition for Operation. The time limits of the action statement requirements are applicable at the time it is identified that a surveillance requirement has not been performed. The action statement requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the action statement requirements are less than 24 hours. Surveillance requirements do not have to be performed on inoperable equipment.
- 4.0.4 Entry into an OPERATIONAL MODE or other specified applicability condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the stated surveillance interval or as otherwise specified.
- 4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:
- a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).





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. 144

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, 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.

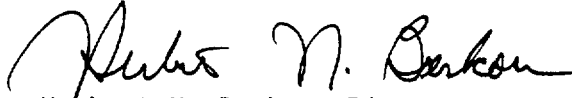
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-7 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 144, 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 10, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 144

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. The corresponding overleaf page is also provided to maintain document completeness.

Remove Page

3/4 0-1

Insert Page

3/4 0-1

## 3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

### 3/4.0 APPLICABILITY

#### LIMITING CONDITION FOR OPERATION

3.0.1 Compliance with the Limiting Conditions for Operation contained in the succeeding specifications is required during the OPERATIONAL MODES or other conditions specified therein; except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met.

3.0.2 Noncompliance with a specification shall exist when the requirements of the Limiting Condition for Operation and associated ACTION requirements are not met within the specified time intervals. If the Limiting Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.

3.0.3 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour ACTION shall be initiated to place the unit in a MODE in which the Specification does not apply by placing it, as applicable, in :

1. At least HOT STANDBY within 6 hours,
2. At least HOT SHUTDOWN within the next 6 hours, and
3. At least COLD SHUTDOWN within the following 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual specifications. This specification is not applicable in MODES 5 or 6.

3.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the conditions of the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION requirements. This provision shall not prevent passage through OPERATIONAL MODES as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual specifications.

3.0.5 When a system, subsystem, train, component, or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided:

1. Its corresponding normal or emergency power source is OPERABLE, and
2. All of its redundant system(s), subsystem(s), train(s), component(s), and device(s) are OPERABLE, or likewise satisfy the requirements of this Specification.

Unless both conditions 1. and 2. above are satisfied, within one hour ACTION shall be initiated to place the unit in a MODE in which the Specification does not apply by placing it, as applicable, in :

1. At least HOT STANDBY within 6 hours,
2. At least HOT SHUTDOWN within the next 6 hours, and
3. At least COLD SHUTDOWN within the following 24 hours.

Exceptions to these requirements are stated in the individual Specifications. This Specification is not applicable in MODES 5 or 6.

APPLICABILITY

SURVEILLANCE REQUIREMENTS

---

- 4.0.1 Surveillance Requirements shall be met during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.
- 4.0.2 Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the surveillance interval.
- 4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the operability requirements for a Limiting Condition for Operation. The time limits of the action statement requirements are applicable at the time it is identified that a surveillance requirement has not been performed. The action statement requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the action statement requirements are less than 24 hours. Surveillance requirements do not have to be performed on inoperable equipment.
- 4.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the stated surveillance interval or as otherwise specified.
- 4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:
- a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 164 AND 144 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 June 8, 1992, the Virginia Electric and Power Company (the licensee) proposed a change to the Technical Specifications (TS) for the North Anna Power Station, Units No. 1 and No. 2 (NA-1&2). The change would revise the time frames in the NA-1&2 TS 3.0.5 for conducting a shutdown in a controlled and orderly manner to be consistent with the time frames in the NA-1&2 TS 3.0.3.

2.0 DISCUSSION

The proposed change would revise TS 3.0.5 completion times to permit a shutdown to proceed in a controlled and orderly manner that is within the maximum cooldown rate and within the cooldown capabilities of the unit, assuming only the minimum required equipment is operable. TS 3.0.5 delineates additional conditions that must be satisfied to permit operation to continue when a normal or emergency power source is not operable. It specifically prohibits operation when one division is inoperable because its normal or emergency power source is inoperable, and a system, subsystem, train, component, or device in another division are inoperable for another reason.

An NRC letter to All Power Reactor Licensees, dated April 10, 1980, requested licensees to submit proposed TS 3.0.3 and 3.0.5. The NRC letter contained model TS. Both model TS 3.0.3 and 3.0.5 were formulated to ensure that no set of equipment outages would be allowed to persist that would result in the facility being in an unprotected condition. The model TS 3.0.3 and 3.0.5 contained the same time frames to reach hot standby, hot shutdown, and cold shutdown.

Amendment No. 19 for NA-1 (issued August 5, 1980) and the original operating license for NA-2 (issued August 21, 1980) contained TSs 3.0.3 and 3.0.5 consistent with the April 10, 1980 NRC letter. However, TS 3.0.3 was later revised in Amendment Nos. 62 and 46 for NA-1&2, respectively (issued

February 1, 1985). These amendments were consistent with NUREG-0452, Revision 4, "Standard Technical Specifications for Westinghouse Pressurized Water Reactors." However, NUREG-0452 does not include TS 3.0.5, and, therefore, a change was not made to TS 3.0.5 at that time. As a result of the issuance of Amendment Nos. 62 and 46, the time frames for TS 3.0.3 and 3.0.5 became inconsistent. The changes proposed in the instant amendment request for NA-1&2 would correct the inconsistency, meet the intent of the April 10, 1980 NRC letter and still maintain consistency with NUREG-0452.

Currently, TS 3.0.5 requires that the unit be placed in hot standby within 1 hour, in hot shutdown within the following 6 hours, and in cold shutdown within the following 30 hours if the conditions stated in the TS are not met. The proposed change will modify TS 3.0.5 such that it includes the following actions if the conditions stated in the applicable TS are not met:

"...within one hour ACTION shall be initiated to place the unit in a MODE in which the Specification does not apply by placing it, as applicable, in:

1. At least HOT STANDBY within 6 hours,
2. At least HOT SHUTDOWN within the next 6 hours, and
3. At least COLD SHUTDOWN within the following 24 hours.

Also, changes in the format have been incorporated in TS 3.0.5 for editorial purposes only.

The purpose of the above-stated section of TS 3.0.5 is to delineate the time limits for placing the unit in a safe shutdown mode. One hour is permitted under the proposed change to prepare for an orderly shutdown before initiating a change in plant operations. The completion times specified to reach lower modes of operation permit the shutdown to proceed in a controlled and orderly manner that is within the maximum cooldown rate and within the shutdown capabilities of the unit, assuming only the minimum required equipment is operable. This reduces thermal stresses on components of the primary coolant system and the potential for a plant upset that could challenge safety systems under conditions for which these time limits would apply.

The completion times proposed above to reach hot standby, hot shutdown, and cold shutdown for TS 3.0.5 are consistent with the completion times currently established in TS 3.0.3.

### 3.0 EVALUATION

The proposed change would correct an inconsistency associated with completion times for TS 3.0.3 and 3.0.5 and meet the intent of the April 10, 1980 NRC letter while still maintaining consistency with NUREG-0452. Therefore, 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 these amendments involve no significant hazards consideration and there has been no public comment on such finding (57 FR 30263). Accordingly, these 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 Engle

Date: August 10, 1992