August 4, 199

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: HIGH HEAD SAFETY INJECTION FLOW BALANCE TESTS (TAC NOS. M85982 AND M85983)

The Commission has issued the enclosed Amendment Nos. 171 and 151 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 letters dated March 10 and July 28, 1993.

The amendments revise the NA-1&2 TS requirements pertaining to the High Head Safety Injection (HHSI) flow balance tests by removing the uncertainty of flow measurements caused by instrument inaccuracies.

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. 171 to NPF-4
2. Amendment No. 151 to NPF-7
3. Safety Evaluation

cc w/enclosures:
See next page

OFC	:LA:PDII-2	:PM:PDII-2	:SRXB	:SRXB	:D:PDII-2	:OGC
NAME	:ETana	:LEngle	:MCarusone	:RJones	:HBerkow	:
DATE	:7/30/93	:7/30/93	:8/1/93	:8/2/93	:8/2/93	:8/3/93

OFFICIAL RECORD COPY - Document Name: NA85982.AMD

CP-1

9308240108 930804
PDR ADOCK 05000338
P PDR

DF01

NRC FILE CENTER COPY

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

Michael W. Maupin, Esq.
Hunton and Williams
Riverfront Plaza, East Tower
951 E. Byrd Street
Richmond, Virginia 23219

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

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

Mr. M. L. Bowling, Manager
Nuclear Licensing & Programs
Virginia Electric and Power Company
Innsbrook Technical Center
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

Robert B. Strobe, M.D., M.P.H.
State Health Commissioner
Office of the Commissioner
Virginia Department of Health
P.O. Box 2448
Richmond, Virginia 23218

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

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

DATED: August 4, 1993

AMENDMENT NO. 171 TO FACILITY OPERATING LICENSE NO. NPF-4-NORTH ANNA UNIT 1
AMENDMENT NO. 151 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
E. Tana
L. Engle
OGC
D. Hagan, 3302 MNBB
G. Hill (4), P-137
C. Grimes, 11/F/23
ACRS (10)
OPA
OC/LFMB
M. Sinkule, R-II

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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. 171
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 March 10, 1993, as supplemented by letter dated July 28, 1993, 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. 171 , 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, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 171

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	Insert Page
3/4 5-5	3/4 5-5

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that each of the following pumps start automatically upon receipt of a safety injection test signal:

   a) Centrifugal charging pump, and

   b) Low head safety injection pump.

f. By verifying that each of the following pumps develops the indicated discharge pressure (after subtracting suction pressure) on recirculation flow when tested pursuant to Specification 4.0.5.

   1. Centrifugal charging pump ≥ 2410 psig.

   2. Low head safety injection pump ≥ 156 psig.

g. By verifying that the following manual valves requiring adjustment to prevent pump "runout" and subsequent component damage are locked and tagged in the proper position for injection:

   1. Within 4 hours following completion of any repositioning or maintenance on the valve when ECCS systems are required to be OPERABLE.

   2. At least once per 18 months.

      1. 1-SI-188 Loop A Cold Leg
      2. 1-SI-191 Loop B Cold Leg
      3. 1-SI-193 Loop C Cold Leg
      4. 1-SI-203 Loop A Hot Leg
      5. 1-SI-204 Loop B Hot Leg
      6. 1-SI-205 Loop C Hot Leg

h. By performing a flow balance test, during shutdown, following completion of modifications to the ECCS subsystems that alter the subsystem flow characteristics and verifying that:

   1. For high head safety injection lines, with a single pump running:

      a) The sum of the injection line flow rates, excluding the highest flow rate, is ≥ 359 gpm,

      b) The total pump flow rate is ≤ 660 gpm, and

      c) For cold leg injection balancing, a value of ≥ 48.3 gpm will be used for simulated seal injection flow during balancing.

ECCS SUBSYSTEMS - Tavg < 350°F

LIMITING CONDITION FOR OPERATION

3.5.3 As a minimum, one ECCS subsystem comprised of the following shall be OPERABLE:

a. One OPERABLE centrifugal charging pump#,

b. One OPERABLE low head safety injection pump#, and

c. An OPERABLE flow path capable of automatically transferring fluid to the reactor coolant system when taking suction from the refueling water storage tank or from the containment sump when the suction is transferred during the recirculation phase of operation or from the discharge of the outside recirculation spray pump.

APPLICABILITY: MODE 4.

ACTION:

a. With no ECCS subsystem OPERABLE because of the inoperability of either the centrifugal charging pump or the flow path from the refueling water storage tank, restore at least one ECCS subsystem to OPERABLE status within 1 hour or be in COLD SHUTDOWN within the next 20 hours.

b. With no ECCS subsystem OPERABLE because of the inoperability of the low head safety injection pump, restore at least one ECCS subsystem to OPERABLE status or maintain the Reactor Coolant System Tavg less than 350°F by use of alternate heat removal methods.

c. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date.

A maximum of one centrifugal charging pump and one low head safety injection pump shall be OPERABLE whenever the temperature of one or more of the RCS cold legs is less than or equal to 316°F.

MAR 9 5 1999

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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. 151
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 March 10, 1993, as supplemented by letter dated July 28, 1993, 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. 151 , 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, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 151

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	Insert Page
3/4 5-5	3/4 5-5

SURVEILLANCE REQUIREMENTS (Continued)

f. By verifying that each of the following pumps develop the indicated discharge pressure (after subtracting suction pressure) on recirculation flow when tested pursuant to Specification 4.0.5.

1. Centrifugal charging pump greater than or equal to 2410 psig.

2. Low head safety injection pump greater than or equal to 156 psig.

g. By verifying that the following manual valves requiring adjustment to prevent pump "runout" and subsequent component damage are locked and tagged in the proper position for injection:

1. Within 4 hours following completion of any repositioning or maintenance on the valve when the ECCS systems are required to be OPERABLE.

2. At least once per 18 months.

1. 2-SI-89 Loop A Cold Leg
2. 2-SI-97 Loop B Cold Leg
3. 2-SI-103 Loop C Cold Leg
4. 2-SI-116 Loop A Hot Leg
5. 2-SI-111 Loop B Hot Leg
6. 2-SI-123 Loop C Hot Leg

h. By performing a flow balance test, during shutdown, following completion of modifications to the ECCS subsystems that alter the subsystem flow characteristics and verifying that:

1. For high head safety injection lines, with a single pump running:

a) The sum of the injection line flow rates, excluding the highest flow rate, is $\geq$ 359 gpm,

b) The total pump flow rate is $\leq$ 660 gpm, and

c) For cold leg injection balancing, a value of $\geq$ 48.3 gpm will be used for simulated seal injection flow during balancing.

ECCS SUBSYSTEMS - Tavg LESS THAN 350°F

LIMITING CONDITION FOR OPERATION

3.5.3 As a minimum, one ECCS subsystem comprised of the following shall be OPERABLE:

a. One OPERABLE centrifugal charging pump#,

b. One OPERABLE low head safety injection pump#, and

c. An OPERABLE flow path capable of automatically transferring fluid to the reactor coolant system when taking suction from the refueling water storage tank or from the containment sump when the suction is transferred during the recirculation phase of operation.

APPLICABILITY: MODE 4.

ACTION:

a. With no ECCS subsystem OPERABLE because of the inoperability of either the centrifugal charging pump or the flow path from the refueling water storage tank, restore at least one ECCS subsystem to OPERABLE status within 1 hour or be in COLD SHUTDOWN within the next 20 hours.

b. With no ECCS subsystem OPERABLE because of the inoperability of the low head safety injection pump, restore at least one ECCS subsystem to OPERABLE status or maintain the Reactor Coolant System Tavg less than 350°F by use of alternate heat removal methods.

c. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

A maximum of one centrifugal charging pump and one low head safety injection pump shall be OPERABLE whenever the temperature of one or more of the RCS cold legs is less than or equal to 358°F.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 171 AND 151 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 March 10, 1993, as supplemented by letter dated July 28, 1993, 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 proposed changes would revise the NA-1&2 TS requirements pertaining to the High Head Safety Injection System (HHSI) flow balance tests. TS 4.5.2.h requires that the HHSI flow balance tests be performed following the completion of modifications to the Emergency Core Cooling System (ECCS) subsystems that alter the subsystem flow charateristics. The successful completion of the HHSI flow balance testing is ensured by two surveillance requirements. These surveillance requirements are for the sum of the flows through the two lowest flow branch lines, and a total HHSI pump flow requirement. These requirements provide a specified acceptance range for HHSI flow balancing of only 4%, which is too narrow to consistently be met during the tests. This is due to the sensitivity of throttle valve positioning and the uncertainty of flow measurements caused by instrument inaccuracies.

The flow rates currently specified for the sum of the flows through the two lowest flow branch lines and the total HHSI pump flow are conservative with respect to the existing NA-1&2 safety analysis values. The flow rates would be revised to remove any instrument inaccuracies. Normal instrument inaccuracies would be factored into the acceptance criteria of the periodic surveillance tests which perform the flow balance testing.

The proposed changes would decrease the sum of the flows through the two lowest flow branch lines from $\geq$ 384 gallons per minute (gpm) to $\geq$ 359 gpm, and increase the total HHSI pump flow from $\leq$ 650 gpm to $\leq$ 660 gpm. This expanded acceptance range would ensure that the system performance remains bounded by the existing NA-1&2 safety analysis and would make test failures due to instrument inaccuracies less likely.

In addition, a surveillance requirement would be added to define a value of $\geq$ 48.3 gpm to be used for simulated reactor coolant pump (RCP) seal injection

flow during cold leg injection balancing. A simulated RCP seal injection flow has been taken into account during actual surveillance tests. It is added for completeness of the surveillance requirements, but does not change the way the surveillance test is currently being performed.

The July 28, 1993 letter provided additional information requested by the staff. This additional information did not alter the proposed action or affect the staff's determination of no significant hazards consideration as noticed in the Federal Register on April 14, 1993 (58 FR 19491).

2.0 DISCUSSION

The function of the ECCS is to provide core cooling and negative reactivity to ensure that the reactor core is protected after any of the following accidents: Loss of Coolant Accident (LOCA), Rod Ejection Accident, Loss of Secondary Coolant Accident, and Steam Generator Tube Rupture (SGTR). During the initial phase of these accidents, HHSI flow enters the Reactor Coolant System (RCS) via the cold leg injection to the three RCS loops and the reactor coolant pump seal supply. The following existing TS ensure that HHSI flow is available as required by the current safety analysis:

- TS 4.5.2.h.1.a requires the sum of the two lowest branch line flows to be $\geq$ 384 gpm with the RCS depressurized (this means the third branch line flow must be $\geq$ 192 gpm and total flow of the three branch lines must be $\geq$ 576 gpm).

- TS 4.5.2.h.1.b requires total HHSI pump flow rate to be $\leq$ 650 gpm with the RCS depressurized.

- TS 3.4.6.2.e and TS 4.4.6.2.1 require RCP seal injection to be throttled to $\leq$ 30 gpm and controlled leakage measured once every 31 days with the RCS at 2235 $\pm$ 20 psig (this ensures that seal injection will be less than or equal to the 48.3 gpm value assumed in the safety analysis if the RCS suddenly depressurizes).

Based on the TS requirements above, total HHSI pump flow must be $\geq$ 624.3 gpm (576 gpm + 48.3 gpm) and $\leq$ 650 gpm during cold leg injection. These requirements provide a specified acceptance range of only 4%, which is too narrow to consistently be met during the tests. This is due to the sensitivity of throttle valve positioning and the uncertainty of flow measurements caused by instrument inaccuracies. These instances have been reported in Licensee Event Reports (LERs). LER 90-008-00, for NA-2, and 91-001-00, for NA-1, documented that the flows obtained during recent surveillance testing were outside the TS limits. Part of the "Actions to Prevent Reoccurrence" in LER 91-001-00 was to determine if tne safety analysis would support TS changes.

A review of the existing NA-1&2 safety analysis has determined that the HHSI system performance will remain bounded if the summation of the indicated flows of the two lowest flow branch lines is $\geq$ 359 gpm with no measurement

uncertainty. This would allow the adjustment of test values depending on the accuracy of the test equipment used.

The small break LOCA analysis was performed using the NOTRUMP evaluation model (Reference 1), assuming HHSI flow rates from the two minimum flow branch lines which are equal to those contained in the proposed TS 4.5.2.h. The analysis was implemented as the analysis of record via a station 10 CFR 50.59 safety evaluation (Reference 2), per the provisions of TS 6.9.1.7, which specifies allowable LOCA analysis methodologies for establishing operating limits for key core parameters. The results of the revised small break LOCA analysis were reported to NRC in Reference (3), which provided the required notification of change in the peak clad temperature (PCT) results for this transient. The PCT for limiting case small break transient is 1873°F
The manufacturer for the HHSI pumps was contacted to obtain the maximum flow rate allowed for these pumps. The manufacturer stated that the maximum flow rate for these pumps was 675 gpm. An engineering study was performed to determine the required net positive suction head (NPSH) for the HHSI pumps at the manufacturer's maximum flow rate. The study determined that under all circumstances the NPSH available exceeds the NPSH required. However, to prevent HHSI flow from exceeding 675 gpm during the safety injection recirculation mode of operation, the study recommended the maximum flow of the HHSI pump be $\leq$ 660 gpm when flowing from the refueling water storage tank to the RCS. The effect of this change on low head safety injection (LHSI) flow and NPSH during the safety injection recirculation mode was also evaluated and found to be acceptable. The total HHSI pump flow rate is limited to 660 gpm in proposed TS 4.5.2.h. In the existing analysis of record for the mass addition transient, 705 gpm was assumed as the HHSI pump runout flow rate. This analysis, submitted by letter dated December 27, 1991, was approved via Reference (4).

Although not specifically delineated in TS 4.5.2.h.1, during the HHSI cold leg injection flow balancing performed to meet this specification, a simulated RCP seal injection flow has been accounted for to support the basis of TS 3.4.6.2.e. This is part of the original design basis and has been taken into account during actual surveillance tests. It is added for completeness of the surveillance requirements. A simulated RCP seal injection flow is not required for hot leg injection flow balancing due to the system configuration at the time of switchover to hot leg injection.

The flow rates currently specified in TS 4.5.2.h.1.a and b are conservative with respect to the existing safety analysis values. The revised flow rates would not incorporate any instrument inaccuracies. Normal instrument inaccuracies will be factored into the acceptance criteria of the periodic surveillance tests which perform the flow balance testing. This expanded acceptance range will ensure the system performance remains bounded by the existing safety analysis and will make test failures due to instrument inaccuracies less likely.

The proposed TS changes would continue to ensure that the three RCS loops and the reactor coolant pump seal supply are throttled to meet the following constraints:

- o When one RCS loop is faulted (i.e., doubled ended cold leg break), sufficient flow is delivered to the two intact RCS loops.
- o The HHSI pump flow does not exceed runout flow with the RCS completely depressurized.
- o With the LHSI pump supplying the HHSI pump, total LHSI flow does not decrease HHSI NPSH available below the NPSH required.

3.0 TECHNICAL SPECIFICATION CHANGES

TS 4.5.2.h.1.a would be modified by decreasing the allowable sum of the flows through the two lowest flow branches lines, with a single HHSI pump running, from $\geq$ 384 gpm to $\geq$ 359 gpm.

TS 4.5.2.h.1.b would be modified by increasing the allowable total flow of the HHSI pump, with a single HHSI pump running, from $\leq$ 650 gpm to $\leq$ 660 gpm.

TS 4.5.2.h.1.c would be added to define the value of $\geq$ 48.3 gpm used for simulated RCP seal injection flow during HHSI cold leg injection flow balance measurements.

In addition, minor editorial changes have been made to these TS sections to improve the readability.

4.0 EVALUATION

A safety evaluation has been performed for the proposed changes using NRC approved methodologies. The safety evaluation results show that a peak cladding temperature of 1873°F for the limiting core small break transient complies with the 10 CFR 50.46, Appendix K criteria. The proposed changes will not affect the capability of the ECCS to perform its design functions and system performance remains bounded by the NA-1&2 safety analysis.

Finally, HHSI pump runout is not increased because the limiting HHSI pump flow of 660 gpm is bounded by the manufacturer maximum flow allowable of 675 gpm. Therefore, based on all of the above, the staff finds the proposed changes to be acceptable.

5.0 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.

6.0 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 (58 FR 19491). 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.

7.0 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, 1993

References:

(1) WCAP-10054-P-A, "Westinghouse Small Break ECCS Evaluation Model Using the NOTRUMP Code," dated August 1985 (Westinghouse Proprietary).

(2) "North Anna Power Station Units 1 and 2 - Implementation of Extended SGTP Small Break LOCA Analysis," 10 CFR 50.59 Safety Evaluation 92-SE-OT-005, dated January 21, 1992.

(3) Letter from W. L. Stewart to USNRC, "Virginia Electric and Power Company - North Anna Power Station Units 1 and 2 Report of Errors/Changes in Application of ECCS Evaluation Models Per Requirements of 10 CFR 50.46," Serial No. 92-091, dated February 10, 1992.

(4) Letter from Leon B. Engle (NRC) to W. L. Stewart, "North Anna Units 1 and 2 Issuance of Amendments Re: Pressure/Temperature Operating Limits and Low Temperature/Overpressure Protection System Setpoints (TAC Nos. M83154 and M83155)," dated March 25, 1993.