

February 16, 2001

Mr. David A. Christian  
Senior Vice President - Nuclear  
Virginia Electric and Power Company  
5000 Dominion Blvd.  
Glen Allen, Virginia 23060

SUBJECT: NORTH ANNA POWER STATION UNITS 1 AND 2 - NOTICE OF  
CONSIDERATION OF ISSUANCE OF AMENDMENTS (TAC NOS. MA9343  
AND MA9344)

Dear Mr. Christian:

The Commission has requested the Office of the Federal Register publish the enclosed "Notice of Consideration of Issuance of Amendments to Facility Operating Licenses, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing." This notice relates to your application for amendments dated June 22, 2000, as supplemented January 4, 2001, which would revise Technical Specifications (TS) Figures 3.4-2 and 3.4-3, and associated Bases, by modifying the reactor coolant system pressure/temperature limit curves. In addition, these amendments would extend the cumulative core burnup applicability limits for the existing Low Temperature Overpressure Protection System (LTOPS) setpoints and LTOPS enable temperature values, and implement American Society of Mechanical Engineers (ASME) Section XI, Code Cases N-514 and N-640. Code Case N-640 utilizes the ASME Section XI, Appendix A critical initiation stress intensity curve instead of the ASME Section XI, Appendix G critical arrest stress intensity curve. Code Case N-514 allows the resetting of the LTOPS power-operated relief valve lift setpoints.

Sincerely,

*/RA/*

Stephen R. Monarque, Project Manager, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosure: Notice

cc w/encl: See next page

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Stephen R. Monarque, Project Manager, Section 1  
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Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosure: As stated

cc w/encl: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NOS. 50-338 AND 50-339

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO  
FACILITY OPERATING LICENSES, PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating License Nos. NPF-4 and NPF-7 issued to Virginia Electric and Power Company for operation of the North Anna Power Station, Units 1 and 2, located in Louisa County, Virginia.

The proposed amendments would revise Technical Specifications (TS) Figures 3.4-2 and 3.4-3, and associated Bases, by modifying the reactor coolant system (RCS) pressure/temperature (P/T) limit curves. In addition, these amendments would extend the cumulative core burnup applicability limits for the existing Low Temperature Overpressure Protection System (LTOPS) setpoints and LTOPS enable temperature values, and implement American Society of Mechanical Engineers (ASME) Section XI, Code Cases N-514 and N-640. Code Case N-640 utilizes the ASME Section XI, Appendix A critical initiation stress intensity curve instead of the ASME Section XI, Appendix G critical arrest stress intensity curve. Code Case N-514 allows the resetting of the LTOPS power-operated relief valve lift setpoints.

Before issuance of the proposed license amendments, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment requests involve no significant hazards consideration. Under the Commission's regulations in 10 CFR

50.92, this means that operation of the facilities in accordance with the proposed amendments would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated[?]

The proposed changes modify the North Anna Units 1 and 2 RCS P/T limit curves and extend the cumulative core burnup applicability limits for the existing LTOPS setpoints and  $T_{enable}$  values. The allowable operating pressures and temperatures under the proposed RCS P/T limit curves are not significantly different from those allowed under the existing Technical Specification P/T limits. No changes to plant systems, structures, or components are proposed, and no new allowable operating modes are established. The P/T limits, LTOPS setpoints, and  $T_{enable}$  values do not contribute to the probability of occurrence or consequences of accidents previously analyzed. The revised licensing basis analyses utilize acceptable analytical methods, and continue to demonstrate that established accident analysis acceptance criteria are met. Therefore, there is no increase in the probability or consequences of any accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated[?]

The proposed changes modify the North Anna Units 1 and 2 RCS P/T limit curves, and extend the cumulative core burnup applicability of the existing LTOPS setpoints and  $T_{enable}$  values. No changes to plant systems, structures, or components are proposed, and no new allowable operating modes are established. Therefore, the proposed changes do not create the possibility of any accident or malfunction of a different type previously evaluated.

3. Does the change involve a significant reduction in the margin of safety[?]

The proposed revised RCS P/T limit curves, and revised LTOPS setpoint and  $T_{enable}$  analysis bases do not involve a significant reduction in the margin of safety for these parameters. The proposed revised RCS P/T limit curves use the ASME Section XI Code Case N-640  $K_{1c}$  stress intensity formulation. The proposed revised LTOPS  $T_{enable}$  analysis bases use a plant-specific application of the analysis methodology that supports ASME Section XI Code Case N-514. These analysis features are less restrictive than those associated with the existing analyses, but are conservative with respect to requirements established by ASME Section XI. The effects of RCS pressure and temperature measurement

uncertainty are considered in the supporting analyses. The proposed revised RCS P/T limit curves are valid to cumulative core burnups of 32.3 EFPY [effective full-power years] and 34.3 EFPY for North Anna Units 1 and 2, respectively. The proposed revised LTOPS setpoint and  $T_{enable}$  analyses support continued use of the existing North Anna Units 1 and 2 Technical Specification LTOPS setpoints and LTOPS enable temperatures to these same cumulative core burnup limits. The analyses demonstrate that established analysis acceptance criteria continue to be met. Specifically, the existing P/T limit curves, LTOPS setpoints, and LTOPS  $T_{enable}$  values provide acceptable margin to vessel fracture under both normal operation and LTOPS design basis (mass addition and heat addition) accident conditions. Therefore, the proposed changes do not result in a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment requests involve no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendments until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendments before the expiration of the 30-day notice period, provided that its final determination is that the amendments involve no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory

Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By March 26, 2001, the licensee may file a request for a hearing with respect to issuance of the amendments to the subject facility operating licenses and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714, which is available at the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (<http://www.nrc.gov>). If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons

why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendments under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment requests involve no significant hazards consideration, the Commission may issue the amendments and make them immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendments.

If the final determination is that the amendment requests involve a significant hazards consideration, any hearing held would take place before the issuance of any amendments.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, by the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to Mr. Donald P. Irwin, Esq., Hunton and Williams, Riverfront Plaza, East Tower, 951 E. Byrd Street, Richmond, Virginia 23219, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the

petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendments dated June 22, 2000, and supplemental letter dated January 4, 2001, which are available for public inspection at the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (<http://www.nrc.gov>).

Dated at Rockville, Maryland, this 16th day of February 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Stephen R. Monarque, Project Manager, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Mr. David A. Christian  
Virginia Electric and Power Company

North Anna Power Station  
Units 1 and 2

cc:

Mr. C. Lee Lintecum  
County Administrator  
Louisa County  
P.O. Box 160  
Louisa, Virginia 23093

Mr. David A. Heacock  
Site Vice President  
North Anna Power Station  
P.O. Box 402  
Mineral, Virginia 23117-0402

Mr. Donald P. Irwin, Esquire  
Hunton and Williams  
Riverfront Plaza, East Tower  
951 E. Byrd Street  
Richmond, Virginia 23219

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

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

Mr. William R. Matthews  
Vice President - Nuclear Operations  
Virginia Electric and Power Company  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, Virginia 23060-6711

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

Mr. Stephen P. Sarver, Acting Director  
Nuclear Licensing & Operations Support  
Virginia Electric and Power Company  
Innsbrook Technical Center  
5000 Dominion Blvd.  
Glen Allen, Virginia 23060-6711

Office of the Attorney General  
Commonwealth of Virginia  
900 East Main Street  
Richmond, Virginia 23219

Senior Resident Inspector  
North Anna Power Station  
U.S. Nuclear Regulatory Commission  
1024 Haley Drive  
Mineral, Virginia 23117