

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

July 18, 2002

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Serial No. 02-465  
NL&OS/ETS R0  
Docket Nos. 50-338  
50-339  
License Nos. NPF-4  
NPF-7

Gentlemen:

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**NORTH ANNA POWER STATION UNITS 1 AND 2**  
**PROPOSED LICENSE CONDITION CHANGES AND**  
**REVISED IMPLEMENTATION SCHEDULE FOR**  
**IMPROVED TECHNICAL SPECIFICATIONS**

Amendment Nos. 231 and 212, dated April 5, 2002, to Facility Operating Licenses NPF-4 and NPF-7 for North Anna Units 1 and 2, respectively, approved the conversion of current Technical Specification (CTS) to improved Technical Specifications (ITS). The amendments became effective immediately and are required to be implemented no later than September 2, 2002. Due to recent problems encountered with the modification and post-modification testing of the MCR/ESGR Bottled Air System, additional time may be necessary to implement ITS. Specifically, the MCR/ESGR Bottled Air System does not meet the new ITS operability requirements, which were submitted and approved based on the completion of the modified system design. Therefore, Dominion is requesting a delay in the implementation date for ITS from no later than September 2, 2002 until no later than December 20, 2002.

Since the new license conditions associated with this ITS amendment contain the implementation date, a change to the license condition is also required. Therefore, pursuant to 10 CFR 50.90, Virginia Electric and Power Company (Dominion) requests changes to Facility Operating License Conditions 2.C(3)d for Unit 1 and 2.C(3)c for Unit 2 to support implementation of Improved Technical Specifications (ITS) to no later than December 20, 2002. A discussion of the proposed change to the license conditions is provided in Attachment 1. The mark-up and proposed license conditions are provided in Attachments 2 and 3, respectively.

We have evaluated the proposed license amendments and have determined that they do not involve a significant hazards consideration as defined in 10 CFR 50.92. The basis for our determination that the changes do not involve a significant hazards consideration is provided in Attachment 1. We have also determined that operation with the proposed changes will not result in any significant increase in the amount of

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effluents that may be released offsite and no significant increase in individual or cumulative occupational radiation exposure. Therefore, the proposed amendment is eligible for categorical exclusion as set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment is needed in connection with the approval of the proposed License changes.

If you have any further questions or require additional information, please contact us.

Very truly yours,



Leslie N. Hartz  
Vice President – Nuclear Engineering

**Attachments**

Commitments made in this letter: None

cc: U.S. Nuclear Regulatory Commission  
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North Anna Power Station

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COMMONWEALTH OF VIRGINIA )  
 )  
COUNTY OF HENRICO )

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Leslie N. Hartz, who is Vice President - Nuclear Engineering, of Virginia Electric and Power Company. She has affirmed before me that she is duly authorized to execute and file the foregoing document in behalf of that Company, and that the statements in the document are true to the best of her knowledge and belief.

Acknowledged before me this 18<sup>TH</sup> day of July, 2002.  
My Commission Expires: May 31, 2006.

Vicki L. Hull  
Notary Public

(SEAL)

**Attachment 1**  
**Discussion of Changes**

**North Anna Power Station**  
**Units 1 and 2**  
**Virginia Electric and Power Company**  
**(Dominion)**

## **Discussion of Changes**

### **Introduction**

Pursuant to 10 CFR 50.90, Virginia Electric and Power Company (Dominion) requests changes to Facility Operating License Additional Conditions 2.C(3)d for Unit 1 and 2.C(3)c for Unit 2 which support implementation of improved Technical Specifications (ITS) and permit a change in the implementation date. The proposed changes will allow additional time for implementation of ITS by changing the implementation date from no later than September 2, 2002 to no later than December 20, 2002. This additional time is necessary should completion of the modifications and post-modification functional testing of the Control Room Bottled Air System not occur by the original implementation date. These modifications are integral to the revised ITS operability requirements.

The proposed changes have been reviewed and it has been determined that the changes qualify for categorical exclusion from an environmental assessment as set forth in 10 CFR 51.22(c)(9). Therefore, no environmental impact statement or environmental assessment is needed in connection with the approval of the proposed changes. This review also determined that the changes do not create a significant hazards consideration.

### **Background**

ITS 3.7.13, "Main Control Room/Emergency Switchgear Room (MCR/ESGR) Bottled Air System" is more restrictive than the current Technical Specifications (CTS). The approved ITS requires three operable trains of bottled air. The MCR/ESGR Bottled Air System is currently being modified to include additional trains with increased bottled air capacity. These modifications will provide additional operational flexibility and increase the design margin for the MCR/ESGR Bottled Air System. However, post-modification testing of the system modifications has identified a problem with the new flow control valves. Due to the problem with the new flow control valves, the modified portion of the system is not yet operable. Therefore, the MCR/ESGR Bottled Air System does not presently meet the new ITS operability requirements, which were submitted and approved based on the modified system design. The MCR/ESGR Bottled Air System continues to be operable in accordance with the current Technical Specifications requirements

### **Description of Changes**

On December 11, 2000, Dominion submitted proposed changes for the conversion of the North Anna current Technical Specifications to improved Technical Specifications based upon NUREG-1431, Revision 1, "Standard Technical Specifications, Westinghouse Plants" dated April 1995.

NRC letter dated April 5, 2002, "Issuance of Amendments Re: Conversion to improved

Technical Specifications” issued Amendments 231 and 212 to the Facility Operating Licenses for Units 1 and 2, respectively. These amendments convert the current Technical Specifications to a set of improved Technical Specifications (ITS) based upon NUREG-1431, Revision 1. In the letter and the attached amendments, it is stated that the ITS conversion will become effective as of April 5, 2002 and shall be implemented by September 2, 2002. Additionally, the Facility Operating Licenses were amended by adding Additional Condition 2.C(3). This condition requires the relocation of certain existing technical specifications requirements to licensee-controlled documents as part of the ITS implementation to be completed no later than September 2, 2002.

ITS 3.7.13 requires modifications to the MCR/ESGR Bottled Air System. These modifications will provide additional operational flexibility and increase the design margin for the MCR/ESGR Bottled Air System. However, due to problems being encountered with the new flow control valves, the post-modification functional system tests are not yet complete. While every effort is being made to complete the modifications and implement ITS by the initial date of September 2, 2002, Dominion has concluded that it would be prudent to anticipate and allow for a delay in the implementation of ITS. Therefore, proposed changes to the license conditions and proposed implementation date are necessary. Accordingly, we request that the implementation date be changed from no later than September 2, 2002 to an implementation date of no later than December 20, 2002. During the period until ITS is implemented, the current Technical Specifications will remain in effect and North Anna will continue to be operated in accordance with the NRC approved CTS requirements.

### **Specific Changes**

Changes will permit delaying the effective implementation date of ITS from no later than September 2, 2002 to no later than December 20, 2002. This should allow sufficient time to complete the necessary work and final post-modification testing of the Control Room Bottled Air System. The specific changes to Paragraph 2.C(3), “Additional License Conditions” of the Facility Licenses NPF-4 and NPF-7 and Item 3 of the issued Amendments 231/212 are:

Facility Operating License NPF-4, Additional Conditions - 2.C(3)d: - Revise last sentence to read:

“These requirements shall be relocated to the appropriate documents no later than ~~September 2, 2002~~ **December 20, 2002.**”

Facility Operating License NPF-7, Additional Conditions - 2.C(3)c: - Revise last sentence to read:

“These requirements shall be relocated to the appropriate documents no later than ~~September 2, 2002~~ **December 20, 2002.**”

### **Safety Significance**

The proposed changes to the Facility Operating License Conditions supercede the

effective implementation date for ITS and the relocation of existing Technical Specifications to licensee-controlled documents from September 2, 2002 to no later than December 20, 2002. The allowance for delay in the implementation of ITS will ensure sufficient time to complete the system modifications and post-modification functional testing of the Control Room Bottled Air System to meet the new ITS operability requirements. This proposed change is purely administrative. Specifically, it does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of a new or different kind of accident from any accident previously evaluated, and does not involve a significant reduction in a margin of safety. Changes are administrative in that they simply extend the date for the implementation of ITS.

### **Significant Hazards Consideration Determination**

The proposed changes will permit delaying the implementation of ITS from no later than September 2, 2002 to no later than December 20, 2002. In accordance with the requirements of 10 CFR 50.92, the enclosed application is judged to involve no significant hazards based upon the following information:

1. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed changes delay implementation of the improved Technical specifications (ITS) to permit completion of system modifications and final functional testing of the Control Room Bottled Air System. The proposed changes are administrative in nature in that they simply delay implementation of ITS for four months. Until the ITS are implemented the current Technical Specifications will remain in effect. Since the changes are administrative, they will not alter the operation or otherwise increase the failure probability of any plant equipment that initiates an analyzed accident. As a result, the probability of any accident previously evaluated is not significantly increased. The changes will not affect the design, function or operation of any system, structure or component nor will it affect any maintenance, modification or testing activities. Thus, there will be no impact on the capability of any structure, system or component to perform its intended safety function. Therefore, it is concluded that operation in accordance with the proposed changes will not involve a significant increase in the probability or consequences of accidents previously analyzed.

2. Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?

Deferral of the ITS implementation date is an administrative change. As such the changes do not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. Thus, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Do the proposed changes involve a significant reduction in a margin of safety?

Deferral of the ITS implementation date is an administrative change. The proposed changes do not affect the plant design or operations. The changes do not eliminate any requirements or impose any new requirements or alter any physical parameters, which could reduce the margin to an identified acceptance limit. Hence, these changes do not involve a significant reduction in the margin of safety.

### **Environmental Assessment**

These changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) as follows:

- (i) The changes involve no significant hazards consideration.
- (ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.
- (iii) The proposed changes do not involve the installation of any new equipment, or the modification of any equipment that may affect the types or amounts of effluents that may be released offsite. Therefore, there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.
- (iv) There is no significant increase in individual or cumulative occupation radiation exposure. The proposed changes do not involve plant physical changes, or introduce any new mode of plant operation.

Based on the above, Dominion concludes that the proposed administrative changes meet the criteria specified in 10 CFR 51.22 for a categorical exclusion from the requirements of 10 CFR 51.22 relative to requiring a specific environmental assessment by the Commission.

### **Conclusion**

The Station Nuclear Safety and Operating Committee (SNSOC) and the Management Safety Review Committee (MSRC) have reviewed these proposed changes to the Facility Operating License Conditions and the issued Amendments with supporting Safety Evaluation. It was concluded that changes do not involve a significant hazards consideration and will not endanger the health and safety of the public.

## References

1. NRC Letter, "North Anna Power Station, Units 1 and 2 – Issuance of Amendments Re: Conversion to Improved Technical Specifications (TAC Nos. MB0799 and MB 0800" dated April 5, 2002)
2. Dominion Letter, "Proposed Technical Specification Changes, Improved Technical Specifications" dated December 11, 2000
3. NUREG-1431, "Standard Technical Specifications, Westinghouse Plants" Revision 1 dated April 1995

**Attachment 2**

**Mark-up of Unit 1 and Unit 2 License Conditions**

**North Anna Power Station  
Units 1 and 2  
Virginia Electric and Power Company  
(Dominion)**

(1) Maximum Power Level

VEPCO is authorized to operate the facility at steady state reactor core power levels not in excess of 2893 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 212, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the condition or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the license supported by a favorable evaluation by the Commission:

- a. If VEPCO plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the North Anna Power Station, the NRC shall be notified in writing regardless of whether the change affects the amount of radioactivity in the effluents.

VEPCO shall report any violations of this requirement within 24 hours by telephone and confirmed by telegram, mailgram, or facsimile transmission to the Director of the Regional Office, or his designate, no later than the first working day following the violation, with a written followup report within 14 days.

- b. The licensee shall implement a procedure that will prohibit entry into an extended Emergency Diesel Generator Outage Time (14 days), for scheduled maintenance purposes, if severe weather conditions are expected, as described in the licensee's application dated June 25, 1998, and evaluated in the staff's Safety Evaluation dated August 26, 1998.

- c. The licensee is authorized to relocate certain Technical Specification requirements previously included in Appendix A to licensee-controlled documents, as described in Table R, Relocated Specifications and Removed Details, attached to the NRC staff's Safety Evaluation enclosed with Amendment No. 212. These requirements shall be relocated to the appropriate documents no later than ~~September 2, 2002~~. DECEMBER 20,

- d. The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment No. 212 shall be as follows:

Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

VEPCO is authorized to operate the North Anna Power Station, Unit No. 1, at reactor core power levels not in excess of 2893 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 231, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the condition or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the license supported by a favorable evaluation by the Commission:

- a. VEPCO may use up to four (4) fuel assemblies containing advanced zirconium based alloys as described in the licensee's submittal dated September 4, 1996, as supplemented February 3, 1997.
- b. If VEPCO plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the North Anna Station, the Commission shall be notified in writing regardless of whether the change affects the amount of radioactivity in the effluents.
- c. VEPCO shall implement a procedure that will prohibit entry into an extended Emergency Diesel Generator Outage Time (14 days), for scheduled maintenance purposes, if severe weather conditions are expected, as described in the licensee's application dated June 25, 1998, and evaluated in the staff's Safety Evaluation dated August 26, 1998.
- d. The licensee is authorized to relocate certain Technical Specification requirements previously included in Appendix A to licensee-controlled documents, as described in Table R, Relocated Specifications and Removed Details, attached to the NRC staff's Safety Evaluation enclosed with Amendment No. 231. These requirements shall be relocated to the appropriate documents no later than ~~September 3, 2002~~. DECEMBER 26, 2002
- e. The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment No. 231 shall be as follows:

**Attachment 3**

**Proposed Unit 1 and Unit 2 License Conditions**

**North Anna Power Station  
Units 1 and 2  
Virginia Electric and Power Company  
(Dominion)**

(1) Maximum Power Level

VEPCO is authorized to operate the facility at steady state reactor core power levels not in excess of 2893 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 212, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the condition or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the license supported by a favorable evaluation by the Commission:

- a. If VEPCO plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the North Anna Power Station, the NRC shall be notified in writing regardless of whether the change affects the amount of radioactivity in the effluents.

VEPCO shall report any violations of this requirement within 24 hours by telephone and confirmed by telegram, mailgram, or facsimile transmission to the Director of the Regional Office, or his designate, no later than the first working day following the violation, with a written followup report within 14 days.

- b. The licensee shall implement a procedure that will prohibit entry into an extended Emergency Diesel Generator Outage Time (14 days), for scheduled maintenance purposes, if severe weather conditions are expected, as described in the licensee's application dated June 25, 1998, and evaluated in the staff's Safety Evaluation dated August 26, 1998.
- d. The licensee is authorized to relocate certain Technical Specification requirements previously included in Appendix A to licensee-controlled documents, as described in Table R, Relocated Specifications and Removed Details, attached to the NRC staff's Safety Evaluation enclosed with Amendment No. 212. These requirements shall be relocated to the appropriate documents no later than December 20, 2002.
- e. The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment No. 212 shall be as follows:

Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

VEPCO is authorized to operate the North Anna Power Station, Unit No. 1, at reactor core power levels not in excess of 2893 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 231, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the condition or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the license supported by a favorable evaluation by the Commission:

- a. VEPCO may use up to four (4) fuel assemblies containing advanced zirconium based alloys as described in the licensee's submittal dated September 4, 1996, as supplemented February 3, 1997.
- b. If VEPCO plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the North Anna Station, the Commission shall be notified in writing regardless of whether the change affects the amount of radioactivity in the effluents.
- c. VEPCO shall implement a procedure that will prohibit entry into an extended Emergency Diesel Generator Outage Time (14 days), for scheduled maintenance purposes, if severe weather conditions are expected, as described in the licensee's application dated June 25, 1998, and evaluated in the staff's Safety Evaluation dated August 26, 1998.
- d. The licensee is authorized to relocate certain Technical Specification requirements previously included in Appendix A to licensee-controlled documents, as described in Table R, Relocated Specifications and Removed Details, attached to the NRC staff's Safety Evaluation enclosed with Amendment No. 231. These requirements shall be relocated to the appropriate documents no later than December 20, 2002. |
- e. The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment No. 231 shall be as follows: