

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

December 16, 1999

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

Serial No. 99-261B
NL&OS/ETS R1
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
SUPPLEMENTAL CHANGE TO PROPOSED TECHNICAL SPECIFICATION
CHANGE - REVISED SURVEILLANCE FREQUENCY AND ACTION TIMES
REACTOR TRIP AND ENGINEERED SAFETY FEATURES ACTUATION SYSTEMS

In a letter dated May 6 and supplemented June 22, 1999 (Serial Nos. 99-261 and 99-261A), Virginia Electric and Power Company requested amendments, in the form of changes to the Technical Specifications for Facility Operating License Numbers NPF-4 and NPF-7, for North Anna Power Station Units 1 and 2, respectively. The proposed changes will revise the surveillance frequency for the Reactor Trip System (RTS) and Engineered Safety Features Actuation System (ESFAS) analog instrumentation channels. In addition, the allowed outage and action times for the RTS and ESFAS analog instrumentation channels and the actuation logic are being modified. In a November 10, 1999 telephone conference call, the NRC staff requested clarification of the test method/condition for the power range neutron flux instrument channels, which required lifting the signal cables. The requested clarification is provided below. We are also requesting an additional change to the surveillance requirements for the power range neutron flux instrument channels.

Clarification of Surveillance Test Method

In order to perform the current Technical Specification required functional testing of the power range neutron flux instrument channels, the signal cables are required to be removed to test the low-power trip function. Prior to the test of each power range channel, the control power fuses are removed which places the channel in the tripped condition. Although the channel is in the tripped condition during the test, we conservatively considered removal of the signal cables as a signal bypass condition in our May 6, 1999 submittal.

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Additional Surveillance Change Request

This additional requested change will eliminate the current quarterly calibration requirement for the neutron flux instruments channels (proposed Table 4.3-1, Functional Unit 2.A). This combined with the previously requested elimination of the requirement to functional test the neutron flux low power setpoint quarterly (proposed Table 4.3-1, Functional Unit 2.B) will eliminate the need to remove the signal cables during quarterly functional testing. This proposed additional change is consistent with the surveillance requirements for power range nuclear instruments in NUREG-1431, Standard Technical Specifications for Westinghouse Plants, Revision 1.

Please replace the attached pages for those previously provided in our May 6, 1999 submittal and incorporate the changes into your review of the proposed Technical Specification. The revised pages 3/4 3-12 for Units 1 and 2 Technical Specifications, are provided as a mark-up in Attachment 1 and as a typed version in Attachment 2. The basis for our determination that the changes do not involve a significant hazards consideration provided in our May 6, 1999 submittal is not affected by the additional Technical Specifications change requested in this submittal.

If you have any further questions, please contact us.

Very truly yours,



David A. Christian
Vice President – Nuclear Operations

Attachments

1. Revised Markup Technical Specifications Pages
2. Revised Proposed Technical Specifications Pages

Commitments made in this letter:

1. None.

cc: U.S. Nuclear Regulatory Commission
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Attachment 1

Mark-up of Technical Specifications Changes

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

TABLE 4.3-1
REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. Manual Reactor Trip	N.A.	N.A.	R(7) Q	1, 2 and *
2. Power Range, Neutron Flux	A. High Setpoint S	D(2) ⁽⁶⁾ , M(3) ⁽⁶⁾ and Q ⁽⁶⁾ or R ⁽⁶⁾	M Q	1, 2
3. Power Range, Neutron Flux, High Positive Rate	B. Low Setpoint S	R(6)	S/U ⁽¹⁾ M Q	1, 2 1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R(6)	M Q	1, 2
5. Intermediate Range, Neutron Flux	a. S M(4) ⁽¹²⁾ Q	R(6, 12) ⁽¹³⁾ N.A.	M, S/U ⁽¹⁾ Q ⁽¹²⁾ N.A.	1***, 2 3*, 4*, 5*
6. Source Range, Neutron Flux	N.A. S ⁽⁷⁾	R(6)	M, S/U ⁽¹⁾ Q ⁽¹²⁾	2, 3, 4, 5
7. Overtemperature ΔT	S	R(6)	M Q	1, 2
8. Overpower ΔT	S	R(6)	M Q	1, 2
9. Pressurizer Pressure - Low	S	R	M Q	1, 2
10. Pressurizer Pressure - High	S	R	M Q	1, 2
11. Pressurizer Water Level - High	S	R	M Q	1, 2
12. Loss of Flow - Single Loop	S	R	M Q	1

Rev. 2

3/4-3-12

Amendment No. 81, 206

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TABLE 4.31
 REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
1. Manual Reactor Trip	N.A.	N.A.	R ⁽⁸⁾	1, 2 and *
2. Power Range, Neutron Flux	A High Setpoint S B. Low Setpoint S	D ⁽²⁾ , M ^(3/6) and Q ⁽⁶⁾ R ⁽⁶⁾	M/Q S/U ⁽¹⁾	1, 2 1***, 2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R ⁽⁶⁾	M/Q	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R ⁽⁶⁾	M/Q	1, 2
5. Intermediate Range, Neutron Flux	a. S b. M ⁽¹²⁾ Q ⁽³⁾	R ^(6, 13) N.A.	M, S/U ⁽¹⁾ Q ⁽¹²⁾ N.A.	1***, 2 3*, 4*, 5*
6. Source Range, Neutron Flux	S ⁽⁷⁾	R ⁽⁶⁾	M, S/U ⁽¹⁾ Q ⁽¹²⁾	2, 3, 4, 5 and *
7. Overtemperature ΔT	S	R ⁽⁶⁾	M/Q	1, 2
8. Overpower ΔT	S	R ⁽⁶⁾	M/Q	1, 2
9. Pressurizer Pressure - Low	S	R	M/Q	1, 2
10. Pressurizer Pressure - High	S	R	M/Q	1, 2
11. Pressurizer Water Level - High	S	R	M/Q	1, 2
12. Loss of Flow - Single Loop	S	R	M/Q	1

Rev. 2.

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Attachment 2

Proposed Technical Specifications Changes

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

TABLE 4.3-1
REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. Manual Reactor Trip	N.A.	N.A.	R ⁽⁸⁾	1, 2 and *
2. Power Range, Neutron Flux				
A. High Setpoint	S	D ⁽²⁾⁽⁶⁾ , M ⁽³⁾⁽⁶⁾ and R ⁽⁶⁾	Q	1, 2
B. Low Setpoint	S	R ⁽⁶⁾	S/U ⁽¹⁾	1***, 2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R ⁽⁶⁾	Q	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R ⁽⁶⁾	Q	1, 2
5. Intermediate Range, Neutron Flux	a. S b. Q ⁽¹²⁾	R ^(6, 13) N.A.	S/U ⁽¹⁾ , Q ⁽¹²⁾ N.A.	1***, 2 3*, 4*, 5*
6. Source Range, Neutron Flux	S ⁽⁷⁾	R ⁽⁶⁾	S/U ⁽¹⁾ , Q ⁽¹²⁾	2, 3, 4, 5
7. Overtemperature ΔT	S	R ⁽⁶⁾	Q	1, 2
8. Overpower ΔT	S	R ⁽⁶⁾	Q	1, 2
9. Pressurizer Pressure – Low	S	R	Q	1, 2
10. Pressurizer Pressure – High	S	R	Q	1, 2
11. Pressurizer Water Level – High	S	R	Q	1, 2
12. Loss of Flow	S	R	Q	1

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. Manual Reactor Trip	N.A.	N.A.	R ⁽⁸⁾	1, 2 and *
2. Power Range, Neutron Flux				
A. High Setpoint	S	D ⁽²⁾⁽⁶⁾ , M ⁽³⁾⁽⁶⁾ and R ⁽⁶⁾	Q	1, 2
B. Low Setpoint	S	R ⁽⁶⁾	S/U ⁽¹⁾	1***, 2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R ⁽⁶⁾	Q	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R ⁽⁶⁾	Q	1, 2
5. Intermediate Range, Neutron Flux	a. S b. Q ⁽¹²⁾	R ^(6, 13) N.A.	S/U ⁽¹⁾ , Q ⁽¹²⁾ N.A.	1***, 2 3*, 4*, 5*
6. Source Range, Neutron Flux	S ⁽⁷⁾	R ⁽⁶⁾	S/U ⁽¹⁾ , Q ⁽¹²⁾	2, 3, 4, 5
7. Overtemperature ΔT	S	R ⁽⁶⁾	Q	1, 2
8. Overpower ΔT	S	R ⁽⁶⁾	Q	1, 2
9. Pressurizer Pressure – Low	S	R	Q	1, 2
10. Pressurizer Pressure – High	S	R	Q	1, 2
11. Pressurizer Water Level – High	S	R	Q	1, 2
12. Loss of Flow	S	R	Q	1