Attachment 1

Proposed Technical Specification Change

North Anna Unit 1

Virginia Electric and Power Company

BORATED WATER SOURCES - OPERATING

LIMITING CONDITION FOR OPERATION

3.1.2.8 Each of the following borated water sources shall be OPERABLE:

a. A boric acid storage system and associated heat tracing with:

1. A contained borated water volume of between 6000 and 16,280 gallons,
2. Between 12,950 and 15,750 ppm of boron, and
3. A minimum solution temperature of 115°F.

b. The refueling water storage tank with:

1. A contained borated water volume of between 466,200 and 487,000 gallons,
2. Between 2300 and 2400 ppm of boron, and
3. A solution temperature between 40°F and 50°F.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With the boric acid storage system inoperable, restore the storage system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and borated to a SHUTDOWN MARGIN equivalent to at least 1.77% $\Delta k/k$ at 200°F;
restore the boric acid storage system to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

a. With the refueling water storage tank inoperable, restore the tank to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.1.2.8 Each borated water source shall be demonstrated OPERABLE:

3/4.1.2 BORATION SYSTEMS (Continued)

The limits on contained water volume and boron concentration of the RWST ensure a pH value of between 7.7 and 9.0 for the solution recirculated within the containment after a LOCA. This pH minimizes the evolution of iodine and minimizes the effect of chloride and caustic stress corrosion on mechanical systems and components.

At least one charging pump must remain operable at all times when the opposite unit is in MODE 1, 2, 3, or 4. This is required to maintain the charging pump cross-connect system operational.

3/4.1.3 MOVABLE CONTROL ASSEMBLIES

The specifications of this section (1) ensure that acceptable power distribution limits are maintained, (2) ensure that the minimum SHUTDOWN MARGIN is maintained, and (3) limit the potential effects of rod misalignment on associated accident analyses. OPERABILITY of the movable control assemblies is established by observing rod motion and determining that rods are positioned within ± 12 steps (indicated position) of the respective demand step counter position. The OPERABILITY of the individual rod position indication system is established by appropriate periodic CHANNEL CHECKS, CHANNEL FUNCTIONAL TESTS, and CHANNEL CALIBRATIONS. OPERABILITY of the individual rod position indicators is required to determine control rod position and thereby ensure compliance with the control rod alignment and insertion limits. The OPERABLE condition for the individual rod position indicators is defined as being capable of indicating rod position within ± 12 steps of the associated demand position indicator. For power levels below 50 percent of RATED THERMAL POWER, the specifications of this section permit a maximum one hour in every 24 stabilization period (thermal "soak time") to allow stabilization of known thermal drift in the individual rod position indicator channels during which time the indicated rod position may vary from demand position indication by no more than ± 24 steps. This "1 in 24" feature is an upper limit on the frequency of thermal soak allowances and is available both for a continuous one hour period or one consisting of several discrete intervals. During this stabilization period, greater reliance is placed upon the demand position indicators to determine rod position. In addition, the ± 24 step/hour limit is not applicable when the control rod position is known to be greater than 12 steps from the rod group step counter demand position indication. Above 50 percent of RATED THERMAL POWER, rod motion is not expected to induce thermal transients of sufficient magnitude to exceed the individual rod position indicator instrument accuracy of ± 12 steps. Comparison of the demand position indicators to the bank insertion limits with verification of rod position by the individual rod position indicators (after thermal soak following rod motion below 50 percent of RATED THERMAL POWER) is sufficient verification that the control rods are above the insertion limits.

4.8.1.1.2 (continued)

7. Verifying the diesel generator operates** for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to an indicated target value of 2950 kw (between 2900-3000 kw)*** and during the remaining 22 hours of this test, the diesel generator shall be loaded to an indicated 2500 to 2600 kw.*** Within 5 minutes after completing this 24-hour test, perform Surveillance Requirement 4.8.1.1.2.d.4.

8. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000 hour rating of 3000 kw.

9. Verifying the diesel generator's capability to:

   a)Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power.

   b)Transfer its loads to the offsite power source, and

   c)Proceed through its shutdown sequence.

10. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:

    a)Remote Local Selection Switch
    a)Emergency Stop Switch

e. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting ** both diesel generators simultaneously, during shutdown, and verifying that both diesel generators accelerate to at least 900 rpm in less than or equal to 10 seconds.

**This test shall be conducted in accordance with the manufacturer's recommendations regarding engine prelube and warmup procedures, and as applicable regarding loading recommendations.

***This band is meant as guidance to avoid routine overloading of the engine. Loads in excess of this band for special testing under direct monitoring of the manufacturer or momentary variations due to changing bus loads shall not invalidate the test.

FUEL BUILDING VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.12 A fuel building ventilation system shall be OPERABLE and discharging through at least one auxiliary building HEPA filter and charcoal absorber assembly.

APPLICABILITY:

a. During irradiated fuel movement within the spent fuel pit, or

b. During crane operation with loads over irradiated fuel in the spent fuel pit.

ACTION:

a. With a fuel building ventilation system inoperable, irradiated fuel movement within the storage pool or crane operation with loads over the spent fuel pit may proceed provided the fuel building ventilation system is in operation and discharging through at least one train of HEPA filters and charcoal absorber assemblies.

b. With no fuel building ventilation system OPERABLE, suspend all operations involving movement of irradiated fuel within the spent fuel pit or crane operation with loads over the spent fuel pit until at least one fuel building ventilation system is restored to OPERABLE status.

c. The provisions of Specifications 3.0.3, 3.0.4 and 4.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.12 The above required fuel building ventilation system shall be demonstrated OPERABLE and discharging through at least one auxiliary building HEPA filter and charcoal absorber assembly:

a. At least once per 31 days by initiating flow through the HEPA filter and charcoal absorber assembly for 15 minutes

b. At least once per 18 months during system operation, by verifying a 1/8 inch vacuum, water gauge, relative to the outside atmosphere, and

c. By performance of the Surveillance Requirements of Specification 4.7.8.1 b, c, d, e and f.

Attachment 2

Proposed Technical Specification Change

North Anna Unit 2

Virginia Electric and Power Company

LIMITING CONDITION FOR OPERATION

3.1.2.2 At least two of the following three boron injection flow paths shall be OPERABLE:

a. The flow path from the boric acid tanks via a boric acid transfer pump and a charging pump to the Reactor Coolant System.

b. Two flow paths from the refueling water storage tank vial charging pumps to the Reactor Coolant System.

APPLICABILITY: MODES 1, 2, 3, and 4#.

ACTION:

With only one of the above required boron injection flow paths to the Reactor Coolant System OPERABLE, restore at least two boron injection flow paths to the Reactor Coolant System to OPERABLE status within 72 hours or be in at least HOT STANDBY and borated to a SHUTDOWN MARGIN equivalent to at least 1.77% delta k/k at 200°F within the next 6 hours; restore at least two flow paths to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

SURVEILLANCE REQUIREMENTS

4.1.2.2 Each of the above required flow paths shall be demonstrated OPERABLE:

a. At least once per 7 days by verifying that the temperature of the heat traced portion of the flow path from the boric acid tanks is greater than or equal to 115°F when it is a required water source.

#Only one boron injection flow path is required to be OPERABLE whenever the temperature of one or more of the RCS cold legs is less than or equal to 340°F.

LIMITING CONDITION FOR OPERATION

3.1.2.8 Each of the following borated water sources shall be OPERABLE:

a. A boric acid storage system and associated heat tracing with:

1. A contained borated water volume of between 6000 and 16,280 gallons,
2. Between 12,950 and 15,750 ppm of boron, and
3. A minimum solution temperature of 115°F.

b. The refueling water storage tank with:

1. A contained borated water volume of between 466,200 and 487,000 gallons,
2. Between 2300 and 2400 ppm of boron, and
3. A solution temperature between 40°F and 50°F.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With the boric acid storage system inoperable, restore the storage system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and borated to a SHUTDOWN MARGIN equivalent to at least 1.77% Δk/k at 200°F;
restore the boric acid storage system to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

a. With the refueling water storage tank inoperable, restore the tank to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.1.2.8 Each borated water source shall be demonstrated OPERABLE:

3/4.1.2 BORATION SYSTEMS (Continued)

The limits on contained water volume and boron concentration of the RWST ensure a pH value of between 7.7 and 9.0 for the solution recirculated within the containment after a LOCA. This pH minimizes the evolution of iodine and minimizes the effect of chloride and caustic stress corrosion on mechanical systems and components.

At least one charging pump must remain operable at all times when the opposite unit is in MODE 1, 2, 3, or 4. This is required to maintain the charging pump cross-connect system operational.

3/4.1.3 MOVABLE CONTROL ASSEMBLIES

The specifications of this section (1) ensure that acceptable power distribution limits are maintained, (2) ensure that the minimum SHUTDOWN MARGIN is maintained, and (3) limit the potential effects of rod misalignment on associated accident analyses. OPERABILITY of the movable control assemblies is established by observing rod motion and determining that rods are positioned within ± 12 steps (indicated position) of the respective demand step counter position. The OPERABILITY of the individual rod position indication system is established by appropriate periodic CHANNEL CHECKS, CHANNEL FUNCTIONAL TESTS, and CHANNEL CALIBRATIONS. OPERABILITY of the individual rod position indicators is required to determine control rod position and thereby ensure compliance with the control rod alignment and insertion limits. The OPERABLE condition for the individual rod position indicators is defined as being capable of indicating rod position within ± 12 steps of the associated demand position indicator. For power levels below 50 percent of RATED THERMAL POWER, the specifications of this section permit a maximum one hour in every 24 stabilization period (thermal "soak time") to allow stabilization of known thermal drift in the individual rod position indicator channels during which time the indicated rod position may vary from demand position indication by no more than ± 24 steps. This "1 in 24" feature is an upper limit on the frequency of thermal soak allowances and is available both for a continuous one hour period or one consisting of several discrete intervals. During this stabilization period, greater reliance is placed upon the demand position indicator to determine rod position. In addition, the ± 24 step/hour limit is not applicable when the control rod position is known to be greater than 12 steps from the rod group step counter demand position indication. Above 50 percent of RATED THERMAL POWER, rod motion is not expected to induce thermal transients of sufficient magnitude to exceed the individual rod position indicator instrument accuracy of ± 12 steps. Comparison of the demand position indicators to the bank insertion limits with verification of rod position by the individual rod position indicators (after thermal soak following rod motion below 50 percent of RATED THERMAL POWER) is sufficient verification that the control rods are above the insertion limits.

LIMITING CONDITION FOR OPERATION

3.4.1.5 A reactor coolant loop cold leg stop valve shall remain closed until:

a. The isolated loop has been operating on a recirculation flow greater than or equal to 125 gpm for at least 30 minutes and the temperature at the cold leg of the isolated loop is within 20°F of the highest cold leg temperature of the operating loops.

b. The reactor is subcritical by at least 1.77 percent Δk/k.

APPLICABILITY: ALL MODES.

ACTION:

With the requirements of the above specification not satisfied, suspend startup of the isolated loop.

SURVEILLANCE REQUIREMENTS

4.4.1.5.1 The isolated loop cold leg temperature shall be determined to be within 20°F of the highest cold leg temperature of the operating loops within 30 minutes prior to opening the cold leg stop valve.

4.4.1.5.2 The reactor shall be determined to be subcritical by at least 1.77 percent Δk/k within 30 minutes prior to opening the cold leg stop valve.

Attachment 3

Discussion of Proposed Changes

North Anna Units 1 and 2

Virginia Electric and Power Company

DISCUSSION OF PROPOSED CHANGES

This request has been submitted to correct certain administrative errors in the North Anna Technical Specifications. The corrections proposed are corrections to numerical values which were inadvertently overlooked during prior amendments. Because the values are non-conservative with respect to the correct values, or a source of potential confusion, it was considered appropriate to revise the items at this time. Other administrative errors which have resulted in more conservative values than required, or which are purely grammatical/editorial corrections, will be addressed during implementation of the MERITS specifications.

3.1.2.2 (Unit 2 Only)
Flow Paths: Limiting Condition for Operation

The required shutdown margin was inadvertently changed from 1.77% to 1% delta k/k in the Unit 2 specification. This was a typographical error included in Amendment 54 to the Unit 2 license. TS 3.1.2.2 is revised to show the correct value of 1.77%. The shutdown margin is stated correctly in the Unit 1 technical specifications.

TS 3.1.2.8 (Both Units)
Borated Water Sources: Limiting Condition for Operation

The refueling water storage tank (RWST) is required to contain a borated water volume of between 475,058 and 487,000 gallons. The RWST minimum volume is changed from 475,058 gallons to 466,200 gallons. This change was previously evaluated in our submittal dated March 2, 1988 (Serial No. 87-385), and approved by NRC letter dated December 14, 1988. The change to the correct value of 466,200 gallons in TS 3.1.2.8 should have occurred at that time.

3/4.1.2 (Both Units)
Reactivity Control Systems: Bases

The Bases for the boration system states that the limits on contained water volume and boron concentration of the RWST ensure a pH value of between 8.5 and 11.0 for the solution recirculated within the containment after a LOCA. The pH value was changed from between "8.5 and 11.0" to "7.7 and 9.0" in our submittal dated December 19, 1985 (Serial No. 85-718), and approved by NRC letter dated August 22, 1986. The change to the correct value of between 7.7 and 9.0 should have occurred at that time. The word "also" is deleted in the sentence for clarity.

3.4.1.5 (Unit 2 Only)
Isolated Loop Startup: Limiting Condition for Operation

The Limiting Condition for Operation on page 3/4 4-5 was originally numbered as 3.4.1.3, and the corresponding surveillance requirements as 4.4.1.3.1 and 4.4.1.3.2. Those numbers are incorrect and cause confusion with the similarly numbered LCO and SR on page 3/4 4-3 and 3/4 4-4. The correct numbers for page 3/4 4-5 are 3.4.1.5, 4.4.1.5.1 and 4.4.1.5.2, respectively.

4.8.1.1.2 (Unit 1 Only)
Electrical Power Systems: Surveillance Requirements

Unit 1 Technical Specification 4.8.1.1.2, Item 7 on page 3/4 8-3c contains an error. The current surveillance requirement states that "...the diesel generator shall be loaded to an indicated target value of 2950 kw (between 290--3000 kw)..." The value of 290 is incorrect and should be changed to 2900. The correct diesel generator target value is between 2900 and 3000 kw.

4.9.12 (Unit 1 Only)
Fuel Building Ventilation System: Surveillance Requirements

Unit 1 Surveillance Requirement 4.9.12 on page 3/4 9 -12 requires flow through the HEPA filter and charcoal absorber assembly for 5 minutes. That is incorrect. The correct value is 15 minutes. The Unit 2 surveillance requirement is stated correctly. In spite of the error, compliance with the correct specification has been maintained. The procedure for implementing the surveillance requirement is 1-PT-95.1, "Fuel Building Ventilation System 15 Minute Run," which contains the correct time interval.

Attachment 4

No Significant Hazards Consideration Determination

North Anna Units 1 and 2

Virginia Electric and Power Company

10 CFR 50.92 Significant Hazards Considerations Determination

The proposed technical specification change has been submitted to correct certain administrative errors in the North Anna Technical Specifications. The corrections proposed are corrections to numerical values which were inadvertently overlooked during prior amendments. Because the values are non-conservative with respect to the correct values, or a source of potential confusion, it was considered appropriate to revise the items at this time. Other administrative errors which have resulted in more conservative values than required, or which are purely grammatical/editorial corrections, will be addressed separately. The proposed changes include:

- Correcting the value for shutdown margin in a Unit 2 specification dealing with operable boron injection flow paths
- Correcting the value for the minimum borated water volume in the Refueling Water Storage Tank in Unit 1 and 2 specification dealing with operable borated water sources
- Correcting the Bases that describe the pH limits on contained water volume and boron concentration in the RWST
- Correcting the numbering for a Limiting Condition for Operations and Surveillance Requirement in the Unit 2 specifications on isolated loop startup to eliminate confusion with a similarly number specification elsewhere in the Technical Specifications
- Correcting the target value for loading the emergency diesel generators in the Unit 1 specifications on electrical power systems, and
- Correcting the time interval for demonstrating the operability of the Unit 1 HEPA filter and charcoal absorber assembly.

It has been determined that the proposed changes do not involve a significant hazards consideration as defined in 10 CFR 50.92. This determination was based on the following points.

1. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed changes have no adverse impact upon potential accident probability or consequence. No new or unique accident precursors are introduced by these changes to the technical specification requirements. In fact, the administrative corrections to the technical specifications may act to decrease any potential accident probability or consequence that might have occurred as a result of inaccurate information that is currently in the Technical Specifications.

Likewise, the consequences of the accidents will not increase as a result of administrative correction of the Technical Specifications.

2. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed changes to the Technical Specifications have been previously evaluated and approved,. Therefore, the changes herein are only administrative changes. Operation with these changes does not create a probability for any accident which has not already been evaluated in the Updated Final Safety Analysis Report (UFSAR). The risk of these changes creating the probability for any new accident has been previously considered by the NRC.

3. The proposed changes do not involve a significant reduction in a margin of safety. The results of the UFSAR accident analyses continue to bound operation under the proposed changes. The proposed changes to the Technical Specifications have been previously evaluated and approved by NRC, therefore the changes herein involve no reduction in a margin of safety and are only administrative changes.

Based on the above, we conclude that the proposed changes do not result in a significant hazards consideration as defined in 10CFR50.92.