

August 31, 2001

Mr. David A. Christian
Sr. Vice President and Chief Nuclear Officer
Virginia Electric and Power Company
5000 Dominion Blvd.
Glen Allen, Virginia 23060-6711

SUBJECT: SURRY UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: CHANGES TO
SURVEILLANCE TEST INTERVALS AND ALLOWED OUTAGE TIMES FOR
INSTRUMENTATION SYSTEMS (TAC NOS. MA9355 AND MA9356)

Dear Mr. Christian:

The Commission has issued the enclosed Amendment No. 228 to Facility Operating License No. DPR-32 and Amendment No. 228 to Facility Operating License No. DPR-37 for the Surry Power Station, Unit Nos. 1 and 2, respectively. The amendments change the Technical Specifications (TS) in response to your application transmitted by letter dated June 16, 2000, as supplemented by letters dated September 27, 2000, and June 6, 2001.

These amendments revise TS Section 3.7, TS Tables 3.7-1, 3.7-2, 3.7-3, and 4.1-1, and associated TS Bases pages. The amendments: (a) reduce the surveillance frequency from monthly to quarterly for Reactor Protection System and Engineered Safety Features Actuation System analog channels; (b) decrease the frequency for most permissives to a refueling interval; (c) increase the allowed outage time to perform maintenance on an inoperable instrument channel; and (d) revise associated action statements consistent with NUREG-1431.

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,

/RA/

Gordon E. Edison, Sr. Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-280 and 50-281

Enclosures:

1. Amendment No. 228 to DPR-32
2. Amendment No. 228 to DPR-37
3. Safety Evaluation

cc w/encls: See next page

Mr. David A. Christian August 31, 2001
Sr. Vice President and Chief Nuclear Officer
Virginia Electric and Power Company
5000 Dominion Blvd.
Glen Allen, Virginia 23060-6711

SUBJECT: SURRY UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: CHANGES TO SURVEILLANCE TEST INTERVALS AND ALLOWED OUTAGE TIMES FOR INSTRUMENTATION SYSTEMS (TAC NOS. MA9355 AND MA9356)

Dear Mr. Christian:

The Commission has issued the enclosed Amendment No. 228 to Facility Operating License No. DPR-32 and Amendment No. 228 to Facility Operating License No. DPR-37 for the Surry Power Station, Unit Nos. 1 and 2, respectively. The amendments change the Technical Specifications (TS) in response to your application transmitted by letter dated June 16, 2000, as supplemented by letters dated September 27, 2000, and June 6, 2001.

These amendments revise TS Section 3.7, TS Tables 3.7-1, 3.7-2, 3.7-3, and 4.1-1, and associated TS Bases pages. The amendments: (a) reduce the surveillance frequency from monthly to quarterly for Reactor Protection System and Engineered Safety Features Actuation System analog channels; (b) decrease the frequency for most permissives to a refueling interval; (c) increase the allowed outage time to perform maintenance on an inoperable instrument channel; and (d) revise associated action statements consistent with NUREG-1431.

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,

/RA/

Gordon E. Edison, Sr. Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-280 and 50-281

Enclosures:

1. Amendment No. 228 to DPR-32
2. Amendment No. 228 to DPR-37
3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

PUBLIC	G. Edison	W. Beckner
PDII Rdg.	E. Dunnington	ACRS
H. Berkow	OGC	R. Haag, RII
R. Emch	G. Hill (4)	

Document Name: C:\Program Files\Adobe\Acrobat 4.0\PDF Output\SRAMDMA9355.WPD
Accession No. ML12480506

OFFICE	PM:PDII/S1	LA:PDII/S2	OGC	SC:PDII/S1
NAME	GEdison	EDunnington	RHoefling	LOlshan for REmch
DATE	8/8/01	8/8/01	8/14/01	8/17/01

OFFICIAL RECORD COPY

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-280

SURRY POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 228

License No. DPR-32

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Virginia Electric and Power Company (the licensee) dated June 16, 2000, as supplemented September 27, 2000, and June 6, 2001, 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 3.B of Facility Operating License No. DPR-32 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 228 , 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 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA by Leonard Olshan for /

Richard L. Emch, Jr., Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 31, 2001

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-281

SURRY POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 228
License No. DPR-37

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Virginia Electric and Power Company (the licensee) dated June 16, 2000, as supplemented September 27, 2000, and June 6, 2001, 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 3.B of Facility Operating License No. DPR-37 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 228 , 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 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA by Leonard Olshan for /

Richard L. Emch, Jr., Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 31, 2001

ATTACHMENT TO

LICENSE AMENDMENT NO. 228 TO FACILITY OPERATING LICENSE NO. DPR-32

LICENSE AMENDMENT NO. 228 TO FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NOS. 50-280 AND 50-281

Remove Pages

TS 3.7-1
TS 3.7-2
TS 3.7-9
TS 3.7-10
TS 3.7-11
TS 3.7-12
TS 3.7-13
TS 3.7-14
TS 3.7-15
TS 3.7-16
TS 3.7-17
TS 3.7-19
TS 3.7-20
TS 3.7-21
TS 3.7-22
TS 3.7-23
TS 3.7-24
TS 4.1-2
TS 4.1-3
TS 4.1-4
TS 4.1-6
TS 4.1-7
TS 4.1-8
TS 4.1-8a
TS 4.1-8b
TS 4.1-8c

Insert Pages

TS 3.7-1
TS 3.7-2
TS 3.7-9
TS 3.7-10
TS 3.7-11
TS 3.7-12
TS 3.7-13
TS 3.7-14
TS 3.7-15
TS 3.7-16
TS 3.7-17
TS 3.7-19
TS 3.7-20
TS 3.7-21
TS 3.7-22
TS 3.7-23
TS 3.7-24
TS 4.1-2
TS 4.1-3
TS 4.1-4
TS 4.1-6
TS 4.1-7
TS 4.1-8
TS 4.1-8a
TS 4.1-8b
TS 4.1-8c

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 228 TO FACILITY OPERATING LICENSE NO. DPR-32
AND AMENDMENT NO. 228 TO FACILITY OPERATING LICENSE NO. DPR-37
VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-280 AND 50-281

1.0 INTRODUCTION

By letter dated June 16, 2000, the Virginia Electric and Power Company (the licensee) submitted a request to amend Facility Operating Licenses DPR-32 and DPR-37 for Surry Power Station, Units 1 and 2. The request proposed changes to the technical specifications (TS) for the Reactor Protection System (RPS) and the Engineered Safety Features Actuation System (ESFAS) instrumentation systems. The proposed changes would revise the surveillance test intervals, allowed outage times (AOTs), bypass times, and limiting conditions for operations (LCO) for these systems. Following conference calls on August 2 and December 7, 2000, the licensee provided additional information and revised the original request by letters dated September 27, 2000, and June 6, 2001. These supplements contained clarifying information only, and did not change the initial no significant hazards consideration determination or expand the scope of the initial application.

2.0 EVALUATION

The licensee has referenced the following previously issued topical reports by the Westinghouse Owners Group (WOG) to justify the proposed changes to the TS:

- a. WCAP-10271, dated January 1983, and WCAP-10271, Supplement 1, dated July 1983, "Evaluation of Surveillance Frequencies and Out of Service Times for the Reactor Protection Instrumentation System." By letter dated February 21, 1985, the NRC issued a Safety Evaluation (SE) approving these reports.
- b. WCAP-10271, Supplement 2, dated February 1986, and WCAP-10271, Supplement 2, Revision 1, dated March 1987, "Evaluation of Surveillance Frequencies and Out of Service Times for the Engineered Safety Features Actuation System." By letter dated February 22, 1989, the NRC issued an SE approving these reports. By letter dated April 30, 1990, the NRC issued a supplemental SE for WCAP-10271, Supplement 2, Revision 1.

Enclosure

WCAP-10271, Supplements 1 and 2, proposed the following TS changes:

- The analog channel functional test frequency may be reduced from monthly to quarterly.
- Surveillance testing of most permissives may be extended from monthly to refueling intervals.
- The time allowed for a channel to be inoperable or out of service in an untripped condition may be increased from 1 to 6 hours.
- The time a channel in a functional group can be bypassed for surveillance testing may be increased from 2 to 4 hours.

The proposed TS changes would reduce inadvertent reactor trips and engineered safety feature actuations, which can cause unnecessary transients and challenges to safety systems. In addition, extension of RPS and ESFAS instrument test intervals would save the plant operating staff the significant time and effort required to perform, review, document, and track the various surveillance activities. The reports indicated that the overall increase in the core damage frequency (CDF) attributable to the proposed changes would be less than 6 percent.

The NRC conducted an independent evaluation of increases in CDF and the large early release frequency (LERF) due to extension of surveillance intervals and AOTs. The NRC's evaluation indicated that the increase in CDF would be about 3.2 percent and the LERF would increase only 4 percent. The NRC also issued the following reports:

- a. NUREG-1366, "Improvement to Technical Specifications Surveillance Requirements," dated December 1992.
- b. Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," dated September 27, 1993.

The SEs approving the WCAP-10271, Supplements 1 and 2, contain certain requirements, and the licensee addressed them as follows:

- Requirement: Staggered test plan for RPS channels with quarterly functional test frequency. Reference: SE on WCAP-10271, Supplement 1.

Response: The NRC's SE on WCAP-10271, Supplement 2, eliminated staggered test for ESFAS and RPS.

- Requirement: The plant procedures should address a common cause evaluation for failures in the RPS analog channels with quarterly channel functional test frequency.

Response: The licensee committed to review the existing plant programs and procedures to evaluate plausible common cause failures prior to implementing the proposed TS changes.

- Requirement: Testing of the RPS analog channels in the bypassed condition by installing temporary jumpers or lifting leads is not acceptable.

Response: In the submittal dated June 16, 2000, the licensee stated that Surry does not have the hardware capability for full bypass testing of each RPS and ESFAS instrument channel, and only those channels that have hardware installed to permit testing in the bypass condition without lifting leads or installing jumpers will be routinely tested in the bypass condition. However, the inoperable channel may be bypassed to perform surveillance testing on another channel of the same functional unit, as permitted by the TS.

- Requirement: Review the “as found” and “as left” data over a 12-month period to provide sufficient information to address the adequacy of the existing setpoints and allowable values.

Response: The licensee evaluated the ‘as found’ and ‘as left’ plant data. In every case the drift with a 95 percent confidence level was well below the assumed value of 1 percent per month. Drifts of the control parameters were within the acceptable limits of the plant control systems.

- Requirement: Confirm the applicability of the generic analysis to the plant-specific applications.

Response: The licensee confirmed that the RPS and ESFAS trip functions and the associated logic schemes evaluated in WCAP-10271, Supplements 1 and 2, are representative of the three-loop protective functions and logic schemes at Surry.

In May 1995, the WOG issued Topical Report WCAP-14333 (P), “Probabilistic Risk Analysis of the RPS and ESFAS Test Times and Completion Times,” which proposed additional time for surveillance testing and allowed outage time for the RPS and ESFAS. The NRC approved this report by letter dated July 15, 1998. The report indicates the overall increase in CDF attributable to the proposed changes is only 3.1 percent.

WCAP-14333 proposed the following generic TS changes:

- For analog channels, the AOT may be increased from 6 hours to 72 hours and the test bypass time from 4 to 12 hours.
- For logic cabinets and master and slave relays the AOTs may be increased from 6 to 24 hours.

In the SEs approving WCAP-14333, the NRC stipulated specific requirements with which the utilities should comply and the licensee addressed them as follows:

- Requirement: Confirm the plant-specific applicability of WCAP-14333.

Response: The licensee provided sufficient information in its submittal to confirm the plant-specific applicability of the topical reports. However, the staff found that several of the AOTs in the proposed TS were outside the scope of the generic studies. The licensee subsequently performed a plant-specific risk assessment to establish a basis for the extended allowed outage and channel bypass times. The risk assessment evaluated the change in CDF and the incremental change in core damage probability as a result of the changes for the additional functions. The licensee concluded that the proposed changes in RPS/ESFAS would result in a negligible increase in risk. Based on the risk insights gained from the generic analyses and the information provided by the licensee, the staff finds the licensee's conclusion credible and reasonable and meets the intent of RG 1.177 and RG 1.174. The design features and operational practices listed in the submittal are generally consistent with the generic plant modeled in the topical reports. The staff finds that the topical reports are applicable for Surry.

- Requirement: Perform Tier 2 and 3 analyses, including configuration risk management program (CRMP) insights, which confirm that these insights are incorporated into their decisionmaking process before taking equipment out of service.

Response: In its submittal, the licensee stated that its implementation of the Maintenance Rule program consistent with 10 CFR 50.65(a)(4) eliminated the need to incorporate the Tier 3 CRMP prescribed in Regulatory Guide (RG) 1.177. For Tier 2, the licensee examined the impact of outages of analog instruments and logic trains to identify the need for potential limitations of concurrent equipment outages. When compared to the base case with all risk significant equipment available, there was no significant increase in component importance due to the unavailability of any of the channels or trains identified above. Therefore, the licensee did not identify a need for special restrictions beyond the existing ones (e.g., TS) to avoid risk significant configurations. The staff finds that the licensee met the intent of the Tier 2 and 3 guidance of RG 1.177 and has satisfied this SE requirement.

In summary, Surry adequately addressed the probabilistic risk assessment-related conditions described in the staff's SE on the topical reports referenced in the licensee's submittal. For the additional functions for which the licensee proposed to extend the AOTs, the staff finds their risk impact would not change the conclusions made in the generic analyses. Therefore, based on the previous staff evaluations of the referenced topical reports and the information provided in the plant-specific application, the licensee's submittal has met the intent of the guidance set forth in RG 1.177 and 1.174. In conclusion, the risk findings and insights support the proposed plant-specific changes.

The specific TS changes and the staff's evaluation of the licensee's justifications are discussed below.

- a. Proposed Change: The licensee has proposed deleting TS Section 3.7A and renumbering the remaining sections.

Evaluation: The licensee has included the requirements of TS Section 3.7A in the appropriate action statement. The staff considers this an administrative change; therefore, it is acceptable.

- b. Proposed Change: Revise Actions 2, 6, 7, and 9 of TS Table 3.7-1, and Actions 17, 20, 25, and 26 of TS Tables 3.7-2 and 3.7-3 to increase the time that an inoperable analog instrument channel may be maintained in an untripped condition from 6 hours to 72 hours.

Evaluation: The licensee has justified these changes based on the staff-approved WCAPs identified above. However, the staff was concerned that the licensee-proposed changes to the TS go beyond the scope of the generic analyses in the approved WCAPs. Therefore, the licensee has performed a plant-specific risk assessment based on the methodology similar to that of the previously approved WCAPs. The staff has reviewed the licensee's submittal of June 6, 2001, which discusses the methodology and results of the analyses, and finds it acceptable. On this basis, the staff finds the licensee's proposed TS changes acceptable.

- c. Proposed Change: Revise Action 11 of the TS Table 3.7-1 and Actions 14 and 22 of TS Tables 3.7-2 and 3.7-3 to increase the time that the logic cabinets and master and slave relays may be inoperable to 24 hours and be in hot shutdown in the next 6 hours.

Evaluation: This change is consistent with the staff-approved WCAPs and the plant-specific analysis identified above; therefore, it is acceptable to the staff.

- d. Proposed Change: Revise Actions 2, 6, and 7 of TS Table 3.7-1 and Actions 17, 20, 25, and 26 of TS Tables 3.7-2 and 3.7-3 to increase the time that an inoperable channel may be bypassed from 4 to 12 hours to allow testing.

Evaluation: This change is consistent with the staff-approved WCAPs and the plant-specific analysis identified above; therefore, it is acceptable to the staff.

- e. Proposed Change: Revise Action 7 of TS Table 3.7-1 for Functional Units 7, 9, 10, 11a and b, 13, and 14 (at-power trips) to require only a power reduction to less than the P-7 setpoint (10%), rather than hot shutdown and subsequent cooldown to cold shutdown.

Evaluation: The updated final safety evaluation report (UFSAR) allows certain reactor trip channels to be bypassed when they are not required for safety, and these functions are not credited in the Chapter 14 accident analysis at a power level below the P-7 setpoint. This change is also consistent with the Standard TS (STS), NUREG-1431, Rev. 1, for these functional units. Therefore, the staff finds the proposed change acceptable.

- f. Proposed Change: Revise Actions 6 and 7 of TS Table 3.7-1 from "equal to Minimum Channels Operable" to "less than the Total Number of Channels" for entry into the action statement.

Evaluation: This change is proposed to eliminate unnecessary entry into TS 3.0.1 and unnecessary cooldown if a second channel becomes inoperable below the P-7 power

level (10%). This change is consistent with the change discussed earlier; therefore, it is acceptable to the staff.

- g. Proposed Change: Delete Action 12 from TS Table 3.7-1.

Evaluation: The revised Action 7 establishes the same requirements for the “at-power trips” and therefore Action 12 is no longer needed. The staff considers this change an administrative change; therefore, it is acceptable.

- h. Proposed Change: Change the required action for Functional Units 12 and 17 from Action 7 to Action 6 of TS Table 3.7-1.

Evaluation: The defined functions of Functional Units 12 and 17 are not “at-power trips,” and since Action 7 was revised to require power reduction to P-7 power levels, it was necessary to change the required action for these functions to Action 6. The staff considers this change an administrative change; therefore, it is acceptable.

- i. Proposed Change: Revise Action 9 for Functional Unit 16 of TS Table 3.7-1 to require reducing power to less than 10% power when the conditions of the action are not met. Similarly for Functional Unit 10 of TS Table 3.7-1, the operator actions for both permissible bypass conditions (P-7 and P-8) are changed to require the plants be reduced to less than 10% power. Action 10 has also been deleted since the revised Action 9 includes the appropriate action for the associated functional unit.

Evaluation: The basis for this change is consistent with the discussion for Action 7 and “at-power trips” discussed above. The licensee has proposed to reduce power below P-7 for a P-8 permissible bypass condition to ensure consistency with the out-of-service and shutdown action times assumed in the WCAP-10271 and WCAP-14333P risk analysis by eliminating the potential for a scenario that would allow sequential entry into the operator actions. This scenario permits an extension of the AOT to a 72-hour period that was not assumed in the risk analysis. The licensee has revised the TS Bases to discuss the actions associated with Functional Units 10 and 16. The staff considers the deletion of Action 10 as administrative since it does not change the requirements of the TS. Based on this, the staff finds the proposed change acceptable.

- j. Proposed Change: Revise Action 1 of TS Table 3.7-1 to require that the unit be shut down and the trip breaker opened rather than shut down and/or open the reactor trip breakers.

Evaluation: The proposed change is conservative and is consistent with the NUREG-1431; therefore, it is acceptable to the staff.

- k. Proposed Change: Revise Action 2.A of TS Table 3.7-1 to include REACTOR CRITICAL as a mode in which plant operation may continue if the conditions are met. Action 2.A was also revised to include AOT and test interval extensions. Also, Action 2.A and 2.B are combined into Action 2.

Evaluation: Action 2 is applicable to nuclear flux power range instrumentation only. This instrumentation is not required below the P-10 power level and no credit is taken for it in the accident analysis. Furthermore, AOT and test interval extension is consistent with the staff-approved WCAPs. Therefore, the proposed change is acceptable to the staff.

- I. Proposed Change: Revise Action 3.b of TS Table 3.7-1 to require increasing power above 10% or reducing power below P-6 within 24 hours with an inoperable intermediate range instrumentation channel.

Evaluation: This revision establishes an allowed action time in accordance with the staff-approved WCAPs and provides an alternative method of placing the plant in a condition where the protection is not needed since no credit is taken in the accident analysis. This change is also consistent with NUREG-1431. Therefore, the staff finds the proposed change acceptable.

- m. Proposed Change: Revise Action 4.a of TS Table 3.7-1 to require suspending reactivity changes that are more positive than necessary to meet the required shutdown margin or refueling boron concentration limits with an inoperable source range below P-6. The action has also been revised to include an action for two inoperable source range channels below P-6.

Evaluation: The proposed change is more restrictive than the current TS and is also consistent with NUREG-1431; therefore, it is acceptable to the staff.

- n. Proposed Change: Revise Action 8.A of TS Table 3.7-1 to permit a trip breaker to be bypassed for up to 4 hours for concurrent surveillance testing of the trip breaker and actuation logic provided the other trip breaker is operable.

Evaluation: This change is consistent with the staff-approved WCAP and is therefore acceptable.

- o. Proposed Change: Change the action for Functional Units 3d and 3e of TS Table 3.7-2 from Action 21 to Action 24, which only requires a unit shutdown and cooldown to less than 350°F and 450 psig.

Evaluation: The TS requires the operability of the auxiliary feedwater (AFW) system before the plant exceeds 350°F and 450 psig to ensure heat removal capability during loss-of-power or accident conditions. The UFSAR Chapter 14 accident analyses assume operability of the AFW system consistent with the TS. This change is also consistent with the NUREG-1431. Therefore, the staff finds the proposed change acceptable.

- p. Proposed Change: Change the action for Functional Units 4a and 4b of TS Table 3.7-2 from Action 20 to the new Action 26, which will require the emergency diesel generator (EDG) to be declared inoperable if the loss-of-power instruments cannot meet the conditions of the actions for an inoperable channel.

Evaluation: In accordance with UFSAR Section 8.5, this instrumentation only provides auto start and loading of the EDGs to ensure power is available on the emergency buses in the event of a loss-of-offsite power during normal or accident conditions. Therefore, consistent with NUREG-1431, it is appropriate to require the EDG to be declared inoperable if the auto start is inoperable. Therefore, the staff finds the proposed change acceptable.

- q. Proposed Change: Change action for Functional Unit 1.b.3 of TS Table 3.7-3 from Action 15 to Action 21.

Evaluation: The revised action for Phase 2 manual containment isolation (Functional Unit 1.b.3) allows 48 hours to return the inoperable channel to operable status or put the plant in hot shutdown in the next 6 hours and in cold shutdown within the next 30 hours. The old action did not allow any time for repair but allowed 12 hours to be in hot shutdown and the next 30 hours to be in cold shutdown. Phase 1 manual containment isolation allows time to repair the inoperable channel similar to the one proposed for Phase 2 isolation. This change is also consistent with NUREG-1431. Therefore, the staff finds the proposed change acceptable.

- r. Proposed Change: Functional Unit 3 of TS Table 3.7-3 is revised by adding a note to allow a permissible bypass condition to eliminate the need for protection when all main feedwater recirculation valves and steam generator feedwater isolation valves and associated bypass valves are closed and deactivated or isolated by manual valves.

Evaluation: When the valves (identified in the note) are in the closed position, the protective function (feedwater isolation) is fulfilled. Therefore, the automatic function is no longer needed. This note is also consistent with NUREG-1431. Therefore, the staff finds the proposed change acceptable.

- s. Proposed Change: Action 20 of TS Table 3.7-3 is revised to not only extend the AOT and testing interval, but also to require a unit shutdown and cooldown to less than 350°F and 450 psig rather than a hot shutdown and then cooldown to cold shutdown.

Evaluation: The current TS requires the operability of the engineered safeguard spray systems when the unit's temperature and pressure are greater than 350°F and 450 psig and the operability of the safety injection system when the reactor is critical. In addition, the accident analysis assumes automatic initiation in accordance with the TS operating condition operability requirements. This action is also consistent with NUREG-1431, and the revised AOT and surveillance test interval extensions are in accordance with the staff-approved WCAPs. Therefore, the staff finds the proposed change acceptable.

- t. Proposed Change: Action 22 of TS Table 3.7-3 is revised not only for AOT extension, but also to reduce the time to place the unit in hot shutdown to 6 hours, and increase the time to reduce the unit's temperature and pressure to less than 350°F and 450 psig to 12 hours.

Evaluation: The proposed change to extend the AOT is in accordance with the staff-approved WCAPs. The total time to reduce the unit's temperature and pressure is not

changed and time to put the unit in hot shutdown has been reduced and therefore is more conservative. Based on this, the staff finds the proposed change acceptable.

- u. Proposed Change: The surveillance test interval for items 1, 4, 5, 6, 7, 8, 11, 15a, 17, 22, 23, 32a, 33a, 33b, 39, and 41a of TS Table 4.1-1 has been changed from monthly to quarterly.

Evaluation: The proposed change is acceptable to the staff since it is based on the staff-approved WCAPs.

- v. Proposed Change: The test frequency definitions at the end of TS Table 4.1-1 are being revised. "P" is changed from 7 to 31 days, "M" is changed from 30 to 31 days, and "Q" is changed from 90 to 92 days.

Evaluation: The proposed change is acceptable to the staff since it is based on the staff-approved WCAPs and NUREG-1431.

- w. Proposed Change: The test frequency for item 32b of TS Table 4.1-1 is changed from NA to refueling.

Evaluation: The proposed change is more conservative than the current TS and is also consistent with NUREG-1431. Therefore, the staff finds the proposed change acceptable.

- x. Proposed Change: The licensee has proposed to add a note in TS Table 4.1-1 for Functional Units 8, 32b, 33a, and 33b to state that setpoint verification is not required during the quarterly test.

Evaluation: The licensee justified this change on the basis that it clarifies the existing surveillance requirements for the relays. Because of the channel design, the sensing relay setpoints are currently not verified at power. Also, the channel functional test does not require setpoint verification. The licensee has further stated that the calibration history of these relays indicates that the relay setpoints are very repeatable and maintain the calibration within their channel statistical allowance. On this basis, the staff finds the proposed TS change acceptable.

- y. Proposed Change: The licensee has proposed to change the test interval for Functional Unit 42 from monthly to refueling.

Evaluation: The proposed change is consistent with the staff-approved WCAPs and therefore is acceptable to the staff.

- z. Proposed Change: The licensee has proposed to remove Functional Units 12, 13, 14, 16, 18, 21, 24, 25, 27, 29, and 31 from TS Table 4.1-1.

Evaluation: The licensee justified the removal of these functional units on the basis that they do not provide any input to RPS and ESFAS logic and do not have any LCOs for the inoperability of these instruments. The licensee has evaluated these instruments against the criteria of 10 CFR 50.36 and has determined that these

instruments do not meet any of the criteria for inclusion in the TS. The NRC staff concurs with this conclusion. This change is also consistent with NUREG-1431. Therefore, the staff finds the proposed change acceptable.

The staff reviewed all the changes and found that they either are editorial or conform with NUREG-1431, "Standard Technical Specifications for Westinghouse Plants," or are changes proposed in the NRC-approved reports WCAP-10271, Supplements 1 and 2, and WCAP-14333. A plant-specific analysis was performed to justify the changes which were not covered by the WCAPs. Where applicable the licensee addressed the NRC's requirements specified in the SEs for WCAP-10271, Supplements 1 and 2, and WCAP--14333. On this basis, the staff has determined the proposed changes to be acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Virginia State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 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 and change surveillance requirements. 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 (65 FR 69067). 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 these amendments.

5.0 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: H. Garg

Date: August 31, 2001

Mr. David A. Christian
Virginia Electric and Power Company

Surry Power Station

cc:

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

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

Mr. Richard H. Blount, II
Site Vice President
Surry Power Station
Virginia Electric and Power Company
5570 Hog Island Road
Surry, Virginia 23883-0315

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

Senior Resident Inspector
Surry Power Station
U. S. Nuclear Regulatory Commission
5850 Hog Island Road
Surry, Virginia 23883

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

Chairman
Board of Supervisors of Surry County
Surry County Courthouse
Surry, Virginia 23683

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

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

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