

August 15, 2003

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: BETA AND
GAMMA ACTIVITY TEST (TAC NOS. MB6754 AND MB6755)

Dear Mr. Christian:

The Commission has issued the enclosed Amendment No. 234 to Renewed Facility Operating License No. DPR-32 and Amendment No. 233 to Renewed 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 November 5, 2002.

These amendments delete the requirement to perform a 15-minute degassed beta and gamma activity test of the secondary coolant and require that the dose equivalent I-131 analysis be performed on a more conservative monthly basis.

The NRC staff also corrected a typographical error introduced during the issuance of a previous amendment to the Surry Units 1 and 2 TS, on a TS page affected by this amendment. The evaluation of that correction is contained in the NRC staff's Safety Evaluation.

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/

Christopher Gratton, 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. 234 to DPR-32
2. Amendment No. 233 to DPR-37
3. Safety Evaluation

cc w/encls: See next page

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3. Safety Evaluation

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*See Previous Concurrence

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DATE	8/15/2003	8/15/2003	6 /11 /2003	7/3/2003	08/15/2003

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VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-280

SURRY POWER STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 234
Renewed 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 November 5, 2002, 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 Renewed 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. 234, 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

John A. Nakoski, 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 15, 2003

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-281

SURRY POWER STATION, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 233
Renewed 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 November 5, 2002, 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 Renewed 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. 233, 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

John A. Nakoski, 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 15, 2003

ATTACHMENT TO
LICENSE AMENDMENT NO. 234 TO
RENEWED FACILITY OPERATING LICENSE NO. DPR-32
LICENSE AMENDMENT NO. 233 TO
RENEWED FACILITY OPERATING LICENSE NO. DPR-37
DOCKET NOS. 50-280 AND 50-281

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

TS 4.1-10
TS 4.1-10a

Insert Pages

TS 4.1-10
TS 4.1-10a

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 234 TO
RENEWED FACILITY OPERATING LICENSE NO. DPR-32
AND AMENDMENT NO. 233 TO RENEWED 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 November 5, 2002, Virginia Electric and Power Company (the licensee) submitted a request for a change to the Surry Power Station, Units 1 and 2, Technical Specifications (TS) Table 4.1-2B, Item 6. The proposed change deletes the requirement to perform a 15-minute degassed beta and gamma activity test of the secondary coolant. This test is required to be performed once every 72 hours. The test results determine whether the dose equivalent I-131 analysis should be performed on a monthly or semiannual frequency. The proposed change requires that the dose equivalent I-131 analysis be performed on the more conservative monthly basis, thereby permitting the deletion of the requirement to perform the 15-minute degassed beta and gamma activity test, as well as the semiannual dose equivalent I-131 analysis. The licensee also proposed to delete the notes associated with TS Table 4.1-2B.

2.0 REGULATORY EVALUATION

The limit on steam generator secondary side Iodine-131 activity is based on limiting the radiological consequences of a steamline break accident to a small fraction of the limits specified in Title 10 of the *Code of Federal Regulations*, Part 100. The steamline break accident analysis assumes the release of the entire contents of the faulted steam generator to the atmosphere. For the steamline break, the radioactive material releases are determined by the initial radionuclide concentrations present in primary liquid, secondary liquid, and secondary steam, and any releases from failed fuel rods. The amounts of activity in the primary and secondary coolant at the initiation of the steamline break are assumed to be the maximum levels allowed by the plant TS.

3.0 TECHNICAL EVALUATION

The TS currently require a 15-minute degassed beta and gamma activity sample of the secondary coolant to establish the frequency of the dose equivalent I-131 analysis as either monthly or semiannually. The licensee must perform a monthly dose equivalent I-131 analysis if the 15-minute degassed beta and gamma activity test result is .01 $\mu\text{Ci/cc}$ dose equivalent

I-131 or higher. Otherwise, a semiannual dose equivalent I-131 analysis is permitted. The results of the dose equivalent I-131 analysis ensure the assumptions made in the main steamline break accident analysis remain valid. It also serves to identify and trend any unusual isotopic concentrations that might indicate changes in reactor coolant activity leakage. The licensee proposed to perform a monthly dose equivalent I-131 analysis, thereby eliminating the need for the 15-minute degassed beta and gamma activity test and the semiannual dose equivalent I-131 analysis.

The NRC staff reviewed the proposed changes to the secondary coolant sampling frequency and came to the following conclusions. The NRC staff found that the 15-minute degassed beta and gamma activity test produces only a gross measure of coolant activity and is not the best method for identifying and quantifying primary-to-secondary leakage for comparison to in-line instrumentation. The gamma isotopic analysis from which the dose equivalent I-131 activity can be calculated is a more sensitive test and is currently the method used to satisfy the existing TS monthly and semiannual secondary coolant sampling requirement to determine the dose equivalent I-131 activity.

The NRC staff also found that the proposed frequency of the dose equivalent I-131 analysis was consistent with the most conservative analysis frequency currently approved in the existing TS for the dose equivalent I-131 analysis. The NRC staff concluded that adopting the monthly dose equivalent I-131 analysis frequency for all secondary coolant activity conditions is conservative. The NRC staff notes that the deletion of the notes associated with the surveillance frequencies proposed by the licensee is appropriate.

The monthly analysis frequency is also consistent with Surveillance Requirement (SR) 3.7.18.1 of NUREG-1431, Vol. 2, Rev. 1, "Standard Technical Specifications, Westinghouse Plants." The NRC staff considers the frequency to be appropriate for the detection of increasing trends of the level of dose equivalent I-131, because the monthly analysis frequency allows for appropriate action to be taken to maintain levels below the limiting condition for operation limit.

Based on the above, the NRC staff concludes the proposed changes to the secondary coolant sampling surveillance test requirements in Table 4.1-2B, Item 6, are acceptable.

The NRC staff also identified a typographical error in note (9) of page TS 4.1-10a. The letter "s" was inadvertently removed from the word "internals" in the licensee's application dated January 30, 1996, when the NRC staff issued Amendments 209/209 to the Surry Power Station TS for Units 1 and 2 on April 29, 1996. It is clear from the licensee's application and the NRC staff's Safety Evaluation of the amendment that the change to the word "internals" was not requested by the licensee, noticed to the public, or evaluated by the NRC staff. Therefore, the NRC staff corrected the note (9) on page TS 4.1-10a to read "internals."

4.0 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 comment.

5.0 ENVIRONMENTAL CONSIDERATION

The 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 changes 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding (67 FR 78525). Accordingly, the 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 the amendments.

6.0 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.

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Date: August 15, 2003

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Units 1 and 2

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