

December 5, 1990

Docket Nos. 50-280
and 50-281

DISTRIBUTION
See attached sheet

Mr. W. L. Stewart
Senior Vice President - Nuclear
Virginia Electric and Power Company
5000 Dominion Blvd.
Glen Allen, Virginia 23060

Dear Mr. Stewart:

SUBJECT: SURRY UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: REACTOR COOLANT
SYSTEM LEAK TEST (TAC NOS. 77103 AND 77104)

The Commission has issued the enclosed Amendment No. 149 to Facility Operating License No. DPR-32 and Amendment No. 146 to Facility Operating License No. DPR-37 for the Surry Power Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TS) in response to your application transmitted by letter dated June 25, 1990.

These amendments delete the 100 psi overpressure leakage test requirement after the reactor coolant system has been closed. Instead, a leakage test will be performed at normal operating pressure and temperature in accordance with ASME Code requirements.

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,

Original signed by

Bart C. Buckley, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 149 to DPR-32
2. Amendment No. 146 to DPR-37
3. Safety Evaluation

cc w/enclosures:
See next page

OFC	: LA:PD22	: PM:PD22	: D:PD22	: OGC	: EMEB	:	:
NAME	: <i>DiMar</i>	: BBuckley	: <i>HBerlow</i>	: <i>E Holler</i>	: CYCheng	: <i>o/c</i>	:
DATE	: 11/29/90	: 11/29/90	: 11/29/90	: 12/4/90	: 11/30/90	:	:

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Virginia Electric and Power Company

Surry Power Station

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DATED: December 5, 1990

AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-32 - SURRY UNIT 1
AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE NO. DPR-37 - SURRY UNIT 2

Docket File

NRC & Local PDRs

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-280

SURRY POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 149
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 25, 1990, 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:

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(B) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 149, 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Bart C. Buckley for

Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 5, 1990



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-281

SURRY POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 146
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 25, 1990, 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. 146, 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Bart C. Buckley for

Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 5, 1990

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 149 FACILITY OPERATING LICENSE NO. DPR-32

AMENDMENT NO. 146 FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NOS. 50-280 AND 50-281

Revise Appendix A as follows:

Remove Pages

TS 4.3-1
TS 4.3-2

Insert Pages

TS 4.3-1
TS 4.3-2

4.3 ASME CODE CLASS 1, 2, AND 3 SYSTEM PRESSURE TESTS

Applicability

Applies to requirement for ASME Code Class 1, 2, and 3 System Pressure Tests. In this context, closed is defined as the state of system integrity which permits pressurization and subsequent normal operation after the system has been opened.

Objective

To specify requirements for ASME Code Class 1, 2, and 3 System Pressure Tests following normal operation, modification, or repair. The pressure-temperature limits for Reactor Coolant System tests will be in accordance with Figure 3.1-1.

Specification

- A. Inservice inspection, which includes system pressure testing, of ASME Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the NRC pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).

BASIS

System pressure testing is performed in order to insure integrity of the system. For normal opening the integrity of the system, in terms of strength, is unchanged. The testing is based on 10 CFR 50.55a and performed pursuant to Section XI of the ASME Code for inservice inspection of Class 1, 2, and 3 components.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-32
AND AMENDMENT NO. 146 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

INTRODUCTION

By letter dated June 25, 1990, Virginia Electric and Power Company (the licensee) requested a change to Technical Specifications (TS) for Surry Power Station, Units 1 and 2. The proposed change to TS Section 4.3B would delete the 100 psi overpressure leakage test requirement after the reactor coolant system has been closed. Instead, a leakage test would be performed at normal operating pressure and temperature in accordance with ASME Code requirements.

DISCUSSION AND EVALUATION

Section 4.3B of the Surry TS requires that the reactor coolant system (RCS) be leak tested at nominal operating pressure (2250 psig) plus 100 psi following closure of the RCS after refueling or certain other maintenance activities. The proposed change would eliminate this requirement. Instead, the leak-tight integrity of the RCS would be verified by visual examination at the normal operating pressure (2250 psig) in accordance with Section XI of the ASME Code. The proposed change would reduce the possibility of needlessly challenging the pressurizer safety valves (PSVs) which are set at 2485 psig $\pm 1\%$. The PSVs have, on occasion, experienced increased seat leakage as the RCS pressure approaches the PSV setpoint of 2485 psig $\pm 1\%$.

The licensee conducted a review for the basis of the 100 psi overpressure test requirement. The original Surry Preliminary Safety Analysis Report, the Final Safety Analysis Report, the ASME Code Section XI, 1970 Edition, Winter 1970 Addenda, and the ASLB hearing notes were all reviewed, but no basis for the requirement could be found. The licensee then theorized that the testing requirement was conservatively established as a result of the original construction concern on welds.

The current Code requirements for hydrostatic tests at Surry are that the system leakage tests be conducted at not less than nominal operating pressure, and hydrostatic tests be conducted at temperatures above 100°F and at pressures as required in Table IWB-5220-1. The system leak test is required to be conducted after each refueling outage prior to startup and after any nonwelded repair or replacement. Therefore, the 100 psi over nominal pressure test is not required to ensure system integrity and in fact poses a potential undue risk of challenging the PSVs in terms of spurious openings.

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Based on the above evaluation, the staff concludes that the TS requirement for the test pressure of 100 psi over nominal operating pressure is unnecessary and should be deleted, and therefore, the proposed change is acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have 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. 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.

CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: December 5, 1990

Principal Contributors:

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