July 8, 1991

Docket Nos. 50-280 and 50-281 Posted

Amount 157 to DPR-37

DORUME

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

Dear Mr. Stewart:

SURRY UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: SURVEILLANCE SUBJECT:

FREQUENCY FOR RECIRCULATION SPRAY AND CONTAINMENT SPRAY CHECK VALVES

(TAC NOS. 79107 AND 79108)

The Commission has issued the enclosed Amendment No. 158 to Facility Operating License No. DPR-32 and Amendment No. 157 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 August 1, 1990.

These amendments revise the frequency of the surveillance for the outside recirculation spray and containment spray weight-loaded check valves from once every 18 months to every refueling outage.

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.

/s/

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

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Enclosures:

Amendment No. 158 to DPR-32
 Amendment No. 157 to DPR-37

3. Safety Evaluation

cc w/enclosures: See next page

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Document Name: AMEND SURRY 79107/108

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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. 158 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 August 1, 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:

#### (B) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 158, 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: July 8, 1991



## 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. 157 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 August 1, 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 157, 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: July 8, 1991

#### ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 158 FACILITY OPERATING LICENSE NO. DPR-32

AMENDMENT NO. 157 FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NOS. 50-280 AND 50-281

Revise Appendix A as follows:

Remove Page

Insert Page

TS 4.5-2

TS 4.5-2

- 2. By verifying that each motor-operated valve in the recirculation spray flow paths performs satisfactorily when tested in accordance with Specification 4.0.3.
- 3. At least once per 5 years, coincident with the closest refueling outage, by performing on air or smoke flow test and verifying each spray nozzle is unobstructed.
- C. Each weight-loaded check valve in the containment spray and outside containment recirculation spray subsystems shall be demonstrated operable at least once each refueling period, by cycling the valve one complete cycle of full travel and verifying that each valve opens when the discharge line of the pump is pressurized with air and seats when a vacuum is applied.
- D. A visual inspection of the containment sump and the inside containment recirculation spray pump wells and the engineered safeguards suction inlets shall be performed at least once each refueling period and/or after major maintenance activities in the containment. The inspection should verify that the containment sump and pump wells are free of debris that could degrade system operation and that the sump components (i.e., trash racks, screens) are properly installed and show no sign of structural distress or excessive corrosion.

#### **Basis**

The flow testing of each containment spray pump is performed by opening the normally closed valve in the containment spray pump recirculation line returning water to the refueling water storage tank. The containment spray pump is operated and a quantity of water recirculated to the refueling water storage tank. The discharge to the tank is divided into two fractions; one for the major portion of the recirculation flow and the other to pass a small quantity of water through test nozzles which are identical with those used in the containment spray headers. The purpose of the recirculation through the test nozzles is to assure that there are no particulate material in the refueling water storage tank small enough to pass through pump suction strainers and large enough to clog spray nozzles.



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

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 158 TO FACILITY OPERATING LICENSE NO. DPR-32 AND AMENDMENT NO.157 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 August 1, 1990, Virginia Electric and Power Company (the licensee) submitted an application to amend the Surry Units 1 and 2 Technical Specifications. The proposed change to Technical Specification 4.5.C would revise the frequency of the surveillance for the outside recirculation spray and containment spray weight-loaded check valves from once every 18 months to every refueling outage.

Technical Specification 4.5.C requires each weight-loaded check valve in the Containment Spray and Recirculation Spray Systems to be cycled one complete cycle of full travel and verified open on air pressure and seated with a vacuum at least once per 18 months.

#### 2.0 DISCUSSION AND EVALUATION

In order to perform this surveillance, scaffolding must be erected in containment and test equipment installed in the containment. Setting up for and performing this test in a subatmospheric containment would expose personnel to risks due to the need to use a breathing apparatus and the time needed to allow for the differences in pressure upon entry and exit from containment. Because of these risks, performance of this surveillance as required by the existing Technical Specification (TS) 4.5.C would necessitate a plant shutdown. The spray systems are normally dry and the only service that they are exposed to is during the testing of these valves.

In a meeting on February 16, 1990, between the licensee and NRC, a review of the results of past surveillances of these valves under TS 4.5.C and under the Appendix J Type C testing was conducted. A review of the maintenance history of these valves was also performed. As a result of these reviews, it was concluded that the surveillance and maintenance history of these valves indicates that they have performed reliably. The normal operating cycle is 18 months and the test would typically be performed within the 18-month-plus-25% interval. Only if an extended shutdown during the operating cycle for maintenance or resolution of a technical issue was necessary would the 18-month-plus-25% interval be exceeded. Exceeding the 18-month-plus-25% interval on an infrequent basis would not have a significant effect on valve operability.

Based on the service history of these valves, the acceptability of these valves when they were last tested, and the benign service and environment to which the valves are normally exposed, the staff has concluded that the proposed change to TS 4.5.C is 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 comment.

#### 4.0 ENVIRONMENTAL CONSIDERATION

These amendments change a surveillance requirement. 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 (55 FR 53078). 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 Contributors: Bart Buckley

Ted Sullivan

Date: July 8, 1991