

January 6, 1977

Dockets Nos: 50-280 ✓  
and 50-281

Virginia Electric & Power Company  
ATTN: Mr. W. L. Proffitt  
Senior Vice President  
P. O. Box 26666  
Richmond, Virginia 23261

Gentlemen:

The Commission has issued the enclosed Amendments No. 27 to Facility Operating Licenses Nos. DPR-32 and DPR-37 for the Surry Power Station, Units Nos. 1 and 2. The amendments consist of changes to your Technical Specifications for each license and are in response to your request dated June 30, 1976, as supplemented October 28, 1976.

The amendments revise the Technical Specifications to remove temporary restrictions, imposed by our License Amendments No. 7 of June 16, 1975, on power operation of certain valve motor operators in emergency core cooling system pipe lines.

Copies of the related Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

*Original signed by*

Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Operating Reactors

Enclosures:

1. Amendment No. 27 to DPR-32
2. Amendment No. 27 to DPR-37
3. Safety Evaluation
4. Federal Register Notice

cc w/enclosures: See next page

*cont 1*

OFFICE →	ORB#4:DOR	ORB#4:DOR <sup>MBJ</sup>	C-ORB#4:DOR	OELD	
SURNAME →	RIngram	MFairtile	RReid	KARMAN	
DATE →	12/2/76	12/23/76	12/10/76	12/4/76	

Virginia Electric & Power Company

cc w/enclosure(s):  
Michael W. Maupin, Esq.  
Hunton, Williams, Gay & Gibson  
P. O. Box 1535  
Richmond, Virginia 23213

Swem Library  
College of William & Mary  
Williamsburg, Virginia 23185

Mr. Sherlock Holmes, Chairman  
Board of Supervisors of Surry County  
Surry County Courthouse  
Surry, Virginia 23683

Chief, Energy Systems  
Analyses Branch (AW-459)  
Office of Radiation Programs  
U. S. Environmental Protection Agency  
Room 645, East Tower  
401 M Street, S.W.  
Washington, D.C. 20460

U. S. Environmental Protection Agency  
Region III Office  
ATTN: EIS COORDINATOR  
Curtis Building (Sixth Floor)  
6th and Walnut Streets  
Philadelphia, Pennsylvania 19106

cc w/enclosures and incoming  
dtd.: 6/30/76 & 10/28/76  
Commonwealth of Virginia  
Council on the Environment  
903 9th Street Office Building  
Richmond, Virginia 23219



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

VIRGINIA ELECTRIC & POWER COMPANY

DOCKET NO. 50-280

SURRY POWER STATION UNIT NO. 1

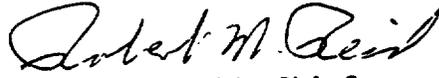
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 27  
License No. DPR-32

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Virginia Electric & Power Company (the licensee) dated June 30, 1976, as supplemented October 28, 1976, 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.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Operating Reactors

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: January 6, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 27

FACILITY OPERATING LICENSE NO. DPR-32

DOCKET NO. 50-280

Revise Appendix A Technical Specifications as follows:

Remove Pages

3.2-3a  
3.3-3

Insert Pages

-  
3.3-3

Changes on the revised page are shown by marginal lines.

9. During power operation the A.C. power shall be removed from the following motor operated valves with the valve in the open position:

<u>Unit No. 1</u>	<u>Unit No. 2</u>
MOV 1890C	MOV 2890C

10. During power operation the A.C. power shall be removed from the following motor operated valves with the valve in the closed position:

<u>Unit No. 1</u>	<u>Unit No. 2</u>
MOV 1869A	MOV 2869A
MOV 1869B	MOV 2869B
MOV 1890A	MOV 2890A
MOV 1890B	MOV 2890B

11. The accumulator discharge valves listed below in non-isolated loops shall be blocked open by de-energizing the valve motor operator when the reactor coolant system pressure is greater than 1000 psig.

<u>Unit No. 1</u>	<u>Unit No. 2</u>
MOV 1865A	MOV 2865A
MOV 1865B	MOV 2865B
MOV 1865C	MOV 2865C

12. Power operation with less than three loops in service is prohibited. The following loop isolation valves shall have AC power removed and be locked in open position during power operation.

<u>Unit No. 1</u>	<u>Unit No. 2</u>
MOV 1590	MOV 2590
MOV 1591	MOV 2591
MOV 1592	MOV 2592
MOV 1593	MOV 2593
MOV 1594	MOV 2594
MOV 1595	MOV 2595



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

VIRGINIA ELECTRIC & POWER COMPANY

DOCKET NO. 50-281

SURRY POWER STATION UNIT NO. 2

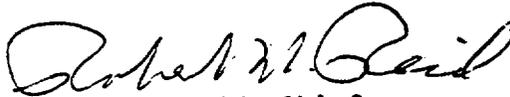
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 27  
License No. DPR-37

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Virginia Electric & Power Company (the licensee) dated June 30, 1976, as supplemented October 28, 1976, 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.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Operating Reactors

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: January 6, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 27

FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NO. 50-281

Revise Appendix A Technical Specifications as follows:

Remove Pages

3.2-3a  
3.3-3

Insert Pages

-  
3.3-3

Changes on the revised page are shown by marginal lines.

9. During power operation the A.C. power shall be removed from the following motor operated valves with the valve in the open position:

<u>Unit No. 1</u>	<u>Unit No. 2</u>
MOV 1890C	MOV 2890C

10. During power operation the A.C. power shall be removed from the following motor operated valves with the valve in the closed position:

<u>Unit No. 1</u>	<u>Unit No. 2</u>
MOV 1869A	MOV 2869A
MOV 1869B	MOV 2869B
MOV 1890A	MOV 2890A
MOV 1890B	MOV 2890B

11. The accumulator discharge valves listed below in non-isolated loops shall be blocked open by de-energizing the valve motor operator when the reactor coolant system pressure is greater than 1000 psig.

<u>Unit No. 1</u>	<u>Unit No. 2</u>
MOV 1865A	MOV 2865A
MOV 1865B	MOV 2865B
MOV 1865C	MOV 2865C

12. Power operation with less than three loops in service is prohibited. The following loop isolation valves shall have AC power removed and be locked in open position during power operation.

<u>Unit No. 1</u>	<u>Unit No. 2</u>
MOV 1590	MOV 2590
MOV 1591	MOV 2591
MOV 1592	MOV 2592
MOV 1593	MOV 2593
MOV 1594	MOV 2594
MOV 1595	MOV 2595



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NO. 27 TO LICENSES NOS. DPR-32 AND DPR-37

VIRGINIA ELECTRIC & POWER COMPANY

SURRY POWER STATION UNITS NOS. 1 AND 2

DOCKETS NOS. 50-280 AND 50-281

Introduction

By letter dated June 30, 1976, as supplemented October 28, 1976, Virginia Electric & Power Company (the licensee) requested amendments to Facility Operating Licenses Nos. DPR-32 and DPR-37. The purpose of the request is to remove temporary restrictions, imposed by our License Amendment No. 7, dated June 16, 1975, on power operation of certain valve motor operators in emergency core cooling system (ECCS) pipe lines.

Background

Following our review of the Surry Power Station Units 1 and 2 submittal of June 6, 1975<sup>(1)</sup>, which was to demonstrate conformance with the acceptance criteria for emergency core cooling systems (ECCS) of 10 CFR 50.46, we issued a Safety Evaluation on June 16, 1975.<sup>(2)</sup> That Safety Evaluation identified several valve motor operators in the ECCS that required electrical power lock-out to satisfy our single failure criteria for ECCS. Since then, the licensee has modified the ECCS providing redundant flow paths removing the need for electrical lock-out and submitted for our review drawings and Technical Specification changes<sup>(3)</sup>, and responses<sup>(5)</sup> to questions<sup>(4)</sup> regarding the electrical alignment of the modified valve arrangements.

Evaluation

In the original valve arrangement, motor operated valve MOV-862 was identified as requiring power removal to preclude spurious closure which would cause loss of suction to the low head safety injection pumps. The licensee has modified this arrangement by replacing the single pipe containing MOV-862 with parallel pipes containing valves MOV-862 A and B. Thus, redundant flow paths have been provided for low head safety injection pump suction.

The original low head safety injection pump recirculation line valve MOV-885C was identified as requiring removal of power during the injection phase and restoration of power for closure during the recirculation phase. Valve MOV-885C has now been replaced by parallel valves MOV-885A and D. Thus, redundant flow paths have been provided.

Valves MOV-862 A and B have been connected to motor control centers 1H1-2-North and 1J1-2-East, respectively, thus insuring electrical power to at least one valve in the event of loss of one electrical bus. The valves MOV-885 A, B, C and D are connected as follows:

	<u>MOV</u>	<u>MCC</u>
Series	885A	1H1-2-South
	885D	1J1-2-East
Series	885B	1J1-2-West
	885C	1H1-2-South

The above noted motor control centers are for Surry Unit 1. The arrangement is identical for Unit 2.

In order to remove the electrical power restrictions, the following Technical Specifications pertaining to power removal to motor operated ECCS valves have been changed:

TS 3.3.A.9 - deleted valves MOV-1862 and 2862

TS 3.3.A.10 - deleted valves MOV-1860A&B, and 2860A&B

TS 3.3.A.9 - deleted valves MOV-1885C and 2885C

With the addition of redundant flow paths, the electrical lock-out to the above listed motor operated valves no longer need be included in these Technical Specifications.

In addition to the above Technical Specification changes, the licensee has also requested deletion of Technical Specification 3.2.D.4 wherein surveillance testing limitations on valve CS-25 are provided. With the addition of redundant low head flow paths and valves MOV-862A&B it is no longer necessary to manually isolate the refueling water storage tank from low head pump suction via the manual valve CS-25 if 862A or B undergoes a spurious opening during the recirculation phase of ECCS operation.

We conclude that the valve and piping modifications which have been performed on the Surry Power Station Units 1 and 2 are acceptable and satisfy our single failure requirements. The Technical Specifications which were imposed as an interim measure on June 16, 1975(2) to meet our single failure criteria for valves MOV-862, 885C, 860A&B, and CS-25 are no longer needed. The ECCS for Surry, as modified, conforms to the requirements of 10 CFR 50.46.

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement, or negative declaration, and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

#### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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: January 6, 1977

REFERENCES

1. Letter C. M. Stallings (VEPCO) to K. R. Goller (NRC) dated June 6, 1975.
2. Safety Evaluation by the Office of Nuclear Reactor Regulation Supporting Amendments No. 7 to Licenses No. DPR-32 and 37, Change No. 22 to Technical Specifications, Surry Units 1 & 2, June 16, 1975.
3. Letter C. M. Stallings (VEPCO) to B. C. Rusche (NRC) dated June 30, 1976.
4. Letter R. W. Reid (NRC) to W. L. Proffitt (VEPCO) dated September 24, 1976.
5. Letter C. M. Stallings (VEPCO) to R. W. Reid (NRC) dated October 28, 1976.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKETS NOS. 50-280 AND 50-281

VIRGINIA ELECTRIC & POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments No. 27 to Facility Operating Licenses Nos. DPR-32 and DPR-37, issued to Virginia Electric & Power Company (the licensee), which revised Technical Specifications for operation of the Surry Power Station Units Nos. 1 and 2 (the facilities) located in Surry County, Virginia. The amendments are effective as of the date of issuance.

The amendments revise the Technical Specifications to remove temporary restrictions, imposed by the Commission's Amendments No. 7 dated June 16, 1975, on power operation of certain valve motor operators in emergency core cooling system pipe lines.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated June 30, 1976, as supplemented October 28, 1976, (2) Amendments No. 27 to Licenses Nos. DPR-32 and DPR-37, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Swem Library, College of William & Mary, Williamsburg, Virginia.

A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 6th day of January 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Operating Reactors