· - : : : MAR 1 7 1978 Distribution: Docket File? J. Rutberg W. Pike W. Miller, ADM J. Knight Local PDR R. DeYoung M. Rushbrook I. Dinitz, AIG D. Ross NRC PDR D. Vassallo F. J. Williams H. Denton, DSE R. Tedesco LWR #3 File 0. Parr H. Smith V. Moore, LDSE B. Scharf, ADM w/10 encl D. Swanson Swanson A. Dromerick Docket No. 50-338 B. Scott M. Ernst, DSE OELD Files IE (3) W. Gammill, DSE D. Skovholt N. Dube R. Mattson, DSS E. Hughes Virginia Electric & Power Company R Clark P. Leech R. Clark, DOR F. Hebdon ATTN: Mr. W. L. Proffitt B. Russell P. Kreutzer Senior Vice President - Power B. McGuff J. Saltzman P. O. Box 26666 ACRS (16) A. Toalston Richmond, Virginia 23261 W. Haass BCC: JBuchanan Gentlemen: TAbernathy, ARosenthal, J. Yore SUBJECT: ISSUANCE OF AMENDMENT NO. 2 TO FACILITY OPERATING LICENSE NO. NPF-4 - NORTH ANNA POWER STATION, UNIT NO. 1

The Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 2 to Facility Operating License NPF-4 in accordance with your letter, dated March 16, 1976, requesting exemptions to the North Anna Power Station Appendix A Technical Specifications which will permit operation in Mode 3 without the outside recirculation spray pumps. These exemptions will permit heat up and tests to be conducted simultaneously with the reinstallation of the outside recirculation spray pumps. During the period while the outside recirculation pumps are being installed, motor operated outside recirculation spray pump isolation valves will be deactivated and secured in the closed position. This amendment authorizes the Virginia Electric & Power Company to operate the North Anna Power Station, Unit No. 1 in a hot standby condition as defined in the amended license.

A copy of the Federal Register Notice of Issuance of Amendment No. 2 and the related Safety Evaluation supporting Amendment No. 2 to the License No. NPF-4 are also enclosed.

Sincerely,

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Domenic B. Vassallo, Assistant Director for Light Water Reactors Division of Project Management

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Enclosures:

- 1. Amendment No. 2 to Facility Operating
- License NPF-4
- 2. Federal Register Notice
- 3. Safety Evaluation Report

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NRC FORM 318 (9-76) NRCM 0240

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Virginia Electric & Power Company

- 2 -

cc: Mrs. James C. Arnold P. O. Box 3951 Charlottesville, Virginia 22903

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Virginia Electric & Power Company

cc: Defense Mapping Agency Aerospace Center (ADL) St. Louis Air Force Station St. Louis, Missouri 63118

> Mr. Jack Anderson Office of Federal Activities Environmental Protection Agency Room W-541, Waterside Mall 401 M Street, S. W. Washington, D. C. 20460

Mr. A. D. Johnson, Chairman Board of Supervisors of Louisa County Trevillians, Virginia 23170

Ms. Susan T. Wilburn Commonwealth of Virginia Council on the Environment 903 9th Street Office Building Richmond, Virginia 23219

Chief, Energy Systems (3 encl) 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 6th and Walnut Streets Philadelphia, Pennsylvania 19106 MAR 1.7 1978

- 3 -

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-338

NORTH ANNA POWER STATION, UNIT NO. 1

FACILITY OPERATING LICENSE

License No. NPF-4 Amendment No. 2

- 1. The Nuclear Regulatory Commission (the Commission) having found that:
 - A. The issuance of this license amendment 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 license, as amended, 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. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Amendment No. ²

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to Facility Operating License No. NPF-4 subject to the conditions for protection of the environment set forth herein is in accordance with Appendix D to 10 CFR Part 50 of the Commission's regulations and all applicable requirements have been satisfied.

Accordingly, Facility Operating License No. NPF-4, as amended, issued to Virginia Electric and Power Company is hereby further amended to include the following paragraph as 2.D.(2) d.

2.D.(2) d. The licensee shall be exempted from compliance with the following Appendix A Technical Specifications:

3.6.2.2 4.6.2.2.b 4.0.5.a.1 4.6.3.1.3

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

FOR THE NUCLEAR REGULATORY COMMISSION

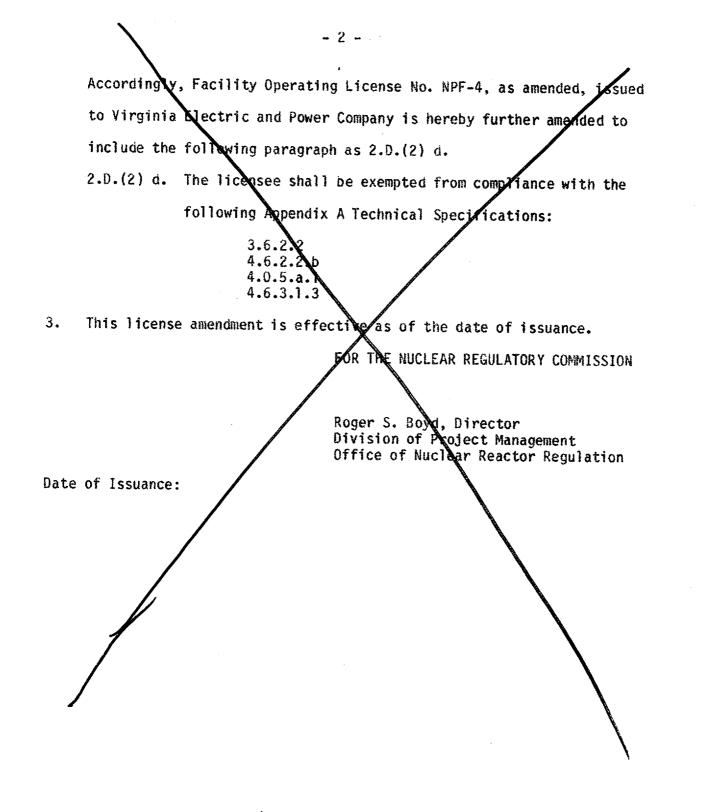
Domenic B. Vassallo, Assistant Director for Light Water Reactors Division of Project Management

Date of Issuance: MAR 1 7 1978

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UNITED STATES NUCLEAR REGULATORY COMMISSION DOCKET NO. 50-338 VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION, UNIT NO. 1

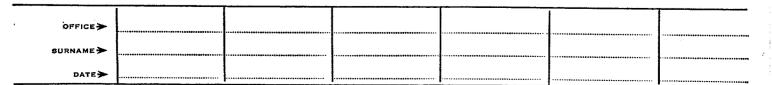
NOTICE OF ISSUANCE OF AN AMENDMENT TO FACILITY OPERATING LICENSE

The Nuclear Regulatory Commission (the Commission) has issued Amendment No. 2 to Facility Operating License No. NPF-4 to the Virginia Electric and Power Company authorizing certain exemptions to the North Anna Power Station Appendix A Technical Specifications. These exemptions permit operation in Mode 3 without the outside recirculation spray pumps. The exemptions permit heat up and tests to be conducted simultaneously with the reinstallation of the outside recirculation spray pumps. During the period while the outside recirculation pumps are being installed, motor operated outside recirculation spray pump isolation valve will be deactivated and secured in the closed position. The amended license is effective as of its date of issuance. NPF-4 issued on November 26, 1977, authorized fuel loading and maintenance of the North Anna Power Station, Unit No. 1 in an operational Mode 5 condition (cold shutdown condition). Amendment No. 1 to NPF-4 issued January 26, 1978, authorized operation of Unit No. 1 in a hot standby condition. The North Anna Power Station, Unit No. 1 is a pressurized water nuclear reactor located at the licensee's site near Mineral in Louisa County, Virginia.



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The application for the amendment 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 Title 10 Chapter I, Code of Federal Regulations, which are set forth in the license amendment. For further details with respect to this action, see (1) Amenament No. 2 to NPF-4; (2) Amendment No. 1 to NPF-4, dated January 26, 1978; (3) Facility Operating License No. NPF-4, dated November 26, 1977; (4) the report of the Advisory Committee on Reactor Safeguards, dated January 17, 1977; (5) the Office of Nuclear Reactor Regulation's Safety Evaluation Report dated June 4, 1976, and its eight supplements; (6) the Final Safety Analysis Report and amendments thereto; (7) the applicant's Environmental Report dated June 17, 1970, and supplements thereto; (8) the Draft Environmental Statement dated December 12, 1972; and (9) the Final Environmental Statement dated April 1973 and its Addendum, dated November 1976. These documents are available for public inspection at the Commission's Public Document Room at 1717 H Street, N.N., Washington, D. C. 20555, at the County Administrator's Office, Louisa County Courthouse, P. O. Box 27, Louisa, Virginia 23093 and at the Alderman Library Manuscripts Department, University of Virginia, Charlottesville, Virginia 22901. A copy of the amended license may be obtained upon request addressed to the United States Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Project Management.



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Copies of the Safety Evaluation and its supplements (Document No. NUREG-0053) and the addendum to the Final Environmental Statement (Document No. NUREG-0134) may be purchased, at current costs, from the National Technical Information Service, Springfield, Virginia 22161.

-3-

Dated at Bethesda, Maryland this $17\frac{1}{day}$ of March 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

Olan D. Parr, Chief Light Water Reactors Branch No. 3 Division of Project Management

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

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-338

NORTH ANNA POWER STATION, UNIT NO. 1

FACILITY OPERATING LICENSE

License No. NPF-4 Amendment No. 2

- 1. The Nuclear Regulatory Commission (the Commission) having found that:
 - A. The issuance of this license amendment 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 license, as amended, 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. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Amendment No. 2

to Facility Operating License No. NPF-4 subject to the conditions for protection of the environment set forth herein is in accordance with Appendix D to 10 CFR Part 50 of the Commission's regulations and all applicable requirements have been satisfied.

Accordingly, Facility Operating License No. NPF-4, as amended, issued to Virginia Electric and Power Company is hereby further amended to include the following paragraph as 2.D.(2) d.

2.D.(2) d. The licensee shall be exempted from compliance with the following Appendix A Technical Specifications:

3.6.2.2 4.6.2.2.b 4.0.5.a.1 4.6.3.1.3

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

FOR THE NUCLEAR REGULATORY COMMISSION

Domenic B. Vassallo, Assistant Director for Light Water Reactors Division of Project Management

Date of Issuance: MAR 1 7 1978

UNITED STATES NUCLEAR REGULATORY COMMISSION DOCKET NO. 50-338 VIRGINIA ELECTRIC AND POWER COMPANY

NOTICE OF ISSUANCE OF AN AMENDMENT TO FACILITY OPERATING LICENSE

NORTH ANNA POWER STATION, UNIT NO. 1

The Nuclear Regulatory Commission (the Commission) has issued Amendment No. 2 to Facility Operating License No. NPF-4 to the Virginia Electric and Power Company authorizing certain exemptions to the North Anna Power Station Appendix A Technical Specifications. These exemptions permit operation in Mode 3 without the outside recirculation spray pumps. The exemptions permit heat up and tests to be conducted simultaneously with the reinstallation of the outside recirculation spray pumps. During the period while the outside recirculation pumps are being installed, motor operated outside recirculation spray pump isolation valve will be deactivated and secured in the closed position. The amended license is effective as of its date of issuance. NPF-4 issued on November 26, 1977, authorized fuel loading and maintenance of the North Anna Power Station, Unit No. 1 in an operational Mode 5 condition (cold shutdown condition). Amendment No. 1 to NPF-4 issued January 26, 1978, authorized operation of Unit No. 1 in a hot standby condition. The North Anna Power Station, Unit No. 1 is a pressurized water nuclear reactor located at the licensee's site near Mineral in Louisa County, Virginia.

The application for the amendment 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 Title 10 Chapter I, Code of Federal Regulations, which are set forth in the license amendment. For further details with respect to this action, see (1) Amendment No. 2 to NPF-4; (2) Amendment No. 1 to NPF-4, dated January 26, 1978; (3) Facility Operating License No. NPF-4, dated November 26, 1977; (4) the report of the Advisory Committee on Reactor Safeguards, dated January 17, 1977; (5) the Office of Nuclear Reactor Regulation's Safety Evaluation Report dated June 4, 1976, and its eight supplements; (6) the Final Safety Analysis Report and amendments thereto; (7) the applicant's Environmental Report dated June 17, 1970, and supplements thereto; (8) the Draft Environmental Statement dated December 12, 1972; and (9) the Final Environmental Statement dated April 1973 and its Addendum, dated November 1976. These documents are available for public inspection at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D. C. 20555, at the County Administrator's Office, Louisa County Courthouse, P. O. Box 27, Louisa, Virginia 23093 and at the Alderman Library Manuscripts Department, University of Virginia, Charlottesville, Virginia 22901. A copy of the amended license may be obtained upon request addressed to the United States Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Project Management.

-2-

Copies of the Safety Evaluation and its supplements (Document No. NUREG-0053) and the addendum to the Final Environmental Statement (Document No. NUREG-0134) may be purchased, at current costs, from the National Technical Information Service, Springfield, Virginia 22161.

Dated at Bethesda, Maryland this 7^{th} -day of March 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

D. Parra Parr, Chief ðTan

Light Water Reactors Branch No. 3 Division of Project Management

MAR 1 7 1978

STAFF EVALUATION FOR ISSUANCE

OF AN EXEMPTION OF CERTAIN

TECHNICAL SPECIFICATIONS RELATED

TO THE OPERABILITY OF

THE NORTH ANNA POWER STATION

UNIT 1 OUTSIDE RECIRCULATION SPRAY PUMPS IN THE

HOT STANDBY CONDITION (MODIFIED OPERATIONAL MODE 3)

In a letter dated March 16, 1978, the Virginia Electric and Power Company requested exemptions to the North Anna Power Station Unit 1 Technical Specifications related to the operation of the reactor in a hot standby condition (Modified Operational Mode 3). These exemptions will permit heat up and tests to be conducted simultaneously with the reinstallation of the outside recirculation spray pumps.

As discussed in our staff evaluation for issuance of a license to operate North Anna Power Station, Unit 1 in a hot standby condition (Modified Operational Mode 3), dated January 26, 1978, the initial core loading of the North Anna Power Station, Unit 1 consists of new fuel. Therefore, none of the fuel in the core has produced any sensible heat. In addition, the unit will be maintained in a hot standby condition with a K_{eff} of 0.90 or less with a reactor coolant system minimum boron concentration of 2000 parts per million. Therefore, criticality will not be achieved and sensible heat would not be produced. The outside recirculation spray pumps, like the low head safety injection pumps, are not required until the reactor has produced power. The quench spray and inside recirculation spray pumps, however, will remain operable.

On the basis of our review of the matters stated above, we have concluded that exemptions to the North Anna Power Station Unit 1 Technical Specifications which will permit heat up and tests to be conducted simultaneously with the reinstallation of the outside recirculation spray pumps while in the hot standby condition (Modified Operational Mode 3), will not be inimical to the common defense and security or to the health and safety of the public.