



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

DOCKET NO. 50-339

NORTH ANNA POWER STATION, UNIT NO. 2

FACILITY OPERATING LICENSE

License No. NPF-7

1. The Nuclear Regulatory Commission (the Commission) having found that:
  - A. The application for license filed by Virginia Electric and Power Company (VEPCO) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the North Anna Power Station Unit No. 2 (facility) has been substantially completed in conformity with Construction Permit No. CPPR-78 and the application, as amended, the provisions of the Act, and the regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;
  - D. There is reasonable assurance: (1) that the activities authorized by this operating license 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 set forth in 10 CFR Chapter I;
  - E. VEPCO is technically and financially qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
  - F. VEPCO and the Old Dominion Electric Cooperative (ODEC) have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
  - G. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public;
  - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License NPF-7, subject to the conditions for protection of the environment set forth herein, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied;

- I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Part 30, 40, and 70; and
  - J. The Old Dominion Electric Cooperative is a partial financial owner of the facility and will not operate the facility.
2. Pursuant to approval by the Nuclear Regulatory Commission at a meeting on August 20, 1980, the License for Fuel-Loading and Low-Power Testing issued on April 11, 1980 is superseded by Facility Operating License NPF-7 hereby issued to Virginia Electric and Power Company (VEPCO) and the Old Dominion Electric Cooperative (ODEC) to read as follows:
- A. This license applies to the North Anna Power Station, Unit No. 2, a pressurized water nuclear reactor and associated equipment (the facility), owned by VEPCO and ODEC. The facility is located near Mineral, in Louisa County, Virginia, and is described in VEPCO's Updated Final Safety Analysis Report and Environmental Report as supplemented and amended (Supplements 1 through 4).
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
    - (1) Pursuant to Section 103 of the Act and 10 CFR Part 50, VEPCO and ODEC to possess and VEPCO to use and operate the facility at the designated location in Louisa County, Virginia, in accordance with the procedures and limitations set forth in this license;
    - (2) Pursuant to the Act and 10 CFR Part 70, VEPCO to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in VEPCO's Updated Final Safety Analysis Report;
    - (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use at any time byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
    - (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material, without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
    - (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
  - C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

**(1) Maximum Power Level**

VEPCO is authorized to operate the facility at steady state reactor core power levels not in excess of 2893 megawatts (thermal).

**(2) Technical Specifications**

The Technical Specifications contained in Appendix A, as revised through Amendment No. 211, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

**(3) Additional Conditions**

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the condition or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the license supported by a favorable evaluation by the Commission:

- a. If VEPCO plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the North Anna Power Station, the NRC shall be notified in writing regardless of whether the change affects the amount of radioactivity in the effluents.

VEPCO shall report any violations of this requirement within 24 hours by telephone and confirmed by telegram, mailgram, or facsimile transmission to the Director of the Regional Office, or his designate, no later than the first working day following the violation, with a written followup report within 14 days.

- b. The licensee shall implement a procedure that will prohibit entry into an extended Emergency Diesel Generator Outage Time (14 days), for scheduled maintenance purposes, if severe weather conditions are expected, as described in the licensee's application dated June 25, 1998, and evaluated in the staff's Safety Evaluation dated August 26, 1998.

- (4) The licensee is authorized to receive from the Surry Nuclear Power Station Units No. 1 and 2, possess, and store irradiated Surry fuel assemblies containing special nuclear material, enriched to not more than 4.1% by weight U-235, subject to the following conditions:

- a. Surry fuel assemblies may not be placed in North Anna Power Station Units No. 1 and 2 reactors.
- b. Irradiated fuel shipped to North Anna shall have been removed from the Surry reactors no less than 730 days prior to shipment.
- c. No more than 500 Surry Irradiated fuel assemblies shall be received for storage at the North Anna Units No. 1 and 2 spent fuel pool.

(5) Environmental Protection Plan

The Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 178, is hereby incorporated in the license. The licensee shall operate the facility in accordance with the Environmental Protection Plan.

D. Fire Protection

VEPCO shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility and as approved in the SER dated February 1979 subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

E. Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "North Anna Power Station Physical Security Plan," with revisions submitted through February 24, 1988; "North Anna Power Station Guard Training and Qualification Plan," with revisions submitted through May 14, 1987; and "North Anna Power Station Safeguards Contingency Plan," with revisions submitted through January 9, 1987. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

F. This license is effective as of the date of issuance and shall expire at midnight on August 21, 2020.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:  
Harold R. Denton

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Attachments:  
Appendix A, Technical Specifications  
Appendix B, Environmental Protection Plan

Date of Issuance: AUG 21 1980

Amendment No. 211