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 RSBoyd, L ADromerick, L \*FKaras, SECY  
 JLee, L (2)

JAN 29 1973

Docket Nos. 50-281

Virginia Electric and Power Company  
 ATTN: Mr. Stanley Ragone  
 Vice President  
 P. O. Box 26666  
 Richmond, Virginia 23261

\*w/Technical Specifications

Gentlemen:

The Atomic Energy Commission has issued Facility Operating License No. DPR-37, with appended Technical Specifications (copy enclosed) to the Virginia Electric and Power Company to operate the Surry Power Station Unit No. 2 at reactor core power levels not in excess of 2441 megawatts (thermal), in accordance with the provisions of the license and the Technical Specifications.

In conversations between my staff and the staff of the Licensing and Quality Assurance office of Vepco, it was agreed that the following limitation should be observed in the operation of Surry Power Station Unit 2: Virginia Electric and Power Company shall not operate the reactor at power levels in excess of 1831 megawatts thermal (75% of the facility's rated power level of 2441 megawatts) until the results of the fuel densification analysis as presented in the Vepco report on fuel densification for Surry Power Station have been evaluated and approved in writing by the Atomic Energy Commission. Further, your letter dated January 25, 1973, states that this limitation will be observed for both Unit 1 and Unit 2.

The enclosed Technical Specifications include a new Section 4.14 which has been added to provide operating limits on thermal releases. A new page TS 4.13-9 has also been added which specifies record keeping of chemical releases and additional monitoring for the purpose of assessing damage to biota from passage through the station cooling system and entrainment in the thermal plume.

A copy of the notice which has been forwarded to the Office of the Federal Register for publication is enclosed.

OFFICE ▶	PWR-1	PWR-1	PWR-1	OGC	ADEP	AD:PWRs
SURNAME ▶	JLee:mds/peb	ADromerick	DVassallo	<i>[Signature]</i>	DRMuller	RCDeYoung
DATE ▶	1/29/73	1/29/73	1/29/73	1/29/73	1/29/73	1/29/73

JAN 29 1973

Two signed copies of Amendment No. 5 to Indemnity Agreement No. B-45, which covers the activities authorized under License No. DPR-37, are enclosed for your review and acceptance. Please sign and return one copy of the amendment to this office.

Sincerely,

Original signed by R. C. DeYoung

R. C. DeYoung, Assistant Director  
for Pressurized Water Reactors  
Directorate of Licensing

Enclosures:

1. Facility License No. DPR-37
2. Technical Specifications
3. Notice of Issuance
4. Amendment No. 5 to Indemnity Agreement (2)

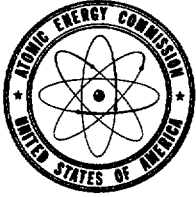
cc w/encls:

George D. Gibson, Esq.  
Hunton, Williams, Gay,  
and Gibson  
P. O. Box 1535  
Richmond, Virginia 23213

Mr. M. Sherlock Holmes  
Chairman  
Board of Supervisors of Surry County  
Surry County Court House, Virginia 23683

Honorable Ralph T. Catterall, Chairman  
State Corporation Commission  
Commonwealth of Virginia  
P. O. Box 1197  
Richmond, Virginia 23209

OFFICE ▶						
SURNAME ▶						
DATE ▶						



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

VIRGINIA ELECTRIC AND POWER COMPANY  
DOCKET NO. 50-280  
FACILITY OPERATING LICENSE

License No. DPR-32

The Atomic Energy Commission (the Commission) having found that:

- a. Construction of the Surry Power Station Unit No. 1, (the facility) has been substantially completed in conformity with Provisional Construction Permit No. CPPR-43, the application, as amended, the provisions of the Atomic Energy Act of 1954, as amended (the Act) and the rules and regulations of the Commission;
- b. The facility will operate in conformity with the application as amended, the provisions of the Act, and the rules and regulations of the Commission; and
- c. There is reasonable assurance (i) that the activities authorized by the 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 rules and regulations of the Commission; and
- d. The Virginia Electric and Power Company is technically and financially qualified to engage in the activities authorized by the operating license in accordance with the rules and regulations of the Commission; and
- e. The applicable provisions of 10 CFR Part 140 have been satisfied; and
- f. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public.

Facility Operating License No. DPR-32 is hereby issued to the Virginia Electric and Power Company as follows:

1. This license applies to the Surry Power Station, Unit No. 1, a pressurized, light water moderated and cooled reactor, and associated steam generators and electric generating equipment (the facility). The facility is located on the applicant's 840 acre site on a point of land called Gravel Neck on the James River, approximately fourteen miles northwest of Newport News and twenty-five miles northwest of Norfolk, Virginia, and is described in the Final Safety Analysis Report, as amended (Amendments Nos. 12-33).
2. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the applicant:
  - A. Pursuant to Section 104b of the Atomic Energy Act of 1954, as amended (the Act), and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility as a utilization facility at the designated location on the Surry Power Station site.
  - B. Pursuant to the Act and 10 CFR Part 70, "Special Nuclear Material," to receive, possess, and use at any time up to 1863 kilograms U-235 in reactor fuel assemblies for Surry Unit No. 1, 80 milligrams of U-235 contained in incore monitoring system detectors, two Pu-Be neutron sources not to exceed a nominal value of 5 curies each, 5 millicuries of Cesium 137 as a sealed source, 10 millicuries of Cesium 137 as 40 sealed sources, 100 millicuries of Cesium 137 as a sealed source, 1 curie of Cobalt 60 as a sealed source, 10 microcuries of Chlorine 36 as 25 sealed sources, four dosimeter capsules containing a total of  $18 \times 10^{-3}$  microcuries of U-238 and 50 microcuries of NP-237, 200 curies of Pu-238 as Pu-Be neutron sealed sources, and any byproduct material, without restrictions as to chemical or physical form, (25 millicuries total), all in connection with operation of the facility.
  - C. Pursuant to the Act and 10 CFR Part 30, "Rules of General Applicability to Licensing of Byproduct Material," to receive, possess and use in connection with operation of the facility any byproduct material with Atomic Numbers 3 through 83, inclusive without restrictions as to chemical or physical form, 25 millicuries total, two curies of Cobalt 60 as a sealed source, 5 millicuries of Cesium 137 as a sealed source, 100 millicuries of Cesium 137 as a sealed source, 0.4 millicurie (total) of Cesium 137 as sealed sources, (maximum activity per source, 10 microcuries), 0.25 millicurie (total) of Chlorine 36 as sealed sources, (maximum activity per source, 10 microcuries), 5 curies of Americium 241 in Americium Beryllium neutron sealed sources, and 5 millicuries of Hydrogen 3 without restrictions as to chemical or physical form.

D. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear material as may be produced by the operation of the facility.

3. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20 Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70, and is subject to all applicable provisions of the Act and the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

A. Maximum Power Level

The applicant is authorized to operate the facility at steady state power levels not in excess of 2441 megawatts (thermal).

B. Technical Specifications

The Technical Specifications contained in Appendix A attached hereto are hereby incorporated in this license. The applicant shall operate the facility at steady state power levels not in excess of 2441 megawatts thermal in accordance with the Technical Specifications, and may make changes therein only when authorized by the Commission in accordance with the provisions of Section 50.59 of 10 CFR Part 50.

C. Reports

The applicant shall make certain reports in accordance with the requirements of the Technical Specifications.

D. Records

The applicant shall keep facility operating records in accordance with the requirements of the Technical Specifications.

4. This license is effective as of the date of issuance, and shall expire at midnight June 25, 2008.

FOR THE ATOMIC ENERGY COMMISSION

**Original signed by**  
**A. Giambusso**

A. Giambusso, Deputy Director  
for Reactor Projects  
Directorate of Licensing

Enclosure  
Appendix A -  
Technical Specifications

Date of Issuance: May 25, 1972

UNITED STATES ATOMIC ENERGY COMMISSION

DOCKET NO. 50-280

VIRGINIA ELECTRIC AND POWER COMPANY  
(Surry Power Station Unit No. 1)

NOTICE OF ISSUANCE OF-A FACILITY OPERATING LICENSE

Notice is hereby given that the Atomic Energy Commission (the Commission) has issued Facility Operating License No. DPR-32 to Virginia Electric and Power Company (the licensee) which authorizes the licensee to operate the Surry Power Station, Unit No. 1 at steady state power levels not in excess of 2441 megawatts (thermal), in accordance with the provisions of the license and the Technical Specifications, except that the licensee shall not operate the reactor at power levels in excess of 1220 megawatts thermal (50 percent of the facility's rated power level of 2441 Mwt) until the results of the environmental qualification tests performed on the recirculation spray pump motors have been evaluated and approved in writing by the Commission. The Notice of AEC Consideration of Issuance of Facility Operating License, was published in the Federal Register on May 28, 1971 (36 F.R. 9793).

The Surry Power Station Unit No. 1 is a pressurized water nuclear reactor located at the licensee's site in Surry County, Virginia.

A Notice of hearing on a facility operating license for the facility was published by the Commission in the Federal Register (36 F.R. 22328). The notice indicated that an Atomic Safety and Licensing Board (Board) would be designated by the Commission to conduct the hearing, specified

the matters to be determined by the Board, provided for intervention by Henry E. Howell, Jr., and provided an opportunity to make limited appearances to other persons who wished to make a statement in the proceeding but who did not wish to intervene. A Supplementary Notice of Hearing was published in the Federal Register on December 30, 1971 (36 F.R. 25245), which provided that pursuant to 10 CFR Part 2, "Rules of Practice," and Appendix D of 10 CFR Part 50, "Licensing of Production and Utilization Facilities," that in the conduct of the proceeding the Board would consider in addition to the matters specified in the notice of hearing and pursuant to the National Environmental Policy Act of 1969, any matter in controversy with respect to whether, in accordance with the requirements of Appendix D of 10 CFR Part 50, the operating license should be issued as proposed. Matters covered by Appendix D of 10 CFR Part 50 were not in controversy in this proceeding.

The Commission's regulatory staff has inspected the facility and has determined that for operation as authorized by this license, the facility has been constructed in accordance with the application, as amended, the provisions of Provisional Construction Permit No. CPPR-43, as amended, the Atomic Energy Act of 1954, as amended, and the Commission's regulations. The licensee has submitted proof of financial protection in satisfaction of the requirements of 10 CFR Part 140.

In accordance with the above described notices of hearing the presiding Atomic Safety and Licensing Board, by its initial decision dated



April 26, 1972, has determined that with respect to the disputed welds and welding practices, there is reasonable assurance that the activities which would be authorized by an operating license can be conducted without endangering the health and safety of the public.

The Director of Regulation has made the findings which are set forth in the license, and has concluded that the application, as amended, complies with the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Chapter 1, and that the issuance of the license will not be inimical to the common defense and security or to the health and safety of the public.

The Director of Regulation has also concluded that postponement of the issuance of this license until thirty (30) days after the final detailed statement on environmental considerations was made available to the public, is impracticable.

The license is effective as of the date of issuance and shall expire on June 25, 2008, unless extended for good cause shown or upon the earlier issuance of a superseding operating license.

A copy of (1) Facility Operating License No. DPR-32, complete with Technical Specifications, (2) the applicant's Environmental Report dated December 1, 1971 and Revision 1 to Environmental Report Supplement thereto dated February 29, 1972, (3) the report of the Advisory Committee on Reactor Safeguards, dated December 17, 1971, (4) the "Safety Evaluation by the Division of Reactor Licensing (now DL), U. S. Atomic Energy

Commission in the Matter of Virginia Electric and Power Company, Surry Power Station Units 1 and 2," dated February 23, 1971, (5) the "Division of Compliance (Now R0), U. S. Atomic Energy Commission, Report in the Matter of Virginia Electric and Power Company, Surry 1 Nuclear Power Station," dated February 23, 1972, (6) the Final Safety Analysis Report and amendments thereto, (7) the Draft Detailed Statement on Environmental Considerations, dated March 1972, and (8) the Final Detailed Statement on Environmental Considerations, dated May, 1972, are available for public inspection at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D. C. Copies of items (1), (4), (5), (7) and (8) may be obtained upon request addressed to the United States Atomic Energy Commission, Washington, D. C. 20545 Attention: Deputy Director for Reactor Projects, Directorate of Licensing.

Dated at Bethesda, Maryland this 25th day of May 1972.

FOR THE ATOMIC ENERGY COMMISSION

Original signed by  
A. Giambusso

A. Giambusso, Deputy Director  
for Reactor Projects  
Directorate of Licensing