LICENSE AUTHORITY ELLE CO'



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

March 30, 1976

Dockets Nos. 50-280 and

In- 16 to APR-37

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. 16 to Facility Operating Licenses Nos. DPR-32 and DPR-37 for the Surry Power Station, Units 1 and 2. The amendments are in response to your request dated March 11, 1976.

The amendments authorize you to receive, possess, and use depleted uranium fuel rods in the 17 x 17 rod array demonstration program at the Surry Power Station.

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

Sincerely,

Robert W. Reid, Chief

Operating Reactors Branch No. 4 Division of Operating Reactors

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Enclosures:

- 1. Amendment No. 16 to DPR-32
- 2. Amendment No. 16 to DPR-37
- 3. Safety Evaluation
- 4. Federal Register Notice

cc w/enclosures:
Michael W. Maupin, Esquire
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

cc w/enclosures & incoming: Ms. Susan T. Wilburn Commonwealth of Virginia Council on the Environment P. O.Box 790 Richmond, Virginia 23206



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. 16 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 March 11, 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;
 - E. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment; and

- F. The receipt, possession, and use of source, and special nuclear material as authorized by this license amendment will be in accordance with the Commission's regulations in 10 CFR Parts 40 and 70, including 10 CFR Sections 40.32, 70.23 and 70.31.
- 2. Accordingly, paragraph 2.B of Facility Operating License No. DPR-32 is hereby amended to read as follows:
 - 2.B. Pursuant to the Act and 10 CFR Parts 40 and 70, to receive, possess, and use at any time, source and special nuclear material as reactor fuel, ir accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- 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 No. 4 Division of Operating Reactors

Date of Issuance: March 30, 1976

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NO. 16 TO LICENSES NOS. DPR-32 AND DPR-37

VIRGINIA ELECTRIC & POWER COMPANY

SURRY POWER STATION UNITS 1 & 2

DOCKETS NOS. 50-280 AND 50-281

INTRODUCTION

By a letter dated March 11, 1976, Virginia Electric & Power Company (the licensee) requested amendments to Facility Operating Licenses Nos. DPR-32 and DPR-37 for the Surry Power Station Units 1 and 2. The purpose of the request is to seek authorization for the Surry Power Station to receive, possess, and use depleted uranium fuel rods in the 17 x 17 rod array demonstration program.

EVALUATION

The licensee began a 17 x 17 rod array fuel assembly demonstration program by placing two such assemblies in Surry Units 1 and 2 at the start of Cycle 2 for each core. One of the demonstration fuel assemblies in each unit is designed to permit individual rod removal. As part of the Surry Unit 1 Cycle 3 reload in late 1975, eight of the removable rods were replaced by new rods containing depleted uranium. These depleted uranium rods had been shipped to the Surry Station as "special nuclear material." The licensee, in discussion with the Commission, at that time, was informed that the definition of the depleted uranium as "special nuclear material" was proper and thus already covered by paragraph 2.B of the licenses. However, 10 CFR Part 40 defines depleted uranium fuel rods as source material, not special nuclear material. In order to authorize the licensee to handle depleted uranium fuel rods in the future, we are amending paragraph 2.B of the licenses to include the definition of 10 CFR Part 40 by adding the term "source material" as nuclear fuel in addition to special nuclear material. These depleted, or dummy, fuel rods contain much smaller amounts of fissile uranium than the normally enriched fuel rods classified as special nuclear material, thus the hazards of handling the dummy rods are significantly less than those incurred in handling other reactor fuel.

- F. The receipt, possession, and use of source, and special nuclear material as authorized by this license amendment will be in accordance with the Commission's regulations in 10 CFR Parts 40 and 70, including 10 CFR Sections 40.32, 70.23, and 70.31.
- 2. Accordingly, paragraph 2.B of Facility Operating License No. DPR-37 is hereby amended to read as follows:
 - 2.B. Pursuant to the Act and 10 CFR Parts 40 and 70, to receive, possess, and use at any time, source and special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- 3. This license amendment is effective as of the date of its issuance.

FOR THE MUCLEAR REGULATORY COMMISSION

Robert W. Reid, Chief

Operating Reactors Branch No. 4 Division of Operating Reactors

J. Mad M. Dead

Date of Issuance:

March 30, 1976



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NO. 16 TO LICENSES NOS. DPR-32 AND DPR-37

VIRGINIA ELECTRIC & POWER COMPANY

SURRY POWER STATION UNITS 1 & 2

DOCKETS NOS. 50-280 AND 50-281

INTRODUCTION

By a letter dated March 11, 1976, Virginia Electric & Power Company (the licensee) requested amendments to Facility Operating Licenses Nos. DPR-32 and DPR-37 for the Surry Power Station Units 1 and 2. The purpose of the request is the fact the authorization for the Surry Power Station to receive, possess, and use depleted uranium fuel rods in the 17 x 17 rod array demonstration program.

EVALUATION

The licensee began a 17 x 17 rod array fuel assembly demonstration program by placing two such assemblies in Surry Units 1 and 2 at the start of Cycle 2 for each core. One of the demonstration fuel assemblies in each unit is designed to permit individual rod removal. As part of the Surry Unit 1 Cycle 3 reload in late 1975, eight of the removable rods were replaced by new rods containing depleted uranium. These depleted uranium rods had been shipped to the Surry Station as "special nuclear material." The licensee, in discussion with the Commission, at that time, was informed that the definition of the depleted uranium as "special nuclear material" was proper and thus already covered by paragraph 2.B of the licenses. However, 10 CFR Part 40 defines depleted uranium fuel rods as source material, not special nuclear material. In order to authorize the licensee to handle depleted uranium fuel rods in the future, we are amending paragraph 2.B of the licenses to include the definition of 10 CFR Part 40 by adding the term "source material" as nuclear fuel in addition to special nuclear material. These depleted, or dummy, fuel reds contain much smaller amounts of fissile uranium than the normally enriched fuel rods classified as special nuclear material, thus the hazards of handling the dummy rods are significantly less than those incurred in handling other reactor fuel.

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 statement, negative declaration, or 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 change does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the change does 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:

March 30, 1976

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKETS NOS. 50-280 AND 50-281

VIRGINIA ELECTRIC & POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments No. 16 to Facility Operating Licenses Nos. DPR-32 and DPR-37 issued to Virginia Electric & Power Company (the licensee) for operation of the Surry Power Station, Units 1 and 2, located in Surry County, Virginia. The amendments are effective as of the date of issuance.

The amendments authorize the licensee to receive, possess, and use depleted uranium fuel rods in the 17×17 rod array demonstration program at the Surry Power Station.

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 is 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 statement, negative declaration or 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 March 11, 1976, (2) Amendments No. 16 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. a. Washington, D. C., and at the Swem Library, College of William and 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 30th day of March, 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert W. Reid, Chief

Operating Reactors Branch No. 4

Division of Operating Reactors