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Docket Nos.: 50-280
 and 50-281 APR. 16 1976

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

Gentlemen:

The Commission has issued the enclosed Amendments No. 18 to Facility Operating Licenses Nos. DPR-32 and DPR-37 for the Surry Power Station Units 1 and 2. These amendments consist of changes to the Technical Specifications in response to your application dated April 15, 1976. We have made certain changes to the Technical Specification proposed in your request of April 15, 1976, and have discussed these changes with you.

These amendments relate to a change in the temperature limitations for condenser cooling water discharge permitted during partial shut-down of a condenser or the circulating water system.

Since these amendments apply only to environmental matters, they do not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. They do not involve a significant increase in the probability or consequences of an accident, do not involve a significant decrease in a safety margin, and therefore do not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

Copies of the Environmental Impact Appraisal 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 and cc: See next page

OFFICE >						
SURNAME >						
DATE >						

Enclosures:

1. Amendment No. 18 to DPR-32
2. Amendment No. 18 to DPR-37
3. Environmental Impact Appraisal
4. Federal Register Notice

cc w/enclosures: See next page

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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 AND POWER COMPANY

DOCKET NO. 50-280

SURRY POWER STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 18
License No. DPR-32

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Virginia Electric and Power Company (the licensee) dated April 15, 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. After weighing the environmental aspects involved, 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 a change 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: APR. 16 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 18

FACILITY OPERATING LICENSE NO. DPR-32

DOCKET NO. 50-280

Replace page 4.14-2 of the Technical Specifications with the attached revised page bearing the same number. The changed area on this page is shown by a marginal line.

ture.

- B.
1. The foregoing thermal discharge limits shall not be exceeded except as necessary for safe shutdown of a reactor, or to meet emergency or exceptional load demands upon the licensee's power supply system. An emergency or exceptional load demand shall be considered to exist if the system is unlikely to meet the demand after the licensee has attempted to satisfy its requirements by all other available means, such as use of spinning reserves, standby generation, and purchase from other utilities.
 2. Specification 4.14.A.2 may be modified to permit full power operation during inspections or periods of maintenance and repair to the condenser or circulating water system. In those instances where a condenser or portions of the circulating water system are partially shut down: (1) for a 24 hour period the temperature difference across the affected condenser or the station may exceed 17.5°F but shall not exceed 23°F; and (2) for a period not to exceed 14 days (including the 24 hours in Section 4.14.B.2) the temperature difference may exceed 15°F but shall not exceed 17.5°F.
- C.
1. In all instances where thermal discharge limits stated in specification 4.14.A are exceeded, except as allowed under 4.14.B, these shall be reported as follows: (1) to the Director, Region II, Directorate of Regulatory Operations, via telephone or telegraph within 24 hours of the time of occurrence; and (2) to the Director of Licensing by letter within 15 days, stating the reason or reasons such limits were exceeded, when the incident occurred, its duration, any evidence of adverse environmental impact, and what actions are being taken to prevent recurrence.
 2. In all instances where thermal discharge limits are exceeded, including those allowed under 4.14.B, appropriate notations shall be included



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

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-281

SURRY POWER STATION UNIT NO. 2

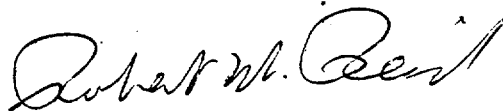
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 18
License No. DPR-37,

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Virginia Electric and Power Company (the licensee) dated April 15, 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. After weighing the environmental aspects involved, 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 a change 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: APR. 16 1975

ATTACHMENT TO LICENSE AMENDMENT NO. 18

FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NO. 50-281

Replace page 4.14-2 of the Technical Specifications with the attached revised page bearing the same number. The changed area on this page is shown by a marginal line.

ture.

- B.
1. The foregoing thermal discharge limits shall not be exceeded except as necessary for safe shutdown of a reactor, or to meet emergency or exceptional load demands upon the licensee's power supply system. An emergency or exceptional load demand shall be considered to exist if the system is unlikely to meet the demand after the licensee has attempted to satisfy its requirements by all other available means, such as use of spinning reserves, standby generation, and purchase from other utilities.
 2. Specification 4.14.A.2 may be modified to permit full power operation during inspections or periods of maintenance and repair to the condenser or circulating water system. In those instances where a condenser or portions of the circulating water system are partially shut down: (1) for a 24 hour period the temperature difference across the affected condenser or the station may exceed 17.5°F but shall not exceed 23°F; and (2) for a period not to exceed 14 days (including the 24 hours in Section 4.14.B.2) the temperature difference may exceed 15°F but shall not exceed 17.5°F.
- C.
1. In all instances where thermal discharge limits stated in specification 4.14.A are exceeded, except as allowed under 4.14.B, these shall be reported as follows: (1) to the Director, Region II, Directorate of Regulatory Operations, via telephone or telegraph within 24 hours of the time of occurrence; and (2) to the Director of Licensing by letter within 15 days, stating the reason or reasons such limits were exceeded, when the incident occurred, its duration, any evidence of adverse environmental impact, and what actions are being taken to prevent recurrence.
 2. In all instances where thermal discharge limits are exceeded, including those allowed under 4.14.B, appropriate notations shall be included



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

ENVIRONMENTAL IMPACT APPRAISAL BY THE OFFICE OF

NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NO. 18 TO DPR-32 AND DPR-37

VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION, UNITS 1 AND 2

Introduction

By letter dated April 15, 1976, the Virginia Electric and Power Company (the licensee) requested a change to the Technical Specifications appended to Facility Operating Licenses Nos. DPR-32 and DPR-37 for the Surry Power Station, Units 1 and 2. The proposed change would change the time limitations applicable to the condenser cooling water temperature requirements permitted during partial shutdown of a condenser or the circulating water system.

Discussion

Specification 4.14.B.2 now provides that when a condenser is partially shut down for maintenance and repair the normal ΔT of 15^oF can be increased to 23^oF but for a time period of only 24 hours. The proposed change would extend 4.14.B.2 to apply to repair or maintenance of other parts of the circulating water system and would further modify 4.14.B.2 to allow the ΔT to increase to 17.5^oF for a time period not to exceed 14 days. The licensee has requested the change because experience has shown that breakdowns sometimes occur in parts of the circulating water system other than just the condenser. The breakdowns typically reduce flow and cause a temporary increase in the normal plant ΔT . The period of time needed to make repairs to the various components of the circulating water system is variable but normally can be completed in 14 days.

Evaluation

The licensee has provided results from biological studies conducted at the station and in the receiving water of the James River. We have reviewed the licensee's proposed changes and have reviewed and analyzed the biological studies' data provided by the licensee.

For full power operation of the station during partial shutdown of the circulating water system, the ΔT for a brief period could be higher than the 15°F ΔT evaluated in the environmental impact statement. An 8°F increase would be permitted for up to 24 hours and a 2.5°F increase for up to 14 days. This means that organisms (most importantly, larval fish and eggs) entrained and pumped through the station experience a slightly greater thermal dose during transit. However, because of the decrease in flow, fewer organisms are exposed to the higher ΔT . The licensee has found that the organisms that would potentially be exposed to entrainment in the station are typically at low densities and the species found were not considered as "important species" in our Final Environmental Statement (FES).

The increase in ΔT allowed by this change will also result in an additional increase of the temperature of the discharge water before it mixes in the James River. The licensee has found that the size of the thermal plume in the river is substantially smaller than that predicted by the model studies in the FES. We conclude that the extent and shape of the various isotherms will not be significantly different from those at normal operation of the circulating water system.

In conclusion, we find that the licensee's proposed changes to T.S. 4.14.B.2 are warranted. Biological impact resulting from this change will be negligible based on the short durations of the increases in ΔT . Furthermore, larval fish and eggs of important species entrained and pumped through the station are present only at very low densities. Operation of the Surry Nuclear Power Station according to proposed limits will not significantly increase the impacts evaluated in the Final Environmental Statement.

Conclusion

We have concluded, based on the reasons discussed in the sections above, that authorization of this change does not involve significant environmental impact or hazards considerations. We also conclude that there is reasonable assurance (1) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (2) that such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or the health and safety of the public.

Date: APR. 18 1978

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-280 AND 50-281

VIRGINIA ELECTRIC AND POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

AND NEGATIVE DECLARATION

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments No. 18 to Facility Operating Licenses Nos. DPR-32 and DPR-37 issued to the Virginia Electric and Power Company which revised Technical Specifications 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 change the temperature limitations for condenser cooling water discharge permitted during partial shutdown of a condenser or the circulating water system.

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.

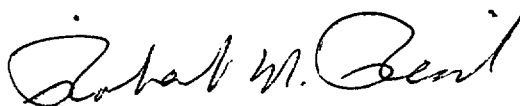
The Commission has prepared an environmental impact appraisal for the revised Technical Specifications and has concluded that an environmental impact statement for this particular action is not warranted because there will be no environmental impact attributable to the action other than that which has already been predicted and described in the Commission's Final Environmental Statements for Surry Power Station, Units 1 and 2 published May and June 1972 and that a negative declaration to this effect is appropriate.

For further details with respect to this action, see (1) the application for amendments dated April 15, 1976, (2) Amendments No. 18 to Licenses Nos. DPR-32 and DPR-37, and (3) the Commission's Environmental Impact Appraisal. 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 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 16th day of April 1976.

FOR THE NUCLEAR REGULATORY COMMISSION



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