Docket Nos. 50-280 and 50-281 DISTRIBUTION See attached sheet

Mr. W. L. Stewart
Senior Vice President - Nuclear
Virginia Electric and Power Company
5000 Dominion Blvd.
Glen Allen, Virginia 23060

Dear Mr. Stewart:

SUBJECT: SURRY UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: SURVEILLANCE

REQUIREMENTS FOR EMERGENCY DIESEL GENERATOR LOAD SEQUENCING

(TAC NOS. 76034 AND 76035)

The Commission has issued the enclosed Amendment No. 141 to Facility Operating License No. DPR-32 and Amendment No. 139 to Facility Operating License No. DPR-37 for the Surry Power Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated December 29, 1989.

These amendments delineate the surveillance requirements for the emergency diesel generator load sequencing modification completed in 1989.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly <u>Federal Register</u> notice.

Sincerely,

Original signed by

Bart C. Buckley, Senior Project Manager Project Directorate II-2 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 141 to DPR-32

2. Amendment No. 139 to DPR-37

3. Safety Evaluation

cc w/enclosures: See next page

OFFICIAL RECORD COPY

Document Name: AMEND SURRY 76034/35

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Mr. W. L. Stewart Virginia Electric and Power Company

cc: Michael W. Maupin, Esq. Hunton and Williams Post Office Box 1535 Richmond, Virginia 23212

Mr. Michael R. Kansler, Manager Surry Power Station Post Office Box 315 Surry, Virginia 23883

Senior Resident Inspector Surry Power Station U.S. Nuclear Regulatory Commission Post Office Box 166, Route 1 Surry, Virginia 23883

Mr. Sherlock Holmes, Chairman Board of Supervisors of Surry County Surry County Courthouse Surry, Virginia 23683

Mr. W. T. Lough Virginia Corporation Commission Division of Energy Regulation Post Office Box 1197 Richmond, Virginia 23209

Regional Administrator, Region II U.S. Nuclear Regulatory Commission 101 Marietta Street N.W., Suite 2900 Atlanta, Georgia 30323

C. M. G. Buttery, M.D., M.P.H. Department of Health 109 Governor Street Richmond, Virginia 23219 Surry Power Station

Attorney General Supreme Court Building 101 North 8th Street Richmond, Virginia 23219

Mr. E. Wayne Harrell Vice President - Nuclear Operations Virginia Electric and Power Company 5000 Old Dominion Blvd. Glen Allen, Virginia 23060

Mr. J. P. O'Hanlon Vice President - Nuclear Services Virginia Electric and Power Company 5000 Old Dominion Blvd. Glen Allen, Virginia 23060

Mr. R. F. Saunders
Manager - Nuclear Licensing
Virginia Electric and Power Company
5000 Old Dominion Blvd.
Glen Allen, Virginia 23060

DATED: May 1, 1990

AMENDMENT NO.141 TO FACILITY OPERATING LICENSE NO. DPR-32 - SURRY UNIT 1 AMENDMENT NO.139 TO FACILITY OPERATING LICENSE NO. DPR-37 - SURRY UNIT 2

Docket File NRC & Local PDRs PDII-2 Reading S. Varga, 14/E/4 G. Lainas, 14/H/3 H. Berkow D. Miller B. Buckley OGC-WF D. Hagan, 3302 MNBB E. Jordan, 3302 MNBB B. Grimes, 9/A/2 G. Hill (8), P1-137 Wanda Jones, P-130A J. Calvo, 11/F/23 N. Trehan ACRS (10) GPA/PA OC/LFMB

cc: Plant Service list

M. Sinkule, R-II



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. 141 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 December 29, 1989, 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. 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 changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-32 is hereby amended to read as follows:

(B) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 141, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Herbert N. Berkow, Director Project Directorate II-2

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: May 1, 1990



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.139 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 December 29, 1989, 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. 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.
- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-37 is hereby amended to read as follows:

(B) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 139, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Herbert N. Berkow, Director Project Directorate II-2

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: May 1, 1990

Mr. W. L. Stewart Virginia Electric and Power Company

cc: Michael W. Maupin, Esq. Hunton and Williams Post Office Box 1535 Richmond, Virginia 23212

Mr. Michael R. Kansler, Manager Surry Power Station Post Office Box 315 Surry, Virginia 23883

Senior Resident Inspector Surry Power Station U.S. Nuclear Regulatory Commission Post Office Box 166, Route 1 Surry, Virginia 23883

Mr. Sherlock Holmes, Chairman Board of Supervisors of Surry County Surry County Courthouse Surry, Virginia 23683

Mr. W. T. Lough Virginia Corporation Commission Division of Energy Regulation Post Office Box 1197 Richmond, Virginia 23209

Regional Administrator, Region II U.S. Nuclear Regulatory Commission 101 Marietta Street N.W., Suite 2900 Atlanta, Georgia 30323

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Mr. R. F. Saunders
Manager - Nuclear Licensing
Virginia Electric and Power Company
5000 Old Dominion Blvd.
Glen Allen, Virginia 23060

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 141 FACILITY OPERATING LICENSE NO. DPR-32

AMENDMENT NO. 139 FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NOS. 50-280 AND 50-281

Revise Appendix A as follows:

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TS 4.6-2

TS 4.6-2

- b. Automatic start of each diesel generator, load shedding, and restoration to operation of particular vital equipment, initiated by a simulated loss of off-site power together with a simulated safety injection signal. Testing will demonstrate load shedding and load sequencing initiated by a simulated loss of off-site power following a simulated engineered safety features signal. Testing will also demonstrate that the loss of voltage and degraded voltage protection is defeated whenever the emergency diesel is the sole source of power to an emergency bus and that this protection is automatically reinstated when the diesel output breaker is opened. This test will be conducted during reactor shutdown for refueling to assure that the diesel generator will start within 10 sec and assume load in less than 30 sec after the engine starting signal.
- c. Availability of the fuel oil transfer system shall be verified by operating the system in conjunction with the monthly test.
- d. Each diesel generator shall be given a thorough inspection during each refueling interval utilizing the manufacturer's recommendations for this class of stand-by service.

2. Acceptance Criteria

The above tests will be considered satisfactory if all applicable equipment operates as designed.

B. Fuel Oil Storage Tanks for Diesel Generators

1. A minimum fuel oil storage of 35,000 gal shall be maintained on-site to assure full power operation of one diesel generator for seven days.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO.141 TO FACILITY OPERATING LICENSE NO. DPR-32 AND AMENDMENT NO.139 TO FACILITY OPERATING LICENSE NO. DPR-37

VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-280 AND 50-281

1.0 INTRODUCTION

Pursuant to 10 CFR 50.90, Virginia Electric and Power Company (VEPCO) proposed to amend Facility Operating Licenses Nos. DPR-32 and DPR-37 for Surry Power Station, Units 1 and 2. By letter dated December 29, 1989, VEPCO proposed a Technical Specification change to delineate the surveil-lance requirements for the emergency diesel generator load sequencing modification which was completed in 1989. The original design of the emergency power system considered a loss-of-coolant accident (LOCA) with a simultaneous loss-of-offsite power (LOOP) as the worst-case loading condition for the emergency diesel generators. However, VEPCO's re-analysis indicated the potential for losing both emergency diesel generators in the event of a LOOP occurring at least several minutes subsequent to a LOCA if all of the accident loads were simultaneously loaded onto the diesels. Based on this analysis, VEPCO modified the logic schemes to shed and sequence the emergency loads onto the diesel generator if a LOOP occurred after a LOCA.

2.0 EVALUATION

VEPCO proposed a change to Technical Specification Section 4.6 to periodically test the sequence and load shed feature for a simulated LOOP condition subsequent to a LOCA. Each diesel generator is designed to accept the safe shutdown loads in the prescribed sequence. The reconnection of all the loads at the same time could result in an overload condition, causing the trip of the respective diesel generator. Therefore, it is necessary to shed all the connected safe shutdown loads and resequence them onto the diesel generator if a LOOP condition occurs subsequent to a LOCA. The proposed testing will assure the ability of the emergency diesel generators to power the necessary safe shutdown loads, following a LOOP subsequent to a design basis accident, by sequencing the loads onto the emergency buses in acceptable loading blocks.

We have reviewed the licensee's submittal and have concluded that the proposed change to include the surveillance requirements associated with Technical Specification 4.6 will assure the ability of the emergency diesel generators to power the necessary shutdown loads following a LOOP subsequent to a LOCA and are, therefore, acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in a requirement with respect to the installation or use of a facility component located within the restricted areas as defined in 10 CFR Part 20 and a change to a surveillance requirement. The staff has determined that these amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that:
(1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) 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: May 1, 1990

Principal Contributors:

N. Trehan
B. Buckley