Docket Nos. 50-280 and 50-281

> 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: "BUDDY SYSTEM" REQUIREMENT (TAC NOS. 75480 AND 75481)

The Commission has issued the enclosed Amendment No. 136 to Facility Operating License No. DPR-32 and Amendment No. 136 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 November 14, 1989.

These amendments delete the "buddy system" requirement for entry into high radiation areas and also delete requirements that are duplicative of the Code of Federal Regulations. In addition, TS 6.4.B has been rewritten using the format of NUREG-0452, Revision 4, "Standard Technical Specifications for Westinghouse Pressurized Water Reactors."

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

Sincerely.

/s/

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. 136 to DPR-32

2. Amendment No. 136 to DPR-37

3. Safety Evaluation

cc w/enclosures: See next page

OFFICIAL RECORD COPY

Document Name: AMENDMENTSURRY

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DATED: January 29, 1990

AMENDMENT NO. 136 TO FACILITY OPERATING LICENSE NO. DPR-32 - SURRY UNIT 1 AMENDMENT NO. 136 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 ACRS (10) GPA/PA OC/LFMB PD Plant-specific file [Gray File] M. Sinkule, R-II Others as required

cc: Plant Service list

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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. 136 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 November 14, 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) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 136, 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: January 29, 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. 136 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 November 14, 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-37 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 136, 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: January 29, 1990

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 136 FACILITY OPERATING LICENSE NO. DPR-32 AMENDMENT NO. 136 FACILITY OPERATING LICENSE NO. DPR-37 DOCKET NOS. 50-280 AND 50-281

Revise Appendix A as follows:

Remove Pages	<u>Insert Pages</u>
TS 6.4-1	TS 6.4-1
TS 6.4-2	TS 6.4-2
TS 6.4-3	TS 6.4-3

6.4 UNIT OPERATING PROCEDURES

Specification

- A. Detailed written procedures with appropriate check-off lists and instructions shall be provided for the following conditions:
 - 1. Normal startup, operation, and shutdown of a unit, and of all systems and components involving nuclear safety of the station.
 - 2. Calibration and testing of instruments, components, and systems involving nuclear safety of the station.
 - 3. Actions to be taken for specific and foreseen malfunctions of systems or components including alarms, primary system leaks and abnormal reactivity changes.
 - 4. Release of radioactive effluents.
 - 5. Emergency conditions involving potential or actual release of radioactivity.
 - 6. Emergency conditions involving violation of industrial security.
 - 7. Preventive or corrective maintenance operations which would have an effect on the safety of the reactor.
 - 8. Refueling operations.
- B. Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

- 1. In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP)*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:
 - a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
 - b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them.
 - c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by Health Physics in the RWP.

^{*} Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved plant radiation protection procedures for entry into high radiation areas.

- 2. The requirements of 6.4.B.1 above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the senior station individual assigned the responsibility for health physics and radiation protection.
- 3. Written procedures shall be established, implemented, and maintained covering the activities referenced below:
 - a. Process Control Program implementation.
 - b. Offsite Dose Calculation Manual implementation.
- C. All procedures described in 6.4.A and 6.4.B, and changes thereto, shall be reviewed and approved by the Station Nuclear Safety and Operating Committee prior to implementation.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 136 TO FACILITY OPERATING LICENSE NO. DPR-32

AND AMENDMENT NO. 136 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

INTRODUCTION

By letter dated November 14, 1989, the Virginia Electric and Power Company (the licensee) requested changes to the Technical Specifications (TS) for Surry Power Station. Units Nos. 1 and No. 2.

The proposed changes would revise TS Section 6.4.B by (1) deleting the "buddy system" requirement in order to reduce unnecessary radiation exposure; (2) deleting requirements that are duplicative of the Code of Federal Regulations (6.4.B.1.c, 6.4.B.1.d and 6.4.B.1.h); and (3) reorganizing TS 6.4.B using the format in the Standard Technical Specifications (STS).

DISCUSSION AND EVALUATION

Included in TS 6.4.B is a requirement to maintain a "buddy system" for entrance into radiation areas in excess of 1 R/hr. For this requirement, one worker maintains positive control of the locked gate regardless of whether it is opened or closed at the time while the other worker (his "buddy") performs the necessary work. The two individuals are required to maintain continuous communication by visual or verbal means during this period. Due to this requirement, two individuals are subject to radiation exposure, regardless of whether both are required to accomplish the work.

In reviewing the historical record, the licensee can find no technical bases or discussion which justifies or directs the inclusion of the "buddy system" into the Technical Specifications. With respect to the regulatory and radiation protection standards of today, the "buddy system" requirement of TS 6.4.B.1.f is inconsistent with STS and contrary to common ALARA practices. Deletion of TS 6.4.B.1.f will result in a significant reduction in man-rem exposure (approximately 9.6 man-rem per year). Therefore, the staff finds this change acceptable.

There are also administrative changes in addition to the above change: (1) the requirement for surveillance of accessible high radiation areas by Health Physics personnel (TS 6.4.B.1.c) is being deleted since it duplicates the requirements of 10 CFR 20.201; (2) the personnel indoctrination requirement of TS 6.4.B.1.d is being deleted because this indoctrination is already stipulated in 10 CFR 19.12; and (3) the fencing requirements of TS 6.4.B.1.h are subsumed by the requirements 10 CFR Part 73, and are therefore deleted. Since the requirements of TS 6.4.B.1.c, 6.4.B.1.d and 6.4.B.1.h are stipulated in the Code of Federal Regulations, their inclusion in the TS are duplicative

9002050384 900129 PDR ADOCK 05000280 and unnecessary. Therefore, the staff finds the deletion of these TS acceptable. $\label{eq:total_start} % \begin{subarray}{ll} \end{subarray} %$

Finally, TS 6.4.B has been rewritten using a format which conforms to that used in NUREG-0452, Revision 4, "Standard Technical Specifications for Westinghouse Pressurized Water Reactors." The staff finds this change acceptable since the new format conforms to an NRC-approved document.

Based on the above, the staff finds the proposed changes, described above, to be acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of the facilities components located within the restricted areas as defined in 10 CFR Part 20. 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). These amendments also involve changes in recordkeeping, reporting or administrative procedures or requirements. Accordingly, these amendments meet the elgibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). 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.

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: January 29, 1990

Principal Contributor:

B. Buckley