

Docket Nos. 50-280  
and 50-281

Posted

*Amdt. 141 to DPR-37*

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: PRESSURIZER  
SAFETY VALVE SETPOINT (TAC NOS. 77105 AND 77106)

The Commission has issued the enclosed Amendment No. 144 to Facility Operating License No. DPR-32 and Amendment No. 141 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 June 25, 1990.

These amendments extend operation of Surry Units 1 and 2 to Cycle 11 with the pressurizer safety valve setpoint of 2485 psig and a tolerance of +5/-1 percent, which is currently allowed for Cycle 10 operation.

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,

(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. 144 to DPR-32
- 2. Amendment No. 141 to DPR-37
- 3. Safety Evaluation

cc w/enclosures:

See next page

\*SEE PREVIOUS CONCURRENCE

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555  
October 5, 1990

Docket Nos. 50-280  
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*Bart C. Buckley*

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

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cc w/enclosures:  
See next page

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Virginia Electric and Power Company

Surry Power Station

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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. 144  
License No. DPR-32

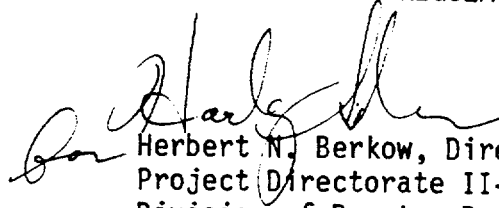
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Virginia Electric and Power Company (the licensee) dated June 25, 1990 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's 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. 144, 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: October 5, 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. 141  
License No. DPR-37

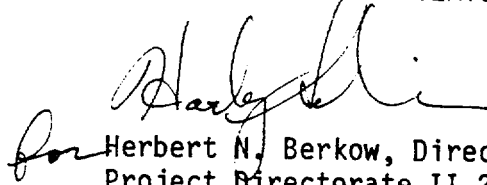
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  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted 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. 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: October 5, 1990

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 144 FACILITY OPERATING LICENSE NO. DPR-32

AMENDMENT NO. 141 FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NOS. 50-280 AND 50-281

Revise Appendix A as follows:

Remove Page

TS 3.1-4

Insert Page

TS 3.1-4



- b. Three valves shall be operable when the reactor coolant average temperature is greater than 350°F, the reactor is critical, or the Reactor Coolant System is not connected to the Residual Heat Removal System.
- c. Valve lift settings shall be maintained at 2485 psig  $^{+1}_{-1}$  percent.\*

4. Reactor Coolant Loops

Loop stop valves shall not be closed in more than one loop unless the Reactor Coolant System is connected to the Residual Heat Removal System and the Residual Heat Removal System is operable.

5. Pressurizer

- a. The reactor shall be maintained subcritical by at least 1% until the steam bubble is established and the necessary sprays and at least 125 KW of heaters are operable.
- b. With the pressurizer inoperable due to inoperable pressurizer heaters, restore the inoperable heaters within 72 hours or be in at least hot shutdown within 6 hours and the reactor coolant system temperature and pressure less than 350°F and 450 psig, respectively, within the following 12 hours.

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\* For the remainder of Cycle 10 and Cycle 11 operation for both units, the valve lift settings shall be maintained at 2485 psig (+5,-1 percent.)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 144 TO FACILITY OPERATING LICENSE NO. DPR-32  
AND AMENDMENT NO. 141 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

By letter dated June 25, 1990, the Virginia Electric and Power Company, the licensee for operation of Surry Power Station, Units 1 and 2, requested amendments to the Technical Specifications of Surry Units 1 and 2 to extend operation to Cycle 11 with the pressurizer safety valve (PSV) setpoint of 2485 psig and a tolerance of +5/-1 percent, which is currently allowed for Cycle 10 operation. Specifically, the request would modify the footnote of TS 3.1-4 to read: "For the remainder of Cycle 10 and Cycle 11 operation for both units, the valve lift settings shall be maintained at 2485 psig (+5,-1 percent.)"

2.0 EVALUATION

The Surry Units 1 and 2 PSVs are installed downstream of loop seals which are filled with 300°F water. The lift setpoints of the PSVs were set with steam conditions. In October 1989, the licensee was informed by Westinghouse of a finding that the actual PSV lift setpoint could shift by 4 to 8 percent under a condition different from that used to establish the setpoint. The licensee's test results of the Unit 2 PSVs in October 1989 also showed an increase of lift setpoint of 3.5 to 5 percent from the as-found setpoint established with steam due to the loop seals. By a letter of November 10, 1989, the licensee requested amendments to the Surry Units 1 and 2 TS 3.1.A.3.c to allow Cycle 10 operation of Units 1 and 2 with the PSV lift setting of 2485 psig and a tolerance increased from +1/-1 percent to +5/-1 percent. This TS change was supported by a safety analysis assuming a 5.4 percent increase in the PSV lift pressure. The results indicated that the reactor coolant system pressure in the limiting overpressurization events would remain below the acceptance criterion of 2750 psia (110 percent of design pressure). In addition, the licensee proposed compensatory measures to maintain operability of at least one power-operated relief valve (PORV) and the anticipatory reactor trip on turbine trip circuit.

Based on the licensee's analysis and proposed compensatory actions, NRC approved the TS change which allowed operation with an increased PSV setpoint tolerance of +5/-1 percent for the remainder of Cycle 10 (Amendment Nos. 135 and 135 dated November 16, 1989). The staff also indicated that it was evaluating the PSV setpoint problem on a generic basis, and that the outcome of the staff generic

evaluation for a long-term solution would also apply to Surry Units 1 and 2. Since a generic resolution to this issue has not yet been completed by industry and the NRC, and since the licensee has decided to continue to take the same compensatory measures to provide added assurance that the primary pressure will remain below 2750 psia, we conclude that the continued operation with increased PSV setpoint tolerance of +5/-1 percent for the remainder of Cycle 10 and Cycle 11 operation is acceptable.

### 3.0 SUMMARY

The staff has reviewed the licensee's request for the Surry Units 1 and 2 TS change to extend the allowable operation from Cycle 10 to Cycle 11 with the current PSV setpoint of 2485 psig +5/-1 percent, and finds it acceptable.

### 4.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of facility 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). 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.

### 5.0 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: October 5, 1990

Principal Contributor:

Y. Hsui