

April 7, 1989

Docket Nos. 50-280  
and 50-281

DISTRIBUTION  
See attached sheet

Mr. W. R. Cartwright  
Vice President - Nuclear  
Virginia Electric and Power Company  
5000 Dominion Blvd.  
Glen Allen, Virginia 23060

Dear Mr. Cartwright:

SUBJECT: SURRY UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: CONTROL ROOM  
CHLORINE MONITORING SYSTEM (TAC NOS. 68460 AND 68461)

The Commission has issued the enclosed Amendment No. 124 to Facility Operating License No. DPR-32 and Amendment No. 124 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 10, 1988.

These amendments delete requirements for and references to the Control Room Chlorine Monitoring System.

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. 124 to DPR-32
2. Amendment No. 124 to DPR-37
3. Safety Evaluation

cc w/enclosures:  
See next page

[AMEND 68460/68461]

LA:PDII-2  
DN:Mer  
03/20/89

*Bob*  
PM:PDII-2  
BBuckley:bd  
03/22/89

*[Signature]*  
D:PDII-2  
HBerkow  
03/16/89

*[Signature]*  
OGC  
RBachmann  
03/27/89

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PDR ADOCK 05000280  
P FDC

*CP-1 cc*

Mr. W. R. Cartwright  
Virginia Electric and Power Company

Surry Power Station

cc:

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Resident Inspector  
Surry Power Station  
U.S. Nuclear Regulatory Commission  
Post Office Box 166, Route 1  
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Mr. Sherlock Holmes, Chairman  
Board of Supervisors of Surry County  
Surry County Courthouse  
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Mr. W. T. Lough  
Virginia Corporation Commission  
Division of Energy Regulation  
Post Office Box 1197  
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Regional Administrator, Region II  
U.S. Nuclear Regulatory Commission  
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C. M. G. BATTERY, M.D., M.P.H.  
Department of Health  
109 Governor Street  
Richmond, Virginia 23219

DATED: APRIL 7, 1989

AMENDMENT NO. 124 TO FACILITY OPERATING LICENSE NO. DPR-32 - SURRY UNIT 1  
AMENDMENT NO. 124 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

T. Meek (8), P1-137

Wanda Jones, P-130A

E. Butcher, 11/F/23

ACRS (10)

GPA/PA

ARM/LFMB

B. Wilson, R-II

cc: Plant Service list

DF01  
1/1



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. 124  
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 10, 1988, 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:

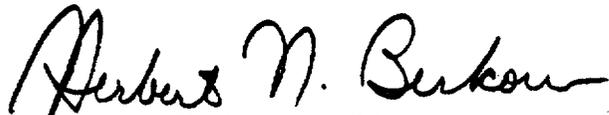
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(B) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 124, 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: April 7, 1989



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. 124  
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 June 10, 1988, 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. 124, 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: April 7, 1989

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 124 FACILITY OPERATING LICENSE NO. DPR-32

AMENDMENT NO. 124 FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NOS. 50-280 AND 50-281

Revise Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
TS 3.7-2a	TS 3.7-2a
TS 3.7-9b	TS 3.7-9b
TS 3.7-22	TS 3.7-22
TS 4.1-8a	TS 4.1-8a

3. The requirements of Specification 3.0.1 and 6.6.2 are not applicable.
- F. The accident monitoring instrumentation for its associated operable components listed in TS Table 3.7-6 shall be operable in accordance with the following:
1. With the number of operable accident monitoring instrumentation channels less than the total number of channels shown in TS Table 3.7-6, either restore the inoperable channel(s) to operable status within 7 days or be in at least hot shutdown within the next 12 hours.
  2. With the number of operable accident monitoring instrumentation channels less than the minimum channels operable requirement of TS Table 3.7-6, either restore the inoperable channel(s) to operable status within 48 hours or be in at least hot shutdown within the next 12 hours.

control room.

The supply lines installed from the containment penetrations to the hydrogen analyzers have Category 1 Class IE heat tracing applied. The heat tracing system receives the same transferable emergency power as is provided to the containment hydrogen analyzers. The heat trace system is de-energized during normal system operation. Upon receipt of a safety injection signal (Train A or Train B), the system is automatically started, after a preset time delay, to bring the piping process temperature to  $250^{\circ}\text{F} \pm 10^{\circ}\text{F}$  within 20 minutes. Each heat trace circuit is equipped with an RTD to provide individual circuit readout, over temperature alarm and cycles the circuit to maintain the process temperature via the solid state control modules.

The hydrogen analyzer heat trace system is equipped with high temperature, loss of D.C. power, loss of A.C. power, loss of control power and failure of automatic initiation alarms.

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TABLE 4.1-1 (Continued)

MINIMUM FREQUENCIES FOR CHECK, CALIBRATIONS AND  
TEST OF INSTRUMENT CHANNELS

<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>
33. Loss of Power				
a. 4.16 KV Emergency Bus Under-voltage (Loss of voltage)	N.A.	R	M	
b. 4.16 KV Emergency Bus Under-voltage (Degraded voltage)	N.A.	R	M	
34. Deleted				
35. Manual Reactor Trip	N.A.	N.A.	R	The test shall independently verify the operability of the undervoltage and shunt trip attachments for the manual reactor trip function. The test shall also verify the operability of the bypass breaker trip circuit.
36. Reactor Trip Bypass Breaker	N.A.	N.A.	M(1), R(2)	(1) Local manual undervoltage trip prior to placing breaker in service.  (2) Automatic shunt trip.
37. Safety Injection Input from ESF	N.A.	N.A.	R	
38. Reactor Coolant Pump Breaker Position Trip	N.A.	N.A.	R	
39. Steam/Feedwater Flow and low S/G Water Level	S	R	M	

S - Each shift

D - Daily

N.A. - Not Applicable

Q - Every 90 effective full power days

\* See Specification 4.1.D

M - Monthly

P - Prior to each startup if not done within the previous week

R - Each Refueling Shutdown



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 124 TO FACILITY OPERATING LICENSE NO. DPR-32  
AND AMENDMENT NO. 124 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

The licensee, the Virginia Electric and Power Company, in its submittal dated June 10, 1988, proposed to amend the Technical Specifications to Facility Operating License Nos. DPR-32 and DPR-37. The proposed revisions would delete requirements for and references to the Control Room Chlorine Monitoring System. The current Technical Specifications, Section 3.7, require the chlorine monitoring system to be operable at all times.

EVALUATION

The chlorine monitors were originally installed, in accordance with Regulatory Guide 1.95, to isolate the control room in the event of a release of chlorine being stored for usage at the Sewage Treatment Plant located at the Surry site. The licensee has committed to a new sewage disinfection system to be used at the site that will not require the use of chlorine. Consequently, the chlorine gas storage bottles were removed from the Surry site in September 1988. The licensee has also stated that the chlorine previously stored at sewage treatment plant was the only source of chlorine which could lead to control room habitability concerns. This finding was based on a NUS Corporation Report No. 3735 (Volumes 1 and 2), entitled "Surry Onsite Toxic Chemical Release Analysis" and "Surry Offsite Toxic Chemical Release Analysis," respectively. These studies were previously found acceptable by the NRC staff as delineated in an NRC Safety Evaluation dated June 28, 1982. In addition, Regulatory Guide 1.95 does not require chlorine detectors in those circumstances where chlorine in amounts not exceeding 20 pounds are located at the plant.

SUMMARY

Based on the staff's review of the licensee's submittal, the staff concludes that the proposed amendments conform with the guidelines of Regulatory Guide 1.95 and are therefore acceptable.

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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). 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: April 7, 1989

Principal Contributor:

B. Buckley