

March 15, 1996

Mr. C. S. Hinnant, Vice President  
Carolina Power & Light Company  
H. B. Robinson Steam Electric Plant  
Unit No. 2  
3581 West Entrance Road  
Hartsville, South Carolina 29551-0790

SUBJECT: ISSUANCE OF AMENDMENT NO. 168 TO FACILITY OPERATING LICENSE NO. DPR-23 REGARDING SERVICE WATER SYSTEM OPERABILITY - H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 (TAC NO. M94095)

Dear Mr. Hinnant:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. to Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit No. 2. This amendment changes the Technical Specifications in response to your request dated November 22, 1995.

The amendment deletes the qualifying statement, "... provided the remaining systems are in continuous operation," from TS Section 3.3.4.2. NRC staff concludes the requirement to maintain a system in continuous operation for the sole purpose of demonstrating operability is unnecessary.

A copy of the related Safety Evaluation is enclosed. Notice of Issuance will be included in the Commission's bi-weekly Federal Register notice.

Sincerely,

Original signed by:

Brenda L. Mozafari, Project Manager  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-261

Enclosures:

1. Amendment No. 168 to DPR-23
2. Safety Evaluation

cc w/enclosures:  
See next page

FILENAME - G:\ROBINSON\ROB94095.AMD

OFFICE	LA:PDII-1	PM:PDII-1	OGC <i>AB</i>	D:PDII-1	SPLB #143-SEA <i>SP</i>
NAME	EDunnington <i>ETD</i>	BMOzafari <i>BPM</i>	EHOLLER <i>EH</i>	EImbro <i>EE</i>	G Hubbard <i>GH</i>
DATE	02/15/96	02/26/96	02/18/96	03/15/96	02/28/96
COPY	Yes/No	Yes/No	Yes/No	Yes/No	Yes

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*concur with comment*

*JFO*

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 15, 1996

Mr. C. S. Hinnant, Vice President  
Carolina Power & Light Company  
H. B. Robinson Steam Electric Plant  
Unit No. 2  
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Hartsville, South Carolina 29551-0790

SUBJECT: ISSUANCE OF AMENDMENT NO. 168 TO FACILITY OPERATING LICENSE NO.  
DPR-23 REGARDING SERVICE WATER SYSTEM OPERABILITY - H. B. ROBINSON  
STEAM ELECTRIC PLANT, UNIT NO. 2 (TAC NO. M94095)

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Sincerely,

A handwritten signature in cursive script that reads "Brenda Mozafari".

Brenda L. Mozafari, Project Manager  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

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See next page

Mr. C. S. Hinnant  
Carolina Power & Light Company

H. B. Robinson Steam Electric  
Plant, Unit No. 2

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3581 West Entrance Road  
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AMENDMENT NO. 168 TO FACILITY OPERATING LICENSE NO. DPR-23 - H. B. ROBINSON  
STEAM ELECTRIC PLANT, UNIT NO. 2

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-261

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 168  
License No. DPR-23

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Carolina Power & Light Company (the licensee), dated November 22, 1995, 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-23 is hereby amended to read as follows:

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**B. Technical Specifications**

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 168, are hereby incorporated in the license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Eugene V. Imbro, Director  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 15, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 168

FACILITY OPERATING LICENSE NO. DPR-23

DOCKET NO. 50-261

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised area is indicated by a marginal line.

Remove Page

3.3-8

Insert Page

3.3-8

3.3.3.3 When the reactor is in the hot shutdown condition, the requirements of 3.3.3.1 and 3.3.3.2 shall be met. Except that any one component as defined in 3.3.3.2 may be inoperable for a period equal to the time period specified in the subparagraphs of 3.3.3.2 plus 48 hours, after which the plant shall be placed in the cold shutdown condition utilizing normal operating procedures.

3.3.4 Service Water System

3.3.4.1 The reactor shall not be made critical unless the following conditions are met:

- a. Four service water pumps, two service water booster pumps, and two loop headers are operable.
- b. All essential features including valves, interlocks, and piping associated with the operation of these pumps are also operable.

3.3.4.2 During power operation, the requirements of 3.3.4.1 may be modified to allow any one of the following components to be inoperable. If the system is not restored to meet the requirements of 3.3.4.1 within the time period specified, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures. If the requirements of 3.3.4.1 are not satisfied within an additional 48 hours, the reactor shall be placed in the cold shutdown condition, utilizing normal operating procedures.

- a. One of the two loop headers may be out of service for a period of 24 hours.
- b. One service water pump may be out of service for a period of 24 hours.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 168 TO FACILITY OPERATING LICENSE NO. DPR-23

CAROLINA POWER & LIGHT COMPANY

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

DOCKET NO. 50-261

1.0 INTRODUCTION

By letter dated November 22, 1995, the Carolina Power & Light Company (licensee) submitted a request for changes to the H. B. Robinson Steam Electric Plant, Unit No. 2 (HBR), Technical Specifications (TS). The requested changes would delete the qualifying statement, "... provided the remaining systems are in continuous operation," from TS Section 3.3.4.2. Currently, this statement requires the remaining systems to be in continuous operation while allowing one SW loop header, or one SW pump, or one SW booster pump to be inoperable for a period of 24 hours.

2.0 EVALUATION

The Service Water System (SWS) is designed to provide cooling water to those components necessary for plant safety either during normal operation or under accident conditions. The SWS also supplies cooling water to various other heat loads in both the primary and secondary portions of the plant. The SWS consists of four SW intake pumps, two 100% capacity SW booster pumps, two 100% capacity supply lines, and associated interlocks, piping, and valves. The four pumps and two supply lines are cross-connected by normally open valves. The four SW intake pumps are located in three separate bays. Either of the two supply lines can be used to provide cooling water to all containment air recirculation cooling coils, the containment air recirculation fan motor coolers, the turbine-driven auxiliary feedwater pump, and the diesel generators. The booster pumps supply service water to the containment ventilation cooling units from the supply lines.

During normal operation, cooling loads are supplied by three of the four SW pumps. Following a simultaneous loss-of-coolant-accident and loss of offsite power, the essential loads can be supplied by any two of the four service water pumps. The current TS require all remaining system components to operate whenever one SW pump, booster pump, or header is out of service. The proposed revision to the TS deletes the requirement for continuous operation of redundant system components.

The requirement that "the remaining systems are in continuous operation" was intended to demonstrate operability of the SW system. This method of demonstrating operability was a typical requirement that was included in the TS when HBR was granted its operating license. However, continuous operation of redundant components/systems does not provide a necessary or optimal

requirement for operation of a system. The NRC staff currently accepts periodic surveillance testing as adequate assurance that a system is operable. Continuous operation of redundant systems/components is not required in NUREG-1431, "Standard Technical Specifications for Westinghouse Plants" nor in recently issued TS.

Based on the above NRC position, the continuous operation of a redundant component/system to demonstrate operability is not necessary. Additionally, the requirement imposes unnecessary operational restrictions that have no safety basis, nor is there a basis supported by the plant design or the license as originally issued or currently revised. Therefore, the NRC staff concludes the requirement to maintain a system in continuous operation for the sole purpose of demonstrating operability is unnecessary and the TS change is acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of South Carolina official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (60 FR 62487). Accordingly, the amendment meets 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 the amendment.

### 5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: B. Mozafari and A. Dummer

Date: March 15, 1996