

April 19, 1993

Docket No. 50-261

Mr. R. A. Watson
Senior Vice President
Nuclear Generation
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Watson:

SUBJECT: ISSUANCE OF AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE NO. DPR-23 REGARDING THE SAFETY INJECTION ACCUMULATOR ACTION STATEMENT H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2, (TAC NO. M82226)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 146 to Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit No. 2. This amendment consists of changes to the Technical Specifications (TS) in response to your request dated November 27, 1991.

The amendment revises the TS to allow one safety injection accumulator to be inoperable due to improper pressure, borated water volume, or boron concentration for the same amount of time currently allowed for inoperability due to isolation.

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

Enclosures:

1. Amendment No. 146 to DPR-23
2. Safety Evaluation

cc w/enclosures:
See next page

URGENT FILE ORIGINAL COPY

CR-1

OFC	LA: PD2A:DRPE	PM: PD21:DRPE	AD: PD21:DRPE	BC: DSSA:SRXB	OGC: <i>My credit</i>
NAME	PDAnderson	BLMozafari:tmw	JAMitchell	RJones	<i>My credit</i>
DATE	04/12/93	04/2/93	04/19/93	04/4/93	04/14/93

Document Name: ROB82226.AMD

9304210379 930419
PDR ADOCK 05000261
P PDR

RFOL
11

Mr. R. A. Watson
Carolina Power & Light Company

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

cc:

Mr. H. Ray Starling
Manager - Legal Department
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Mr. Dayne H. Brown, Director
Department of Environmental,
Health and Natural Resources
Division of Radiation Protection
Post Office Box 27687
Raleigh, North Carolina 27611-7687

Mr. H. A. Cole
Special Deputy Attorney General
State of North Carolina
Post Office Box 629
Raleigh, North Carolina 27602

Mr. Robert P. Gruber
Executive Director
Public Staff - NCUC
Post Office Box 29520
Raleigh, North Carolina 27626-0520

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
H. B. Robinson Steam Electric Plant
Route 5, Box 413
Hartsville, South Carolina 29550

Mr. C. R. Dietz
Vice President
Robinson Nuclear Department
H. B. Robinson Steam Electric Plant
Post Office Box 790
Hartsville, South Carolina 29550

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

Mr. Heyward G. Shealy, Chief
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Mr. Ray H. Chambers, Jr.
General Manager
H. B. Robinson Steam Electric Plant
Post Office Box 790
Hartsville, South Carolina 29550

Mr. R. B. Starkey
Vice President
Nuclear Services Department
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Public Service Commission
State of South Carolina
Post Office Drawer 11649
Columbia, South Carolina 29211



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. 146
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 27, 1991, 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:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 146, are hereby incorporated in the license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications.

AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE NO. DPR-23 - H. B. ROBINSON
STEAM ELECTRIC PLANT, UNIT NO. 2

DISTRIBUTION:

~~Docket File~~

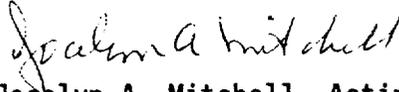
NRC/Local PDRs
PD II-1 Reading File
S. Varga
J. A. Mitchell
B. L. Mozafari
P. D. Anderson
R. Jones 8-E-23
OGC
D. Hagan MNBB 3302
G. Hill (2) P1-37
Wanda Jones P-130
C. Grimes 11-E-22
ACRS (10)
OPA
OC/LFDCB
E. Merschoff, R-II

cc: Robinson Service List

210101

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Jocelyn A. Mitchell, Acting Project 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: April 19, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 146

FACILITY OPERATING LICENSE NO. DPR-23

DOCKET NO. 50-261

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

Remove Pages

3.3-3
3.3-5

Insert Pages

3.3-3
3.3-5

- i. Power operation with less than three loops in service is prohibited.

3.3.1.2 During power operation, the requirements of 3.3.1.1 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 3.3.1.1 within the time period specified, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures. If the requirements of 3.3.1.1 are not satisfied within an additional 48 hours, the reactor shall be placed in the cold shutdown condition utilizing normal operating procedures.

- a. One accumulator may be isolated or otherwise inoperable relative to the requirements of 3.3.1.1.b for a period not to exceed four hours.
- b. If one safety injection pump becomes inoperable during normal reactor operation, the reactor may remain in operation for a period not to exceed 24 hours, provided the remaining safety injection pump is demonstrated to be operable prior to initiating repairs.
- c. If one residual heat removal pump becomes inoperable during normal reactor operation, the reactor may remain in operation for a period not to exceed 24 hours, provided the other residual heat removal pump is demonstrated to be operable prior to initiating repairs.

3.3.1.3 When the reactor is in the hot shutdown condition, the requirements of 3.3.1.1 and 3.3.1.2 shall be met. Except that the accumulators may be isolated or otherwise inoperable relative to the requirements of 3.3.1.1.b. In addition, any one component as defined in 3.3.1.2 may be inoperable for a period equal to the time period specified in the subparagraphs of 3.3.1.2 plus 48 hours, after which the plant shall be placed in the cold shutdown condition utilizing normal operating procedures. The safety injection pump power supply breakers must be racked out when the reactor coolant system temperature is below 350°F and the system is not vented to containment atmosphere.

3.3.1.4 When the reactor is in the cold shutdown condition (except refueling operation when Specification 3.8.1.e applies), both residual heat removal loops must be operable. Except that either the normal or emergency power source to both residual heat removal loops may be inoperable.

- a. If one residual heat removal loop becomes inoperable during cold shutdown operation, within 24 hours verify the existence of a method to add make-up water to the reactor coolant system such as charging pumps, safety injection pumps (under adequate operator control to prevent system overpressurization), or primary water (if the reactor coolant system is open for maintenance) as back-up decay heat removal method. Restore the inoperable RHR loop to operable status within 14 days or prepare and submit a Special Report to the Commission within the next 30 days outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the loop to operable status.
- b. If both residual heat removal loops become inoperable during cold shutdown operation, close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere prior to the reactor coolant average temperature exceeding 200°F, restore at least one residual



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 146 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 27, 1991, Carolina Power & Light Company (licensee) submitted a request for changes to the H. B. Robinson Steam Electric Plant, Unit No. 2 (HBR2), Technical Specifications (TS). The amendment would revise the TS to allow one safety injection accumulator to be inoperable due to improper pressure, borated water volume, or boron concentration for the same amount of time currently allowed for inoperability due isolation.

2.0 DISCUSSION AND EVALUATION

The HBR2 emergency core cooling system is equipped with three safety injection accumulators, each connected to a reactor coolant system (RCS) cold leg. The accumulators are pressure vessels partially filled with borated water and pressurized with nitrogen gas. The functions of the accumulators are to supply water to the reactor vessel in case of a loss-of-coolant accident (LOCA).

A Licensee Event Report (LER) was submitted to the NRC on July 19, 1991, which reported that on April 12, 1991, an accumulator was drained down below the minimum volume required by TS and refilled with borated water to correct a low boron concentration. The level was below TS limits for 40 minutes. The licensee applied TS 3.3.1.2.a, which allows one accumulator to be isolated for a period not to exceed 4 hours. The LER indicates that this was consistent with past applications of the TS.

The current TS for HBR2 provide no action statement to address an accumulator that becomes inoperable due to volume, pressure, or boron concentration. The licensee stated in a November 27, 1991 letter, that without an action statement, by literally reading the TS, operations staff could enter TS 3.0 whenever an accumulator becomes inoperable for any reason other than closure of the discharge isolation valve. Entry into TS 3.0 requires the plant to be in hot shutdown within 8 hours. Anomalies in these parameters do not typically require entry into hot shutdown.

To eliminate the potential for unnecessary shutdown in response to a condition for which 4 hours is sufficient to take corrective action, the licensee has proposed a revision to TS 3.3.1.2 to clarify the TS by adding an action statement to account for one accumulator that is inoperable for reasons other than being isolated. The licensee has proposed an allowed out of service time (AOT) of 4 hours, the same period presently allowed for an isolated accumulator. The current TS for an isolated accumulator establish the 4-hour time period as an acceptable AOT. We find that the proposed amendment assures availability of accumulators in the event of a loss-of-coolant-accident and, thus, 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 (57 FR 45078). 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 Contributor: B. Mozafari

Date: April 19, 1993