

April 27, 1990

Docket No. 50-261

DISTRIBUTION
See attached page

Mr. Lynn W. Eury
Executive Vice President
Power Supply
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

see correction letter of 5/15/90

Dear Mr. Eury:

SUBJECT: ISSUANCE OF AMENDMENT NO. 126 TO FACILITY OPERATING LICENSE NO. DPR-23 - H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2, REGARDING DETECTION OF INADEQUATE CORE COOLING TECHNICAL SPECIFICATIONS (TAC NO. 71209)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 126 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 February 13, 1990.

The amendment changes the TS to incorporate provisions for the reactor vessel level instrumentation system (RVLIS) and core exit thermocouple (CET) by adding Notes 7 and 8. The staff finds the revisions of the RVLIS and CET TS to be acceptable.

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

Sincerely,

Original signed By:

Ronnie H. Lo, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 126 to DPR-23
- 2. Safety Evaluation

cc w/enclosures:
See next page

OFC	: LA:RD21:DRPR:PM:PD21:DRPR:D:PD21:DRPR:	:	:	:
NAME	: PANASON : RLo:sw <i>Ho</i> : Adensam <i>Ho</i>	:	:	:
DATE	: 4/16/90 : 4/16/90 : 4/17/90	:	:	:

CP-1

OFFICIAL RECORD COPY

9005040211 900427
PDR ADOCK 05000261
P PDC

DF01
11

AMENDMENT NO. 126 TO FACILITY OPERATING LICENSE NO. DPR-23 - ROBINSON,
UNIT NO. 2

Docket File

NRC PDR

Local PDR

PDII-1 Reading

S. Varga (14E4)

G. Lainas

E. Adensam

P. Anderson

R. Lo

OGC

D. Hagan (MNBB 3302)

E. Jordan (MNBB 3302)

G. Hill (4) (P1-137)

W. Jones (P-130A)

J. Calvo (11D3)

T. Huang

ACRS (10)

GPA/PA

ARM/LFMB

cc: Licensee/Applicant Service List

Mr. L. W. Eury
Carolina Power & Light Company

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

cc:

Mr. R. E. Jones, General Counsel
Carolina Power & Light Company
P. O. Box 1551
Raleigh, North Carolina 27602

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

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

Mr. Robert P. Gruber
Executive Director
Public Staff - NCUC
P. O. 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
Manager, Robinson Nuclear Project
Department
H. B. Robinson Steam Electric Plant
P. O. Box 790
Hartsville, South Carolina 29550

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street
Suite 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. R. Morgan
General Manager
H. B. Robinson Steam Electric Plant
P. O. Box 790
Hartsville, South Carolina 29550



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

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-261

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

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 126
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 February 13, 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-23 is hereby amended to read as follows:

9005040214 900427
PDR ADOCK 05000261
P PIC

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 126, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Ronnie Lo/for

Elinor G. Adensam, 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 27, 1990

OFC	: LA: PD21: DRPR: PM: PD21: DRPR: OGC	: D: PD21: DRPR:	:	:
NAME	: PAnderson	: RLo: sw	: R. Buchmann	: EAdensam
DATE	: 4/6/90	: 4/6/90	: 4/12/90	: 4/27/90

ATTACHMENT TO LICENSE AMENDMENT NO. 126

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.

<u>Remove Pages</u>	<u>Insert Pages</u>
3.5-18	3.5-18
3.5-19b	3.5-19b
4.1-9a	4.1-9a

TABLE 3.5-5
 (THIS TABLE APPLIES WHEN THE RCS IS > 350°F)
INSTRUMENTATION TO FOLLOW THE COURSE OF AN ACCIDENT

NO.	<u>INSTRUMENT</u>	1 MINIMUM CHANNELS OPERABLE	2 <u>OPERATOR ACTION IF CONDITIONS OF COLUMN 1 CANNOT BE MET</u>
1	Pressurizer Level	2	See Item 9 Table 3.5-2
2	Auxiliary Feedwater Flow Indication (Primary Indication) SD AFW Pump MD AFW Pump	1 per S/G 1 per S/G	Note 1
3	Reactor Coolant System Subcooling Monitor	1	Note 2
4	PORV Position Indicator (Primary)	1	Note 3
5	PORV Blocking Valve Position Indicator (Primary)	1	Note 3
6	Safety Valve Position Indicator (Primary)	1	Note 3
7	Noble Gas Effluent Monitors ***** a. Main Steam Line b. Main Vent Stack High Range Mid Range c. Spent Fuel Pit-Lower Level High Range	1 per steamline 1 1 1	Note 4 Note 4 Note 4 Note 4
8	CV High Range Radiation Monitor *****	2	Note 4
9	CV Level (Wide Range) *	2	Note 5
10	CV Pressure (Wide Range) **	2	Note 5
11	CV Hydrogen Monitor ***	1	Note 6
12	Reactor Vessel Level Instrumentation System (RVLIS)	2	Note 7
13	Incore Thermocouple (T/C)	2 T/C per core quadrant	Note 8

* Containment Water Level Monitor - NUREG-0737 Item II.F.1.5
 ** Containment Pressure Monitor - NUREG-0737 Item II.F.1.4
 *** Containment Hydrogen Monitor - NUREG-0737 Item II.F.1.6
 **** Containment High-Range Radiation Monitor - NUREG-0737 Item II.F.1.3
 ***** Noble Gas Effluent Monitors - NUREG-0737 Item II.F.1.1

3.5-18

Amendment No. 4, 126

TABLE 3.5-5 (Continued)

INSTRUMENTATION TO FOLLOW THE COURSE OF AN ACCIDENT

TABLE NOTATION

Note 7:* With the number of OPERABLE channels one less than the MINIMUM CHANNELS OPERABLE requirement, restore the inoperable channel to OPERABLE status within 7 days, or be in at least HOT SHUTDOWN within the next 12 hours.

With the number of operable channels two less than the MINIMUM CHANNELS OPERABLE requirement, restore at least one channel to operable status within 48 hours, or be in at least HOT SHUTDOWN within the next 12 hours.

Note 8: With the number of operable thermocouples one less than required by the MINIMUM CHANNELS OPERABLE requirements, restore the inoperable thermocouples to operable status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and < 350°F within the next 30 hours.

With the number of operable thermocouples two less than the MINIMUM CHANNELS OPERABLE requirement, restore at least one thermocouple to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours and < 350°F within the next 30 hours.

* For the remainder of Cycle 13 and Cycle 14, Note 7 above is superseded by the following:

With the number of OPERABLE channels one less than the MINIMUM CHANNELS OPERABLE requirement, restore the inoperable channel to OPERABLE status within 7 days or prepare and submit a Special Report to the Commission within the following 14 days outlining the action taken, the cause of inoperability, and the plans and schedule for restoring the system to OPERABLE status.

With the number of operable channels two less than the MINIMUM CHANNELS OPERABLE requirement, ensure the availability of an alternate method of monitoring the reactor vessel inventory. Restore at least one channel to operable status within 48 hours and prepare and submit a Special Report to the Commission within the following 14 days outlining the action taken, the cause of inoperability, and the plans and schedule for restoring the system to OPERABLE status.

TABLE 4.1-1 (Continued)

48.	Reactor Vessel Level Instrumentation System (RVLIS)	M	R	N.A.
49.	Incore Thermocouple Temperature Instrumentation	M	R	N.A.

- + Containment Water Level Monitor - NUREG 0737 Item II.F.1.5
- ++ Containment Pressure Monitor - NUREG-0737 Item II.F.1.4
- +++ Containment Hydrogen Monitor - NUREG-0737 Item II.F.1.6
- ++++ Containment High-Range Radiation Monitor - NUREG-0737 Item II.F.1.3
- # Calibration performed in accordance with CP&L's letter dated April 28, 1982; S. R. Zimmerman to S. A. Varga.

S	-	At least once per 12 hours	Q	-	At least once per 92 days
D	-	At least once per 24 hours	S/U	-	Prior to each reactor startup if not performed in the previous seven (7) days
W	-	At least once per 7 days	R	-	At least once per 18 months
B/W	-	At least once per 14 days	N.A.	-	Not applicable
M	-	At least once per 31 days			

4.1-9a



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 126 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 December 10, 1982, the NRC issued Generic Letter 82-28, "Inadequate Core Cooling Instrumentation System." Licensees were asked to install an inadequate core cooling instrumentation (ICCI) in accordance with Item F.2 of NUREG-0737. The ICCI at H. B. Robinson Steam Electric Plant, Unit No. 2 consists of the reactor coolant system subcooling monitor (RCSM), the reactor vessel level indicating system (RVLIS) and the core exit thermocouple (CET). By letter dated February 13, 1990, Carolina Power & Light Company (CP&L) requested an amendment to the TS to incorporate the provisions for the RVLIS and the CET by adding Notes 7 and 8.

2.0 EVALUATION

The licensee has proposed the following actions for the RVLIS and CET as part of TS Table 3.5-5, "Instrumentation to Follow the Course of an Accident."

For RVLIS (Note 7 is used):

With the number of OPERABLE channels one less than the MINIMUM CHANNELS OPERABLE requirement, restore the inoperable channel to operable status within 7 days, or be in at least HOT SHUTDOWN within the next 12 hours.

With the number of OPERABLE channels two less than the MINIMUM CHANNELS OPERABLE requirement, restore at least one channel to operable status within 48 hours, or be in at least HOT SHUTDOWN within the next 12 hours.

However, for the remainder of Cycle 13 and Cycle 14, Note 7 above is superseded by the following under "*":

9005040217 900427
PDR ADOCK 05000261
P PDC

With the number of operable channels one less than the MINIMUM CHANNELS OPERABLE requirement, restore the inoperable channel to OPERABLE status within 7 days or prepare and submit a Special Report to the Commission within the following 14 days outlining the action taken, the cause of inoperability, and the plans and schedule for restoring the system to OPERABLE status.

With the number of operable channels two less than the MINIMUM CHANNELS OPERABLE requirement, ensure the availability of an alternate method of monitoring the reactor vessel inventory. Restore at least one channel to operable status within 48 hours and prepare and submit a Special Report to the Commission within the following 14 days outlining the action taken, the cause of inoperability, and the plans and schedule for restoring the system to OPERABLE status.

For CET (Note 8 is used)

With the number of operable thermocouples, one less than required by the MINIMUM CHANNELS OPERABLE requirements, restore the inoperable thermocouples to operable status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and $<350^{\circ}\text{F}$ within the next 30 hours.

With the number of operable thermocouples two less than the MINIMUM CHANNELS OPERABLE requirement, restore at least one channel of thermocouple to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours and $<350^{\circ}\text{F}$ within the next 30 hours.

We have reviewed these specifications for RVLIS and CET and find them consistent with the GL 83-37 "NUREG-0737 Technical Specifications" guidance. Therefore, the Note 7 and Note 8 action statements for RVLIS and CET, respectively, are acceptable. In addition, a request was made to use a modified action statement for Note 7 as discussed above until Cycle 15 for gaining operational experience. We find this request acceptable.

Finally, the surveillance requirements of the RVLIS and the CET are added to Table 4.1-1 and we find the request for these additions, acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment changed a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. The 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 off site; and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration, and there has been no public comment on such finding. Accordingly, this 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 this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that this amendment involves no significant hazards consideration, which was published in the FEDERAL REGISTER (55 FR 8220) on March 7, 1990, and consulted with the State of South Carolina. No public comments or requests for hearing were received, and the State of South Carolina did not have any comments.

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

Principal Contributor: T. Huang

Dated April 27, 1990