

July 31, 11990

Docket No. 50-400

DISTRIBUTION
See attached list

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

Dear Mr. Eury:

SUBJECT: ISSUANCE OF AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE
NO. NPF-63 - SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1,
REGARDING ENGINEERED SAFETY FEATURES ACTUATION SYSTEM
INSTRUMENTATION (TAC NO. 75183)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 20 to Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1. This amendment consists of changes to the Technical Specifications in response to your request dated October 26, 1989, as supplemented December 15, 1989.

The amendment request clarifies the requirements of Item 6.a and Action Statement 23 of Technical Specification Table 3.3-3, Engineered Safety Features Actuation System Instrumentation. Currently, the required number of channels for manual initiation of auxiliary feedwater is listed as one per pump. This is correct for the motor driven auxiliary feedwater pumps; however, the turbine driven auxiliary feedwater pump has two control channels per pump, one of which is required to manually start the pump. The amendment request incorporates separate line items for the motor driven pumps and for the turbine driven pump reflecting the number of channels required for each pump.

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

Sincerely,

Original Signed By:

Richard A. Becker, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 20 to NPF-63
 - 2. Safety Evaluation
- cc w/enclosures:
See next page

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Handwritten signatures and initials:
C. J. [unclear]
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OFC	:LA:PD21:DRPR:PM:PD21:DRPR:D:PD21:DRPR	:	:	:
NAME	:PAnderson: RBecker: EAdensam	:	:	:
DATE	:7/17/90: 7/17/90: 7/17/90	:	:	:

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

Shearon Harris

cc:

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

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

CAROLINA POWER & LIGHT COMPANY, et al.

DOCKET NO. 50-400

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 20
License No. NPF-63

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power & Light Company, (the licensee), dated October 26, 1989, as supplemented December 15, 1989, 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 2.C.(2) of Facility Operating License No. NPF-63 is hereby amended to read as follows:

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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No.20, are hereby incorporated into this license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By:

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: July 31, 1990

OFC	: LA: PD21: DRPR: PM: PD21: DRPR: SPLB	:	<i>OGC</i>	:	D: PD21: DRPR	:	:
NAME	: PAnderson:	:	<i>Rebeck</i>	:	CMcCracken	:	<i>R Bachmann</i>
DATE	: 7/10/90	:	7/10/90	:	7/11/90	:	7/19/90

ATTACHMENT TO LICENSE AMENDMENT NO. 20

FACILITY OPERATING LICENSE NO. NPF-63

DOCKET NO. 50-400

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

Remove Pages

3/4 3-23

3/4 3-27

Insert Pages

3/4 3-23

3/4 3-27

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
6. Auxiliary Feedwater					
a. Manual Initiation					
1) Motor-Driven Pumps	1/pump	1/pump	1/pump	1, 2, 3	23
2) Turbine-Driven Pumps	2/pump	1/pump	2/pump	1, 2, 3	23
b. Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2, 3	21
c. Steam Generator Water Level--Low-Low					
1) Start Motor-Driven Pumps	3/stm. gen.	2/stm. gen. in any stm. gen.	2/stm. gen. in each stm. gen.	1, 2, 3	15*
2) Start Turbine-Driven Pump	3/stm. gen.	2/stm. gen. in any 2 stm. gen.	2/stm. gen. in each stm. gen.	1, 2, 3	15*
d. Safety Injection Start Motor-Driven Pumps	See Item 1. above for all Safety Injection initiating functions and requirements.				
e. Loss-of-Offsite Power Start Motor-Driven Pumps and Turbine-Driven Pump	See Item 9. below for Loss of Offsite Power initiating functions and requirements.				
f. Trip of All Main Feedwater Pumps Start Motor-Driven Pumps	1/pump	1/pump	1/pump	1, 2	15*

SHEARON HARRIS - UNIT 1

3/4 3-23

Amendment No. 20

TABLE 3.3-3 (Continued)

ACTION STATEMENTS (Continued)

ACTION 19 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

- a. The inoperable channel is placed in the tripped condition within 1 hour, and
- b. The Minimum Channels OPERABLE requirement is met; however, one additional channel may be bypassed for up to 2 hours for surveillance testing of other channels per Specification 4.3.2.1.

ACTION 20 - With less than the Minimum Number of Channels OPERABLE, within 1 hour determine by observation of the associated permissive annunciator window(s) that the interlock is in its required state for the existing plant condition, or apply Specification 3.0.3.

ACTION 21 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours and in at least HOT SHUTDOWN within the following 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1 provided the other channel is OPERABLE.

ACTION 22 - With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hour or be in at least HOT STANDBY within 6 hours and in at least HOT SHUTDOWN within the following 6 hours.

ACTION 23 - With the number of OPERABLE channels less than the Total Number of Channels, declare the associated equipment inoperable and take the appropriate ACTION required in accordance with the specific equipment specification.

ACTION 24 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1 provided the other channel is OPERABLE.

ACTION 25 - During CORE ALTERATIONS or movement of irradiated fuel within containment, comply with the ACTION statement of Specification 3.9.9.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE NO. NPF-63
CAROLINA POWER & LIGHT COMPANY, et al.
SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1
DOCKET NO. 50-400

1.0 INTRODUCTION

By letters dated October 26, 1989, as supplemented December 15, 1989, the Carolina Power & Light Company submitted a request for changes to the Shearon Harris Nuclear Power Plant, Unit 1, Technical Specifications (TS) Table 3.3-3, Engineered Safety Features Actuation System Instrumentation. This change clarifies the requirements of Item 6.a and Action Statement 23 of TS Table 3.3-3. The December 15, 1989, letter provided clarifying information that did not change the proposed determination of no significant hazards consideration as published in the Federal Register (55 FR 18410) dated May 2, 1990.

Currently, the required number of channels for manual initiation of auxiliary feedwater in TS Table 3.3-3 is listed as one per pump. This is correct for the motor driven auxiliary feedwater pumps. However, the turbine driven auxiliary pump has two control channels per pump, one of which is required to manually start the pump.

2.0 EVALUATION

Currently, Item 6.a in TS Table 3.3-3 is correct as written. However, Item 6.a, as currently written, could be misleading because it is written with minimal information which, in turn, does not clearly reflect the as-built plant. The auxiliary feedwater system has both motor driven pumps and a turbine driven pump. Both type of pumps require only one control channel for manual initiation. The information which is absent from the as-written requirement, however, is that the motor driven pumps have only a single control channel while the turbine driven pump has two control channels.

The proposed amendment would incorporate separate line items for the motor driven pumps and for the turbine driven pump, the number of control channels for each pump type and the number of control channels each requires for manual initiation. The amendment would more clearly reflect the design and as-built plant and would simplify or clarify determinations of operability related to TS Table 3.3-3 and is, therefore, acceptable. Further, Action Statement 23 is changed to be consistent with the change in Item 6.a and is also acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted areas as defined in 10 CFR Part 20. 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 offsite, 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 18410) on May 2, 1990, and consulted with the State of North Carolina. No public comments or requests for hearing were received, and the State of North 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: July 31, 1990

Principal Contributor: R. Becker

AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE NO. NPF-63 - HARRIS, UNIT 1

Docket File

NRC PDR

Local PDR

PDII-1 Reading

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G. Lainas

E. Adensam

P. Anderson

R. Becker

OGC

D. Hagan (MNBB 3302)

E. Jordan (MNBB 3302)

G. Hill (4) (P1-137)

W. Jones (P-130A)

J. Calvo (11D3)

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GPA/PA

ARM/LFMB

cc: Licensee/Applicant Service List