

April 26, 1994

Docket No. 50-400

Mr. W. R. Robinson
Vice President - Harris Plant
Carolina Power & Light Company
Shearon Harris Nuclear Power Plant
Post Office Box 165, Mail Code: Zone 1
New Hill, North Carolina 27562-0165

Dear Mr. Robinson:

SUBJECT: ISSUANCE OF AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. NPF-63 REGARDING CONTAINMENT HYDROGEN MONITORING SYSTEM - SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 (TAC NO. M88686)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 47 to Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1. This amendment changes the Technical Specifications (TS) in response to your request dated February 4, 1994.

The amendment revises TS Surveillance Requirement 4.6.4.1 to delete the 12-hour channel check, thereby eliminating the need for continuous operation of the hydrogen monitors.

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

Sincerely,

Original Signed By:

Ngoc B. Le, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 47 to NPF-63
2. Safety Evaluation

cc w/enclosures:
See next page

* See previous concurrence

OFFICE	LA:PD2-1	PM:PD2-1	PD:PD2-1	OGC*	OTSB*
NAME	PAnderson	NLe:jrm	WBateman	CMarco	CGrimes
DATE	04/26/94	04/26/94	04/26/94	04/25/94	04/25/94

OFFICIAL RECORD COPY
Document Name: G:\HARRIS\HAR88686.AMD

9405040259 940426
PDR ADOCK 05000400
P PDR

020024

NRC FILE SYSTEM COPY

CP-1

DFOI



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 26, 1994

Docket No. 50-400

Mr. W. R. Robinson
Vice President - Harris Plant
Carolina Power & Light Company
Shearon Harris Nuclear Power Plant
Post Office Box 165, Mail Code: Zone 1
New Hill, North Carolina 27562-0165

Dear Mr. Robinson:

SUBJECT: ISSUANCE OF AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. NPF-63 REGARDING CONTAINMENT HYDROGEN MONITORING SYSTEM - SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 (TAC NO. M88686)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 47 to Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1. This amendment changes the Technical Specifications (TS) in response to your request dated February 4, 1994.

The amendment revises TS Surveillance Requirement 4.6.4.1 to delete the 12-hour channel check, thereby eliminating the need for continuous operation of the hydrogen monitors.

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

Sincerely,

A handwritten signature in cursive script, appearing to read "Ngoc B. Le".

Ngoc B. Le, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 47 to NPF-63
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. W. R. Robinson
Carolina Power & Light Company

Shearon Harris Nuclear Power Plant
Unit 1

cc:

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

Admiral Kinnaird R. McKee
214 South Morris Street
Oxford, Maryland 21654

Resident Inspector/Harris NPS
c/o U.S. Nuclear Regulatory Commission
5421 Shearon Harris Road
New Hill, North Carolina 27562-9998

Mr. Robert D. Martin
3382 Sean Way
Lawrenceville, Georgia 30244

Karen E. Long
Assistant Attorney General
State of North Carolina
Post Office Box 629
Raleigh, North Carolina 27602

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

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

Mr. W. R. Robinson
Vice President - Harris Plant
Carolina Power & Light Company
Shearon Harris Nuclear Power Plant
Post Office Box 165, MC: Zone 1
New Hill, North Carolina 27562-0165

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

Mr. H. W. Habermeyer, Jr.
Vice President
Nuclear Services Department
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. NPF-63 - HARRIS, UNIT 1

DISTRIBUTION:

Docket File
NRC/Local PDRs
PD II-1 Reading File
S. Varga
W. Bateman
P. Anderson
N. Le
OGC
D. Hagan
G. Hill (2)
C. Grimes
J. Wermiel
S. Mazumdar
ACRS (10)
OPA
OC/LFDCB
J. Johnson, Acting, R-II

cc: Harris Service List



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

CAROLINA POWER & LIGHT COMPANY, et al.

DOCKET NO. 50-400

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 47
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 February 4, 1994, 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:

9405040263 940426
PDR ADDCK 05000400
P PDR

(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. 47, 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 and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

for Brenda Mozafari

William H. Bateman, 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 26, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 47

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 Page

3/4 6-30

Insert Page

3/4 6-30

CONTAINMENT SYSTEMS

3/4.6.4 COMBUSTIBLE GAS CONTROL

HYDROGEN MONITORS

LIMITING CONDITION FOR OPERATION

3.6.4.1 Two independent containment hydrogen monitors shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

- a. With one hydrogen monitor inoperable, restore the inoperable monitor to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.
- b. With both hydrogen monitors inoperable, restore at least one monitor to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.1 Each hydrogen monitor shall be demonstrated OPERABLE by the performance of an ANALOG CHANNEL OPERATIONAL TEST at least once per 31 days, and at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION using sample gas containing:

- a. Two volume percent hydrogen, balance nitrogen, and
- b. Six volume percent hydrogen, balance nitrogen.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. NPF-63

CAROLINA POWER & LIGHT COMPANY

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

DOCKET NO. 50-400

1.0 INTRODUCTION

By letter dated February 4, 1994, Carolina Power & Light Company (the licensee) submitted a request for changes to the Shearon Harris Nuclear Power Plant, Unit 1, Technical Specifications (TS). The requested changes would eliminate the 12-hour channel check surveillance requirement for the containment hydrogen monitoring system to conform with the new Standard TS for Westinghouse plants, NUREG-1431.

The proposed change to Surveillance Requirement 4.6.4.1 states, "Each hydrogen monitor shall be demonstrated OPERABLE by the performance of a CHANNEL CHECK at least once per 12 hours, an ANALOG CHANNEL OPERATIONAL TEST at least once per 31 days, and at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION...." The proposed change will eliminate the part "a CHANNEL CHECK at least once per 12 hours".

2.0 EVALUATION

Currently, to allow for the performance of the 12-hour channel check, the hydrogen monitors are continuously energized, subjecting six solenoid actuated sample valves to about 26,000 cyclic operations per valve per fuel cycle and continuous operation of the associated pumps. The licensee has determined that the continuous operation of the hydrogen monitoring system causes unnecessary wear and tear on the valves and pumps and requires additional inspections and maintenances. With the elimination of the 12-hour channel check the hydrogen monitors will be normally in standby mode with the electronic components in an energized state while the solenoid valves and the pumps will be in a deenergized state. In accordance with the Shearon Harris plant licensing basis as stated in the Final Safety Analysis Report, Section 6.2.5.2.3, the hydrogen analyzer is required to function only within 30 minutes after safety injection initiation. Thus, the elimination of continuous operation of the hydrogen monitors will improve the reliability of the hydrogen monitoring system. In addition, the standby hydrogen monitors will still be subjected to analog channel operational tests at least once every 31 days and channel calibration tests at least once per 92 days, and this will provide assurance that the hydrogen analyzer will function when needed. The proposed modification does not change the original licensing basis of the plant and does not involve any system, design or operational modification of the plant, and is consistent with the current Westinghouse Standard TS as documented in NUREG-1431; and therefore, is acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes the Surveillance Requirements. 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 (10 CFR 10001). 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: S. Mazumdar

Date: April 26, 1994