July 27, 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. 49 TO FACILITY OPERATING LICENSE NO. NPF-63 REGARDING VACUUM RELIEF SYSTEM - SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 (TAC NO. M88858)

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

The amendment revises the Action Statement of TS 3.6.5, Vacuum Relief System, to require in Modes 1-4 with one vacuum relief system inoperable that the system be restored to the operable status within seventy-two hours or be in at least hot standby within the next six hours.

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. 49 to NPF-63
2. Safety Evaluation

cc w/enclosures:

OFC	LA:PD21:DRPE	PM:PD21:DRPE	SCSB	PD:PD2-1
NAME	PAnderson	NLe:jrm	RBarnett	WBateman
DATE	6/30/94	6/22/94	6/30/94	6/30/94

OFC	OGC			
NAME	EHoller			
DATE	7/6/94	/94	/94	

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

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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

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

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. 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

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

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

Mr. J. W. Donahue
Plant Manager - Harris Plant
Carolina Power & Light Company
Shearon Harris Nuclear Power Plant
Post Office Box 165, MC: Zone 1
New Hill, North Carolina 27562-0165

AMENDMENT NO. 49 TO FACILITY OPERATING LICENSE NO. NPF-63 - HARRIS, UNIT 1

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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. 49
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:

(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. 49 , 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

David B. Matthews, 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: July 27, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 49

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	Insert Pages
3/4 6-2	3/4 6-2

3/4.6.5 VACUUM RELIEF SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.5 The containment vacuum relief system shall be OPERABLE with an Actuation Setpoint of equal to or less negative than -2.5 inches water gauge differential pressure (containment pressure less atmospheric pressure)

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one containment vacuum relief system inoperable, restore the system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.5 No additional requirements other than those required by Specification 4.0.5.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 49 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 a change to the Shearon Harris Nuclear Power Plant, Unit 1 (SHNPP), Technical Specifications (TS). The requested change would increase the time in the Limiting Condition For Operation (LCO) with one containment vacuum relief system (CVRS) inoperable from 4 hours to 72 hours.

The proposed change is related to the LCO Action Statement of Technical Specification (TS) 3.6.5 with one CVRS inoperable. The Action Statement of TS 3.6.5 currently states, "With one containment vacuum relief system inoperable, restore the system to operable status within 4 hours or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours." The proposed TS change will increase this LCO time from 4 hours to 72 hours to conform with Section 3.6.12, of NUREG-1431, "Standard Technical Specifications for Westinghouse Plants" (STS), dated September 1992.

2.0 EVALUATION

The licensee states in its submittal that the CVRS for SHNPP is not an engineered safety feature system, nor does it provide protection features for any accident analyzed in Chapter 15 of the Final Safety Analysis Report (FSAR). The staff pointed out during a telephone call with the licensee on March 15, 1994, that while the CVRS is not discussed in Chapter 15, Chapter 6 does discuss the postulated event that the CVRS is design to mitigate. The valves and penetrations which make up a portion of the CVRS also perform as containment isolation valves during a positive pressure event. The licensee agreed with the staff's comments during the phone call and confirmed that the containment vacuum relief valves are considered a part of the plant's containment isolation system.

The staff reviewed the CVRS system design basis and the system description contained in Chapter 6.2.1.1.3.4 of the SHNPP FSAR, and finds that the CVRS is designed to provide vacuum relief for the containment as well as containment isolation for maintaining containment pressure integrity during a postulated loss-of-coolant accident (LOCA) or main steam/feedwater line break. The containment isolation function of the CVRS is performed by the system's vacuum relief check valves and the pneumatically operated butterfly valves which have been designed to Safety Class 2 and Seismic Category I criteria to withstand

the full containment design pressure. The design basis event for this system during the vacuum relief function is an accidental initiation of the containment spray system with two fan coolers in operation, one of two CVRS systems assumed to be operable and the containment initial temperature at 120°F. For an accidental initiation of containment sprays with the above-mentioned assumptions, the licensee calculated a negative differential pressure across the containment wall to be 1.93 psid (pounds per square inch differential) which is within the containment vessel's external design pressure of 2.0 psi. When one of the required vacuum relief lines is inoperable, the present technical specifications require that the inoperable line must be restored to operable status within 4 hours; the licensee proposes to increase the allowed outage time to 72 hours. The staff considers this change acceptable based on a quantitative judgment of the low probability that the system will be called upon to perform its design basis function with one train inoperable. This time period is also consistent with other LCOs for the loss of one train of a system required to mitigate the consequences of a LOCA or other design basis accidents.

Based on the above evaluation, the staff concludes that the licensee's TS change request is consistent with the STS LCO 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 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 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 (59 FR 14886). 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: A. D'Angelo

Date: July 27, 1994