

March 12, 2003

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

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 - ISSUANCE OF  
AMENDMENT RE: CONTAINMENT VENTILATION ISOLATION SYSTEM  
(TAC NO. MB6227)

Dear Mr. Scarola:

The Nuclear Regulatory Commission (NRC) has issued Amendment No. 113 to Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1 (HNP). This amendment changes the Technical Specifications (TS) in response to your application dated August 28, 2002.

The amendment revises TS 3/4.9.9, "Containment Ventilation Isolation System," to allow the same administrative controls for this TS as were approved previously by the NRC in Amendment No. 104 to the HNP TS for TS 3/4.9.4, "Containment Building Penetrations," to provide consistency between the two TS.

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,

*/RA/*

Chandu P. Patel, Project Manager, Section 2  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-400

Enclosures:

1. Amendment No. 113 to NPF-63
2. Safety Evaluation

cc w/enclosures:

See next page

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**Accession Number ML030760083**

\*No major changes to SE

OFFICE	PM:PDII/S2	LA:PDII/S2	TSS/RORP*	OGC	SC/PDII-2
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CAROLINA POWER & LIGHT COMPANY, et al.  
DOCKET NO. 50-400  
SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 113  
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 August 28, 2002, 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. 113 , 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Allen G. Howe, Chief, Section 2  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 12, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 113

FACILITY OPERATING LICENSE NO. NPF-63

DOCKET NO. 50-400

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

3/4 9-11  
B 3/4 9-3  
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Insert Pages

3/4 9-11  
B 3/4 9-3  
B 3/4 9-4

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 113 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 August 28, 2002, the Carolina Power & Light Company (the licensee) submitted a request for changes to the Shearon Harris Nuclear Power Plant, Unit 1 (HNP) Technical Specifications (TS). The requested changes would revise TS 3/4.9.9, "Containment Ventilation Isolation System," to allow the same administrative controls for this TS as were approved previously by the U.S. Nuclear Regulatory Commission (NRC) in Amendment No. 104 for TS 3/4.9.4, "Containment Building Penetrations," to provide consistency between the two TS. The applicable TS Bases would be revised to document the TS changes and provide supporting information.

## 2.0 REGULATORY EVALUATION

NUREG-1431, "Standard Technical Specifications - Westinghouse Plants," Revision 2, incorporated Technical Specification Task Force Change Traveler (TSTF)-312 guidance that allows the containment building penetrations specified in Standard Technical Specification (STS) 3.9.4, "Containment Penetrations," to remain open during core alterations and movement of irradiated fuel provided specific administrative controls are met. Similar guidance is provided for the Actions of STS 3.3.6, "Containment Purge and Exhaust Isolation Instrumentation."

On July 30, 2001, the NRC issued License Amendment No. 104 to the HNP TS that revised TS 3/4.9.4, "Containment Building Penetrations," and its associated Bases, to allow all containment building penetrations to remain open during refueling operations provided specific administrative controls are met in accordance with TSTF- 312. The provisions of License Amendment 104 applied specifically to the dampers, and did not apply to automatic signals that control the operation of the dampers. As a result, the requirements of the Containment Ventilation Isolation System (CVIS) are more restrictive than the dampers that CVIS controls. Specifically, current HNP TS require that if an actuation signal to the dampers is inoperable, the required action is to close each of the containment purge makeup and exhaust penetrations providing direct access from the containment atmosphere to the outside atmosphere. Operations (i.e., irradiated fuel movement) may continue as long as the penetrations are closed and remain closed. This is more restrictive than TS 3/4.9.4, which allows the penetrations to be

opened under administrative control during movement of irradiated fuel assemblies and core alterations. The proposed change would apply the same administrative controls to TS 3/4.9.9, previously reviewed and approved by the NRC in License Amendment 104, for TS 3/4.9.4 in order to provide consistency between the two specifications and in conformance with TSTF-312 guidance.

### 3.0 TECHNICAL EVALUATION

The proposed change to TS 3/4.9.9 is that a note “\*” that states that penetration flow path(s) providing direct access from the containment atmosphere to outside atmosphere may be unisolated under administrative controls is added to Action a. In addition, the Bases for TS 3/4.9.9 are modified to state that the breached penetration shall not be obstructed unless capability for rapid removal of obstruction is provided, and also to indicate that the administrative controls ensure that 1) appropriate personnel are aware of the open status of the penetration flow path during core alterations or movement of irradiated fuel assemblies within containment, and 2) specified individuals are designated and readily available to isolate the flow path in the event of a fuel handling accident. The proposed Bases also state that the allowance for un-isolated penetration flow paths with direct access from the containment atmosphere to the outside atmosphere during fuel movement and core alterations is based on (1) confirmatory dose calculations of a fuel handling accident as approved by the NRC staff, which indicates acceptable radiological consequences, and (2) commitments from the licensee to implement acceptable administrative procedures that ensure, in the event of a fuel handling accident (even though the containment fission product control function is not required to meet acceptable dose consequences) the open penetration can and will be promptly closed. The applicable procedures have been previously revised as part of the implementation of License Amendment No. 104.

HNP performed an alternate source term analysis for fuel handling accidents in containment and the fuel handling building as a part of License Amendment No. 104. The analysis assumes that activity produced by the accident escapes to the outside atmosphere. The NRC reviewed and approved the HNP fuel handling accident analysis.

The NRC, in License Amendment No. 104, approved maintaining containment penetrations (that include containment purge and makeup penetrations) open under administrative controls. The radiological consequences of a fuel handling accident are not affected by the inoperability of the CVIS and the associated actions, and the previously approved fuel handling accident analysis remains bounding.

In NUREG-1431, “Standard Technical Specifications - Westinghouse Plants,” Revision 2, which incorporates Technical Specification Task Force Change Traveler (TSTF)-312, the corresponding TS to HNP TS 3/4.9.4 and 3/4.9.9 are Standard TS (STS) 3.9.4 “Containment Penetrations” and STS 3.3.6 “Containment Purge and Exhaust Isolation Instrumentation,” respectively. The STS Action for an inoperable containment purge and exhaust isolation instrumentation system during movement of irradiated fuel assemblies specified in STS 3.3.6 is to isolate the penetration or follow the Actions of STS 3.9.4, which would allow the penetration to be opened under the administrative controls specified by STS 3.9.4 (TSTF-312). The HNP-proposed change is an acceptable alternative to the STS Actions for an inoperable CVIS. Thus, the NRC staff finds the proposed change acceptable.

#### 4.0 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.

#### 5.0 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 (67 FR 61676). 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.

#### 6.0 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: R. J. Giardina

Date: March 12, 2003



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Unit 1

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