



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

May 7, 2009

Chris L. Burton, 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 REGARDING ELIMINATION OF WORK HOUR CONTROLS TO  
SUPPORT COMPLIANCE WITH REVISED PART 26 OF TITLE 10 OF THE *CODE  
OF FEDERAL REGULATIONS* (TAC NO. MD9815)

Dear Mr. Burton:

The Nuclear Regulatory Commission (NRC or the Commission) has issued the enclosed Amendment No. 130 to Renewed Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1 (HNPP) in response to your application dated October 6, 2009 (Agencywide Documents Access and Management System Accession No. ML082830137). The amendment removes work hour controls and/or references to the NRC Generic Letter 82-12 from the administrative control sections of the technical specifications.

On April 17, 2007, the NRC approved a final rule that amended Part 26 of Title 10 of the *Code of Federal Regulations* (10 CFR Part 26) and, among other changes, established requirements for managing worker fatigue at operating nuclear power plants. Subpart I, "Managing Fatigue," of 10 CFR Part 26, specifically addresses managing worker fatigue by designating individual break requirements, work hour limits, and annual reporting requirements. Subpart I was published in the *Federal Register* on March 31, 2008 (73 FR 16966), with a required implementation period of 18 months. Compliance is, therefore, required by October 1, 2009. In order to support compliance with 10 CFR Part 26, Subpart I, the licensee requested to eliminate these work hour controls from Technical Specification 6.2.2.f at the HNPP.

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

Sincerely,



for Marlayna Vaaler  
Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing

Docket No. 50-400

Enclosures:

1. Amendment No. 130 to Renewed Facility  
Operating License No. NPF-63
2. Safety Evaluation

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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 RENEWED FACILITY OPERATING LICENSE

Amendment No.130  
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 6, 2009, 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 Renewed 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.130 , 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 its date of issuance and shall be implemented no later than October 1, 2009.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas H. Boyce, Chief  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Operating License  
and Technical Specifications

Date of Issuance: May 7, 2009

ATTACHMENT TO LICENSE AMENDMENT NO. 130  
RENEWED FACILITY OPERATING LICENSE NO. NPF-63  
DOCKET NO. 50-400

Replace page 4 of Renewed Facility Operating License No. NPF-63 with the attached page 4. The revised page is identified by amendment number and contains a marginal line indicating the area of change

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  
6-2

Insert  
6-2

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified or incorporated below.

(1) Maximum Power Level

Carolina Power & Light Company is authorized to operate the facility at reactor core power levels not in excess of 2900 megawatts thermal (100 percent rated core power) in accordance with the conditions specified herein.

(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. 130<sup>1</sup>, 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) Antitrust Conditions

Carolina Power & Light Company shall comply with the antitrust conditions delineated in Appendix C to this license.

(4) Initial Startup Test Program (Section 14)<sup>1</sup>

Any changes to the Initial Test Program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

(5) Steam Generator Tube Rupture (Section 15.6.3)

Prior to startup following the first refueling outage, Carolina Power & Light Company shall submit for NRC review and receive approval if a steam generator tube rupture analysis, including the assumed operator actions, which demonstrates that the consequences of the design basis steam generator tube rupture event for the Shearon Harris Nuclear Power Plant are less than the acceptance criteria specified in the Standard Review Plan, NUREG-0800, at 15.6.3 Subparts II(1) and (2) for calculated doses from radiological releases. In preparing their analysis Carolina Power & Light Company will not assume that operators will complete corrective actions within the first thirty minutes after a steam generator tube rupture.

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<sup>1</sup>The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

UNIT STAFF (Continued)

f. Deleted by Amendment No. 130



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 130 TO RENEWED

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 October 6, 2008 (Agencywide Document and Management System (ADAMS) Accession No. ML082830137), the Carolina Power & Light Company (the licensee) submitted a request for changes to the Shearon Harris Nuclear Power Plant, Unit 1 (HNPP), Technical Specifications (TSs). The amendment removes work hour controls and/or references to the Nuclear Regulatory Commission (NRC or the Commission) Generic Letter (GL) 82-12 "Nuclear Power Plant Staff Working Hours," from the administrative control sections of the TSs.

On April 17, 2007, the NRC approved a final rule that amended Part 26 of Title 10 of the *Code of Federal Regulations* (10 CFR Part 26) and, among other changes, established requirements for managing worker fatigue at operating nuclear power plants. Subpart I, "Managing Fatigue," of 10 CFR Part 26 specifically addresses managing worker fatigue by designating individual break requirements, work hour limits, and annual reporting requirements. Subpart I was published in the *Federal Register* on March 31, 2008 (73 FR 16966), with a required implementation period of 18 months. Compliance is, therefore, required by October 1, 2009. In order to support compliance with 10 CFR Part 26, Subpart I, the licensee requested to eliminate these work hour controls from TS 6.2.2.f at HNPP.

The NRC staff's proposed no significant hazards consideration determination as published in the *Federal Register* on January 27, 2009 (74 FR 4769).

2.0 REGULATORY EVALUATION

On June 15, 1982, the NRC staff issued GL 82-12, which was a revision of past guidance and discussions regarding the limitation of work hours to mitigate worker fatigue and the impact of fitness-for-duty on safety. GL 82-12 established overtime guidance for work hours beyond a normal 8-hour day, 40-hour week. Issued prior to GL 82-12, GL 82-02, "Nuclear Power Plant Staff Working Hours," requested that all licensees revise the administrative section of their TSs to require that administrative procedures follow policy guidelines. GL 82-12 invoked this request.



References to GL 82-12 were incorporated into the HNPP TSs in accordance with 10 CFR 50.36, "Technical Specifications."

On April 17, 2007, the NRC approved a final rule amending 10 CFR Part 26 in the Commission Paper, SECY-06-0244 (ADAMS Accession No. ML071070362), "Final Rulemaking - 10 CFR Part 26 – Fitness-for-Duty Programs." The regulations in 10 CFR Part 26, Subpart I, specifically address managing worker fatigue by designating individual break requirements, work hour limits, and annual reporting requirements. The rule was published in the *Federal Register* on March 31, 2008 (73 FR 16966), with required implementation no later than October 1, 2009.

### 3.0 TECHNICAL EVALUATION

The proposed changes remove references to and limits provided by GL 82-12 from the administrative controls sections of HNPP's TSs. The requirements established by 10 CFR Part 26, Subpart I, supersede GL 82-12 guidance. Subpart I of 10 CFR Part 26 strengthens requirements for both work hour controls and fatigue management. Requirements in the rule include work hour limitations for rolling 24-hour, 48-hour, and 7-day periods, which were imposed by GL 82-12. The rule also includes a required minimum break between work periods and varying required minimum days off. Additionally, 10 CFR Part 26, Subpart I, restricts the use of waivers used to deviate from requirements to situations where noncompliance with the regulations is necessary to mitigate or prevent a condition adverse to safety or necessary to maintain the security of the facility. The scope of the rule's requirements includes operating and maintenance personnel, as well as those directing operating and maintenance personnel, performing work on risk significant equipment, health physics and chemistry personnel who are a part of the on-site minimum shift complement, the fire brigade leader or advisor, and security personnel.

The proposed changes remove references to and limits provided by GL 82-12 from the administrative controls section of the TSs to support compliance with 10 CFR Part 26, Subpart I. Upon implementation, federal regulations will govern the requirements associated with work hour controls and fatigue management at HNPP. The work hour controls and fatigue management requirements were incorporated into the *Code of Federal Regulations*; therefore, it is unnecessary to have work hour control requirements in the administrative control section of the TSs. As required by the rule (73 FR 16966), licensees must implement the requirements of 10 CFR Part 26, Subpart I, no later than October 1, 2009.

The licensee committed to implement the new requirements of 10 CFR Part 26, Subpart I, concurrent with the deletion of the TSs references to GL 82-12. The commitment ensures work hour controls will be in effect continuously, either through the current TSs requirements or through the requirements of 10 CFR Part 26, Subpart I. Due to this commitment and since 10 CFR Part 26, Subpart I, supersedes GL 82-12 guidance, the staff finds the removal of references to GL 82-12 guidance from the TSs 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 (74 FR 4769). 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: Kamishan Martin

Date: May 7, 2009

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

Sincerely,

/RA by Farideh E. Saba for/

Marlayna Vaaler  
Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing

Docket No. 50-400

Enclosures:

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