



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

May 7, 2009

Mr. Eric McCartney, Vice President  
H. B. Robinson Steam Electric Plant,  
Unit No. 2  
Carolina Power & Light Company  
3581 West Entrance Road  
Hartsville, South Carolina 29550-0790

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 — 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. MD9816)

Dear Mr. McCartney:

The Nuclear Regulatory Commission (NRC or the Commission) has issued the enclosed Amendment No. 221 to Renewed Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP) in response to your application dated October 6, 2008 (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 5.2.2.e at the HBRSEP.

A copy of the related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,



for

Marlayna Vaaler, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-261

Enclosures:

1. Amendment No. 221 to Renewed Facility  
Operating License No. DPR-23
2. Safety Evaluation

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

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-261

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 221  
Renewed License No. DPR-23

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, as amended, 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 3.B. of Renewed Facility Operating License No. DPR-23 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 221 are hereby incorporated in the license.

The licensee shall operate the facility in accordance with the Technical Specifications.

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 Renewed Facility  
Operating License No. DPR-23  
and the Technical Specifications

Date of Issuance: May 7, 2009

ATTACHMENT TO LICENSE AMENDMENT NO. 221  
RENEWED FACILITY OPERATING LICENSE NO. DPR-23  
DOCKET NO. 50-261

Replace page 3 of Renewed Operating License No. DPR-23 with the attached page 3.

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 Page

5.0-3  
5.0-4

Insert Page

5.0-3  
5.0-4

neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

- D. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components;
  - E. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by operation of the facility.
3. This renewed license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Section 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; 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:

A. Maximum Power Level

The licensee is authorized to operate the facility at a steady state reactor core power level not in excess of 2339 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 221 are hereby incorporated in the license.

The licensee shall operate the facility in accordance with the Technical Specifications.

- (1) For Surveillance Requirements (SRs) that are new in Amendment 176 to Final Operating License DPR-23, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 176. For SRs that existed prior to Amendment 176, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment 176.

Renewed Facility Operating License No. DPR-23

Amendment No. 221

## 5.2 Organization

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### 5.2.2 Unit Staff (continued)

- operator shall be assigned to the shift crew while the unit is operating in MODES 1, 2, 3, or 4.
- b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
  - c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and Specification 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
  - d. An individual qualified as a radiation control technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
  - e. Deleted

(continued)

5.2 Organization

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5.2.2 Unit Staff (continued)

- f. The Operations Manager or Superintendent in charge of the operations shift crews shall hold an SRO license.
  - g. During MODES 1, 2, 3, and 4, the shift technical advisor (STA) shall provide advisory technical support to the SSO with regard to the safe operation of the unit. If an individual that holds an SRO license also meets the STA requirements, that individual may act in both capacities.
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 221 TO

RENEWED FACILITY OPERATING LICENSE NO. DPR-23

CAROLINA POWER & LIGHT COMPANY

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

DOCKET NO. 50-261

1.0 INTRODUCTION

By letter dated October 6, 2008 (Agencywide Document and Management System (ADAMS) Accession No. ML082830137), Carolina Power & Light Company, (the licensee), requested changes to the Technical Specifications (TSs) for the H. B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP). 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 requested to eliminate these work hour controls from TS 5.2.2.e at HBRSEP.

The NRC staff's proposed no significant hazards consideration determination as published in the *Federal Register* on January 27, 2009 (74 FR 4768).

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 HBRSEP 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 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 HBRSEP'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 HBRSEP. 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 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 South Carolina State 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 the 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 the finding as published in the *Federal Register* on January 27 2009 (74 FR 4768). 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 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 also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

**/RA FSaba for/**

Marlayna Vaaler, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-261

Enclosures:

1. Amendment No. 221 to Renewed Facility  
Operating License No. DPR-23
2. Safety Evaluation

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**ADAMS ACCESSION NUMBER: ML091030243**

**NRR-058**

OFFICE	LPL2-2/PM	LPL2-2/LA	IOLB/BC*	ITSB/BC	OGC NLO	LPL2-2/BC
NAME	MVaaler	RSola	NSalgado	RElliott	BHarris (w/comments)	TBoyce
DATE	4/21/09	4/21/09	04/03/09	5/7/09	4/27/09	5/7/09

\* By memorandum

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