

June 30, 1988

Docket No. 50-261

Mr. E. E. Utley
Senior Executive Vice President
Power Supply and Engineering & Construction
Carolina Power & Light Company
P. O. Box 1551
Raleigh, North Carolina 27602

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Dear Mr. Utley:

SUBJECT: REVISED EXEMPTIONS FROM CERTAIN REQUIREMENTS OF 10 CFR PART 50,
APPENDIX R, SECTION III.J - H.B. ROBINSON STEAM ELECTRIC PLANT,
UNIT NO. 2 (TAC NO. 55440)

By letter dated July 30, 1987, we granted you exemptions from certain requirements of 10 CFR Part 50, Appendix R, Section III.J, in accordance with 10 CFR 50.12. These exemptions were in response to your letters dated June 29, 1984 and January 16, 1985. By letter dated January 29, 1988, you noted inconsistencies between your two letters requesting the exemptions and the exemptions granted by NRC letter dated July 30, 1987, and requested a revised exemption.

We have reviewed your request and find that there were inconsistencies, as you stated. The inclusion of access and egress routes to the charging pump room, component cooling water heat exchanger room, and the battery room in the exemption from certain lighting requirements was unnecessary, as you have stated you will comply with the requirements of the regulation for these routes. However, your request for exemption from the requirement to provide fixed, 8-hour battery-powered emergency lighting units for "several plant areas ... which require cold shutdown manual operations and/or repairs ..." was too general for the staff to grant. Therefore, we restricted the exemption to those specific examples you did name - containment and the residual heat removal (RHR) pit. Should there be other areas for which you seek exemption from this requirement, you must file a request specifying what areas are to be exempted. We also found a typographical omission on page 4 of our evaluation that has been corrected in the revised exemption (enclosed).

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PDR ADOCK 05000261
P PDR

Mr. E. E. Utley

- 2 -

Based on our reevaluation of all correspondence, the Commission has granted a revised exemption pursuant to 10 CFR 50.12. This exemption supercedes the exemption granted by NRC letter dated July 30, 1987. The exemption is being forwarded to the Office of the Federal Register for publication.

Sincerely,

E. News
for

Elinor G. Adensam, Director
Project Directorate II-1
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosure:
Exemption

cc w/enclosure:
See next page

OFC	:LA:	PD21:	DRPR:	PE:	PD21:	DRPR:	PM:	PD21:	DRPR:	D:	PD21:	DRPR:	:	:
NAME	:PAnderson	:	GRegg	:clh	:	RLo	:clw	:	EAdensam	:for	:	:	:	:
DATE	: 5/20/88	:	5/23/88	:	5/27/88	:	5/27/88	:	:	:	:	:	:	:

Mr. E. E. Utley
Carolina Power & Light Company

H. B. Robinson 2

cc:

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Raleigh, North Carolina 27602

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Division of Facility Services
Department of Human Resources
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Darlington County Board of Supervisors
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Darlington, South Carolina 29535

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Resident Inspector's Office
H. B. Robinson Steam Electric Plant
Route 5, Box 413
Hartsville, South Carolina 29550

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
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Atlanta, Georgia 30323

Mr. R. Morgan
General Manager
H. B. Robinson Steam Electric Plant
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Hartsville, South Carolina 29550

Mr. Avery Upchurch, Chairman
Triangle J Council of Governments
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Post Office Box 12276
Research Triangle Park, NC 27709

June 30, 1988

DOCKET NO. ²⁶¹ 50-281

MEMORANDUM FOR: Rules and Procedures Branch
Division of Rules and Records
Office of Administration

DISTRIBUTION
Docket File
PD21 r/f
P. Anderson

FROM: Office of Nuclear Reactor Regulation

SUBJECT: CAROLINA POWER & LIGHT COMPANY - H. B. ROBINSON STEAM ELECTRIC
PLANT, UNIT NO. 2

One signed original of the *Federal Register* Notice identified below is enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (5) of the Notice are enclosed for your use.

- Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s); Time for Submission of Views on Antitrust Matters.
- Notice of Consideration of Issuance of Amendment to Facility Operating License.
- Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- Notice of Availability of NRC Draft/Final Environmental Statement.
- Notice of Limited Work Authorization.
- Notice of Availability of Safety Evaluation Report.
- Notice of Issuance of Construction Permit(s).
- Notice of Issuance of Facility Operating License(s) or Amendment(s).
- Order.
- Exemption.
- Notice of Granting Exemption.
- Environmental Assessment.
- Notice of Preparation of Environmental Assessment.
- Other: Re revised exemptions from certain requirements of 10 CFR Part 50,

Appendix R, Section III.J

Office of Nuclear Reactor Regulation

Enclosure:
As stated

Contact: P. Anderson, NRR
Phone: 49-21415

OFFICE ▶	LA:PD21:DRPR					
SURNAME ▶	PAnderson:ch					
DATE ▶	6/30/88					

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of)
CAROLINA POWER & LIGHT COMPANY) Docket No. 50-261
H. B. ROBINSON STEAM ELECTRIC)
PLANT, UNIT NO. 2)

EXEMPTION

I.

The Carolina Power & Light Company (CP&L or the licensee) is the holder of Operating License No. DPR-23 that authorizes operation of the H. B. Robinson Steam Electric Plant, Unit No. 2. The license provides, among other things, that the H. B. Robinson Steam Electric Plant, Unit No. 2, is subject to all rules, regulations, and Orders of the Commission now or hereafter in effect.

The station is a single-unit pressurized water reactor at the licensee's site located in Darlington County, South Carolina.

II.

On November 19, 1980, the Commission published a revised Section 50.48 and a new Appendix R to 10 CFR Part 50 regarding fire protection features of nuclear power plants. The revised Section 50.48 and Appendix R became effective on February 17, 1981. Section III of Appendix R contains 15 subsections, lettered A through O, each of which specifies requirements for a particular aspect of the fire protection features at a nuclear power plant. One of these subsections, III.J, is the subject of the licensee's exemption request.

Section III.J, of Appendix R to 10 CFR Part 50, Emergency Lighting, requires 8-hour battery powered lighting units in areas needed for operation of safe shutdown equipment and along access and egress routes thereto.

III.

By letters dated June 29, 1984, and January 16, 1985, CP&L requested approval of exemption from the technical requirements of Section III.J of Appendix R to 10 CFR Part 50 concerning the need for 8-hour battery powered lighting units in areas needed for operation of safe shutdown equipment and along access routes. The exemption request relates to the access routes to the safety injection pump room and the service water intake structure. The licensee also requested an exemption for the containment and residual heat removal (RHR) pit areas where manual, cold shutdown operations are required and/or where possible repairs may be needed. The staff's evaluation of the licensee's request is provided below.

The reason for requiring 8-hour battery powered emergency lighting is to ensure that at least minimal lighting is available for the performance of manual actions necessary for safe shutdown after a fire. Usually manual actions are required for valve alignment, repairs and pump control operations. A fire at the north end of the auxiliary building hallway on the ground level would prevent access to the SI-864 A and B valves in the safety injection pump room. Also, manual operation of service water valve V6-12D, located at the intake structure, would require emergency lighting. The licensee has stated that due to the numerous alternate access pathways, a large number of fixed emergency lighting units would have to be installed, and the routing of associated cabling to provide the necessary electrical power for redundant lighting is not practicable.

In the areas where lighting units would not be installed, dedicated portable, hand-held lighting would be provided for the operator to perform the necessary functions. The licensee justifies this approach on the basis that the availability of dedicated portable hand-held lighting provides a level of emergency lighting equivalent to that required by Section III.J for the above areas.

The technical requirements of Section III.J of Appendix R are not expressly met at the intake structure and along the access route to the safety injection pump room because fixed, individual 8-hour battery powered lighting units are not provided for safe shutdown.

At the north end of the auxiliary building, the staff was concerned about the availability of a reliable means of illumination and whether the path of travel would be unobstructed and easily traversed. The alternate access route to the safety injection pump room follows the exterior of the auxiliary building along the east and north sides of the safety injection pump room exterior door. Portable hand-held lighting will be provided for operator access to the safety injection pump room. Permanent emergency lighting is provided inside the safety injection pump room to operate the required equipment. Portable lights will be provided in the control room for performing the required functions at the service water intake structure. These portable lights will provide adequate illumination for the operators to access the intake structure and operate valve V6-12D.

Since the only manual actions required inside the containment and RHR pit are for the operation of valves for cold shutdown, sufficient time is available for the licensee to take appropriate action to re-energize the normal containment lighting or assemble portable lighting units prior to containment entry.

Based on the above evaluation of alternate access routes and provision for portable, hand-held lighting, the staff concludes that adequate lighting will be available in access areas and to perform necessary safe shutdown functions. Therefore, the licensee's request for exemptions from the requirements of Section III.J of Appendix R for certain paths to the safety injection pump room is acceptable and should be granted. Furthermore, the staff concludes that the installation of 8-hour battery powered emergency lighting units inside the containment would not significantly improve the level of fire protection for this fire area. The licensee has sufficient time available to take appropriate action to re-energize the normal containment lighting or to assemble portable lighting units prior to containment entry. Therefore, their omission is an acceptable exemption from Section III.J of Appendix R, and application of the regulation in this particular circumstance is not necessary to achieve the underlying purpose of the rule.

IV.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), that (1) these exemptions as described in Section III are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security and (2) special circumstances are present for the exemptions in that application of the regulation in these particular circumstances is not necessary to achieve the underlying purposes of Appendix R to 10 CFR Part 50. Therefore, the

Commission hereby grants the following exemptions from the requirements of Section III.J of Appendix R to 10 CFR Part 50:

1. Access and egress routes to the:
 - a. safety injection pump room; and
 - b. service water intake structure.
2. Containment and RHR pit areas where manual, cold shutdown operations are required and/or where possible repairs may be needed.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the environment (52 FR 29103).

For further details with respect to this action, see the requests for exemption dated June 29, 1984, and January 16, 1985, and letter dated January 29, 1988, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Hartsville Memorial Library, Home and Fifth Avenues, Hartsville, South Carolina 29535.

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

151

Steven A. Varga, Director
 Division of Reactor Projects I/II
 Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,
this 30th day of June, 1988.

OFC	:LA:PD21:DRPR:PE:PD21:DRPR:PM:PD21:DRPR: ECEB:DEST	: OGC	:D:PD21:DRPR	: ADRI:DRPR
NAME	:PAnderson	: GRequa	: RLo	: CMcCracken
DATE	: 5/30/88	: 5/23/88	: 5/23/88	: 5/24/88

OFC	: D:DRPR	:	:	:	:
NAME	: SVarga	:	:	:	:
DATE	: 6/29/88	:	:	:	:

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of
CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC
PLANT, UNIT NO. 2

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Docket No. 50-261

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Section III.J, of Appendix R to 10 CFR Part 50, Emergency Lighting, requires 8-hour battery powered lighting units in areas needed for operation of safe shutdown equipment and along access and egress routes thereto.

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The reason for requiring 8-hour battery powered emergency lighting is to ensure that at least minimal lighting is available for the performance of manual actions necessary for safe shutdown after a fire. Usually manual actions are required for valve alignment, repairs and pump control operations. A fire at the north end of the auxiliary building hallway on the ground level would prevent access to the SI-864 A and B valves in the safety injection pump room. Also, manual operation of service water valve V6-12D, located at the intake structure, would require emergency lighting. The licensee has stated that due to the numerous alternate access pathways, a large number of fixed emergency lighting units would have to be installed, and the routing of associated cabling to provide the necessary electrical power for redundant lighting is not practicable.

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The technical requirements of Section III.J of Appendix R are not expressly met at the intake structure and along the access route to the safety injection pump room because fixed, individual 8-hour battery powered lighting units are not provided for safe shutdown.

At the north end of the auxiliary building, the staff was concerned about the availability of a reliable means of illumination and whether the path of travel would be unobstructed and easily traversed. The alternate access route to the safety injection pump room follows the exterior of the auxiliary building along the east and north sides of the safety injection pump room exterior door. Portable hand-held lighting will be provided for operator access to the safety injection pump room. Permanent emergency lighting is provided inside the safety injection pump room to operate the required equipment. Portable lights will be provided in the control room for performing the required functions at the service water intake structure. These portable lights will provide adequate illumination for the operators to access the intake structure and operate valve V6-12D.

Since the only manual actions required inside the containment and RHR pit are for the operation of valves for cold shutdown, sufficient time is available for the licensee to take appropriate action to re-energize the normal containment lighting or assemble portable lighting units prior to containment entry.

Based on the above evaluation of alternate access routes and provision for portable, hand-held lighting, the staff concludes that adequate lighting will be available in access areas and to perform necessary safe shutdown functions. Therefore, the licensee's request for exemptions from the requirements of Section III.J of Appendix R for certain paths to the safety injection pump room is acceptable and should be granted. Furthermore, the staff concludes that the installation of 8-hour battery powered emergency lighting units inside the containment would not significantly improve the level of fire protection for this fire area. The licensee has sufficient time available to take appropriate action to re-energize the normal containment lighting or to assemble portable lighting units prior to containment entry. Therefore, their omission is an acceptable exemption from Section III.J of Appendix R, and application of the regulation in this particular circumstance is not necessary to achieve the underlying purpose of the rule.

IV.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), that (1) these exemptions as described in Section III are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security and (2) special circumstances are present for the exemptions in that application of the regulation in these particular circumstances is not necessary to achieve the underlying purposes of Appendix R to 10 CFR Part 50. Therefore, the

Commission hereby grants the following exemptions from the requirements of Section III.J of Appendix R to 10 CFR Part 50:

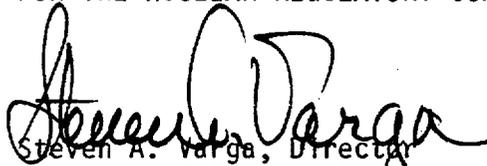
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 - b. service water intake structure.
2. Containment and RHR pit areas where manual, cold shutdown operations are required and/or where possible repairs may be needed.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the environment (52 FR 29103).

For further details with respect to this action, see the requests for exemption dated June 29, 1984, and January 16, 1985, and letter dated January 29, 1988 which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Hartsville Memorial Library, Home and Fifth Avenues, Hartsville, South Carolina 29535.

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Director
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,
this 30th day of June , 1988.