

October 27, 1986

Docket No. 50-261

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

Dear Mr. Utley:

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The Commission has issued the enclosed Amendment No. 104 to Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant Unit No. 2. This amendment consists of changes to the Technical Specifications in response to your request dated August 13, 1986.

The amendment revises the Technical Specifications (TS) to delete the maximum amount of enriched fissionable material which can be used in the core, or available onsite, in the form of fabricated neutron flux detectors for the purpose of monitoring core neutron flux. This is necessary to allow for new excore neutron flux monitoring systems to be installed pursuant to Regulatory Guide (RG) 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants To Assess Plant Conditions During and Following An Accident."

In addition, we have corrected an error in TS 5.3.1.3 by revising the enrichment of reload fuel from 3.9 weight percent to 3.5 weight percent (w/o). This error occurred during the Cycle 10 fuel reload evaluation (Amendment No. 87, dated November 7, 1984). Your original application for the Cycle 10 fuel reload, dated July 23, 1984, requested a change from 3.5 w/o to 3.9 w/o, however, by letter dated September 7, 1984, you withdrew this portion of your request, which therefore should have maintained the original value of 3.5 w/o. Although the Safety Evaluation that was issued with Amendment No. 87 referred to your withdrawal letter of September 7, 1984, we inadvertently included TS page 5.3-1 with the original requested change of 3.9 w/o. Therefore, due to the fact that this error was due to administrative oversight on the part of the staff, we are correcting this error with the issuance of this amendment.

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Mr. E. E. Utley

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A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

Glode Requa, Project Manager
PWR Project Directorate #2
Division of PWR Licensing-A

Enclosures:

1. Amendment No. 104 to DPR-23
2. Safety Evaluation

cc: w/enclosures
See next page

LA: PAD#2
DMS:ter
10/23/86

PM: PAD#2
GRequa: ab
10/23/86

OGC
M. Karman
10/27/86

PD: PAD#2
LRubenstein
10/23/86

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

H. B. Robinson 2

cc:

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

CAROLINA POWER AND LIGHT COMPANY

DOCKET NO. 50-261

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

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 104
License No. DPR-23

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power and Light Company (the licensee) dated August 13, 1986, 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 3.B of Facility Operating License No. DPR-23 is hereby amended to read as follows:

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(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 104, 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Lester S. Rubenstein, Director
PWR Project Directorate #2
Division of PWR Licensing-A

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 27, 1986

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 104 FACILITY OPERATING LICENSE NO. DPR-23

DOCKET NO. 50-261

Revise Appendix A as follows:

Remove Pages

5.3-1

Insert Pages

5.3-1

5.3 REACTOR

5.3.1 Reactor Core

5.3.1.1 The reactor core contains approximately 68 metric tons of uranium in the form of natural or slightly enriched uranium dioxide pellets. The pellets are encapsulated in Zircaloy-4 tubing to form fuel rods which are all pre-pressurized. The reactor core is made up of 157 fuel assemblies. Each fuel assembly contains 204 fuel rod locations occupied by rods consisting of natural or slightly enriched uranium pellets, solid inert materials, or a combination of the aforementioned.⁽¹⁾

5.3.1.2 Deleted.

5.3.1.3 Reload fuel will be similar in design to the initial core. The enrichment of reload fuel will be no more than 3.5 weight percent of U-235.

5.3.1.4 Deleted.

5.3.1.5 There are 45 full-length RCC assemblies in the reactor core. The full-length RCC assemblies contain 144 inch segments of silver-indium-cadmium alloy clad with the stainless steel.⁽²⁾

5.3.1.6 Deleted.

5.3.2 Reactor Coolant System

5.3.2.1 The design of the Reactor Coolant System complies with the Code requirements.⁽³⁾



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 104 TO FACILITY OPERATING LICENSE NO. DPR-23

CAROLINA POWER AND LIGHT COMPANY

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

DOCKET NO. 50-261

1. Introduction

By letter dated August 13, 1986, the Carolina Power and Light Company (the licensee) submitted proposed changes to the Technical Specifications (TS) appended to Facility Operating License No. DPR-23 for the H.B. Robinson Steam Electric Plant, Unit No. 2.

The proposed changes would modify the Technical Specifications to delete the limit on the quantity of fissionable material that may be used in the core, or available onsite in fission detectors.

2. Discussion

Technical Specification 5.3.1.6 limits to 10 grams the quantity of enriched fissionable material which may be used either in the core, or available on the site, in the form of fabricated neutron flux detectors for the purposes of monitoring core neutron flux. The licensee is installing a new excore neutron monitoring system as required by the NRC pursuant to Regulatory Guide 1.97, Revision 3 and for alternate shutdown. Each of the detectors in the new system will contain a small quantity of enriched fissionable material. The total quantity of fissionable material onsite would exceed that allowed by TS 5.3.1.6.

Section 2.C of the Operating License was amended on July 30, 1980, to permit the licensee, pursuant to the Act and 10 CFR 30, 50 and 70, to receive, process and use at anytime any byproduct, source and special nuclear material such as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and fission detectors in "amounts as required." Apparently by oversight, TS 5.3.1.6 was not amended to remove the restriction in the number of grams of enriched fissionable material allowed onsite in neutron flux detectors.

3. Evaluation

The proposed change to TS 5.3.1.6 would delete this section which limits the quantity of enriched fissionable material in neutron flux detectors to 10 grams. This limit is inconsistent with Section 2.C of the Operating License which authorizes the use of special nuclear material in sealed neutron sources and fission detectors in "amounts as required." The intent of this section was

to allow the use of identified materials in amounts as required for reactor operation. This change does not impact on safeguards control (e.g., Material Control and Accountability or Physical Security) because any increase in the amount of the material would be small. The licensee has programs in place to control and account for special nuclear material (SNM) and existing physical security systems. These safeguards programs will continue to operate effectively with the small increase in SNM quantity. Deletion of TS 5.3.1.6 will make Technical Specification consistent with Operating License Section 2.C. We, therefore, find this deletion acceptable.

Environmental Consideration

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 this amendment.

Conclusion

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: October 27, 1986

Principal Contributor:

G. Requa