February 10, 199

Mr. C. S. Hinnant, Vice President
Carolina Power & Light Company
H. B. Robinson Steam Electric Plant,
Unit No. 2
Post Office Box 790
Hartsville, South Carolina 29551-0790

SUBJECT: ISSUANCE OF AMENDMENT NO. 157 TO FACILITY OPERATING LICENSE NO. DPR-23 REGARDING CONTAINMENT SPRAY SURVEILLANCE INTERVAL - H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 (TAC NO. M91107)

Dear Mr. Hinnant:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. to Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit No. 2. This amendment changes the Technical Specifications (TS) in response to your request dated December 12, 1994.

The amendment revises the containment spray (CS) nozzle surveillance interval in TS 4.5.1.4 from 5 to 10 years.

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

Sincerely,

(Original Signed By)

Brenda L. Mozafari, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-261

Enclosures:
1. Amendment No. 157 to DPR-23
2. Safety Evaluation

cc w/enclosures:
See next page

DOCUMENT NAME: G:\ROBINSON\ROB91107.AMD

OFFICE	LA:PDII-1	PM:PDII-1	PD:PDII-1	SCSB	OGC
NAME	PAnderson	BMozafari	WBateman	RBarrett	CMARCO
DATE	01/19/95	01/19/95	01/20/95	01/23/95	01/31/95
COPY	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

OFFICIAL RECORD COPY

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AMENDMENT NO. 157 TO FACILITY OPERATING LICENSE NO. DPR-23 - H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

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cc: Robinson Service List

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 FACILITY OPERATING LICENSE

Amendment No. 157
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 December 12, 1994, 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:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 157 , are hereby incorporated in the license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

William H. Bateman

William H. Bateman, Director
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 10, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 157

FACILITY OPERATING LICENSE NO. DPR-23

DOCKET NO. 50-261

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

Remove Pages	Insert Pages
4.5-2	4.5-2
4.5-4	4.5-4

Containment Spray System

4.5.1.3 System tests shall be performed at each refueling interval. The test shall be performed with the isolation valves in the spray supply lines at the containment and spray additive tank blocked closed. Operation of the system is initiated by tripping the normal actuation instrumentation.

4.5.1.4 Verify each spray nozzle is unobstructed at least every 10 years. |

4.5.1.5 The tests discussed in 4.5.1.3 and 4.5.1.4 will be considered satisfactory if visual observations indicate all components have operated satisfactorily.

Containment Fan Coolers

4.5.1.6 Each fan cooler unit shall be tested at intervals not to exceed one month to verify proper operation of all essential features including valves, dampers and piping.

4.5.2 Component Verification

4.5.2.1 When the reactor coolant pressure is in excess of 1,000 psi, it shall be verified at least once per 12 hours (from the RTGB indicators/controls) that the following valves are in their proper position with control power to the valve operators removed.

Valve Number	Valve Position
1- MOV 862 A&B	Open
2- MOV 863 A&B	Closed
3- MOV 864 A&B	Open
4- MOV 866 A&B	Closed

addition, the active components (pumps and signal valves) are to be tested quarterly to check the operation of the starting circuits and to verify that the pumps are in satisfactory running order. The quarterly test interval is based on the judgment that more frequent testing would not significantly increase the reliability (i.e., the probability that the component would operate when required), and that more frequent testing would result in increased wear over a long period of time.

Quarterly testing of valves is consistent with the requirements of ASME Section XI.

Quarterly testing of the safety injection pumps, residual heat removal pumps, containment spray pumps and the boron injection tank isolation valves is not required when in the cold shutdown condition. These components are not required for plant safety when the reactor is in cold shutdown and testing during this condition will result in unnecessary wear on the equipment.

With the containment spray pump discharge valves closed and the spray headers drained of any solution, low pressure air or smoke can be blown through test connections. This surveillance requirement ensures that each spray nozzle is unobstructed and provides assurance that spray coverage of the containment during an accident is not degraded. Due to the passive design of the nozzle, a test at 10 year intervals is considered adequate to detect obstruction of the nozzles.

Other systems that are also important to the emergency cooling function are the accumulators, the Component Cooling System, the Service Water System and the containment fan coolers. The accumulators are a passive safeguard. In accordance with Specification 4.1, the water volume and pressure in the accumulators are checked periodically. The other systems mentioned operate when the reactor is in operation and by these means are continuously monitored for satisfactory performance.

References

(1) FSAR Section 6.2
(2) FSAR Section 6.4
(3) FSAR Section 6.1
(4) CP&L report and supplemental letters of September 29, November 5, December 8, 1971, and March 20, 1972.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 157 TO 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 December 12, 1994, Carolina Power & Light Company (CP&L or the licensee) requested an amendment to the Facility Operating License DPR-23 for H. B. Robinson Steam Electric Plant, Unit No. 2 (HBR2). The proposed amendment would change the surveillance interval specified in TS 4.5.1.4 from 5 years to 10 years for performing an air or smoke flow test through the containment spray headers.

2.0 EVALUATION

Existing HBR2 Technical Specification (TS) 4.5.1.4 requires that the licensee demonstrate that the containment spray system is operable at least once per 5 years by performing an air or smoke test through each spray header and verifying that each spray nozzle is unobstructed. Such testing provides no quantitative data on flow rates exiting the spray nozzles and only verifies that there is flow.

The NRC staff studied industry experience regarding problems revealed by means of this testing and found that the only problems in pressurized water reactor containment spray systems were those that were construction-related. Based on this investigation and other screening criteria established for evaluating surveillance requirements (SR), the NRC staff recommended that this test interval be extended to once every 10 years. This recommendation is documented in NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements," December 1992.

In addition, the revised NUREG-1431, "Standard Technical Specifications for Westinghouse Plants," in the basis for the SR for the containment spray header smoke or air flow test state in SR 3.6.6A.9: "With the containment spray inlet valves closed and the spray header drained of any solution, low pressure air or smoke can be blown through test connections. This SR ensures that each spray nozzle is unobstructed and provides assurance that spray coverage of the containment during an accident is not degraded. Due to the passive design of the nozzle, a test at [the first refueling and at] 10 year intervals is considered adequate to detect obstruction of the nozzles."

Surveillance air flow tests were performed at HBR2 in 1970, 1975, 1980, 1986 and 1991. All tests demonstrated that obstructions did not exist in any of

the nozzles involved. Therefore, CP&L plant-specific operational experience regarding the containment spray header air or smoke flow tests is consistent with the findings and recommendations of NUREG-1366. The proposed reduced testing of the spray system's nozzles remains adequate to ensure operability of the nozzles to mitigate the consequences of a design basis accident. Based on the above discussion, the NRC staff finds that the proposed changes of the surveillance frequency for performing an air or smoke flow test through the containment spray headers for HBR2 from 5 years to 10 years is acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of South Carolina official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes the Surveillance Requirements. 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 (60 FR 497). 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.

5.0 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.

Principle contributor: B. Mozafari

Date: February 10, 1995