

October 3, 1996

Mr. W. R. Robinson, 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: ISSUANCE OF AMENDMENT NO. 67 TO FACILITY OPERATING LICENSE
NO. NPF-63 REGARDING CONTAINMENT SPRAY SURVEILLANCE INTERVAL
- SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 (TAC NO. M96209)

Dear Mr. Robinson:

The Nuclear Regulatory Commission has issued Amendment No. 67 to Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1. This amendment changes the Technical Specifications in response to your request dated July 19, 1996.

The amendment revises the containment spray (CS) nozzle surveillance interval in TS 3/4.6.2 from 5 to 10 years.

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

Sincerely,
Original signed by:
Ngoc B. Le, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-400

Enclosures:

1. Amendment No. 67 to NPF-63
2. Safety Evaluation

cc w/enclosures:

See next page

DOCUMENT NAME: G:\HARRIS\HAR96209.AMD *RL for*

OFFICE	LA:PDII-1	PM:PDII-1	SCSB	OGC	D:PDII-1
NAME	EDunnington <i>ED</i>	NLe <i>Le</i>	CBerlinger	Cmarco	EImbro <i>MI</i>
DATE	08/14/96	08/14/96	08/14/96	08/16/96	09/3/96
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Carolina Power & Light Company

Shearon Harris Nuclear Power Plant
Unit 1

cc:

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AMENDMENT NO. 67 TO FACILITY OPERATING LICENSE NO. NPF-63 - HARRIS, UNIT 1

Docket File
PUBLIC
PDII-1 Reading
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cc: Harris Service List



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 FACILITY OPERATING LICENSE

Amendment No. 67
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 July 19, 1996, 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 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. 67, 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 the date of its issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



 Eugene V. Imbro, 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: October 3, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 67

FACILITY OPERATING LICENSE NO. NPF-63

DOCKET NO. 50-400

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised area is indicated by a marginal line.

Remove Page

3/4 6-11

Insert Page

3/4 6-11

CONTAINMENT SYSTEMS

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT SPRAY SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two independent Containment Spray Systems shall be OPERABLE with each Spray System capable of taking suction from the RWST and transferring suction to the containment sump.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one Containment Spray System inoperable, restore the inoperable Spray System to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours; restore the inoperable Spray System to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the following 30 hours. Refer also to Specification 3.6.2.3 Action.

SURVEILLANCE REQUIREMENTS

4.6.2.1 Each Containment Spray System shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position;
- b. By verifying that, on an indicated recirculation flow of at least 1832 gpm, each pump develops a differential pressure of greater than or equal to 186 psi when tested pursuant to Specification 4.0.5;
- c. At least once per 18 months during shutdown, by:
 1. Verifying that each automatic valve in the flow path actuates to its correct position on a containment spray actuation test signal and
 2. Verifying that each spray pump starts automatically on a containment spray actuation test signal.
 3. Verifying that, coincident with an indication of containment spray pump running, each automatic valve from the sump and RWST actuates to its appropriate position following an RWST Lo-Lo test signal.
- d. At least once per 10 years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 67 TO 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 July 19, 1996, the Carolina Power & Light Company (CP&L or the licensee) submitted a request for changes to the Shearon Harris Nuclear Power Plant, Unit 1, (SHNPP) Technical Specifications (TS). The requested changes would revise TS 3/4.6.2, Containment Spray (CS) System, to extend the surveillance interval for performance of an air or smoke flow test through CS spray nozzles from once per 5 years to once per 10 years.

2.0 EVALUATION

Existing SHNPP Technical Specification (TS) 3/4.6.2, Containment Spray System, requires that the licensee demonstrate that the CS 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 of the existing spray nozzles and only verifies that there is flow through each nozzle.

The NRC staff studied industry experience regarding problems revealed by means of this testing and found that the only problems in pressurized water reactor CS systems were those that were construction-related. Based on this review and other screening criteria established for evaluating surveillance requirements (SRs), the NRC staff recommended that this test interval be extended to once every 10 years. This recommendation is documented in NUREG-1366, "Improvement to Technical Specifications Surveillance Requirements," dated December 1992. On September 27, 1993, the NRC staff issued Generic Letter (GL) 93-05, "Line-Item Technical Specifications Improvement to Reduce Surveillance Requirements for Testing During Power Operation," to encourage licensees to adopt the line-item TS improvements to reduce testing commensurate with the recommendations of NUREG-1366.

In addition, SR 3.6.6A.9 in the revised NUREG-1431, "Standard Technical Specifications for Westinghouse Plants," sets forth the basis for the SR for

the CS header smoke or air flow test, which provides that: "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 years intervals is considered adequate to detect obstruction of the nozzles."

In its July 19, 1996 submittal, the licensee states that pre-operational testing of the CS system at SHNPP performed in June 1986 verified air flow through each containment nozzle. Also in April 1991, a containment spray nozzle flow test was performed to satisfy TS 4.6.2.1.d. This test also verified air flow through each nozzle.

In GL 93-05, the NRC identified an additional problem at San Onofre Unit 1 (S01) plant which experienced nozzle clogging due to coating degradation in carbon steel piping. Consistent with the NRC's recommendations in GL 93-05, the licensee states in its July 19, 1996 submittal that the CS piping design at the SHNPP is stainless steel, and thus is different from the piping design at S01 and should not be susceptible to the coating degradation described in GL 93-05.

On the above basis, the staff finds that SHNPP plant-specific operational experience regarding the CS header air or smoke flow test is consistent with the findings and recommendations of NUREG-1366 and GL 93-05. The proposed reduced testing of the CS system's nozzles remains adequate to ensure operability of the nozzles to mitigate the consequences of a design basis accident. Therefore, the proposed changes of the surveillance frequency for performing an air or smoke flow test through the CS headers for SHNPP from 5 years to 10 years is acceptable.

3.0 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.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a Surveillance Requirement. 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 (61 FR 44354). 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.

Principal Contributor: N. Le

Date: October 3, 1996