

March 3, 1994

Docket No. 50-400

Mr. W. R. Robinson
Vice President - Harris Plant
Nuclear Generation
Carolina Power & Light Company
Post Office Box 165, Mail Code: Zone 1
New Hill, North Carolina 27562-0165

Dear Mr. Robinson:

SUBJECT: ISSUANCE OF AMENDMENT NO. 45 TO FACILITY OPERATING LICENSE NO. NPF-63 REGARDING EMERGENCY DIESEL GENERATOR MAINTENANCE AND SURVEILLANCE FOR SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 (TAC NO. M86381)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 45 to Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1 (SHNPP). This amendment modified the license in response to your request dated May 15, 1993, as supplemented February 17, and February 25, 1994.

The amendment modifies the SHNPP Operating License to provide for a one-time exemption from compliance with License Condition 2.C.(8) in support of the upcoming refueling outage for SHNPP.

A copy of the related Safety Evaluation is enclosed. The notice of Issuance will be included in the Commission's regular biweekly 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

Enclosures:

1. Amendment No. 45 to NPF-63
2. Safety Evaluation

cc w/enclosures:
See next page

*See Previous Concurrence

OFFICE	LA:PD21:DRPE	PM:PD21:DRPE	D:PD21:DRPE	OGC*
NAME	PAnderson	NLe	SBajwa	EHoller
DATE	3/3/94	3/3/94	3/3/94	3/3/94

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

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Mr. W. R. Robinson
Vice President - Harris Plant
Nuclear Generation
Carolina Power & Light Company
Post Office Box 165, Mail Code: Zone 1
New Hill, North Carolina 27562-0165

Dear Mr. Robinson:

SUBJECT: ISSUANCE OF AMENDMENT NO.45 TO FACILITY OPERATING LICENSE NO.
NPF-63 REGARDING EMERGENCY DIESEL GENERATOR MAINTENANCE AND
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Sincerely,

A handwritten signature in black ink, appearing to read "Ngoc B. Le".

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

Enclosures:

1. Amendment No. 45 to NPF-63
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. W. R. Robinson
Carolina Power & Light Company

Shearon Harris Nuclear Power Plant
Unit 1

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AMENDMENT NO. 45 TO FACILITY OPERATING LICENSE NO. NPF-63 - HARRIS, UNIT 1

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cc: Harris Service List



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

CAROLINA POWER & LIGHT COMPANY, et al.

DOCKET NO. 50-400

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 45
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 May 15, 1993, as supplemented February 17, and February 25, 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, paragraph 2.C. of Facility Operating License No. NPF-63 is hereby amended to read as follows:

(8) Transamerica Delaval, Inc. (TDI) Diesel Generators

Carolina Power & Light Company shall implement the TDI diesel requirements as specified in Attachment 1. Attachment 1 is hereby incorporated into this license. However, Carolina Power & Light Company is granted a one-time exemption from implementing these requirements during Refueling Outage No. 5 and the ensuing Operating Cycle No. 6.

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



S. Singh Bajwa, Acting Director
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
License Page 5

Date of Issuance: March 3, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 45

FACILITY OPERATING LICENSE NO. NPF-63

DOCKET NO. 50-400

Replace the following page of the Operating License NPF-63 with the enclosed page. The revised area are indicated by marginal lines.

Remove Page

5

Insert Page

5

(6) Detailed Control Room Design Review (Item I.D.1, Section 18)

Carolina Power & Light shall submit the final results of the control room surveys prior to startup following the first refueling outage.

(7) Safety Parameter Display System (Section 18.2.1)

Carolina Power & Light Company shall submit to the NRC for review prior to startup following the first refueling:

- (a) The final Validation Test Report,
- (b) The resolution of additional human engineering deficiencies identified on the safety parameter display system.

(8) Transamerica Delaval, Inc. (TDI) Diesel Generators

Carolina Power & Light Company shall implement the TDI diesel requirements as specified in Attachment 1. Attachment 1 is hereby incorporated into this license. However, Carolina Power & Light Company is granted a one-time exemption from implementing these requirements during Refueling Outage No. 5 and the ensuing Operating Cycle No. 6.

(9) Formal Federal Emergency Management Agency Finding

In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of emergency preparedness, the provisions of 10 CFR Section 50.54(s)(2) will apply.

(10) Fresh Fuel Storage

The following criteria apply to the storage and handling of new fuel assemblies in the Fuel Handling Building:

- (a) The minimum edge-to-edge distance between a new fuel assembly outside its shipping container or storage rack and all other new fuel assemblies shall be at least 12 inches.
- (b) New fuel assemblies shall be stored in such a manner that water would drain freely from the assemblies in the event of flooding and subsequent draining of the fuel storage area.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 45 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 May 15, 1993, as supplemented February 17, 1994, Carolina Power & Light Company (CP&L or the licensee) submitted a request for a change to the Shearon Harris Nuclear Power Plant, Unit 1, (SHNPP) Operating License NPF-63 to remove License Condition 2.C.(8), as defined in Attachment 1 to Operating License NPF-63.

Since a generic evaluation by the NRC will not be completed in time to support the licensee's upcoming refueling outage, the licensee modified the original amendment request on February 25, 1994, to request a one-time exemption from implementing the Transamerica Delaval, Inc. (TDI), diesel requirements specified in the Attachment 1 during Refueling Outage No. 5 and the subsequent Operating Cycle No. 6. The requested change would allow a one-time exemption from the emergency diesel generator License Condition 2.C.(8).

The February 17, 1994, and February 25, 1994, letters provided information within the scope of the original application and did not change the initial proposed no significant hazards consideration determination.

The Transamerica Delaval, Inc. (TDI), Owners Group was formed in late 1983 following the crankshaft failure at the Shoreham Nuclear Plant of an Enterprise emergency diesel generator (EDG) manufactured by TDI. The Owners Group developed a detailed program plan to provide for generic design review and quality revalidation (DR/QR) of Enterprise EDGs. This plan was reviewed by the NRC and approved in its August 13, 1984, Safety Evaluation (SE). Following the issuance of the SE, the licensees in the Owners' Group developed and implemented the DR/QR requirements in response to, and in accordance with, the program plan. The specific details of the DR/QR were submitted to the NRC for review and the results of this review were documented in NUREG-1216, "Safety Evaluation Report Related to the Operability and Reliability of Emergency Diesel Generators Manufactured by Transamerica Delaval, Inc.," dated August 1986. NUREG-1216 outlines specific provisions that were incorporated as a License Condition in the SHNPP Operating License.

At the time of the DR/QR review, these conditions were imposed on SHNPP as well as other plants with Enterprise EDGs being licensed at the time because little operating history of these engines was available. Since that time, the industry has accumulated over 9,000 hours of operational history for these

engines. The inspections required by plant license conditions have not revealed any significant problems from operation of the engines. The analysis of the inspection results is documented in generic submittals of the TDI Owners' Group, "Generic Licensing Submittal for Emergency Diesel Generator - Conditions of License for Utilities with Enterprise Engine," dated November 30, 1992, and December 7, 1993.

2.0 EVALUATION

The licensee provided an item-by-item discussion of the License Condition requirements. The items relate to the frequency of the major engine overhauls, inspection of EDG components (connecting rod assemblies, cylinder and turbochargers), performance of air roll tests and requirements to be met prior to restart following the first refueling outage.

The bases for the proposed change is documented in the TDI Owners' Group reports submitted November 30, 1992, and December 7, 1993. These generic reports are currently under review by the staff and it is expected that the staff's generic SE will be issued in the near future.

The staff has completed its review of the operational database and inspection results of the TDI engines over the past eight years. The staff's review of the operational database and inspection results submitted by the November 30, 1992, TDI Owners' Group report, as revised December 7, 1993, did not reveal any unacceptable findings. The results of the end of Cycle 2, five-year component inspections at SHNPP have shown minimal or no wear on major engine components and very few other component-related problems. The staff finds, therefore, that the proposed deferment of the diesel engine teardown inspection requirement until the end of Operating Cycle 6 does not affect any parameters that relate to the margin of safety as defined in the SHNPP Technical Specifications, and that the proposed changes do not involve a significant reduction in a margin of safety.

Based on the above review, the staff concludes that proposed change to defer License Condition 2.C.(8) requiring the TDI complete engine overhaul from Refueling Outage No. 5 to Refueling Outage No. 6 will not result in a reduction in engine reliability, and therefore 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 requirement with respect to 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 such finding (58 FR 32378). 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: J. Rajan

Date: March 3, 1994