

January 12, 1995

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. 53 TO FACILITY OPERATING LICENSE NO. NPF-63 REGARDING EMERGENCY DIESEL GENERATORS - SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 (TAC NO. M90988)

Dear Mr. Robinson:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 53 to Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1 (SHNPP). This amendment deletes Section 2.C.(8) of the Facility Operating License NPF-63, and deletes Attachment 1 to the License, in response to your request dated May 15, 1993, as supplemented February 17, 1994, February 25, 1994, and November 23, 1994.

A copy of the related Safety Evaluation is enclosed.

A 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. 53 to NPF-63
2. Safety Evaluation

cc w/enclosures: See next page

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See next page

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

Shearon Harris Nuclear Power Plant
Unit 1

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AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE NO. NPF-63 - HARRIS, UNIT 1

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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. 53
License No. NPF-63

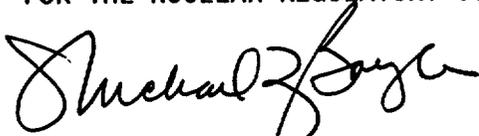
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power & Light Company, (the licensee), dated May 15, 1993, as supplemented February 17, 1994, February 25, 1994, and November 23, 1994, complies with the standards and requirements of 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, Facility Operating License No. NPF-63 is hereby amended by deletion of License Condition 2.C.(8), "Transamerica Delaval, Inc., (TDI) Diesel Generators. License Condition 2.C.(8) will read as follows:

(8) Deleted

Also by this amendment, Attachment 1 to Facility Operating License No. NPF-63, "TDI Diesel Requirements NPF-63," is deleted.

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


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

Attachment: License Page 5

Date of Issuance: January 12, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 53

FACILITY OPERATING LICENSE NO. NPF-63

DOCKET NO. 50-400

Replace the following page of Facility Operating License No. NPF-63 with the enclosed page. The revised area is indicated by marginal lines.

Remove Pages

5

Insert Pages

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) Deleted

(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. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE 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, February 25, 1994, and November 23, 1994, Carolina Power & Light Company (CP&L or the licensee) submitted a request to remove License Condition 2.C.(8) from Facility Operating Licensee No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1 (SHNPP) and to delete Attachment 1 to the license. The license condition requires emergency diesel generators (EDG) teardowns for component inspections. This license condition is defined in Attachment 1 to the SHNPP Operating License. The license condition was originally imposed by NUREG-1216, "Safety Evaluation Report Related to the Operability of Emergency Diesel Generators Manufactured by Transamerica Delaval, Inc.," dated August 1986.

The licensee stated in its submittal that since inspections performed to date by the industry have not uncovered any significant wear patterns or problems that could not have been detected by other means, which do not require extensive teardown, and thus the license condition is no longer warranted and may be deleted. The basis for the proposed change is documented in the Transamerica Delaval, Inc. (TDI) Owners Group evaluation and justification to remove the license condition in a generic proposal submitted to the U.S. Nuclear Regulatory Commission (NRC) on November 30, 1992, and December 7, 1993.

The licensee originally submitted letters dated May 15, 1993, and February 17, 1994, to request the removal of License Condition 2.C.(8) to support refueling outage 5 scheduled to begin on March 19, 1994. However, in anticipation that the NRC staff's generic evaluation of the TDI Owners Group generic proposal would not be completed in time to support this refueling outage, the licensee submitted a supplemental letter dated February 25, 1994, which requested that the NRC staff grant an interim one-time exemption to defer the diesel engine teardown inspection at SHNPP until refueling outage 6.

In response to the February 25, 1994, supplemental letter, the NRC staff reviewed the operational database and inspection results for SHNPP's TDI engines for the previous 8 years, along with the operational database and inspection results as documented in the TDI Owners Group submittal. After review, the NRC staff found the submittal to be acceptable, and on March 17, 1994, the NRC staff issued Amendment No. 45 granting a one-time exemption from compliance with SHNPP License Condition 2.C.(8) during refueling outage 5 and the ensuing operating cycle 6.

By letter dated November 23, 1994, the licensee supplemented its May 15, 1993, February 17, 1994, and February 25, 1994, letters, again requesting that License Condition 2.C.(8) be removed from Facility Operating License No. NPF-63 before the completion of operating cycle 6. The November 23, 1994, letter also incorporated by reference all of the findings and conclusions of the NRC-approved version of the TDI Emergency Diesel Generators Owners Group (Owners Group) generic topical report TDI-EDG-001-A, "Basis for Modification to Inspection Requirements for Transamerica Delaval, Inc. Emergency Diesel Generators." The additional information did not change either the scope of the May 15, 1993, application, as supplemented February 17, 1994, February 25, 1994, November 23, 1994, or the initial no significant hazards consideration determination.

2.0 EVALUATION

The Owners Group submitted proposals on November 30, 1992, and December 7, 1993, on behalf of a number of plants with TDI EDGs, including the SHNPP. The Owners Group proposed removal of the diesel generator-related license conditions that were imposed as part of a technical resolution to address concerns regarding the reliability of the TDI EDGs after the crankshaft failure had occurred at the Shoreham nuclear plant in August 1983. The technical resolution involved implementation of Phase I and Phase II programs as identified in NUREG-1216. The Phase I program focused on the resolution of known engine component problems that had potential generic implications; the Phase II program focused on the design review of a large set of important engine components to ensure their adequacy from a manufacturing standpoint, as well as operational performance. At that time, the NRC staff concluded that these components merited special emphasis in the area of load restrictions and/or maintenance and surveillance. The 16 major components identified included connecting rods, crankshafts, cylinder blocks, cylinder heads, piston skirts, and turbochargers. Engine load restrictions were addressed in the plant-specific technical specifications, license conditions, engine operating procedures, and operator training, as appropriate, for five of these components. The most critical periodic maintenance and surveillance actions for these components were incorporated as license conditions.

On the basis of substantial operational data and inspection results, the Owners Group provided information in its submittals of November 1992 and December 1993 to demonstrate that the special concerns of NUREG-1216 were no longer warranted. The Owners Group stated that the TDI EDGs should be treated equally with other EDGs within the nuclear industry and be subjected to the same standard regulations, without the special requirements of NUREG-1216. In addition, the Owners Group stated that this action would improve availability of the engines for service, especially during outages, while maintaining current reliability levels.

The NRC staff and its consultants at the Pacific Northwest Laboratory have completed a review of the operational data and inspection results contained in the Owners Group submittals regarding to the engine's individual components. In addition, independent opinions were obtained from three leading diesel engine experts regarding these inspection requirements. On the basis of the review, the NRC staff concluded that there is adequate justification for

removing the present component-based license conditions. The NRC staff's evaluation of the Owners Group submittals is given in a letter to the TDI Diesel Generators Owners' Group Clearinghouse, dated March 17, 1994.

The NRC staff has reviewed the licensee's submittal of May 15, 1993, as supplemented February 17, 1994, February 25, 1994, and November 23, 1994, regarding whether its findings from its review of the Owners Group's submittals are applicable to SHNPP. Appendix D of the Safety Evaluation of the Owners Group submittal identifies the specific license conditions describing inspection requirements for certain components that may be deleted as a result of the review. These requirements encompass, and are consistent with, the conditions in the SHNPP Operating License; therefore the NRC staff concludes that the licensee's proposal is consistent with the Owners Group's submittals and that License Condition 2.C.(8) for SHNPP may be deleted. Deletion of License Condition 2.C.(8) will not adversely affect the public health and safety.

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 Contributors: N. Le
J. Rajan

Date: January 12, 1995