

June 2, 1994

Docket Nos. 50-413
and 50-414

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Mr. David L. Rehn
Vice President, Catawba Site
Duke Power Company
4800 Concord Road
York, South Carolina 29745

Dear Mr. Rehn:

SUBJECT: ISSUANCE OF AMENDMENTS - CATAWBA NUCLEAR STATION, UNITS 1 AND 2
EMERGENCY DIESEL GENERATOR LICENSING CONDITIONS
(TAC NOS. M86350 AND M86351)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 119 to Facility Operating License NPF-35 and Amendment No. 113 to Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2. The amendments consist of changes to the list of licensing conditions in the Facility Operating Licenses in response to your application dated April 29, 1993, as supplemented May 16, 1994.

The amendments remove License Condition 2.C.(20) from Facility Operating License NPF-35 for Unit 1 and License Condition 2.C.(11) from Facility Operating License NPF-52 for Unit 2. These licensing conditions were imposed in response to the issues discussed in Supplements 4, 5, and 6 to the Catawba operating license Safety Evaluation Report, NUREG-0954, and in NUREG-1216, "Safety Evaluation Report Related to the Operability and Reliability of Emergency Diesel Generators Manufactured by Transamerica Delaval, Inc." These issues have been resolved as stated in the enclosed Safety Evaluation and accordingly, these license conditions are no longer warranted and may be deleted.

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

Sincerely,

/s/

Robert E. Martin, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

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Enclosures:

1. Amendment No. 119 to NPF-35
2. Amendment No. 113 to NPF-52
3. Safety Evaluation

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*SEE PREVIOUS CONCURRENCE

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DATE	5/27/94	5/27/94	3/28/94	5/26/94	6/1/94

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 2, 1994

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Vice President, Catawba Site
Duke Power Company
4800 Concord Road
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Sincerely,

Robert E. Martin, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 119 to NPF-35
2. Amendment No. 113 to NPF-52
3. Safety Evaluation

cc w/enclosures:
See next page

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

DUKE POWER COMPANY
NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION
SALUDA RIVER ELECTRIC COOPERATIVE, INC.
DOCKET NO. 50-413
CATAWBA NUCLEAR STATION, UNIT 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 119
License No. NPF-35

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Catawba Nuclear Station, Unit 1 (the facility) Facility Operating License No. NPF-35 filed by the Duke Power Company, acting for itself, North Carolina Electric Membership Corporation and Saluda River Electric Cooperative, Inc. (licensees), dated April 29, 1993, as supplemented May 16, 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 as 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 set forth in 10 CFR Chapter I;
 - 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-35 is hereby amended by deletion of License Condition 2.C.(20), "Transamerica Delaval, Inc. (TDI) Diesel Generators (Section 8.3.1 SSER #4, NUREG-1216)," and Attachment 1 to read as follows:

2.C.(20) Deleted

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
License Condition change

Date of Issuance: June 2, 1994

- (iv) Additional containment response sensitivity analyses to investigate the effect of drain water temperature and flow rate, and uncertainties in parameters determined by test.
 - (v) Scaled tests or detailed mass transport analyses for a spectrum of break locations to quantify the impact of break conditions on thermal gradients and non-condensable gas distribution in containment and on ice condenser performance.
 - (b) During the interim period of operation, Duke Power Company shall submit to the NRC staff bimonthly reports on the progress of the above confirmatory research program of tests and analyses regarding containment response for MSLB accidents.
- (18) Residual Heat Removal System (Section 5.4.4, SER, SSER #2; Section 15.4.4, SSER #3, SSER #4)*

Prior to startup following the first refueling outage, Duke Power Company shall upgrade the pressurizer power operated relief valves (PORVs) and the steam generator PORVs to safety related.

- (19) Seismic Equipment Qualification (Section 3.10, SSER #2, SSER #3, SSER #4)

A seismic test will be performed utilizing a generic mounting scheme with a GLASTIC pad and fiberglass bushing for electrical isolation to verify the acceptability of the existing mounting. This test will be completed by July 1985.

2.C.(20) Deleted

- (21) Generic Letter 83-28 (Section 15.6, SSER #4,**)

Duke Power Company shall submit responses to and implement the requirements of Generic Letter 83-28 on a schedule which is consistent with that given in its November 2, and December 31, 1984, letters.

* Requires exemption; see paragraph 2.D

**Safety evaluation attached to D. Eisenhut letter dated January 17, 1985. To be incorporated in SSER #5.



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

DUKE POWER COMPANY

NORTH CAROLINA MUNICIPAL POWER AGENCY NO. 1

PIEDMONT MUNICIPAL POWER AGENCY

DOCKET NO. 50-414

CATAWBA NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 113
License No. NPF-52

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Catawba Nuclear Station, Unit 2 (the facility) Facility Operating License No. NPF-52 filed by the Duke Power Company, acting for itself, North Carolina Municipal Power Agency No. 1 and Piedmont Municipal Power Agency (licensees), dated April 29, 1993, as supplemented May 16, 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 as 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 set forth in 10 CFR Chapter I;
 - 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-52 is hereby amended by deletion of License Condition 2.C.(11), "Transamerica Delaval, Inc. (TDI) Diesel Generators (Section 8.3.1 SSER#5, SSER#6, NUREG-1216)," and Attachment 1 to read as follows:

(11) Deleted

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
License Condition change

Date of Issuance: June 2, 1994

(8) Emergency Response Capabilities (Generic Letter 82-33, Supplement 1 to NUREG-0737).

(a) Deleted

(b) Safety Parameter Display System (SPDS) (Section 18, SSER #5)

Prior to December 8, 1989, Duke Power Company shall add to the existing SPDS and have operational the following SPDS parameters: (a) residual heat removal flow, (b) containment isolation status, (c) stack radiation measurements, and (d) steam generator or steamline radiation. The actual value of these and all other SPDS variables should be displayed for operator viewing in easily and rapidly accessible display formats.

(9) Anticipatory Reactor Trip, II.K.3.10 (Section 5.2.2, SER)

Prior to exceeding 70% power, Duke Power Company shall complete the described turbine trip tests to verify that PORVs will not be challenged when the anticipatory trip bypass is in effect.

(10) Steam Generator Tube Rupture (Section 15.4.4, SER, SSER #2)

Prior to startup following the first refueling outage of Catawba Unit 2, Duke Power Company shall submit for NRC staff review and approval an analysis which demonstrates that the steam generator single-tube rupture analysis presented in the FSAR is the most severe case with respect to the release of fission products and calculated doses. Consistent with the analytical assumptions, Duke Power Company shall propose any necessary changes to Appendix A to this license.

(11) Deleted



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 119 TO FACILITY OPERATING LICENSE NPF-35
AND AMENDMENT NO. 113 TO FACILITY OPERATING LICENSE NPF-52

DUKE POWER COMPANY, ET AL.

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-413 AND 50-414

1.0 INTRODUCTION

By letter dated April 29, 1993, as supplemented May 16, 1994, Duke Power Company, et al. (the licensee), submitted a request for changes to the Catawba Nuclear Station, Units 1 and 2, Facility Operating License Nos. NPF-35 and NPF-52, respectively. The requested changes would remove License Condition 2.C.(20) from Facility Operating License NPF-35 for Unit 1, and License Condition 2.C.(11) from Facility Operating License NPF-52 for Unit 2. These licensing conditions were imposed in response to the issues discussed in Supplements 4, 5, and 6 to the Catawba Operating License Safety Evaluation Report, NUREG-0954, and in NUREG-1216, "Safety Evaluation Report Related to the Operability and Reliability of Emergency Diesel Generators Manufactured by Transamerica Delaval, Inc.," dated August 1986. These issues have been resolved as stated below and, accordingly, these license conditions are no longer warranted and may be deleted.

By letter dated May 16, 1994, the licensee incorporated by reference all of the findings and conclusions of the NRC-approved version of the Transamerica Delaval, Inc. Emergency Diesel Generators Owners Group Generic Topical Report TDI-EDG-001-A as submitted on April 28, 1994. The licensee's letter of May 16, 1994, provided additional information that did not change the scope of the April 29, 1993, application and the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The Transamerica Delaval (TDI) diesel generators Owners' Group (Owners' Group) submitted proposals on November 30, 1992, and December 7, 1993, on behalf of a number of plants with TDI emergency diesel generators (EDG) including the Catawba plant. The Owner's Group proposed removal of diesel generator related licensing conditions. These conditions were imposed as part of a technical resolution to address concerns regarding the reliability of the TDI EDGs following the crankshaft failure at Shoreham 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, while

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 staff concluded that these components merited special emphasis in the area of load restrictions and/or maintenance and surveillance. The 16 major components which were 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/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 on a par with other EDGs within the nuclear industry and subjected to the same standard regulations, without the special requirements of NUREG-1216. In addition, the Owners' Group stated that this action will improve availability of the engines for service, especially during outages, while maintaining current reliability levels.

The NRC staff and its consultants at Pacific Northwest Laboratories have completed a review of the operational data and inspection results contained in the Owners' Group submittals relative to the 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 staff concluded that there is adequate justification for removing the present component-based licensing conditions. The staff's evaluation of the Owners' Group submittals is reported in a letter to Mr. R. C. Day, TDI Diesel Generators Owners' Group Clearinghouse, dated March 17, 1994.¹

The NRC staff has reviewed the licensee's submittal of April 29, 1993, with respect to whether its findings from its review of the Owners' Group submittals are applicable to the Catawba Nuclear Station, Units 1 and 2. Appendix D of the Safety Evaluation of the Owners' Group submittals identifies the specific license condition components that may be deleted as a result of the review. These components encompass and are consistent with the conditions in the Catawba operating licenses. Therefore, the NRC staff concludes that the licensee's proposal is consistent with its Safety Evaluation on the Owners' Group submittals and that License Conditions 2.C.(20) for Unit 1 and 2.C.(11) for Unit 2 may be deleted.

¹ Letter from Mr. James A. Norberg, NRC, to Mr. R. C. Day, Duke Engineering & Services, Inc., TDI Diesel Generators Owners Group Clearinghouse, dated March 17, 1994.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements 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 amendments involve 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 amendments involve no significant hazards consideration, and there has been no public comment on such finding (58 FR 30192 dated May 26, 1993). Accordingly, the amendments meet 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 amendments.

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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: R. Martin
J. Rajan

Date: June 2, 1994