July 28, 1988

Docket Nos.: 50-413
and 50-414

Mr. H. B. Tucker, Vice President
Nuclear Production Department
Duke Power Company
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

SUBJECT: ISSUANCE OF AMENDMENT NO. 51 TO FACILITY OPERATING LICENSE NPF-35 AND AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE NPF-52 - CATAWBA NUCLEAR STATION, UNITS 1 AND 2 (TACS 67765/67766)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 51 to Facility Operating License NPF-35 and Amendment No. 44 to Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications (TS) in response to your application dated February 15, 1988.

The amendments modify the Technical Specifications to permit separation of the diesel generator 24 hour test run and the hot restart with full Engineered Safety Features load test.

A copy of the related safety evaluation supporting Amendment No. 51 to Facility Operating License NPF-35 and Amendment No. 44 to Facility Operating License NPF-52 is enclosed.

Notice of issuance of amendments will be included in the Commission's next bi-weekly Federal Register notice.

Sincerely,

Original signed by:

Kahtan N. Jabbour, Project Manager
Project Directorate II-3
Division of Reactor Projects I/II

Enclosures:
1. Amendment No. 51 to NPF-35
2. Amendment No. 44 to NPF-52
3. Safety Evaluation

cc w/enclosures:
See next page

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MRood	KJabbour:pw	DMatthews
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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. 51
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 February 15, 1988, 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.

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2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachments to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-35 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 51 , are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

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

Attachment:
Technical Specification Changes

Date of Issuance: July 28, 1988

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LA:PDII-3	PM:PDII-3	SPLB:DEST	DPLB:DEST	OGC-WF	D:PDII-3
MRood	KJabbour:pw	JCraig	FRosa		DMatthews
5/18/88	5/18/88	/88	5/24/88	7/21/88	7/28/88

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

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. 44
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 February, 15, 1988, 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, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachments to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-52 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 44 , are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

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

Attachment:
Technical Specification Changes

Date of Issuance: July 28, 1988

OFFICIAL RECORD COPY

See concurrence on Unit 1 amendment

LA:PDII-3	PM:PDII-3	SPLB:DEST	DPLB:DEST	OGC-WF	D:PDII-3
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5/18/88	5/18/88	/88	5/24/88	/88	7/28/88

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ATTACHMENT TO LICENSE AMENDMENT NO. 51

FACILITY OPERATING LICENSE NO. NPF-35

DOCKET NO. 50-413

AND

TO LICENSE AMENDMENT NO. 44

FACILITY OPERATING LICENSE NO. NPF-52

DOCKET NO. 50-414

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the areas of change.

Amended Page

3/4 8-6

3/4 8-7

SURVEILLANCE REQUIREMENTS (Continued)

b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 11 seconds, energizes the auto-connected emergency (accident) loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test;** and

c) Verifying that all automatic diesel generator trips, except engine overspeed, low-low lube oil pressure, generator differential, and the 2 out of 3 voltage controlled overcurrent relay scheme, are automatically bypassed upon loss of voltage on the emergency bus concurrent with a Safety Injection Actuation signal.

7) Verifying, during shutdown, the diesel generator operates for at least 24 hours. The diesel generator shall be loaded to greater than or equal to 5600 kW but less than or equal to 5750 kW. The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 11 seconds after the start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test.

8) Verifying, during shutdown, that the auto-connected loads to each diesel generator do not exceed 5750 kW;**

9) Verifying, during shutdown, the diesel generator's capability to:**

a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,

b) Transfer its loads to the offsite power source, and

c) Be restored to its standby status.

10) Verifying, during shutdown, that with the diesel generator operating in a test mode, connected to its bus, a simulated Safety Injection signal overrides the test mode by: (1) returning the diesel generator to standby operation, and (2) automatically energizing the emergency loads with offsite power;**

**This surveillance need not be performed until prior to entering HOT SHUTDOWN following the Unit 1 first refueling.

11) Verifying that the fuel transfer valve transfers fuel from each fuel storage tank to the day tank of each diesel via the installed cross-connection lines;

12) Verifying that the automatic load sequence timer is OPERABLE with the interval between each load block within the tolerances given in Table 4.8-2;

13) Verifying that the voltage and diesel speed tolerances for the accelerated sequencer permissives are 92.5 ± 1% and 98 + 1%, respectively, with a minimum time delay of 2 ± 0.2 s;

14) Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:

a) Turning gear engaged, or

b) Maintenance mode; and

15) Operating at greater than or equal to 5600 KW but less than or equal to 5750 KW for one hour or until operating temperature has stabilized. Within 5 minutes after completing this test, perform Specification 4.8.1.1.2g.6)b).

h. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting both diesel generators simultaneously, during shutdown, and verifying that both diesel generators accelerate to at least 441 rpm in less than or equal to 11 seconds; and

i. At least once per 10 years by:

1) Draining each fuel oil storage tank, removing the accumulated sediment and cleaning the tank using a sodium hypochlorite solution or its equivalent, and

2) Performing a pressure test of those portions of the diesel fuel oil system designed to Section III, subsection ND of the ASME Code at a test pressure equal to 110% of the system design pressure.

3) Performing tank wall thickness measurements. The resulting data shall be evaluated and any abnormal degradation will be justified or corrected. Any abnormal degradation will be documented in a report to the Commission.

4.8.1.1.3 Reports - All diesel generator failures, valid or non-valid, shall be reported in a Special Report to the Commission pursuant to Specification 6.9.2 within 30 days. Reports of diesel generator failures shall include the information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977. If the number of failures in the last 100 valid tests (on a per nuclear unit basis) is greater than or equal to 7, the report shall be supplemented to include the additional information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 51 TO FACILITY OPERATING LICENSE NPF-35

AND AMENDMENT NO. 44 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

I. INTRODUCTION

By letter dated February 15, 1988, Duke Power Company, et al., (the licensee) proposed amendments to the operating licenses for Catawba Units 1 and 2, which would revise Technical Specification (TS) 4.8.1.1.2g.7) and add TS 4.8.1.1.2g.15) for testing the diesel generators (DGs). The changes would permit the licensee to separate the DG 24 hour test run and the hot restart with full Engineered Safety Features (ESF) load test. These tests were previously carried out in succession.

II. EVALUATION

The amendments add a new TS 4.8.1.1.2g.15) which requires that the DGs be operated at greater than or equal to 5600 kw but less than or equal to 5750 kw for one hour or until operating temperature has stabilized, and then within 5 minutes, that the DG be restarted and accident loads be sequenced on it in accordance with TS 4.8.1.1.2g.6)b). This replaces the previous requirement that the start and load sequence be conducted within 5 minutes of the 24 hour load test specified in TS 4.8.1.1.2g.7). The licensee states that performing these tests in quick succession, as previously required by TS 4.8.1.1.2g.7), creates a potential for causing critical path complications and delays during an outage.

Conducting the start and sequencing test after the diesel has been operated, at its continuous rating, for one hour or until operating temperature has stabilized fulfills the intent of conducting the test following the 24 hour load test. The tests under the proposed change would be carried out under conditions which are nearly identical to those required for previous tests because the DGs would be operated until temperature stabilization is achieved which is the objective in both cases. The proposed change does not significantly alter the requirements for either the 24 hour test run or the hot restart test with full ESF load test and provides the same degree of assurance regarding the DG operability and reliability.

Based on the above evaluation, the staff finds that the licensee's proposed change has no adverse impact on safety and would not pose an undue risk to public health and safety. Therefore, it is acceptable.

III. ENVIRONMENTAL CONSIDERATION

These amendments involve changes to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and

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changes in surveillance requirements. The 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 exposures. The NRC staff has previously made a proposed determination that the amendments involve no significant hazards consideration, and there has been no public comment on such finding. 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 these amendments.

IV. CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (53 FR 17789) on May 18, 1988. The Commission consulted with the state of South Carolina. No public comments were received, and the state of South Carolina did not have any comments.

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: K. Jabbour, PD#II-3/DRP-I/II

Dated: July 28, 1988

July 28, 1988

Docket Nos. 50-413/414

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MEMORANDUM FOR: Sholly Coordinator

FROM: Kahtan N. Jabbour, Project Manager
Project Directorate II-3
Division of Reactor Projects-I/II

SUBJECT: REQUEST FOR PUBLICATION IN BIWEEKLY FR NOTICE - NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE (TACS 67765/67766)

Duke Power Company, et al., Docket Nos. 50-413 and 50-414, Catawba Nuclear Station, Units 1 and 2, York County, South Carolina

Date of application for amendments: February 15, 1988

Brief description of amendments: The amendments modified the Technical Specifications to permit separation of the diesel generator 24 hour test run and the hot restart with Full Engineered Safety features load test.

Date of issuance: July 28, 1988

Effective date: July 28, 1988

Amendment Nos.: 51 and 44

Facility Operating License Nos. NPF-35 and NPF-52. Amendments revised the Technical Specifications.

Date of initial notice in FEDERAL REGISTER: May 18, 1988 (53 FR 17789)

The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated July 28, 1988.

No significant hazards consideration comments received: No.

Local Public Document Room location: York County Library, 138 East Black Street, Rock Hill, South Carolina 29730

Original signed by:

Kahtan N. Jabbour, Project Manager
Project Directorate II-3
Division of Reactor Projects-I/II

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DATED: July 28, 1988

AMENDMENT NO. 51 TO FACILITY OPERATING LICENSE NPF-35 - Catawba Nuclear Station, Unit 1
AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE NPF-52 - Catawba Nuclear Station, Unit 2

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