

Docket No. 50-413

February 14, 1986

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. 5 to Facility Operating License
NPF-35 - Catawba Nuclear Station, Unit 1

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 5 to Facility Operating License NPF-35 for the Catawba Nuclear Station, Unit 1. This amendment consists of changes to the Technical Specifications in response to your application dated July 31, 1985. The other changes requested in that letter will be addressed in future correspondence.

The amendment changes Technical Specifications related to diesel generator surveillance testing. The amendment is effective as of its date of issuance.

A copy of the related safety evaluation supporting Amendment No. 5 to Facility Operating License NPF-35 is enclosed.

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

Sincerely,

B. J. Youngblood, Director
PWR Project Directorate No. 4
Division of PWR Licensing-A

Enclosures:

1. Amendment No. 5 to NPF-35
2. Safety Evaluation

cc w/encl:
See next page

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Mr. H. B. Tucker
Duke Power Company

Catawba Nuclear Station

cc:

William L. Porter, Esq.
Duke Power Company
P.O. Box 33189
Charlotte, North Carolina 28242

North Carolina Electric Membership
Corp.
3333 North Boulevard
P.O. Box 27306
Raleigh, North Carolina 27611

J. Michael McGarry, III, Esq.
Bishop, Liberman, Cook, Purcell
and Reynolds
1200 Seventeenth Street, N.W.
Washington, D. C. 20036

Saluda River Electric Cooperative,
Inc.
P.O. Box 929
Laurens, South Carolina 29360

North Carolina MPA-1
Suite 600
3100 Smoketree Ct.
P.O. Box 29513
Raleigh, North Carolina 27626-0513

Senior Resident Inspector
Route 2, Box 179N
York, South Carolina 29745

Mr. C. D. Markham
Power Systems Division
Westinghouse Electric Corp.
P.O. Box 355
Pittsburgh, Pennsylvania 15230

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission,
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

NUS Corporation
2536 Countryside Boulevard
Clearwater, Florida 33515

Robert Guild, Esq.
P.O. Box 12097
Charleston, South Carolina 29412

Mr. Jesse L. Riley, President
Carolina Environmental Study Group
854 Henley Place
Charlotte, North Carolina 28208

Palmetto Alliance
2135 1/2 Devine Street
Columbia, South Carolina 29205

Richard P. Wilson, Esq.
Assistant Attorney General
S.C. Attorney General's Office
P.O. Box 11549
Columbia, South Carolina 29211

Karen E. Long
Assistant Attorney General
N.C. Department of Justice
P.O. Box 629
Raleigh, North Carolina 27602

Piedmont Municipal Power Agency
100 Memorial Drive
Greer, South Carolina 29651

Spence Perry, Esquire
Associate General Counsel
Federal Emergency Management Agency
Room 840
500 C Street
Washington, D. C. 20472

Mark S. Calvert, Esq.
Bishop, Liberman, Cook,
Purcell & Reynolds
1200 17th Street, N.W.
Washington, D. C. 20036

Mr. Michael Hirsch
Federal Emergency Management Agency
Office of the General Counsel
Room 840
500 C Street, S.W.
Washington, D. C. 20472

Brian P. Cassidy, Regional Counsel
Federal Emergency Management Agency,
Region I
J. W. McCormach POCH
Boston, Massachusetts 02109

Catawba

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cc:

Mr. Heyward G. Shealy, Chief
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

County Manager of York County
York County Courthouse
York, South Carolina 29745

Attorney General
P.O. Box 11549
Columbia, South Carolina 29211

February 14, 1986

AMENDMENT NO. 5 TO FACILITY OPERATING LICENSE NPF-35 -
CATAWBA NUCLEAR POWER STATION, UNIT 1

DISTRIBUTION: w/enclosures:

Docket No. 50-413

NRC PDR

Local PDR

NSIC

PRC System

PWR#4 R/F

B. J. Youngblood

K. Jabbour

M. Duncan

Attorney, OELD

R. Diggs, ADM

T. Barnhart (4)

E. L. Jordan

L. J. Harmon

B. Grimes

J. Partlow

M. Virgilio

D. Hood

~~ACRS (10)~~

O. Chopra



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. 5
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 July 31, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the 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 license amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - 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-35 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 5, and the Environmental Protection Plan

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contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Duke Power Company 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

B. J. Youngblood, Director
PWR Project Directorate No. 4
Division of PWR Licensing-A

Attachment:
Technical Specification Changes

Date of Issuance: February 14, 1986

** See previous concurrence*

* PWR#4:DPWR-A
MDuncan:mac
02/6/86

PWR#4/DPWR-A
* KJabbour
02/5/86

* OELD
02/7/85

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02/6/86

ATTACHMENT TO LICENSE AMENDMENT NO. 5

FACILITY OPERATING LICENSE NO. NPF-35

DOCKET NO. 50-413

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 area of change.

Amended
Page

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ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 2) Verifying the fuel level in the fuel storage tank,
 - 3) Verifying the fuel transfer valve can be operated to allow fuel to be transferred from the storage system to the day tank,
 - 4) Verifying the diesel starts from ambient condition and accelerates to at least 441 rpm in less than or equal to 11 seconds.[#]
The generator voltage and frequency shall be 4160 + 420 volts and 60 + 1.2 Hz within 11 seconds after the start signal.
The diesel generator shall be started for this test by using one of the following signals:
 - a) Manual, or
 - b) Simulated loss of offsite power by itself, or
 - c) Simulated loss of offsite power in conjunction with an ESF Actuation test signal, or
 - d) An ESF Actuation test signal by itself.
 - 5) Verifying the generator is synchronized, loaded to greater than or equal to 5600 kW but less than or equal to 5750 kW in less than or equal to 60 seconds, and operates for at least 60 minutes, and
 - 6) Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
- b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from the day tank;
 - c. At least once per 31 days by checking for and removing accumulated water from the fuel oil storage tanks;
 - d. By verifying that the Cathodic Protection System is OPERABLE* by verifying:
 - 1) At least once per 60 days that cathodic protection rectifiers are OPERABLE and have been inspected in accordance with the manufacturer's inspection procedures, and
 - 2) At least once per 12 months that adequate protection from corrosion is provided in accordance with manufacturer's inspection procedures.
 - e. By sampling new fuel oil in accordance with ASTM-D4057 prior to addition to storage tanks and:

*The Cathodic Protection System need not be OPERABLE until after June 1, 1985.

#The diesel generator start (11 sec.) from ambient conditions shall be performed at least once per 184 days in these surveillance tests. All other engine starts for the purpose of this surveillance testing may be preceded by an engine prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical stress and wear on the diesel engine is minimized.



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

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

CATAWBA NUCLEAR STATION, UNIT 1

DUKE POWER COMPANY

NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION

SALUDA RIVER ELECTRIC COOPERATIVE, INC.

INTRODUCTION

By letter dated July 31, 1985, Duke Power Company proposed to revise surveillance requirement 4.8.1.1.2a.4) of Technical Specification 3/4.8.1, "A.C. Sources," relative to the diesel generator surveillance testing.

On July 2, 1984, the NRC issued Generic Letter No. 84-15 entitled "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability." The generic letter requested licensees to review the reliability of their diesel generators based on surveillance test data, to review their programs concerning diesel generator surveillance testing, and to describe their plans for attaining and maintaining certain diesel generator reliability goals. By letter dated July 31, 1985, Duke Power Company requested several changes to the Technical Specifications related to the diesel generators. One of the changes requested, in response to the generic letter, is to reduce the diesel generator cold fast starts. The other changes requested by the licensee's letter of July 31, 1985, are outside the scope of this amendment.

The revision is based on the Typical Technical Specification provided as an Attachment to Enclosure 1 of Generic Letter 84-15. As noted in Generic Letter 84-15, such a revision is intended to reduce the number and severity of diesel generator cold fast starts, thereby decreasing engine wear and increasing reliability.

EVALUATION

The NRC staff has reviewed this portion of the licensee's submittal dated July 31, 1985, and finds it to be in accordance with the technical specification changes encouraged by the staff in Generic Letter 84-15. The previous surveillance requirement 4.8.1.1.2a.4) required fast starts from ambient conditions to be performed on a frequency specified in Table 4.8-1 of this specification for all surveillance testing. The frequency specified in Table 4.8-1 varies from at least once per 31 days to at least once per 3 days depending on the number of failures in the last 100 valid tests. These fast cold starts subject the engines to undue wear and stress on engine parts. The

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Technical Specification change requires fast starts from ambient conditions at least once per 184 days in these surveillance tests. All other engine starts for the purpose of this surveillance testing may be preceded by an engine pre-lube period and/or other warmup procedures recommended by the manufacturer so that mechanical stress and wear on the engines are minimized.

As noted in the Generic Letter, the change represents a reduction in frequency of diesel generator cold fast starts which we expect to result in less wear and stress on engine parts and, thereby, increase reliability and decrease the probability of an accident due to failure of engine parts. We also find that the change has no adverse impact upon diesel generator automatic response times or emergency loads from those used in the accident analyses. Accordingly, we conclude that the change is consistent with the intent of Generic Letter 84-15 and has no adverse impact upon safety. Therefore, the change is acceptable.

ENVIRONMENTAL CONSIDERATION

The amendment involves a change in use of facility components located within the restricted area as defined in 10 CFR Part 20 and a change in surveillance requirements. The 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 exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there have been no public comments on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 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.

CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (50 FR 51621) on December 18, 1985, and 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 the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: Kahtan Jabbour, PWR#4
Darl S. Hood, PWR#4
Om Chopra, EICSB

Dated: February 14, 1986