

January 29, 1987

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. 21 to Facility Operating License NPF-35 and
Amendment No. 11 to Facility Operating License NPF-52 - Catawba
Nuclear Station, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 21 to Facility Operating License NPF-35 and Amendment No. 11 to Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications in response to your application dated April 9, 1986, and supplemented June 5 and September 2, 1986.

These amendments modify the Technical Specification Table 3.3-6, Table Notations, to allow changing the alarm/trip setpoint for the containment radiation monitor EMF-39. The amendments are effective as of their date of issuance.

A copy of the related safety evaluation supporting Amendment No. 21 to Facility Operating License NPF-35 and Amendment No. 11 to Facility Operating License NPF-52 is enclosed.

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

Sincerely,

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Kahtan Jabbour, Project Manager
PWR Project Directorate #4
Division of PWR Licensing-A

Enclosures:

- 1. Amendment No. 21 to NPF-35
- 2. Amendment No. 11 to NPF-52
- 3. Safety Evaluation

cc w/encl
See next page

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PWR#4/DPWR-A
BJYoungblood
01/20/87

Mr. H. B. Tucker
Duke Power Company

Catawba Nuclear Station

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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. 21
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., (the licensees) dated April 9, 1986, and supplemented June 5 and September 2, 1986, 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 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.21, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into the 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

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Kahtan Jabbour, Project Manager
PWR Project Directorate #4
Division of PWR Licensing-A

Attachment:
Technical Specification Changes

Date of Issuance: January 29, 1987

KNJ
PWR#4/DPWR-A
KJabbour/rad
01/20/87

MD
PWR#4/DPWR-A
MDuncan
01/16/87

OGC/BETH
JOHNSON
01/21/87
BJ

BJ
PWR#4/DPWR-A
BJYoungblood
01/28/87



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. 11
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, (the licensees) dated April 9, 1986, and supplemented June 5 and September 2, 1986, 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 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. 11, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into the 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

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Kahtan Jabbour, Project Manager
PWR Project Directorate #4
Division of PWR Licensing-A

Attachment:
Technical Specification Changes

Date of Issuance: January 29, 1987

KNT
PWR#4/DPWR-A
KJabbour/rad
01/20/87

med
PWR#4/DPWR-A
MDuncan
01/16/87

OGC/BETH
JOHNSON
01/21/87
JA

RMS
PWR#4/DPWR-A
BJYoungblood
01/21/87
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ATTACHMENT TO LICENSE AMENDMENT NO. 21

FACILITY OPERATING LICENSE NO. NPF-35

DOCKET NO. 50-413

AND

TO LICENSE AMENDMENT NO. 11

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. The corresponding overleaf page is also provided to maintain document completeness.

Amended
Page

3/4 3-53

Overleaf
Page

3/4 3-54

TABLE 3.3-6 (Continued)

TABLE NOTATIONS

- * With fuel in the fuel storage pool areas.
- ** With irradiated fuel in the fuel storage pool areas.
- *** When venting or purging from containment to the atmosphere, the trip setpoint shall not exceed the equivalent limits of Specification 3.11.2.1 in accordance with the methodology and parameters in the ODCM. When not venting or purging in Modes 5 or 6, the alarm setpoint concentration ($\mu\text{Ci}/\text{ml}$) shall be such that the actual submersion dose rate would not exceed 5mR/hr without alarm. When not venting or purging in Modes 1 through 4 the alarm setpoint shall be no more than 3 times the containment atmosphere activity as indicated by the radiation monitor.

ACTION STATEMENTS

- ACTION 30 - With less than the Minimum Channels OPERABLE requirement, operation may continue provided the containment purge and exhaust valves are maintained closed.
- ACTION 31 - With the number of operable channels one less than the Minimum Channels OPERABLE requirement, within 1 hour isolate the affected Control Room Ventilation System intake from outside air with flow through the HEPA filters and carbon adsorbers.
- ACTION 32 - With less than the Minimum Channels OPERABLE requirement, operation may continue for up to 30 days provided an appropriate portable continuous monitor with the same Alarm Setpoint is provided in the fuel storage pool area. Restore the inoperable monitors to OPERABLE status within 30 days or suspend all operations involving fuel movement in the fuel building.
- ACTION 33 - Must satisfy the ACTION requirement for Specification 3.4.6.1.
- ACTION 34 - With the number of OPERABLE channels less than the Minimum Channels OPERABLE requirement, operation may continue provided the Fuel Handling Ventilation Exhaust System is operating and discharging through the HEPA filters and carbon adsorbers. Otherwise, suspend all operations involving fuel movement in the fuel building.
- ACTION 35 - With the number of OPERABLE channels less than the Minimum Channels OPERABLE requirement, operation may continue provided the Auxiliary Building Filtered Exhaust System is operating and discharging through the HEPA filter and carbon adsorbers.
- ACTION 36 - With the number of OPERABLE channels less than the Minimum Channels OPERABLE requirement, operation may continue for up to 30 days provided that, at least once per 12 hours, grab samples are collected and analyzed for radioactivity (gross gamma) at a lower limit of detection of no more than 10^{-7} $\mu\text{Ci}/\text{ml}$.

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION FOR PLANT
OPERATIONS SURVEILLANCE REQUIREMENTS

| <u>FUNCTIONAL UNIT</u> | <u>CHANNEL CHECK</u> | <u>CHANNEL CALIBRATION</u> | <u>ANALOG CHANNEL OPERATIONAL TEST</u> | <u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u> |
|--|--------------------------|--------------------------------|--|---|
| 1. Containment | | | | |
| a. Containment Atmosphere - High Gaseous Radioactivity (Low Range - EMF-39) | S | R | M | A11 |
| b. Reactor Coolant System Leakage Detection (Low Range - EMF-38 and Low Range - EMF-39) | S | R | M | 1, 2, 3, 4 |
| 2. Fuel Storage Pool Areas | | | | |
| a. High Gaseous Radioactivity (Low Range - EMF-42) | S | R | M | ** |
| b. Criticality-Radiation Level (Fuel Bridge - Low Range - 1EMF-15, 2EMF-4) | S | R | M | * |
| 3. Control Room | | | | |
| Air Intake Radiation Level - High Gaseous Radioactivity - (Low Range - EMF-43 A & B) | S | R | M | A11 |
| 4. Auxiliary Building Ventilation | | | | |
| High Gaseous Radioactivity (Low Range - EMF-41) | S | R | M | 1, 2, 3, 4 |
| 5. Component Cooling Water System (EMF-46 A&B) | S | R | M | A11 |

TABLE NOTATIONS

* With fuel in the fuel storage pool area.

** With irradiated fuel in the fuel storage pool areas.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 21 TO FACILITY OPERATING LICENSE NPF-35
AND AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NPF-52

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DUKE POWER COMPANY, ET AL.

INTRODUCTION

By letter dated April 9, 1986, Duke Power Company, et al., (the licensee) proposed a change to Technical Specification (TS) Table 3.3-6, Table Notations, for Catawba Nuclear Station, Units 1 and 2. The June 5 and September 2, 1986, letters clarified the TS change request which would allow the alarm/trip setpoint for the containment radiation monitor EMF-39 to be set and adjusted based upon activity inside containment.

EVALUATION

The setpoint for radiation monitor EMF-39 serves 3 different purposes in different modes of operation. The existing requirements, as established by the triple asterisk notation of TS Table 3.3-6, do not clearly distinguish between these various purposes. As a consequence, it creates significant operational problems without commensurate safety benefits. The licensee proposes to change the notation to address the operational functions of EMF-39.

When containment is being purged or vented to the atmosphere the purpose of EMF-39 is to automatically isolate the system if the release rate is too high. The regulations require the licensee to keep concentrations of radioactivity at the site boundary from exceeding the values in 10 CFR 20 Appendix B, Table 2, Column 1. For Catawba this requirement is established by TS 3.11.2.1. Accordingly, the first sentence of the revised notation would explicitly require that the setpoint meet this requirement during purging or venting.

When the containment is not being purged or vented to the atmosphere, monitor EMF-39 serves one of the two other purposes, depending on the operating mode. During modes 5 and 6, EMF-39 provides personnel radiation protection. Thus, the second sentence of the revised notation establishes the alarm setpoint at 5 mR/hr in these operating modes. During modes 1 through 4 the purpose of EMF-39 is to support the leakage detection program. For this purpose interest is in changes in radiation level (rather than some predetermined value). Therefore, the third sentence in the revised notation establishes the alarm setpoint at 3 times the previous reading during Modes 1 through 4. The staff has reviewed this change and found it acceptable.

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ENVIRONMENTAL CONSIDERATION

The amendments involve a change in the use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in 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 Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there have been no public comments on such finding. Accordingly, the amendments meet 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 amendments.

CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (51 FR 30565) on August 27, 1986, 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 amendments 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/DPWR-A
Charles Willis, PSB/DPWR-A

Dated: January 29, 1987

DATED: January 29, 1987

AMENDMENT NO. 21 TO FACILITY OPERATING LICENSE NPF-35 - Catawba Nuclear Station, Unit 1
AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NPF-52 - Catawba Nuclear Station, Unit 2

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Docket File 50-413/414

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