

Mr. Gary R. Peterson  
 Site Vice President  
 Catawba Nuclear Station  
 Duke Energy Corporation  
 4800 Concord Road  
 York, South Carolina 29745-9635

July 9, 1998

SUBJECT: ISSUANCE OF AMENDMENTS - CATAWBA NUCLEAR STATION, UNITS 1 AND 2 (TAC NOS. MA1299 AND MA1300)

Dear Mr. Peterson:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 167 to Facility Operating License NPF-35 and Amendment No. 159 to Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2. The amendments are in response to your application dated April 20, 1998.

The amendments revise Tables 3.3-3 and 4.3-2 of the Technical Specifications for each unit, correcting the operation mode applicability of the control room area ventilation actuation logic and relays from "All" to "1, 2, 3, 4."

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

Sincerely,  
 original signed by:  
 Peter S. Tam, Senior Project Manager  
 Project Directorate II-2  
 Division of Reactor Projects - I/II  
 Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

Enclosures:

1. Amendment No. 167 to NPF-35
2. Amendment No. 159 to NPF-52
3. Safety Evaluation

cc w/encls: See next page

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OFFICE	PDII-2/PM	PDII-2/LA	HICB	HICB/BC	OGC	PDII-2
NAME	P. Tammen	L. Berry	S. Mazumdar	J. Wermiel	R. Bachman	H. Berkow
DATE	6/23/98	6/16/98	6/29/98	6/29/98	7/7/98	7/19/98
COPY	YES NO	YES	YES NO	YES NO	YES NO	YES NO

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

July 9, 1998

Mr. Gary R. Peterson  
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Catawba Nuclear Station  
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Sincerely,

A handwritten signature in black ink that reads "Peter S. Tam".

Peter S. Tam, Senior Project Manager  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

Enclosures:

1. Amendment No. 167 to NPF-35
2. Amendment No. 159 to NPF-52
3. Safety Evaluation

cc w/encls: See next page

**Catawba Nuclear Station**

cc:

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**Catawba Nuclear Station**

**cc:**

**Mr. T. Richard Puryear  
Owners Group (NCEMC)  
Duke Energy Corporation  
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**Richard M. Fry, Director  
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North Carolina Department of  
Environment, Health, and  
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**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

**DUKE ENERGY CORPORATION**

**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. 167  
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 Energy Corporation, acting for itself, North Carolina Electric Membership Corporation and Saluda River Electric Cooperative, Inc. (licensees), dated April 20, 1998, 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 attachment 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. 167, which are attached hereto, are hereby incorporated into this license. Duke Energy Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Technical Specification  
Changes

Date of Issuance: July 9, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 167

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 areas of change.

Remove

3/4 3-22

3/4 3-50

Insert

3/4 3-22

3/4 3-50

TABLE 3.3-3 (Continued)  
ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
11. Control Room Area Ventilation Operation					
a. Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2, 3, 4	24
b. Loss-of-Offsite Power	3	2	2	1, 2, 3	15a
c. Safety Injection	See Item 1. above for all Safety Injections initiating functions and requirements.				
12. Containment Air Return and Hydrogen Skimmer Operation					
a. Manual Initiation	2	1	2	1,2,3,4	18
b. Automatic Actuation Logic and Actuation Relays	2	1	2	1,2,3,4	14a
c. Containment Pressure-High-High	4	2	3	1,2,3	16
13. Annulus Ventilation Operation					
a. Manual Initiation	2	1	2	1,2,3,4	18
b. Automatic Actuation Logic and Actuation Relays	2	1	2	1,2,3,4	14a
c. Safety Injection	See Item 1. above for all Safety Injection initiating functions and requirements.				



TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

<u>CHANNEL FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>	<u>TRIP ACTUATING DEVICE OPERATIONAL TEST</u>	<u>ACTUATION LOGIC TEST</u>	<u>MASTER RELAY TEST</u>	<u>SLAVE RELAY TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
9. Containment Sump Recirculation (Continued)								
b. Refueling Water Storage Tank Level - Low Coincident With Safety Injection	S	R	M	N.A.	N.A.	N.A.	N.A.	1, 2, 3, 4
	See Item 1. above for all Safety Injection Surveillance Requirements.							
10. Loss of Power								
a. 4 kV Bus Undervoltage-Loss of Voltage	N.A.	R	N.A.	M (2)	N.A.	N.A.	N.A.	1, 2, 3, 4
b. 4 kV Bus Undervoltage-Grid Degraded Voltage	N.A.	R	N.A.	M (2)	N.A.	N.A.	N.A.	1, 2, 3, 4
11. Control Room Area Ventilation Operation								
a. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2, 3, 4
b. Loss-of-Offsite Power	N.A.	R	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3
c. Safety Injection	See Item 1. above for all Safety Injection Surveillance Requirements.							



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

DUKE ENERGY CORPORATION  
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. 159  
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 Energy Corporation, acting for itself, North Carolina Municipal Power Agency No. 1 and Piedmont Municipal Power Agency (licensees), dated April 20, 1998, 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 attachment 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. 159 , which are attached hereto, are hereby incorporated into this license. Duke Energy Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Technical Specification  
Changes

Date of Issuance: July 9, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 159

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.

Remove

3/4 3-22

3/4 3-50

Insert

3/4 3-22

3/4 3-50

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
11. Control Room Area Ventilation Operation					
a. Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2, 3, 4	24
b. Loss-of-Offsite Power	3	2	2	1, 2, 3	15a
c. Safety Injection	See Item 1. above for all Safety Injections initiating functions and requirements.				
12. Containment Air Return and Hydrogen Skimmer Operation					
a. Manual Initiation	2	1	2	1,2,3,4	18
b. Automatic Actuation Logic and Actuation Relays	2	1	2	1,2,3,4	14a
c. Containment Pressure-High-High	4	2	3	1,2,3	16
13. Annulus Ventilation Operation					
a. Manual Initiation	2	1	2	1,2,3,4	18
b. Automatic Actuation Logic and Actuation Relays	2	1	2	1,2,3,4	14a
c. Safety Injection	See Item 1. above for all Safety Injection initiating functions and requirements.				

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

<u>CHANNEL FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>	<u>TRIP ACTUATING DEVICE OPERATIONAL TEST</u>	<u>ACTUATION LOGIC TEST</u>	<u>MASTER RELAY TEST</u>	<u>SLAVE RELAY TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
9. Containment Sump Recirculation (Continued)								
b. Refueling Water Storage Tank Level - Low Coincident With Safety Injection	S	R	M	N.A.	N.A.	N.A.	N.A.	1, 2, 3, 4
	See Item 1. above for all Safety Injection Surveillance Requirements.							
10. Loss of Power								
a. 4 kV Bus Undervoltage-Loss of Voltage	N.A.	R	N.A.	M (2)	N.A.	N.A.	N.A.	1, 2, 3, 4
b. 4 kV Bus Undervoltage-Grid Degraded Voltage	N.A.	R	N.A.	M (2)	N.A.	N.A.	N.A.	1, 2, 3, 4
11. Control Room Area Ventilation Operation								
a. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2, 3, 4
b. Loss-of-Offsite Power	N.A.	R	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3
c. Safety Injection	See Item 1. above for all Safety Injection Surveillance Requirements.							



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 167 TO FACILITY OPERATING LICENSE NPF-35  
AND AMENDMENT NO. 159 TO FACILITY OPERATING LICENSE NPF-52

DUKE ENERGY CORPORATION, ET AL.

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-413 AND 50-414

1.0 INTRODUCTION

By letter dated April 20, 1998, Duke Energy Corporation, et al. (the licensee) submitted a request for changes to the Catawba Nuclear Station, Units 1 and 2, Technical Specifications (TS). The requested changes would correct errors in Tables 3.3-3, Engineered Safety Features Actuation System (ESFAS) Instrumentation, and 4.3-2, Engineered Safety Features Actuation System Instrumentation Surveillance Requirements.

2.0 DISCUSSION AND EVALUATION

TS 3/4.3.2, Tables 3.3-3 and 4.3-2 delineate operability and surveillance requirements, respectively, for the portion of the ESFAS, which actuates the Control Room Area Ventilation System. Functional Unit 11.a (Automatic Actuation Logic and Actuation Relays) of Table 3.3-3 states that two channels of the subject instrumentation are required operable in all modes of plant operation. Table 4.3-2 similarly specifies that the surveillance requirement for the same functional unit be applicable for all modes.

The requirements for Functional Unit 11.a have been incorrectly specified by the subject tables as applicable in all modes (1 thru 6) of operation. The only relationship between automatic actuation of the Control Room Area Ventilation System (CRAVS) and the ESFAS is through a Safety Injection (SI) initiation, i.e., if an SI initiation occurs, it will cause an automatic start of the nonrunning CRAVS filter train. The ESFAS requirements for SI are correctly specified in the subject tables as Function Unit 11.c (which references Functional Unit 1) to be applicable for Modes 1, 2, 3, and 4. The mode requirements for both Functional Units 11.a and 11.c should be consistent, i.e., applicable in Modes 1 through 4.

The licensee proposed to revise the mode applicability for Functional Unit 11.a from "All [modes]" to "1, 2, 3, 4" in Tables 3.3-3 and 4.3-2. Based on the preceding discussion, this revision only corrects errors in these tables. The staff has reviewed the proposed revisions against the actual design of the involved systems, and agrees with the licensee. The revisions are, thus, acceptable.

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### **3.0 STATE CONSULTATION**

In accordance with the Commission's regulations, the South Carolina State official, Mr. Virgil Autrey, 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 and change surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, 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 (63 FR 27761, dated May 20, 1998). 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 Contributor: Subinoy Mazumdar

Date: July 9, 1998