



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 13, 2000

Mr. H. B. Barron
Vice President, McGuire Site
Duke Energy Corporation
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

SUBJECT: McGUIRE NUCLEAR STATION, UNITS 1 AND 2 RE: ISSUANCE OF
AMENDMENTS (TAC NOS. MA8439 AND MA8440)

Dear Mr. Barron:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 193 to Facility Operating License NPF-9 and Amendment No. 174 to Facility Operating License NPF-17 for the McGuire Nuclear Station, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated February 29, 2000, as supplemented by letter dated July 5, 2000.

The amendments revise TS Table 3.3.2-1, Engineered Safety Feature Actuation System Instrumentation, Function 6.f, Auxiliary Feedwater Pump Suction Pressure-Lo.

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,

Frank Rinaldi, Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-369 and 50-370

Enclosures:

1. Amendment No. 193 to NPF-9
2. Amendment No. 174 to NPF-17
3. Safety Evaluation

cc w/encl: See next page

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/RA/

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DATE	8/28/00	8/22/00	9/16/00	9/11/00

OFFICIAL RECORD COPY

McGuire Nuclear Station

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UNITED STATES
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WASHINGTON, D.C. 20555-0001

DUKE ENERGY CORPORATION

DOCKET NO. 50-369

McGUIRE NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 193
License No. NPF-9

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the McGuire Nuclear Station, Unit 1 (the facility), Facility Operating License No. NPF-9 filed by the Duke Energy Corporation (licensee) dated February 29, 2000, as supplemented by letter dated July 5, 2000, 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-9 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 193 , are hereby incorporated into this license. The licensee 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 of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard L. Emch, Jr., Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: September 13, 2000



UNITED STATES
NUCLEAR REGULATORY COMMISSION
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DUKE ENERGY CORPORATION

DOCKET NO. 50-370

McGUIRE NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 174
License No. NPF-17

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the McGuire Nuclear Station, Unit 2 (the facility), Facility Operating License No. NPF-17 filed by the Duke Energy Corporation (licensee) dated February 29, 2000, as supplemented by letter dated July 5, 2000, 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-17 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 174 , are hereby incorporated into this license. The licensee 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 of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard L. Emch, Jr., Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: September 13, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 193

FACILITY OPERATING LICENSE NO. NPF-9

DOCKET NO. 50-369

ATTACHMENT TO LICENSE AMENDMENT NO. 174

FACILITY OPERATING LICENSE NO. NPF-17

DOCKET NO. 50-370

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contain marginal lines indicating the areas of change.

Remove

3.3.2-13

Insert

3.3.2-13

Table 3.3.2-1 (page 4 of 6)
 Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE	TRIP SETPOINT
6. Auxiliary Feedwater (continued)						
c. Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.					
d. Station Blackout						
(1) Loss of voltage	1,2,3	3 per bus	D	SR 3.3.2.7 SR 3.3.2.9	≥ 3122 V (Unit 1) ≥ 3108 V (Unit 2) with 8.5 ± 0.5 sec time delay	≥ 3174 V (Unit 1) ≥ 3157 V (Unit 2) ± 45 V with 8.5 ± 0.5 sec time delay
(2) Degraded Voltage	1,2,3	3 per bus	D	SR 3.3.2.7 SR 3.3.2.9	≥ 3661 V (Unit 1) ≥ 3685.5 V (Unit 2) with ≤ 11 sec with SI and ≤ 600 sec without SI time delay	≥ 3678.5 V (Unit 1) ≥ 3703 V (Unit 2) with ≤ 11 sec with SI and ≤ 600 sec without SI time delay
e. Trip of all Main Feedwater Pumps	1,2(a)	1 per MF pump	K	SR 3.3.2.7 SR 3.3.2.9	NA	NA
f. Auxiliary Feedwater Pump Suction Transfer on Suction Pressure - Lo	1,2,3	2 per MDP, 4 per TDP	N,O	SR 3.3.2.7 SR 3.3.2.8 SR 3.3.2.9	≥ 3 psig	≥ 3.5 psig
7. Automatic Switchover to Containment Sump						
a. Refueling Water Storage Tank (RWST) Level - Lo	1,2,3	3	P	SR 3.3.2.1 SR 3.3.2.3 SR 3.3.2.8 SR 3.3.2.9	≥ 175.85 inches	≥ 180 inches
Coincident with Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.					

(continued)

(a) Above the P-11 (Pressurizer Pressure) Interlock.



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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 193 TO FACILITY OPERATING LICENSE NPF-9
AND AMENDMENT NO. 174 TO FACILITY OPERATING LICENSE NPF-17

DUKE ENERGY CORPORATION

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-369 AND 50-370

1.0 INTRODUCTION

By letter dated February 29, 2000, as supplemented by letter dated July 5, 2000, Duke Energy Corporation, et al. (DEC, the licensee), submitted a request for changes to the McGuire Nuclear Station, Units 1 and 2, Technical Specifications (TS). The requested changes would revise TS Table 3.3.2-1, Engineered Safety Feature Actuation System Instrumentation, Function 6.f, Auxiliary Feedwater Pump Suction Pressure-Lo.

The letter dated July 5, 2000, provided clarifying information that did not change the scope of the February 29, 2000, application and the initial proposed no significant hazards consideration determination.

2.0 BACKGROUND

The Licensee Event Report 369/92-11, dated January 29, 1993, documented a TS violation due to inoperable Auxiliary Feedwater System pressure switches. A licensee investigation following this event identified that several pressure switches were outside their specified setpoint limits. As a corrective measure, setpoints were recalculated and administrative controls were initiated to verify the setpoints. However, the licensee did not initiate any TS change at that time. On December 29, 1998, the NRC issued Administrative Letter 98-10, "Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety". Following the directives of this Administrative Letter, the licensee initiated the review of the TS for non-conservative setpoints and found that Function 6.f of TS Table 3.3.2-1 needed to be updated.

3.0 EVALUATION

The current TS state that the trip setpoint for function 6.f of Table 3.3.2-1 should be ≥ 2.0 psig and the allowable value should be ≥ 1.0 psig. The licensee stated that their new setpoint calculations indicate that the minimum analytical limit should be ≥ 1.87 psig, the allowable value should be ≥ 3.0 psig, and the trip setpoint should be ≥ 3.5 psig. Based on the new calculations the licensee proposed to change the allowable value from ≥ 1 psig to ≥ 3 psig and trip setpoint from ≥ 2 psig to ≥ 3.5 psig.

By letter dated July 5, 2000, in response to discussions with the staff on May 23 and June 8, 2000, the licensee confirmed that their setpoint calculation methodology was developed utilizing the following documents:

1. ANSI/ISA-S67.04, Part I, 1992, Setpoints for Nuclear Safety-Related Instrumentation
2. ISA-dRP67.04, Part II (draft 11, dated August 1994), Methodologies for the Determination of Setpoints for Nuclear Safety Related Instrumentation
3. ANSI/ISA S51.1-1979, Process Instrumentation Terminology
4. Regulatory Guide 1.105, Instrument Setpoints for Safety Related Systems, Rev. 2, dated February 1986

The licensee also stated that their setpoint calculations and uncertainty evaluations are generally consistent with Regulatory Guide 1.105, Rev. 3, dated December 1999. Further, by letter dated March 29, 2000, a NRC inspection team approved similar setpoint calculation methodology for the nuclear service water system.

The staff finds that the proposed TS changes are based on plant-specific instrument setpoint calculations performed in response to the NRC's Administrative Letter 98-10 using methodologies specified in:

- ISA-S67.04, Part I, approved September 1994
- ISA-dRP67.04, Part II, draft 11, dated August 1994
- ANSI/ISA-S51.1-1992
- Regulatory Guide 1.105, Rev. 2, dated February 1986
- Plant Design Bases specified in McGuire UFSAR

Based on these findings, the staff concludes that the proposed changes are acceptable.

4.0 STATE CONSULTATION

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

5.0 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 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 (65 FR 51350). 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.

6.0 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: September 13, 2000