January 27, 2005

G. R. Peterson, Vice President McGuire Nuclear Station Duke Energy Corporation 12700 Hagers Ferry Road Huntersville, NC 28078

SUBJECT: MCGUIRE NUCLEAR STATION, UNITS 1 AND 2 RE: ISSUANCE OF AMENDMENTS TO RENEWED FACILITY OPERATING LICENSES (TAC NOS. MC4504 AND MC4505)

Dear Mr. Peterson:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 224 to Renewed Facility Operating License NPF-9 and Amendment No. 206 to Renewed 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 August 18, 2004.

The current amendments correct TS omissions that occurred upon conversion to Standardized TS (STS). Licensing Amendments 182/164 deleted all references to the safety injection (SI) steam line pressure-low function (SLPL). These amendments were approved on September 22, 1998. As part of the conversion to STS, which was approved with Amendments 184/166 on September 30, 1998, references to the SI SLPL function were inadvertently included into the STS. The current amendments correct these errors by removing those references.

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,

/**RA**/

James J. Shea, 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. 224 to NPF-9
- 2. Amendment No. 206 to NPF-17
- 3. Safety Evaluation

cc w/encls: See next page

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			James J. Shea, Project Manager, Section 1 Project Directorate II Division of Licensing Project Management Office of Nuclear Reactor Regulation			
Docket Nos	. 50-369 and 5	0-370	<u>DISTRIBUTION</u> : PUBLIC			
Enclosures:			PDII-1 R/F			
1. Amendment No. 224 to NPF-9			RidsNrrDlpmLpdii (EHackett)			
2. Amendment No. 206 to NPF-17			RidsNrrDlpmLpdii1 (JNakoski)			
3. Safety Evaluation			RidsRgn2MailCenter (VTravick)			
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cc w/encls: See next page			RidsNrrPMJShea			
			RidsOgcRp			
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NAME	JShea	TMintz	CHawes	DFruchter	JNakoski	
DATE	1/4/05	1/4/05	1/3/05	1/13/05	1/25/05	

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DUKE ENERGY CORPORATION

DOCKET NO. 50-369

MCGUIRE NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 224 Renewed 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), Renewed Facility Operating License No. NPF-9 filed by the Duke Energy Corporation (licensee) dated August 18, 2004, 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.

- 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 Renewed Facility Operating License No. NPF-9 is hereby amended to read as follows:
 - (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 224, 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

/**RA**/

John A. Nakoski, Chief, Section 1 Project Directorate II Division of Licensing Project Management Office of Nuclear Reactor Regulation

Attachment: Technical Specification Changes

Date of Issuance: January 27, 2005

DUKE ENERGY CORPORATION

DOCKET NO. 50-370

MCGUIRE NUCLEAR STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 206 Renewed 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 August 18, 2004, 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.

- 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 Renewed Facility Operating License No. NPF-17 is hereby amended to read as follows:
 - (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 206, 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

/**RA**/

John A. Nakoski, Chief, Section 1 Project Directorate II Division of Licensing Project Management Office of Nuclear Reactor Regulation

Attachment: Technical Specification Changes

Date of Issuance: January 27, 2005

ATTACHMENT TO LICENSE AMENDMENT NO. 224

RENEWED FACILITY OPERATING LICENSE NO. NPF-9

DOCKET NO. 50-369

AND LICENSE AMENDMENT NO. 206

RENEWED FACILITY OPERATING LICENSE NO. NPF-17

DOCKET NO. 50-370

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

Remove	Insert
3.3.2-12	3.3.2-12
B 3.3.2-17	B 3.3.2-17

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 224 TO RENEWED FACILITY

OPERATING LICENSE NPF-9 AND

AMENDMENT NO. 206 TO RENEWED 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 August 18, 2004, Duke Energy Corporation, et al. (Duke, the licensee), submitted a request for changes to the McGuire Nuclear Station, Units 1 and 2, Technical Specifications (TS). The requested changes would remove all references to safety injection (SI) steam line pressure-low (SLPL) function in the standardized TS (STS).

The requested TS alteration would correct a TS omission, associated with conversion to STS. Licensing Amendments 182/164 removed all references to the SI SLPL function and was approved on September 22, 1998. As part of the conversion to STS in Amendment 184/166, references to the SI SLPL were inadvertently included in the STS. Specifically, these references were included in Footnote (c) of the STS Table 3.3.2-1 on page 3.3.2-12 and in the Basis of STS 3.3.2 Function 4.d.(1). Amendment 184/166 was approved on September 30, 1998.

The removal of the SI SLPL function was due to redundant safety injection signals being available during a design basis accident.

2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act of 1954, as amended requires applicants for nuclear power plant operating licenses to include TS as a part of the license. The TS ensure the operational capability of structures, systems and components that are required to protect the health and safety of the public. The Nuclear Regulatory Commission's (NRC) regulatory requirements that are related to the content of the TS are contained in the Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36(c); (1) safety limits, limiting safety system settings, and limiting control settings (50.36(c)(1)); (2) limiting conditions for operation (50.36(c)(2)); (3) surveillance requirements (SRs) (50.36(c)(3)); (4) design features (50.36(c)(4)); and (5) administrative controls (50.36(c)(5)).

Pursuant to 10 CFR 50.90, a licensee may apply for an amendment to its license, including the TS incorporated into the license. In determining the acceptability of the proposed changes, the NRC staff interprets the requirements of the current version of 10 CFR 50.36. Within this general framework, licensees may revise their current TS provided that a plant-specific review supports a finding of continued adequate safety because: (1) the change is editorial, administrative, or produces clarifications (i.e., no requirements are materially altered); (2) the change is more restrictive than the licensee's current requirement; or (3) the change is less restrictive than the licensee's current requirement, but continues to afford adequate assurance of safety when judged against current regulatory standards.

3.0 TECHNICAL EVALUATION

In previous Amendments 182/164, DUKE had determined that in their Engineered Safety Feature Actuation System (ESFAS) Instrumentation, the SI signal on SLPL was redundant and unnecessary. The ESFAS has multiple SI actuations, which include manual, automatic actuation logic and actuation set points for containment pressure-High and pressurizer pressure-Low. Any of these actuation signals are capable of initiation an SI signal.

The removal of the SI SLPL from TS was evaluated for McGuire, Units 1 and 2 in license Amendments 182/164. A transient analysis was conducted and the results were separated into three different transient categories. These categories were transients without a SI actuation, transients with a SI actuation but not from SLPL, and transients with a SI actuation from SLPL. Transients which had a SI actuation due to SLPL were re-evaluated while removing the SLPL actuation from the analysis. The results showed that these transients would still initiate a SI actuation and that the calculated departure from nucleate boiling maintained a significant safety margin. Therefore, the amendment was approved and the SLPL signal was removed from the TS.

While the SLPL function no longer provides a SI actuation, it would still actuate a closure of the Main Steam Isolation Valves (MSIVs) in the event of a steam line break. The MSIVs are shut in order to maintain three unfaulted steam generators as a heat sink for the reactor, and to limit the mass and energy release to containment. The SLPL function will also close the MSIVs in the event of a feed line break to ensure a supply of steam for the turbine driven auxiliary feedwater pump. The SLPL function must be operable above the P-11 set point. Below the P-11 set point the SLPL function can be manually blocked, at which point the steam line pressure-negative rate-high (SLPNRH) function is automatically enabled.

The current amendment corrects inaccurate referencing of the SI SLPL by replacing it with the correct MSIV closure reference to SLPL. The inaccurate referencing is found in two places, one of which is a footnote of Table 3.3.2-1 of the TS and the other is in the basis Section 3.3.2. In both of these references, the topic is the interchange between SLPL and SLPNRH around the P-11 set point for MSIV closure. Above P-11 the SLPL function will always be engaged while the SLPNRH function is blocked. Below P-11 the SLPL function may be engaged unless the operator manually blocks this function, in which case the SLPNRH function will automatically engage. The SI SLPL reference had been substituted with the MSIV SLPL reference in the previous TS Amendments 182/164. Upon conversion to the STS in

Amendments 184/166, the footnote and basis were incorrectly converted back to referencing the SI SLPL function. Referencing the SI SLPL, is inaccurate and confusing since this action no longer exists. Therefore, the licensee has proposed to interchange the SI SLPL with the Main Steamline Isolation SLPL in the footnote and basis. As mentioned previously, this change had already been accepted in Amendments 182/164. By making this change, the TS accurately reflects the accepted TS criteria. There are no safety function affected by this change.

Upon review of the licensee's submittal of August 18, 2004, the NRC staff finds that the licensee inadvertently included references to a previously deleted SI SLPL function upon converting from TS to STS. The proposed change is editorial, correcting a typographical omission that was previously evaluated and approved. Therefore, granting a replacement of the SI SLPL reference with the correct MSIV SLPL reference in Section 3.3.2-12 of the proposed TS revision request is 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 SRs. 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 (69 FR 64987). 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: T. Mintz, DLPM

Date: January 27, 2005

McGuire Nuclear Station

CC:

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