January 14, 2004

Mr. G. R. Peterson
Vice President
McGuire Nuclear Station
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. MB8361 AND MB8362)

Dear Mr. Peterson:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 219 to Renewed Facility Operating License NPF-9 and Amendment No. 201 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 March 24, 2003, as supplemented by letters dated June 25 and October 15, 2003.

The amendments change the TS to relocate certain reactor coolant system cycle-specific parameter limits from the TSs to the Core Operating Limits Report (COLR), and revises the minimum allowable reactor coolant system flow rate.

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/

Robert E. Martin, Senior 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. 219 to NPF-9
2. Amendment No. 201to NPF-17
3. Safety Evaluation

cc w/encls: See next page

January 14, 2004

Mr. G. R. Peterson
Vice President
McGuire Nuclear Station
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. MB8361 AND MB8362)

Dear Mr. Peterson:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 219 to Renewed Facility Operating License NPF-9 and Amendment No. 201 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 March 24, 2003, as supplemented by letters dated June 25 and October 15, 2003.

The amendments change the TS to relocate certain reactor coolant system cycle-specific parameter limits from the TSs to the Core Operating Limits Report (COLR), and revises the minimum allowable reactor coolant system flow rate.

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/

Robert E. Martin, Senior 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. 219 to NPF-9
2. Amendment No. 201 to NPF-17
3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

PUBLIC	JNakoski	ACRS	
PDII-1 R/F	RMartin	OGC	
EHackett	CHawes	GHill (4)	
RHaag, RII	JUhle	WLyon	SPeters

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML040140090.wpd

ADAMS Accession No: ML040140090 * See previous concurrence

OFFICE	PDII-1/PM	PDII-1/LA	SRXB/SC*	IROB/TSS*	OGC*	PDII-1/SC
NAME	RMartin	CHawes	JUhle	TBoyce	CMarco	JNakoski
DATE	01/12/04	12/16/03	11/20/03	11/25/03	12/12/03	01/13/04

OFFICIAL RECORD COPY

DUKE ENERGY CORPORATION

DOCKET NO. 50-369

MCGUIRE NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 219
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 March 24, 2003, as supplemented by letters dated June 25 and October 15, 2003, 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 Renewed 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. 219, 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. The license amendment 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 14, 2004

DUKE ENERGY CORPORATION

DOCKET NO. 50-370

MCGUIRE NUCLEAR STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 201
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), Renewed Facility Operating License No. NPF-17 filed by the Duke Energy Corporation (licensee) dated March 24, 2003, as supplemented by letters dated June 25 and October 15, 2003, 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 Renewed 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. 201, 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. The license amendment 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 14, 2004

ATTACHMENT TO LICENSE AMENDMENT NO. 219

RENEWED FACILITY OPERATING LICENSE NO. NPF-9

DOCKET NO. 50-369

ATTACHMENT TO LICENSE AMENDMENT NO. 201

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
2.0-1	2.0-1
2.0-2	---
B 2.2.2-2	B 2.1.1-2
B 2.1.1-3	B 2.1.1-3
B 2.1.1-4	B 2.1.1-4
3.3.1-18	3.3.1-18
3.3.1-19	3.3.1-19
B 3.3.1-17	B 3.3.1-17
B 3.3.1-18	B 3.3.1-18
3.4.1-1	3.4.1-1
3.4.1-2	3.4.1-2
3.4.1-4	3.4.1-4
B 3.4.1-2	B 3.4.1-2
B 3.4.1-3	B 3.4.1-3
B 3.4.1-4	B 3.4.1-4
5.6.-2	5.6-2
5.6-3	5.6-3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 219 TO RENEWED FACILITY

OPERATING LICENSE NPF-9 AND

AMENDMENT NO. 201 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 March 24, 2003, as supplemented June 25, and October 15, 2003, Duke Power Company, et al. (the licensee), submitted a request for changes to the Catawba Nuclear Station, Units 1 and 2, (Catawba) and to the McGuire Nuclear Station, Units 1 and 2, (McGuire) Technical Specifications (TS). The TS affected by the application are as follows:

- TS 2.1.1, "Reactor Core Safety Limits;"
- TS Table 3.3.1-1, "Reactor Trip System Instrumentation;"
- TS 3.4.1, "RCS Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits." This includes a change in the required minimum measured flow (MMF) for the reactor coolant system (RCS) from 390,000 gallons per minute (gpm) to 388,000 gpm for Catawba Unit 1 and for McGuire Units 1 and 2. The required MMF will be maintained at 390,000 gpm for Catawba Unit 2; and
- TS 5.6.5, "Core Operating Limits Report".

The Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determinations was published in the *Federal Register* on September 18, 2003 (68 FR 54749). A second notice was published in the *Federal Register* on November 18, 2003 (68 FR 65090) because the supplemental letter of October 15, 2003, revised the MMF from previously specified values.

2.0 REGULATORY EVALUATION

2.1 Applicable Regulatory Requirements and Guidance

Guidance on the relocation of cycle-specific TS parameters to the Core Operating Limits Report (COLR) was developed by the NRC staff and was provided to all power reactor licensees and applicants by Generic Letter (GL) 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," dated October 3, 1988. In the GL, the NRC staff stated that license

amendments were generally needed every refueling outage to update the cycle-specific parameter limits in the TSs; however, methodologies developed for the licensee to determine these cycle-specific parameters have been reviewed and approved by the NRC staff. As a consequence, the NRC staff review of proposed changes to the TSs to update these parameter limits was primarily limited to the confirmation that the updated limits were calculated by the approved methodology and were consistent with the appropriate plant-specific safety analysis. The COLR was created to allow inclusion of the NRC-approved methodologies in the TSs and thus allow licensees to make changes using these methodologies to update the parameter values without changing the TSs. The NRC staff addressed this in its Safety Evaluation for WCAP-14483-A, "Generic Methodology for Expanded Core Operating Limits Report," as follows:

> NRC Generic Letter 88-16 allows licensees to remove cycle-dependent variables from TS provided that the values of these variables are included in a COLR and are determined with NRC-approved methodology which is referenced in the TS. These variables are moved from TS to the COLR to avoid the need for frequent revision of TS to change the value of those operating limits which cannot be specified to reasonably bound several operating cycles without significant loss of operating flexibility.

The licensee stated that its justification to expand the COLR is based on Westinghouse Owners Group (WOG) Technical Specifications Task Force (TSTF) TSTF-339, "Relocate TS Parameters to the COLR Consistent with WCAP-14483," Revision 2. TSTF-339, Revision 2, approved changes to the Westinghouse Standard Technical Specifications (NUREG-1431) to relocate to the COLR (1) the TS 2.1.1 reactor core safety limits figure, (2) the values for TS 3.1.1, Notes 1 and 2 for overtemperature ΔT (OTDT) and overpower ΔT (OPDT) setpoint parameters for reactor trip instrumentation, and (3) the TS 3.4.1 DNB parameter limit values. These are the changes for TSs 2.1.1, 3.3.1, and 3.4.1 proposed by the licensee. Further references to TSTF-339 in this Safety Evaluation refer to TSTF 339, Revision 2.

The methodology supporting these changes is described in the Westinghouse Energy Systems topical report WCAP-14483-A. The NRC staff's evaluation approving WCAP-14483-A as an acceptable method to relocate these TS requirements to the COLR consistent with GL 88-16 is provided in Reference 1. The topical report addresses the relocation of (1) the reactor core safety limits figure, (2) OTDT and OPDT setpoint parameter values for reactor trip instrumentation, and (3) DNB parameter limits in the TSs to the COLR. Therefore, the NRC staff has incorporated the generic methodology of WCAP-14483-A for expanding the COLR into NUREG-1431, the Improved Standard Technical Specifications for Westinghouse Plants, that is the standard that the Catawba TSs are based upon.

3.0 TECHNICAL EVALUATION

3.1 Revision of TS 2.1.1, Reactor Core Safety Limits (SLs)

TS 2.1.1, "Reactor Core Safety Limits," would be revised by relocating Figure 2.1.1-1, "Reactor Core Safety Limits," to the COLR and by replacing the figure with more specific safety limits for Departure from Nucleate Boiling Ratio (DNBR) and peak fuel centerline temperature. The licensee's letter dated June 25, 2003, revised the proposed changes to TS 2.1.1. This

evaluation addresses the proposed changes to TS 2.1.1 in the licensee's revised submittals dated June 25 and October 15, 2003.

The licensee stated that it is necessary to relocate TS Figure 2.1.1-1 to the COLR since cycle-dependent changes to parameters upon which TS Figure 2.1.1-1 is based would require a license amendment request to revise the figure. The NRC staff finds that the necessity of requesting an amendment to the TS in order to change the TS is not in itself sufficient basis for relocating a TS to the COLR. The NRC staff's basis for its finding that TS Figure 2.1.1-1 may be relocated to the COLR was included in Reference 1 as follows:

> The current TS figure (2.1.1-1) presents core limits on RCS temperature conditions (T-avg) as a function of pressurizer pressure and fractional rated thermal power. This figure was originally included in the Westinghouse TS to satisfy the requirements of 10 CFR 50.36 which states that "safety limits for nuclear reactors are limits upon important process variables that are found to be necessary to reasonably protect the integrity of certain of the physical barriers that guard against the uncontrolled release of radioactivity." However, the figure is not a complete representation of reactor core safety limits but is intended to provide the relationship between the process variables that are available to the operator (i.e., T-avg, pressurizer pressure, and thermal power) and the DNB design basis safety limit.
>
> To ensure that the requirements of 10 CFR 50.36 are met, i.e., limits upon important process variable, the WOG has proposed to retain the requirement for a Reactor Core Limits figure in the Safety Limits TS, but relocate the actual figure to the COLR and replace it with the DNB design basis limit and the fuel centerline melt limit [ ]. Both of these limits are criteria that must be satisfied for normal operation and for [anticipated operational occurrences] AOOs to prevent overheating of the fuel cladding and possible cladding perforation which would result in the release of fission products to the RCS and are, therefore, the true safety limits. . . .

The NRC staff finds that the changes proposed by the licensee are consistent with the approved changes identified in WCAP-14483-A for relocating TS Figure 2.1.1-1 to the COLR, and the above reasoning applies to the requested change. The licensee stated in its letter dated October 15, 2003, that the methodology for determining the reactor core safety limits in TS Figure 2.1.1-1 are determined using the methods described in three Duke Power topical reports that have been reviewed and approved by the NRC staff. These reports are DPC-NE-2004P-A, "Duke power Company McGuire and Catawba Nuclear Stations Core Thermal-Hydraulic Methodology Using VIPRE-01"; DPC-NE-2005P-A, "Thermal Hydraulic Statistical Core Design Methodology"; and DPC-NE-2009P-A, "Westinghouse Fuel Transition Report." These reports have been approved by the NRC staff and they are currently included in the list of NRC-approved analytical methods in TS Section 5.6.5.

Based on the above, the NRC staff concludes that the proposed changes to TS 2.1.1 to relocate the Reactor Core Limits Figure 2.1.1-1 to the COLR and to replace it with specific values of the DNB design basis limit and the fuel centerline melt limit are acceptable. In addition, the proposed changes are consistent with TSTF-339, Revision 2, and with the Westinghouse Standard Technical Specifications. Associated changes to the Bases were also proposed.

3.2 Revision of TS Table 3.3.1-1, Reactor Trip System Instrumentation

Note 1 of TS 3.3.1, Table 3.3.1-1, "Reactor Trip System Instrumentation," would be revised to relocate the OTDT numerical values for the nominal average temperature at rated thermal power (RTP) and the nominal RCS operating pressure to the COLR. Note 2 of Table 3.3.1-1 would also be revised to relocate the numerical values of the nominal average temperature at RTP and the K_5 and K_6 constants in the equation for the nominal trip setpoint to the COLR.

The licensee indicated that relocating the numerical values of these parameters in Notes 1 and 2 to the COLR, while leaving the parameter in the TS, provides the licensee the flexibility of enhancing operating and core design margins without the need for cycle-specific license amendment requests. The licensee also indicated that the relocation of these values to the COLR will result in a more complete COLR containing cycle-specific operating conditions and core reload related parameters.

The NRC staff finds that the changes proposed by the licensee are consistent with the approved changes identified in WCAP-14483-A for relocating parameter values in the OTDT and OPDT equations in Table 3.3.1-1. The licensee stated in its letter dated October 15, 2003, that the methodology for determining the values of these parameters in TS Table 3.3.1-1 is contained in three Duke Power topical reports that have been reviewed and approved by the NRC staff. These reports are DPC-NE-3000P-A, “Thermal Hydraulic Transient Analysis Methodology”; DPC-NE-3001P-A, “Multidimensional Reactor Transients and Safety Analysis Physics Parameter Methodology”; and DPC-NE-3002-A, “UFSAR Chapter 15 System Transient Analysis Methodology.” These reports have been approved by the NRC staff and they are currently included in the list of NRC-approved analytical methods in TS Section 5.6.5.

Based on the above, the NRC staff concludes that the proposed changes to Notes 1 and 2 of TS Table 3.3.1-1 to relocate parameters to the COLR are acceptable. In addition, the proposed changes to TS Table 3.3.1-1 are consistent with TSTF-339, Revision 2, and with the Westinghouse Standard Technical Specifications. Associated changes to the Bases were also proposed.

3.3 Revision of TS 3.4, RCS Pressure, Temperature, and Flow Departure From Nucleate Boiling Limits

TS 3.4.1, "RCS Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits," would be revised to relocate values for pressurizer pressure, RCS average temperature (T_{avg}) and RCS flow rate to the COLR.

In a manner similar to that discussed in the previous sections of this evaluation, the licensee has indicated that relocating the numerical values of these parameters to the COLR, while leaving the parameter in the TS, provides the licensee the flexibility of enhancing operating and core design margins without the need for cycle-specific license amendment requests. The licensee also indicated that the relocation of these values to the COLR will result in a more complete COLR containing cycle-specific operating conditions and core reload related parameters.

The NRC staff finds that the changes proposed by the licensee are consistent with the approved changes identified in WCAP-14483-A for relocating these parameter values to the COLR as indicated by the following statement in Reference 1:

> The TS limits on the DNB parameters assure that pressurizer pressure, RCS flow, and the RCS T-avg will be maintained within the limits of steady-state operation assumed in the accident analyses. These limits must be consistent with the initial full power conditions considered in the FSAR safety analysis for normal operation and anticipated operational occurrences (AOOs) in which precluding DNB is the primary criterion. The DNB parameter limits are also based on initial conditions assumed for accidents in which precluding DNB is not a criterion.

The licensee stated in its letter dated October 15, 2003, that the methodology for determining the values of these parameters in TS Table 3.3.1-1 is contained in six Duke Power topical reports that have been reviewed and approved by the NRC staff. These reports are DPC-NE-3000P-A, DPC-NE-3001P-A, DPC-NE-3002-A, DPC-NE-2004P-A, DPC-NE-2005P-A, and DPC-NE-2009P-A. These reports have been approved by the NRC staff and they are currently included in the list of NRC-approved analytical methods in TS Section 5.6.5.

Although the limits for pressurizer pressure, RCS average temperature, and RCS total flow rate would be relocated from TS 3.4.1 to the COLR, the minimum RCS total flow rate of 388,000 gpm, would be retained in TS Table 3.4.1-1 to assure that an RCS total flow rate lower than that approved by the NRC will not be used. Because this minimum value is retained in the TSs, any reduction in the RCS flow rate below this value would have to be reviewed by the NRC as part of an amendment request. As noted above, the proposed changes to TS 3.4.1 are consistent with WCAP-14483-A.

The licensee's submittal dated March 24, 2003, proposed a reduction in the minimum RCS flow value to 382,000 gpm. The NRC staff requested additional information on the basis for a reduction to 382,000 gpm. The licensee responded in its letter dated October 15, 2003, by attributing the principal reason for RCS flow reductions below 390,000 gpm in several of the McGuire and Catawba units to the increasing use of Westinghouse Robust Fuel Assembly (RFA) fuel. RFA fuel assemblies have a greater hydraulic flow resistance than the fuel previously utilized. The licensee also noted that changes in flow rates have been observed at McGuire, Units 1 and 2 and Catawba, Unit 1 due to corrosion and wear products within the RCS. The licensee indicated that these latter effects produced small but measurable hydraulic changes and that they were not the basis for its application to reduce flow rates below the value of 390,000 gpm. The NRC staff finds that the licensee has provided a reasonable explanation of the cause for the changes in RCS flow.

The NRC staff also requested additional information regarding the initially proposed minimum RCS flow value of 382,000 gpm with respect to whether it continues to be supported by current safety analyses for the operation of the plants. The NRC staff stated that its concern as "An underlying assumption for the adequacy of this minimum limit for the RCS flow rate is that it is applicable to the current design of the plant and the current design basis analysis for the plant." The licensee reiterated its position in its letter dated October 15, 2003, that its understanding of the approval granted in the safety evaluation for WCAP-14483 and of TSTF-339 may be based on any previous NRC approved value for the plant and that current safety analyses supporting the value are not required.

The NRC staff notes that the Commission's regulations in 10 CFR 50.36, require that: "The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to § 50.34." The safety evaluation for WCAP-14483 also states: "The minimum limit for total flow based on that used in the reference safety analysis [emphasis added] will be retained in the TS." Although no formal definition applies, the "reference safety analysis" is understood to refer to the currently applicable safety analysis of record as reflected in the Updated Final Safety Analysis Report. Therefore, the NRC staff finds that the minimum flow value to be retained in the TS must be supported by current safety analyses that demonstrate that the plant can meet safety analysis acceptance criteria at that flow rate and not some prior value that for reasons of changes in the plant or reactor core design may no longer provide adequate protection.

The licensee addressed the concern with the initial minimum value of 382,000 gpm by revising the value to 388,000 gpm and by providing extensive information showing that all applicable safety analyses either are not affected by the change or have been reanalyzed at the 388,000 gpm value. The NRC staff finds this to be an acceptable response and accordingly, finds that the revised minimum value of 388,000 gpm is acceptable for McGuire, Units 1 and 2.

Based on the above, the NRC staff concludes that the proposed changes to TS 3.4.1 are acceptable. In addition, the proposed changes to TS 3.4.1 are consistent with TSTF-339, Revision 2, and with NUREG-1431, "Standard Technical Specifications Westinghouse Plants." The current TSs for the plant are based on NUREG-1431.

3.4 Revision of TS 5.6.5, Core Operating Limits Report

TS 5.6.5.a, "Core Operating Limits Report," would be modified, consistent with the proposed changes to TS 2.1.1 and TS 3.4.1, by adding item 1, "Illustration of Reactor Core Safety Limits for Specification 2.1.1," and item 9, "Reactor Coolant System Pressure, Temperature, and Flow Departure From Nucleate Boiling (DNB) Limits for Specification 3.4.1" to the list of specifications for which core operating limits shall be established. A renumbered item 8, "Overtemperature and Overpower Delta T setpoint parameter values for Specification 3.3.1," is currently included in TS 5.6.5.a, and therefore, does not need to be added.

As discussed above, TS 5.6.5.b currently includes the appropriate NRC-approved analytical methods used to determine the core operating limits listed in TS 5.6.5.a for TS 2.1.1, 3.3.1 and 3.4.1. Therefore, the NRC staff concludes that the approved NRC methodologies for the proposed additions to TS 5.6.5.a are contained in TS 5.6.5.b. Based on the above, the NRC staff concludes that the proposed addition of Specifications 2.1.1, and 3.4.1 to TS 5.6.5.a is acceptable.

TS 5.6.5.b, "Core Operating Limits Report," lists the references to the topical reports only by report number and title with a note that the COLR provides the complete identification of the report (i.e., report number, title, revision number, report date or NRC SER date, and any supplements). In an earlier evaluation (Reference 2) the NRC staff discussed a concern with specifying the topical reports in TS 5.6.5.b using only the report number and title in that the NRC Safety Evaluation that approves the topical report may contain conditions on the use of the topical report that are not listed in the topical report. The NRC staff was concerned that the conditions in NRC safety evaluations for plant-specific topical reports could cease to be applied

by the licensee if TS 5.6.5.b listed only the report number and title. This concern is met for the Duke Power Company topical reports discussed in this evaluation because the approved versions of the topical reports are issued containing a copy of the NRC safety evaluation; therefore, the NRC-approved topical report listed in the COLR will contain any conditions specified in the safety evaluation.

3.5 Conclusion

The staff concludes that the cycle-specific RCS-related parameters in TSs 2.1.1, 3.3.1, and 3.4.1 are not required to be in the TSs under 10 CFR 50.36, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Accordingly, they may be relocated from the TSs to the COLR. The NRC staff has reviewed the proposed TS revisions, and finds them to be in conformance with WCAP-14483-A, and, therefore, acceptable. Based on this and the above evaluation, the NRC staff concludes that the proposed amendment is acceptable. In addition, the proposed changes to TSs 2.1.1, 3.3.1, and 3.4.1 are generally consistent with TSTF-339, Revision 2.

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 changes 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 (68 FR 65090). 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.

7.0 REFERENCES

1. Letter, T. H. Essig, NRC, to A. Drake, Westinghouse Owners Group, Acceptance for Referencing of Licensing Topical Report WCAP-14483, "Generic Methodology for Expanded Core Operating Limits Report," dated January 19, 1999. (ADAMS ML020430092)

2. Letter, J. Donohew, NRC, to O. Maynard, Wolf Creek Nuclear Operating Corporation, transmitting Amendment No. 144 for the Wolf Creek Generating Station, dated March 28, 2002. ADAMS ML020180190.

Principal Contributors: R. Martin
W. Lyon
K. Kavanagh

Date: January 14, 2004

cc:
Ms. Lisa F. Vaughn
Duke Energy Corporation
Mail Code - PB06E
422 South Church Street
P.O. Box 1244
Charlotte, North Carolina 28201-1244

County Manager of
Mecklenburg County
720 East Fourth Street
Charlotte, North Carolina 28202

Mr. C. Jeffrey Thomas
Regulatory Compliance Manager
Duke Energy Corporation
McGuire Nuclear Site
12700 Hagers Ferry Road
Huntersville, North Carolina 28078

Anne Cottingham, Esquire
Winston and Strawn
1400 L Street, NW.
Washington, DC 20005

Senior Resident Inspector
c/o U.S. Nuclear Regulatory Commission
12700 Hagers Ferry Road
Huntersville, North Carolina 28078

Dr. John M. Barry
Mecklenburg County
Department of Environmental
Protection
700 N. Tryon Street
Charlotte, North Carolina 28202

Mr. Peter R. Harden, IV
VP-Customer Relations and Sales
Westinghouse Electric Company
6000 Fairview Road
12th Floor
Charlotte, North Carolina 28210

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

Michael T. Cash
Manager - Nuclear Regulatory
Licensing
Duke Energy Corporation
526 South Church Street
Charlotte, North Carolina 28201-1006

NCEM REP Program Manager
4713 Mail Service Center
Raleigh, NC 27699-4713

Mr. Richard M. Fry, Director
Division of Radiation Protection
North Carolina Department of
Environment, Health and Natural
Resources
3825 Barrett Drive
Raleigh, North Carolina 27609-7721

Mr. T. Richard Puryear
Owners Group (NCEMC)
Duke Energy Corporation
4800 Concord Road
York, South Carolina 29745