Duke Power
A Duke Energy Company

Duke Power
526 South Church St. EC07H
Charlotte, NC 28202
P. O. Box 1006 EC07H
Charlotte, NC 28201-1006
(704) 382-2200 OFFICE
(704) 382-4360 FAX

M. S. Tuckman
Executive Vice President
Nuclear Generation

December 20, 2001

U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001
ATTENTION: Document Control Desk

SUBJECT: Duke Energy Corporation

Oconee Nuclear Station Units 1, 2, and 3
Docket Nos. 50-269, 50-270, and 50-287
McGuire Nuclear Station Units 1 and 2
Docket Nos. 50-369 and 50-370
Catawba Nuclear Station Units 1 and 2
Docket Nos. 50-413 and 50-414

License Amendment Request Applicable to the Technical Specifications Requirements for the Core Operating Limits Report - Oconee, McGuire, and Catawba Technical Specification 5.6.5

Pursuant to 10CFR50.90, this letter contains a Duke Energy Corporation (Duke) license amendment request (LAR) for the Oconee, McGuire, and Catawba Nuclear Stations Facility Operating Licenses and Technical Specifications (TS). This LAR applies to Oconee, McGuire, and Catawba TS 5.6.5. These TSs contain the requirements for the plants' Core Operating Limits Report (COLR). Subsequent paragraphs of this letter provide: 1) a description of the proposed changes and technical justification, 2) a no significant hazards consideration determination, 3) a basis for the exclusion from performing an environmental assessment/impact statement, and 4) a description of the attachments.

DESCRIPTION OF THE PROPOSED CHANGES AND TECHNICAL JUSTIFICATION

Oconee, McGuire, and Catawba TS 5.6.5.b are being changed to eliminate the revision number and dates from the list of topical reports that contain the analytical methods used to determine the core operating limits. This proposed change is consistent with the NRC approved Industry Technical Specifications Task Force (TSTF) Standard Technical

A001

Specifications Traveler.[1] Implementation of the changes proposed in this LAR will have no adverse impact on Duke's practices for controlling the methodologies used to develop the core operating limits for Oconee, McGuire, and Catawba. The complete citations (i.e., report number, title, revision number, report date or NRC SER date, and any supplements) for each of the topical reports listed in TS 5.6.5 will be displayed as applicable in each station's COLR. NRC review and approval of new or revised topical reports will continue to be obtained in the same manner. Changes to the COLRs will be controlled by 10CFR50.59.

The topical report listed as item 4 in TS 5.6.5.b, is currently shown as DPC-NE-1004P-A. This should be DPC-NE-1004-A. There is no proprietary version of this topical report. This change is only applicable to Oconee.

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Duke Energy Corporation has made the determination that this license amendment request (LAR) for the Oconee, McGuire, and Catawba Technical Specifications (TS) involves No Significant Hazards. This determination was made through the application of the standards established by 10CFR50.92. The three standards are discussed below.

1. Would implementation of the changes proposed in this LAR involve a significant increase in the probability or consequences of an accident previously evaluated?

   No. This LAR makes an administrative change to TS 5.6.5.b, Core Operating Limits Report (COLR), affecting a list of documents that are separately reviewed and approved by the NRC. The changes proposed to TS 5.6.5.b have no substantive impact on the Oconee, McGuire, or Catawba licensing bases. Only NRC-approved methodologies will be used to generate the core operating limits. Based on these considerations, it has been determined that the proposed changes have no impact on any accident probabilities or consequences.

[1] TSTF-363, "Revise Topical Report References in ITS 5.6.5 COLR"

2. Would implementation of the changes proposed in this LAR create the possibility of a new or different kind of accident from any accident previously evaluated?

   No. This LAR makes administrative changes that have no impact on any accident analyses.

3. Would implementation of the changes proposed in this LAR involve a significant reduction in a margin of safety?

   No. The analytical methodologies used to generate the core operating limits are unchanged by this LAR. As such, this LAR has no affect on margins of safety. Future changes to these methodologies will remain subject to NRC review and approval. Therefore, this proposed amendment does not involve a reduction in any margin of safety.

ENVIRONMENTAL ASSESSMENT/IMPACT STATEMENT

The proposed Technical Specification amendment has been reviewed against the criteria of 10CFR51.22 for environmental considerations. The proposed amendment does not involve a significant hazards consideration, nor increase the types and/or amounts of effluents that may be released offsite, nor increase individual or cumulative occupational radiation exposures. Therefore, the proposed amendment meets the criteria given in 10 CFR 51.22(c)(9) for a categorical exclusion from the requirement for performing an Environmental Assessment or Impact Statement.

DESCRIPTION OF ATTACHMENTS

The attachments to this submittal letter are as follows:

- Attachments 1a, 1b, and 1c provide a marked copy of the existing Technical Specifications for Oconee Units 1, 2, and 3; McGuire Units 1 and 2; and Catawba Units 1 and 2, respectively. These marked copies show the proposed changes.

- Attachments 2a, 2b, and 2c provide the reprinted Technical Specifications pages for Oconee Units 1, 2, and 3; McGuire Units 1 and 2; and Catawba Units 1 and 2, respectively.

Implementation of this LAR in the Facility Operating Licenses and Technical Specifications will not impact the Oconee, McGuire, or Catawba Updated Final Safety Analysis Reports (UFSAR), but will require revision to each station's COLR. The COLR revision will be completed prior to implementation of this LAR at each station.

This submittal document contains the following regulatory commitments:

1. The Oconee, McGuire, and Catawba COLRs will be revised prior to implementation of this LAR at the applicable nuclear station.

2. The revised COLRs will be submitted to the NRC consistent with past Duke practice.

Duke is requesting NRC review and approval of this submittal by June 1, 2002. In order to provide sufficient time to revise each station's COLR, Duke is requesting a 60-day grace period to implement this LAR.

Please note that in a letter to the NRC dated October 7, 2001, Duke submitted a McGuire and Catawba LAR which affects some of the pages (McGuire Page 5.6-4 and Catawba Pages 5.6-4 and 5.6.5) that are also being changed within the enclosed LAR. Consequently, the NRC's approval/issuance of these two amendments will require coordination with Duke personnel.

The changes contained in this LAR have been reviewed and approved by the Duke Nuclear Safety Review Board. Pursuant to 10CFR50.91, a copy of this LAR is being sent to the designated official of the State of North Carolina and the designated official of the State of South Carolina.

Inquiries on this matter should be directed to J. S. Warren at (704) 382-4986.

Very truly yours,

M. S. Tuckman

M. S. Tuckman

xc w/Attachments:

L. A. Reyes
U. S. Nuclear Regulatory Commission
Regional Administrator, Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

L. N. Olshan (Addressee Only)
NRC Senior Project Manager (ONS)
U. S. Nuclear Regulatory Commission
Mail Stop O-8 H12
Washington, DC 20555-0001

C. P. Patel (Addressee Only)
NRC Senior Project Manager (CNS)
U. S. Nuclear Regulatory Commission
Mail Stop O-8 H12
Washington, DC 20555-0001

R. E. Martin (Addressee Only)
NRC Senior Project Manager (MNS)
U. S. Nuclear Regulatory Commission
Mail Stop O-8 H12
Washington, DC 20555-0001

M. E. Shannon
Senior Resident Inspector (ONS)
U. S. Nuclear Regulatory Commission
Oconee Nuclear Site

D. J. Roberts
Senior Resident Inspector (CNS)
U. S. Nuclear Regulatory Commission
Catawba Nuclear Site

S. M. Shaeffer
Senior Resident Inspector (MNS)
U. S. Nuclear Regulatory Commission
McGuire Nuclear Site

R. Wingard
Division of Radioactive Waste Management
South Carolina Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

M. Frye
Division of Radiation Protection
3825 Barrett Drive
Raleigh, NC 27609-7221

M. S. Tuckman, affirms that he is the person who subscribed his name to the foregoing statement, and that all the matters and facts set forth herein are true and correct to the best of his knowledge.

M. S. Tuckman

M. S. Tuckman, Executive Vice President

Subscribed and sworn to me: Dec 20, 2001
Date

Mary P. Nelms, Notary Public

My commission expires: JAN 22, 2006

SEAL

Attachment 1a

Oconee Units 1, 2, and 3 Technical Specifications

Marked Copy

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

6. Nuclear Overpower Flux/Flow/Imbalance and RCS Variable Low Pressure allowable value limits for Specification 3.3.1;

7. RCS Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits for Specification 3.4.1

8. Core Flood Tanks Boron concentration limits for Specification 3.5.1;

9. Borated Water Storage Tank Boron concentration limits for Specification 3.5.4;

10. Spent Fuel Pool Boron concentration limits for Specification 3.7.12;

11. RCS and Transfer Canal boron concentration limits for Specification 3.9.1; and

12. AXIAL POWER IMBALANCE protective limits and RCS Variable Low Pressure protective limits for Specification 2.1.1.

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

(1) DPC-NE-1002A, Reload Design Methodology II, Rev. 1, (SER dated October 1, 1985);

(2) NFS-1001A, Reload Design Methodology, Rev. 4, (SER dated July 29, 1981);

(3) DPC-NE-2003P-A, Oconee Nuclear Station Core Thermal Hydraulic Methodology Using VIPRE-01, (SER dated July 19, 1989);

(4) DPC-NE-1004P-A, Nuclear Design Methodology Using CASMO-3/SIMULATE-3P, (SER dated November 23, 1992);

(5) DPC-NE-2008P-A, Fuel Mechanical Reload Analysis Methodology Using TACO3, (SER dated April 3, 1995);

(6) BAW-10192-PA, BWNT LOCA - BWNT Loss of Coolant Accident Evaluation Model for Once-Through Steam Generator Plants, (SER dated February 18, 1997);

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

(7) DPC-NE-3000P-A, Thermal Hydraulic Transient Analysis Methodology, Rev. 2, (SER dated October 14, 1998);

(8) DPC-NE-2005P-A, Thermal Hydraulic Statistical Core Design Methodology, Rev. 2, (SER dated June 8, 1999); and

(9) DPC-NE-3005-PA, UFSAR Chapter 15 Transient Analysis Methodology, Rev 1, (SER dated May 25, 1999).

(10) BAW-10227-PA, Evaluation of Advanced Cladding and Structural Material (M5) in PWR Reactor Fuel, (SER dated December 14, 1999).

INSERT

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling System (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.6 Post Accident Monitoring (PAM) and Main Feeder Bus Monitor Panel (MFPMP) Report

When a report is required by Condition B or G of LCO 3.3.8, "Post Accident Monitoring (PAM) Instrumentation" or Condition D of LCO 3.3.23, "Main Feeder Bus Monitor Panel," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring (PAM only), the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.7 Tendon Surveillance Report

Any abnormal degradation of the containment structure detected during the tests required by the Pre-stressed Concrete Containment Tendon Surveillance Program shall be reported to the NRC within 30 days. The report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and the corrective action taken.

INSERT

The COLR will contain the complete identification for each of the Technical Specifications referenced topical reports used to prepare the COLR (i.e., report number, title, revision number, report date or NRC SER date, and any supplements).

Attachment 1b

McGuire Units 1 and 2 Technical Specifications

Marked Copy

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

2. Shutdown Bank Insertion Limit for Specification 3.1.5,

3. Control Bank Insertion Limits for Specification 3.1.6,

4. Axial Flux Difference limits for Specification 3.2.3,

5. Heat Flux Hot Channel Factor for Specification 3.2.1,

6. Nuclear Enthalpy Rise Hot Channel Factor limits for Specification 3.2.2,

7. Overtemperature and Overpower Delta T setpoint parameter values for Specification 3.3.1,

8. Accumulator and Refueling Water Storage Tank boron concentration limits for Specification 3.5.1 and 3.5.4,

9. Reactor Coolant System and refueling canal boron concentration limits for Specification 3.9.1,

10. Spent fuel pool boron concentration limits for Specification 3.7.14,

11. SHUTDOWN MARGIN for Specification 3.1.1.

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. WCAP-9272-P-A, "WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY," July 1985 (W Proprietary).

2. WCAP-10266-P-A Rev. 2, "THE 1981 VERSION OF WESTINGHOUSE EVALUATION MODEL USING BASH CODE", March 1987, (W Proprietary).

3. BAW-10168P-A, "B&W Loss-of-Coolant Accident Evaluation Model for Recirculating Steam Generator Plants," Rev. 1, SER dated January 22, 1991; Rev. 2, SERs dated August 22, 1996 and November 26, 1996; Rev. 3, SER dated June 15, 1994 (B&W Proprietary).

(continued)

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

4. DPC-NE-2011PA, "Duke Power Company Nuclear Design Methodology for Core Operating Limits of Westinghouse Reactors," March 1990 (DPC Proprietary).

5. DPC-NE-3001PA, "Multidimensional Reactor Transients and Safety Analysis Physics Parameter Methodology," November 1991 (DPC Proprietary).

6. DPC-NF-2010A, "Duke Power Company McGuire Nuclear Station Catawba Nuclear Station Nuclear Physics Methodology for Reload Design," June 1985.

7. DPC-NE-3002A, Rev. 3, "FSAR Chapter 15 System Transient Analysis Methodology," SER dated February 5, 1999.

8. DPC-NE-3000PA, Rev. 0 "Thermal-Hydraulic Transient Analysis Methodology," SER dated October 14, 1998 (DPC Proprietary).

9. DPC-NE-1004A, Rev. 1, "Nuclear Design Methodology Using CASMO-3/SIMULATE-3P," SER dated April 26, 1996.

10. DPC-NE-2004P-A, Rev. 1, "Duke Power Company McGuire and Catawba Nuclear Stations Core Thermal-Hydraulic Methodology using VIPRE-01," SER dated February 20, 1997 (DPC Proprietary).

11. DPC-NE-2005P-A, Rev. 1, "Thermal Hydraulic Statistical Core Design Methodology," SER dated November 7, 1996 (DPC Proprietary).

12. DPC-NE-2008P-A, "Fuel Mechanical Reload Analysis Methodology Using TACO3," SER dated April 3, 1995 (DPC Proprietary).

13. WCAP-10054-P-A, "Westinghouse Small Break ECCS Evaluation Model using the NOTRUMP Code," August 1985 (W Proprietary).

14. DPC-NE-2009-P-A, "Westinghouse Fuel Transition Report," SER dated September 22, 1999 (DPC Proprietary).

15. WCAP-12945-P-A, Volume 1 (Revision 2) and Volumes 2-5 (Revision 1), "Code Qualification Document for Best-Estimate Loss of Coolant Analysis," March 1998, (W Proprietary).

INSERT →

(continued)

INSERT

The COLR will contain the complete identification for each of the Technical Specifications referenced topical reports used to prepare the COLR (i.e., report number, title, revision number, report date or NRC SER date, and any supplements).

Attachment 1c

Catawba Units 1 and 2 Technical Specifications

Marked Copy

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

1. Moderator Temperature Coefficient BOL and EOL limits and 300 ppm surveillance limit for Specification 3.1.3,

2. Shutdown Bank Insertion Limit for Specification 3.1.5,

3. Control Bank Insertion Limits for Specification 3.1.6,

4. Axial Flux Difference limits for Specification 3.2.3,

5. Heat Flux Hot Channel Factor for Specification 3.2.1,

6. Nuclear Enthalpy Rise Hot Channel Factor for Specification 3.2.2,

7. Overtemperature and Overpower Delta T setpoint parameter values for Specification 3.3.1,

8. Accumulator and Refueling Water Storage Tank boron concentration limits for Specification 3.5.1 and 3.5.4,

9. Reactor Coolant System and refueling canal boron concentration limits for Specification 3.9.1,

10. Spent fuel pool boron concentration limits for Specification 3.7.15,

11. SHUTDOWN MARGIN for Specification 3.1.1.

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. WCAP-9272-P-A, "WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY," July 1985 (W Proprietary).

2. WCAP-10266-P-A Rev 2, "THE 1981 VERSION OF WESTINGHOUSE EVALUATION MODEL USING BASH CODE", March 1987, (W Proprietary).

(continued)

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

3. BAW-10168P-A, "B&W Loss-of-Coolant Accident Evaluation Model for Recirculating Steam Generator Plants," Rev. 1, SER dated January 22, 1991; Rev. 2, SERs Dated August 22, 1996 and November 26, 1996; Rev. 3, SER Dated June 15, 1994 (B&W Proprietary).

4. DPC-NE-2011P-A, "Duke Power Company Nuclear Design Methodology for Core Operating Limits of Westinghouse Reactors," March, 1990 (DPC Proprietary).

5. DPC-NE-3001P-A, "Multidimensional Reactor Transients and Safety Analysis Physics Parameter Methodology," November, 1991 (DPC Proprietary).

6. DPC-NF-2010A, "Duke Power Company McGuire Nuclear Station Catawba Nuclear Station Nuclear Physics Methodology for Reload Design," June, 1985

7. DPC-NE-3002-A, Rev. 3 "FSAR Chapter 15 System Transient Analysis Methodology," SER dated February 8, 1999

8. DPC-NE-3000PA, Rev. 2 "Thermal-Hydraulic Transient Analysis Methodology," SER Dated October 14, 1998 (DPC Proprietary).

9. DPC-NE-1004A, Rev. 1, "Design Methodology Using CASMO-3/SIMULATE-3P," SER Dated April 26, 1996.

10. DPC-NE-2004P-A, Rev. 1, "Duke Power Company McGuire and Catawba Nuclear Stations Core Thermal-Hydraulic Methodology using VIPRE-01," SER dated February 20, 1997 (DPC Proprietary).

11. DPC-NE-2005P-A, Rev. 1, "Thermal Hydraulic Statistical Core Design Methodology," SER dated November 7, 1996 (DPC Proprietary).

12. DPC-NE-2008P-A, "Fuel Mechanical Reload Analysis Methodology Using TACO3," SER dated April 8, 1995 (DPC Proprietary).

(continued)

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

13. WCAP-10054-P-A, "Westinghouse Small Break ECCS Evaluation Model Using the NOTRUMP Code," August 1985 (W Proprietary).

14. DPC-NE-2009P-A, "Westinghouse Fuel Transition Report," SER dated September 22, 1999 (DPC Proprietary).

15. WCAP-12945-P-A, Volume 1 (Revision 2) and Volumes 2-5 (Revision 1), "Code Qualification Document for Best-Estimate Loss of Coolant Analysis," March 1998, (W Proprietary).

INSERT

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.6 Ventilation Systems Heater Report

When a report is required by LCO 3.6.10, "Annulus Ventilation System (AVS)," LCO 3.7.10, "Control Room Area Ventilation System (CRAVS)," LCO 3.7.12, Auxiliary Building Filtered Ventilation Exhaust System (ABFVES)," LCO 3.7.13, "Fuel Handling Ventilation Exhaust System (FHVES)," or LCO 3.9.3, "Containment Penetrations," a report shall be submitted within the following 30 days. The report shall outline the reason for the inoperability and the planned actions to return the systems to OPERABLE status.

5.6.7 PAM Report

When a report is required by LCO 3.3.3, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.8 Steam Generator Tube Inspection Report

a. The number of tubes plugged in each steam generator shall be reported to the NRC within 15 days following completion of the program;

(continued)

INSERT

The COLR will contain the complete identification for each of the Technical Specifications referenced topical reports used to prepare the COLR (i.e., report number, title, revision number, report date or NRC SER date, and any supplements).

Attachment 2a

Oconee Units 1, 2, and 3 Technical Specifications

Reprinted Pages

Remove	Insert
5.0-30	5.0-30
5.0-31	5.0-31

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

6. Nuclear Overpower Flux/Flow/Imbalance and RCS Variable Low Pressure allowable value limits for Specification 3.3.1;

7. RCS Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits for Specification 3.4.1

8. Core Flood Tanks Boron concentration limits for Specification 3.5.1;

9. Borated Water Storage Tank Boron concentration limits for Specification 3.5.4;

10. Spent Fuel Pool Boron concentration limits for Specification 3.7.12;

11. RCS and Transfer Canal boron concentration limits for Specification 3.9.1; and

12. AXIAL POWER IMBALANCE protective limits and RCS Variable Low Pressure protective limits for Specification 2.1.1.

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

(1) DPC-NE-1002-A, Reload Design Methodology II;

(2) NFS-1001-A, Reload Design Methodology;

(3) DPC-NE-2003-P-A, Oconee Nuclear Station Core Thermal Hydraulic Methodology Using VIPRE-01;

(4) DPC-NE-1004-A, Nuclear Design Methodology Using CASMO-3/SIMULATE-3P;

(5) DPC-NE-2008-P-A, Fuel Mechanical Reload Analysis Methodology Using TACO3;

(6) BAW-10192-P-A, BWNT LOCA - BWNT Loss of Coolant Accident Evaluation Model for Once-Through Steam Generator Plants;

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

(7) DPC-NE-3000-P-A, Thermal Hydraulic Transient Analysis Methodology;

(8) DPC-NE-2005-P-A, Thermal Hydraulic Statistical Core Design Methodology;

(9) DPC-NE-3005-P-A, UFSAR Chapter 15 Transient Analysis Methodology; and

(10) BAW-10227-P-A, Evaluation of Advanced Cladding and Structural Material (M5) in PWR Reactor Fuel.

The COLR will contain the complete identification for each of the Technical Specifications referenced topical reports used to prepare the COLR (i.e., report number, title, revision number, report date or NRC SER date, and any supplements).

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling System (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.6 Post Accident Monitoring (PAM) and Main Feeder Bus Monitor Panel (MFPMP) Report

When a report is required by Condition B or G of LCO 3.3.8, "Post Accident Monitoring (PAM) Instrumentation" or Condition D of LCO 3.3.23, "Main Feeder Bus Monitor Panel," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring (PAM only), the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.7 Tendon Surveillance Report

Any abnormal degradation of the containment structure detected during the tests required by the Pre-stressed Concrete Containment Tendon Surveillance Program shall be reported to the NRC within 30 days. The report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and the corrective action taken.

Attachment 2b

McGuire Units 1 and 2 Technical Specifications

Reprinted Pages

Remove	Insert
5.6-3	5.6-3
5.6-4	5.6-4

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

2. Shutdown Bank Insertion Limit for Specification 3.1.5,

3. Control Bank Insertion Limits for Specification 3.1.6,

4. Axial Flux Difference limits for Specification 3.2.3,

5. Heat Flux Hot Channel Factor for Specification 3.2.1,

6. Nuclear Enthalpy Rise Hot Channel Factor limits for Specification 3.2.2,

7. Overtemperature and Overpower Delta T setpoint parameter values for Specification 3.3.1,

8. Accumulator and Refueling Water Storage Tank boron concentration limits for Specification 3.5.1 and 3.5.4,

9. Reactor Coolant System and refueling canal boron concentration limits for Specification 3.9.1,

10. Spent fuel pool boron concentration limits for Specification 3.7.14,

11. SHUTDOWN MARGIN for Specification 3.1.1.

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. WCAP-9272-P-A, "WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY," (W Proprietary).

2. WCAP-10266-P-A, "THE 1981 VERSION OF WESTINGHOUSE EVALUATION MODEL USING BASH CODE," (W Proprietary).

3. BAW-10168P-A, "B&W Loss-of-Coolant Accident Evaluation Model for Recirculating Steam Generator Plants," (B&W Proprietary).

(continued)

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

4. DPC-NE-2011PA, "Duke Power Company Nuclear Design Methodology for Core Operating Limits of Westinghouse Reactors," (DPC Proprietary).

5. DPC-NE-3001PA, "Multidimensional Reactor Transients and Safety Analysis Physics Parameter Methodology," (DPC Proprietary).

6. DPC-NF-2010A, "Duke Power Company McGuire Nuclear Station Catawba Nuclear Station Nuclear Physics Methodology for Reload Design".

7. DPC-NE-3002A, "FSAR Chapter 15 System Transient Analysis Methodology".

8. DPC-NE-3000PA, "Thermal-Hydraulic Transient Analysis Methodology ," (DPC Proprietary).

9. DPC-NE-1004A, "Nuclear Design Methodology Using CASMO-3/SIMULATE-3P".

10. DPC-NE-2004P-A, "Duke Power Company McGuire and Catawba Nuclear Stations Core Thermal-Hydraulic Methodology using VIPRE-01," (DPC Proprietary).

11. DPC-NE-2005P-A, "Thermal Hydraulic Statistical Core Design Methodology," (DPC Proprietary).

12. DPC-NE-2008P-A, "Fuel Mechanical Reload Analysis Methodology Using TACO3," (DPC Proprietary).

13. WCAP-10054-P-A, "Westinghouse Small Break ECCS Evaluation Model using the NOTRUMP Code," (W Proprietary).

14. DPC-NE-2009-P-A, "Westinghouse Fuel Transition Report," (DPC Proprietary).

15. WCAP-12945-P-A, Volume 1 and Volumes 2-5, "Code Qualification Document for Best-Estimate Loss of Coolant Analysis," (W Proprietary).

The COLR will contain the complete identification for each of the Technical Specifications referenced topical reports used to prepare the COLR (i.e., report number, title, revision number, report date or NRC SER date, and any supplements).

(continued)

Attachment 2c

Catawba Units 1 and 2 Technical Specifications

Reprinted Pages

Remove	Insert
5.6-3	5.6-3
5.6-4	5.6-4
5.6-5	5.6-5

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

1. Moderator Temperature Coefficient BOL and EOL limits and 300 ppm surveillance limit for Specification 3.1.3,

2. Shutdown Bank Insertion Limit for Specification 3.1.5,

3. Control Bank Insertion Limits for Specification 3.1.6,

4. Axial Flux Difference limits for Specification 3.2.3,

5. Heat Flux Hot Channel Factor for Specification 3.2.1,

6. Nuclear Enthalpy Rise Hot Channel Factor for Specification 3.2.2,

7. Overtemperature and Overpower Delta T setpoint parameter values for Specification 3.3.1,

8. Accumulator and Refueling Water Storage Tank boron concentration limits for Specification 3.5.1 and 3.5.4,

9. Reactor Coolant System and refueling canal boron concentration limits for Specification 3.9.1,

10. Spent fuel pool boron concentration limits for Specification 3.7.15,

11. SHUTDOWN MARGIN for Specification 3.1.1.

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. WCAP-9272-P-A, "WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY" (W Proprietary).

2. WCAP-10266-P-A, "THE 1981 VERSION OF WESTINGHOUSE EVALUATION MODEL USING BASH CODE" (W Proprietary).

(continued)

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

3. BAW-10168-P-A, "B&W Loss-of-Coolant Accident Evaluation Model for Recirculating Steam Generator Plants" (B&W Proprietary).

4. DPC-NE-2011-P-A, "Duke Power Company Nuclear Design Methodology for Core Operating Limits of Westinghouse Reactors" (DPC Proprietary).

5. DPC-NE-3001-P-A, "Multidimensional Reactor Transients and Safety Analysis Physics Parameter Methodology" (DPC Proprietary).

6. DPC-NF-2010-A, "Duke Power Company McGuire Nuclear Station Catawba Nuclear Station Nuclear Physics Methodology for Reload Design."

7. DPC-NE-3002-A, "FSAR Chapter 15 System Transient Analysis Methodology."

8. DPC-NE-3000-P-A, "Thermal-Hydraulic Transient Analysis Methodology" (DPC Proprietary).

9. DPC-NE-1004-A, "Design Methodology Using CASMO-3/SIMULATE-3P."

10. DPC-NE-2004-P-A, "Duke Power Company McGuire and Catawba Nuclear Stations Core Thermal-Hydraulic Methodology using VIPRE-01" (DPC Proprietary).

11. DPC-NE-2005-P-A, "Thermal Hydraulic Statistical Core Design Methodology" (DPC Proprietary).

12. DPC-NE-2008-P-A, "Fuel Mechanical Reload Analysis Methodology Using TACO3" (DPC Proprietary).

13. WCAP-10054-P-A, "Westinghouse Small Break ECCS Evaluation Model Using the NOTRUMP Code" (W Proprietary).

(continued)

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

14. DPC-NE-2009-P-A, "Westinghouse Fuel Transition Report" (DPC Proprietary).

15. WCAP-12945-P-A, Volume 1 and Volumes 2-5, "Code Qualification Document for Best-Estimate Loss of Coolant Analysis" (W Proprietary).

The COLR will contain the complete identification for each of the Technical Specifications referenced topical reports used to prepare the COLR (i.e., report number, title, revision number, report date or NRC SER date, and any supplements).

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.6 Ventilation Systems Heater Report

When a report is required by LCO 3.6.10, "Annulus Ventilation System (AVS)," LCO 3.7.10, "Control Room Area Ventilation System (CRAVS)," LCO 3.7.12, Auxiliary Building Filtered Ventilation Exhaust System (ABFVES)," LCO 3.7.13, "Fuel Handling Ventilation Exhaust System (FHVES)," or LCO 3.9.3, "Containment Penetrations," a report shall be submitted within the following 30 days. The report shall outline the reason for the inoperability and the planned actions to return the systems to OPERABLE status.

5.6.7 PAM Report

When a report is required by LCO 3.3.3, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.8 Steam Generator Tube Inspection Report

a. The number of tubes plugged in each steam generator shall be reported to the NRC within 15 days following completion of the program;

(continued)