

January 19, 2005

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

SUBJECT: Duke Energy Corporation

McGuire Nuclear Station Units, 1 and 2
Docket Nos. 50-369, 50-370

License Amendment Request Applicable to
Technical Specification 5.6.5.b, "Core Operating
Limits Report (COLR)"

Pursuant to 10 CFR 50.90, Duke Energy Corporation (Duke) is requesting an amendment (LAR) to the McGuire Nuclear Station, Units 1 and 2, Technical Specifications (TS). This LAR adds an NRC-approved Topical Report, DPC-NE-1005P-A, "Duke Power Nuclear Design Methodology Using CASMO-4/SIMULATE-3 MOX," to the list of analytical methods used to determine core operating limits contained in TS 5.6.5.b, "Core Operating Limits Report (COLR)." Topical Report DPC-NE-1005P-A has been previously approved by the NRC.

The contents of this submittal package are as follows:

- An Affidavit is included within the cover letter.
- Attachment 1 provides a marked copy of the existing McGuire TS. The marked copy shows the proposed changes.
- Attachment 2 provides revised (clean) TS pages.
- Attachment 3 provides a Description of the Proposed Changes and Technical Justification.
- Pursuant to 10 CFR 50.92, Attachment 4 documents Duke's determination that this LAR contains No Significant Hazards Consideration.

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- Pursuant to 10 CFR 51.22(c)(10), Attachment 5 provides the basis for the categorical exclusion of this LAR from the requirement to perform an environmental assessment or environmental impact statement.

Duke is requesting NRC review and approval of this LAR by September 1, 2005, in order to support the McGuire Unit 1, Cycle 18 refueling. Duke has determined that the NRC's standard 30-day implementation grace period will be sufficient to implement this LAR. Please be aware that in a letter to the NRC dated September 28, 2004, Duke submitted an LAR that is applicable to McGuire TS 5.6.1 and 5.6.4, and in regard to the issuance of new TS pages, will require coordination with the current LAR contained herein.

Implementation of this LAR in the Facility Operating Licenses and TS will impact the McGuire Updated Final Safety Analysis Report (UFSAR). The necessary changes are discussed in Attachment 3 and these will be submitted in accordance with 10 CFR 50.71(e). This submittal document contains no additional regulatory commitments.

Pursuant to 10 CFR 50.91, a copy of this LAR is being sent to the designated official of the State of North Carolina.

Inquiries on this matter should be directed to J. S. Warren at (704) 875-5171.

Very truly yours,



G. R. Peterson

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xc w/Attachments:

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U. S. Nuclear Regulatory Commission, Region II
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Atlanta, GA 30303

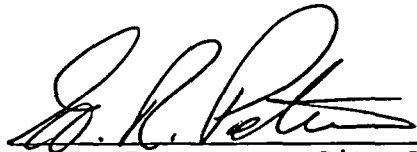
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G. R. Peterson, affirms that he is the person who subscribed his name to the foregoing statement, and that all the matters and facts set forth herein are true and correct to the best of his knowledge.

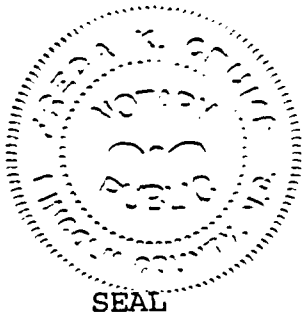


G. R. Peterson, Site Vice President

Subscribed and sworn to me: January 19, 2005
Date

Freda K. Crump, Notary Public

My commission expires: August 17, 2006
Date



Attachment 1

McGuire Units 1 and 2

Proposed Technical Specifications Changes (Mark-up)

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," (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).

16. DPC-NE-1005P-A, "Duke Power Nuclear Design Methodology Using CASMO-4/SIMULATE-3 MOX," (DPC Proprietary).

(continued)

Attachment 2

McGuire Units 1 and 2

Revised (Clean) Technical Specifications Pages

Remove

5.6-4

Insert

5.6-4

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," (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-3 P".
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).
16. DPC-NE-1005P-A, "Duke Power Nuclear Design Methodology Using CASMO-4/SIMULATE-3 MOX," (DPC 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 3

Description of Proposed Changes and Technical Justification

DESCRIPTION

This license amendment request (LAR) proposes a change to the McGuire Nuclear Station, Units 1 and 2, Technical Specifications (TS) 5.6.5.b, "Core Operating Limits Report (COLR)." This TS contains a list of documents which comprise the analytical methods used to determine core operating limits. These documents are reviewed and approved by the NRC prior to inclusion in the TS. The change proposed in this LAR adds another document to TS 5.6.5.b as new item number 16. The new document is DPC-NE-1005P-A, "Duke Power Nuclear Design Methodology Using CASMO-4/SIMULATE-3 MOX," (DPC Proprietary).

TECHNICAL JUSTIFICATION

Discussion

Topical Report DPC-NE-1005P-A was approved by the NRC in a letter and safety evaluation report (SER) dated August 20, 2004 (Reference 1). This topical report addresses the use of the Studsvik Core Management System (Studsvik/CMS) code package to support reload design analyses for McGuire and Catawba Nuclear Stations. It is being included in McGuire TS 5.6.5.b consistent with the provisions of an NRC-approved Industry/Technical Specifications Task Force (TSTF) Standard Technical Specifications Traveler, TSTF-363, "Revise Topical Report References in ITS 5.6.5, COLR," and previously approved amendments for McGuire Units 1 and 2 (Reference 2), in that the new topical report is being added to the TS without listing the approval date or revision number. This detailed information is included in the complete citation for the topical reports that is contained in the plant's actual COLR documents. As mentioned above, this practice is consistent with TSTF-363 and the current, approved McGuire TS 5.6.5.b. Note that revisions to the COLR documents are routinely submitted to the NRC. Implementation of DPC-NE-1005P-A will be consistent with the provisions of the NRC's SER (Reference 1). Since the proposed change to TS 5.6.5.b consists only of adding a document that has been previously approved by

Attachment 3

Description of Proposed Changes and Technical Justification

the NRC for use at McGuire, this LAR has been determined to be administrative in nature.

Implementation of this LAR in the Facility Operating Licenses and TS will impact the McGuire Updated Final Safety Analysis Report (UFSAR). Chapters 4, 14, and 15 of the UFSAR will be revised to include Topical Report DPC-1005P-A, as appropriate, in the lists of reference documents. The necessary changes will be submitted in accordance with 10 CFR 50.71(e), as stated in the cover letter of this LAR submittal package.

The addition of DPC-NE-1005P-A to Catawba TS 5.6.5.b has been previously addressed by a separate Duke LAR submittal (Reference 3).

Applicable Regulatory Criteria

The NRC's Public Website provides the industry with a description of the agency's topical report program and describes the procedures for submitting topical reports for review and approval by the agency and subsequent publication by licensees. As stated in the website, the NRC's regulations related to topical reports are found in 10 CFR 170.11 and 10 CFR 2.390. This current submittal package consists of an LAR which Duke is submitting to the NRC pursuant to 10 CFR 50.90.

Conclusion

Duke has evaluated the addition of Topical Report DPC-NE-1005P-A to TS 5.6.5.b and has determined this change to be solely administrative in nature, and thus, appropriate for implementation at McGuire.

REFERENCES

1. Letter, R. E. Martin, USNRC, to H. B. Barron, Duke Energy Corporation, SUBJECT: Final Safety Evaluation for Duke Topical Report, DPC-NE-1005P, "Nuclear Design Methodology Using CASMO-4/SIMULATE-3 MOX," Dated August 20, 2004.

Attachment 3

Description of Proposed Changes and Technical Justification

2. Letter, R. E. Martin, USNRC, to H. B. Barron, Duke Energy Corporation, SUBJECT: McGuire Nuclear Station, Units 1 and 2, RE: Issuance of Amendments (TAC Nos. MB3702 and MB3703), Dated July 10, 2002.
3. Letter, M. S. Tuckman, Duke Energy Corporation, to Document Control Desk (USNRC); SUBJECT: Duke Energy Corporation, Catawba Nuclear Station, Units 1 & 2, Docket Nos. 50-413, 50-414; McGuire Nuclear Station, Units 1 & 2, Docket Nos. 50-369 and 50-370; Proposed Amendments to the Facility Operating License and Technical Specifications to Allow Insertion of Mixed Oxide Fuel Lead Assemblies and Request for Exemption from Certain Regulations in 10 CFR Part 50; Dated February 27, 2003.

Attachment 4

No Significant Hazards Consideration Determination

Duke Energy Corporation (Duke) has made the determination that this license amendment request (LAR) involves No Significant Hazards Consideration through the application of the standards established by the NRC's regulations in 10 CFR 50.92. These 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 Technical Specification (TS) 5.6.5.b, "Core Operating Limits Report (COLR)." This TS contains a listing of documents (analytical methods) that are used to determine core operating limits. These documents are separately and individually reviewed and approved by the NRC. The current LAR adds a new document, DPC-NE-1005P-A, "Duke Power Nuclear Design Methodology Using CASMO-4/SIMULATE-3 MOX," (DPC Proprietary), to the list in TS 5.6.5.b. Topical Report DPC-NE-1005P-A has been previously reviewed by the NRC and determined to be appropriate for use at McGuire. The NRC's determination was documented in a safety evaluation report dated August 20, 2004. Based on these considerations, it has been determined that the proposed administrative change has no impact on any accident probabilities or consequences.

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 is solely administrative in nature since it only adds an NRC-approved licensing basis document to the TS. No new accident causal mechanisms will be created as a result of the NRC approval of this LAR.

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

No. This LAR is solely administrative in nature. The analytical methodologies used to generate the core operating limits are separately and individually reviewed and approved by the NRC, and are unchanged by this LAR. The change contained in this LAR merely revises the McGuire TS in an administrative manner in order to

Attachment 4

No Significant Hazards Consideration Determination

conform with a Duke licensing action that has been previously approved by the NRC. Therefore the change proposed in this amendment request has no impact on margin.

Conclusion

Based upon the preceding discussion, Duke has concluded that this proposed amendment does not involve a significant hazards consideration.

Attachment 5

Environmental Assessment/Impact Statement

The proposed license amendment request is administrative in nature and has been determined to meet the criteria given in 10 CFR 51.22(c)(10) for a categorical exclusion from the requirement for performing an environmental impact statement or environmental assessment.