Duke Power
A Duke Energy Company

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October 27, 2004

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

Catawba Nuclear Station, Units 1 and 2
Docket Nos. 50-413, 50-414

License Amendment Request Proposing Deletion of an Additional License Condition Limiting Maximum Rod Burnup and Reporting Requirements Within Facility Operating Licenses NPF-9, NPF-17, NPF-35, and NPF-52

Pursuant to 10 CFR 50.90, Duke Energy Corporation (Duke) is submitting a license amendment request (LAR) for the McGuire Nuclear Station and Catawba Nuclear Station Facility Operating Licenses (FOL). This LAR is applicable to an FOL condition currently contained in FOLs NPF-9 for McGuire Unit 1, NPF-17 for McGuire Unit 2, NPF-35 for Catawba Unit 1, and NPF-52 for Catawba Unit 2. The current license condition limits the maximum fuel rod burnup to 60 GWd/mtU until the completion of an NRC environmental assessment supporting an increased limit. The NRC's environmental assessment has been completed and documented as noted below.[1] Consequently, this Duke LAR proposes to delete this condition from the McGuire Units 1 and 2 and Catawba Units 1 and 2 FOLs. As mentioned above and detailed in Attachment 2, the change being proposed to this condition is based upon and supported by an NRC environmental assessment. The deletion of this FOL condition will increase the burnup limit to 62 GWd/mtU at McGuire and Catawba.

This LAR also proposes to delete several reporting requirements from the McGuire and Catawba FOLs because they

[1] NUREG/CR-6703, *Environmental Effects of Extending Fuel Burnup Above 60 GWd/MTU*, Published January 2001.

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are redundant to reporting requirements contained in Title 10 of the Code of Federal Regulations (10 CFR).

The contents of this amendment package are as follows:

- Attachments 1a and 1b provide a marked copy of the existing FOL for McGuire Units 1 and 2 and Catawba Units 1 and 2, respectively. The marked copies show the proposed changes.

- Attachment 2 provides a Description of the Proposed Changes and Technical Justification.

- Pursuant to 10 CFR 50.92, Attachment 3 documents Duke's determination that this LAR contains No Significant Hazards Consideration.

- Pursuant to 10 CFR 51.22(c)(9), Attachment 4 provides the basis for the categorical exclusion from performing an Environmental Assessment/Impact Statement.

Revised (clean) FOL pages will be provided prior to NRC issuance of the approved amendment.

In accordance with Duke administrative procedures and the Quality Assurance Program Topical Report, the changes contained in this LAR have been reviewed and approved by the respective McGuire and Catawba Plant Operations Review Committee. This LAR has also been reviewed and approved by the Duke Nuclear Safety Review Board. Pursuant to 10 CFR 50.91, 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.

Implementation of the changes proposed in this LAR at McGuire and Catawba will result in the need to revise both of the stations' Updated Final Safety Analysis Reports (UFSAR). Section 4.0 of the McGuire and Catawba UFSARs will require revision in order to include a discussion of the 62 GWd/mtU burnup limit. The necessary permanent revisions to the UFSARs will be made in accordance with 10 CFR 50.71(e). Additionally, following NRC approval of this LAR, Duke will submit an administrative revision to Duke Topical Report DPC-NE-2009-P-A, *Duke Power Company Westinghouse Fuel Transition Report,* Revision 2. This administrative revision

will reference the NRC's approval of this LAR and will reflect removal of the current license condition. Duke will transmit this revised topical report to the NRC. Duke is requesting NRC review and approval of this LAR by November 1, 2005. It has been determined that the NRC's standard 30-day implementation grace period will be adequate for this LAR. This submittal document contains no additional regulatory commitments.

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

Very truly yours,

William R. McCollum, Jr.

Attachments

xc w/Attachments:

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Columbia, SC 29201

William R. McCollum, Jr., 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.

William R. McCollum, Jr., Vice President, Nuclear Support

Subscribed and sworn to me: October 27, 2004
Date

Notary Public

My commission expires: 3/9/09
Date

BETTY SHARPE GREGORY
NOTARY
My Comm. Exp.
March 09, 2009
PUBLIC
MECKLENBURG COUNTY, N.C.

SEAL

Attachment 1a

McGuire Units 1 and 2 Facility Operating Licenses

Marked Copy

(4) Fire Protection Program

Duke Energy Corporation shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility and as approved in the SER dated March 1978 and Supplements 2, 5 and 6 dated March 1979, April 1981, and February 1983, respectively, and the safety evaluation dated May 15, 1989, subject to the following provision:

Duke may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(5) Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. 200, are hereby incorporated into this renewed operating license. Duke Energy Corporation shall operate the facility in accordance with the Additional Conditions.

(6) Antitrust Conditions

The license shall comply with the antitrust conditions delineated in Appendix C of this renewed operating license.

D. Physical Protection

Duke Energy Corporation shall fully implement and maintain in effect all provisions of the Commission-approved nuclear security and contingency, guard training and qualification plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains safeguards information protected under 10 CFR 73.21, is entitled: "Nuclear Security and Contingency Plan," Revision 12, as revised per 10 CFR 50.54(p). The Plan which does not contain safeguards information is entitled "Nuclear Security Training and Qualification Plan," Revision 6, as revised per 10 CFR 50.54(p). Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

E. The licensee shall report any violations of the requirements contained in Section 2 Items C.(1), C.(4) and D of this renewed operating license within 24 hours by telephone and confirm by telegram, mailgram, or facsimile transmission to the Director of the Regional Office, or his designate, no later than the first working day following the violation, with a written follow-up report within 14 days.

Deleted by Amendment No. XXX.

E. The licensee shall report any violation of the requirements contained in Section 2 Items C.(1), C.(4), C.(5) and D of this renewed operating license within 24 hours by telephone and confirm by telegram, mailgram, or facsimile transmission to the NRC Regional Administrator, Region II, or his designate, no later than the first working day following the violation, with a written follow-up report within 14 days.

Deleted by Amendment No. XXX.

F. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

G. In accordance with the Commission's direction in its Statement of Policy, Licensing and Regulatory Policy and Procedures for Environmental Protection: Uranium Fuel Cycle Impacts, October 29, 1982, this renewed operating license is subject to the final resolution of the pending litigation involving Table S-3. See, Natural Resources Defense Council v. NRC, No. 74-1586 (D.C. cir. April 27, 1982).

H. The licensee is authorized to receive from the Oconee Nuclear Station, Units 1, 2, and 3, possess, and store irradiated Oconee fuel assemblies containing special nuclear material, enriched to not more than 3.24% by weight U-235 subject to the following conditions:

a. Oconee fuel assemblies may not be placed in the McGuire Nuclear Station, Unit 1 and 2, reactors.

b. Irradiated fuel shipped to McGuire Nuclear Station, Units 1 and 2, from Oconee shall have been removed from the Oconee reactor no less than 270 days prior to shipment.

c. No more than 300 Oconee irradiated fuel assemblies shall be received for storage at McGuire Nuclear Station.

d. Burnup of Oconee fuel shipped shall be no greater than 36,000 MW days per metric ton.

e. Receipt of irradiated Oconee fuel shall be limited by the use of the NFS-4 (NAC-1), NLI-1/2, TN-8, or TN-8L spent fuel casks.

f. The spent fuel pool crane travel shall be restricted by administrative controls to the paths required by Selected Licensee Commitment 16.9.20 whenever a spent fuel cask is being handled.

g. Oconee fuel assemblies may not be transferred from one McGuire spent fuel pool to the other.

APPENDIX B

ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. NPF-9

Duke Energy Corporation shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Conditions		Implementation Date
184	The schedule for the performance of new and revised surveillance requirements shall be as follows: For surveillance requirements (SRs) that are new in Amendment No. 184 the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment No. 184. For SRs that existing prior to Amendment No. 184, including SRs with modified acceptance criteria and SRs whose intervals of performance are being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of amendment No. 184. For SRs that existed prior to Amendment No. 184, whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of Amendment No. 184.		Within 90 days of the date of this amendment
188	The maximum rod average burnup for any rod shall be limited to 60 GWd/mtU until the completion of an NRC environmental assessment supporting an increased limit.		Within 30 days of date of this amendment

Amendment No. 200

APPENDIX B

ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. NPF-17

Duke Energy Corporation shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Conditions	Implementation Date
166	The schedule for the performance of new and revised surveillance requirements shall be as follows: For surveillance requirements (SRs) that are new in Amendment No. 166 the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment No. 166. For SRs that existed prior to Amendment No. 166, including SRs with modified acceptance criteria and SRs whose intervals of performance are being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of amendment No. 166. For SRs that existed prior to Amendment No. 166, whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of Amendment No. 166.	Within 90 days of the date of this amendment.
169	The maximum rod average burnup for any rod shall be limited to 60 GWd/mtU until the completion of an NRC environmental assessment supporting an increased limit.	Within 30 days of date of amendment

Attachment 1b

Catawba Units 1 and 2 Facility Operating Licenses

Marked Copy

(6) Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. 180, are hereby incorporated into this renewed license. Duke Energy Corporation shall operate the facility in accordance with the Additional Conditions.

D. The facility requires exemptions from certain requirements of Appendix J to 10 CFR Part 50, as delineated below and pursuant to evaluations contained in the referenced SER and SSERs. These include, (a) partial exemption from the requirement of paragraph III.D.2(b)(ii) of Appendix J, the testing of containment airlocks at times when the containment integrity is not required (Section 6.2.6 of the SER, and SSERs # 3 and #4), (b) exemption from the requirement of paragraph III.A.(b) of Appendix J, insofar as it requires the venting and draining of lines for type A tests (Section 6.2.6 of SSER #3), and (c) partial exemption from the requirements of paragraph III.B of Appendix J, as it relates to bellows testing (Section 6.2.6 of the SER and SSER #3). These exemptions are authorized by law, will not present an undue risk to the public health and safety, are consistent with the common defense and security, and are consistent with certain special circumstances as discussed in the referenced SER and SSERs. These exemptions are, therefore, hereby granted pursuant to 10 CFR 50.12. With the granting of these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

E. Physical Protection

Duke Energy Corporation shall fully implement and maintain in effect all provisions of the Commission-approved nuclear security and contingency, and guard training and qualification plans including amendments made pursuant to provisions of the Miscellaneous Amendment and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains safeguards information protected under 10 CFR 73.21, is entitled: "Nuclear Security and Contingency Plan," as revised through April 18, 1996. The plan which does not contain safeguards information is entitled "Nuclear Security Training and Qualification Plan," as revised through April 19, 1996. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

F. Reporting to the Commission

Except for Item 2.C.(2), Duke Energy Corporation shall report any violations of the requirements contained in Section 2.C. of this renewed license in the following manner: initial notification shall be made within twenty-four (24) hours to the NRC Operations Center via the Emergency Notification System with written follow-up within 30 days in accordance with the procedures described in 10 CFR 50.73 (b), (c) and (e).

Deleted by Amendment No. XXX

(6) Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. 172, are hereby incorporated into this renewed license. Duke Energy Corporation shall operate the facility in accordance with the Additional Conditions.

D. The facility requires exemptions from certain requirements of Appendix J to 10 CFR Part 50, as delineated below, and pursuant to evaluations contained in the referenced SER and SSER. These include: (a) partial exemption from the requirement of paragraph III.D.2(b)(ii) of Appendix J, the testing of containment airlocks at times when the containment integrity is not required (Section 6.2.6 of SSER #5), (b) exemption from the requirement of paragraph III.A.1(d) of Appendix J, insofar as it requires the venting and draining of lines for type A tests (Section 6.2.6 of SSER #5), and (c) partial exemption from the requirements of paragraph III.B of Appendix J, as it relates to bellows testing (Section 6.2.6 of the SER and SSER #5). These exemptions are authorized by law, will not present an undue risk to the public health and safety, are consistent with the common defense and security, and are consistent with certain special circumstances, as discussed in the referenced SER and SSER. These exemptions are, therefore, hereby granted pursuant to 10 CFR 50.12. With the granting of these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

E. Physical Protection

Duke Energy Corporation shall fully implement and maintain in effect all provisions of the Commission-approved nuclear security and contingency, and guard training and qualification plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains safeguards information protected under 10 CFR 73.21 is entitled: "Nuclear Security and Contingency Plan," with revisions submitted through April 18, 1996. The plan which does not contain safeguards information is entitled "Nuclear Security Training and Qualification Plan," with revisions submitted through April 19, 1996. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

Deleted by Amendment No. XXX.

F. Reporting to the Commission

Except for Item 2.C.(2), Duke Energy Corporation shall report any violations of the requirements contained in Section 2.C of this renewed license in the following manner: initial notification shall be made within twenty-four (24) hours to the NRC Operations Center via the Emergency Notification System with written follow-up within 30 days in accordance with the procedures described in 10 CFR 50.73 (b), (c), and (e).

G. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

Amendment Number	Additional Condition	Implementation Date
173	The schedule for the performance of new and revised surveillance requirements shall be as follows: For surveillance requirements (SRs) that are new in Amendment No. 173 the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment No. 173. For SRs that existing prior to Amendment No. 173, including SRs with modified acceptance criteria and SRs who intervals of performance are being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of amendment No. 173. For SRs that existed prior to Amendment No. 173, whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of Amendment No. 173	By January 31, 1999
180	The maximum rod average burnup for any rod shall be limited to 60 GWd/mtU until the completion of an NRC environmental assessment supporting an increased limit.	Within 30 days of date of amendment.

Amendment No. 180

Amendment Number	Additional Condition	Implementation Date
165	The schedule for the performance of new and revised surveillance requirements shall be as follows: For surveillance requirements (SRs) that are new in Amendment No. 165 the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment No. 165. For SRs that existing prior to Amendment No. 165, including SRs with modified acceptance criteria and SRs who intervals of performance are being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of amendment No. 165. For SRs that existed prior to Amendment No. 165, whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of Amendment No. 165	By January 31, 1999
172	The maximum rod average burnup for any rod shall be limited to 60 GWd/mtU until the completion of an NRC environmental assessment supporting an increased limit.	Within 30 days of date of amendment.

Attachment 2

Description of Proposed Changes and Technical Justification

DESCRIPTION OF PROPOSED CHANGES AND TECHNICAL JUSTIFICATION

Attachment 2 provides a description and technical justification for the changes proposed in this license amendment request (LAR). A list of reference documents is provided in the final section of this attachment.

DESCRIPTION OF PROPOSED CHANGES

This license amendment request (LAR) proposes two changes to each of the Facility Operating Licenses (FOL) for McGuire Nuclear Station, Units 1 and 2; and Catawba Nuclear Station, Units 1 and 2. These FOLs are for McGuire Unit 1, FOL No. NPF-9; McGuire Unit 2, FOL No. NPF-17; Catawba Unit 1, FOL No. NPF-35; and Catawba Unit 2, FOL No. NPF-52. The proposed changes are described below.

1. This proposed change applies to an additional condition contained in Appendix B of the McGuire, Units 1 and 2, FOLs; and Appendix B of the Catawba, Units 1 and 2, FOLs. This condition now reads:

   > "The maximum rod average burnup for any rod shall be limited to 60 GWd/mtU until the completion of an NRC environmental assessment supporting an increased limit."

   Within this LAR, Duke Energy Corporation (Duke) is proposing to delete this additional condition from the McGuire and Catawba FOLs listed above.

2. McGuire Units 1 and 2 FOLs, Section 2.E, contains reporting requirements which provide for initial notification to be made to the NRC within 24 hours, with a written follow-up report within 14 days. Catawba Units 1 and 2 FOLs, Section 2.F, contains reporting requirements which provide for initial notification to be made to the NRC within 24 hours, with written follow-up within 30 days. Within this LAR, Duke is proposing to delete these reporting requirements.

Attachment 2

Description of Proposed Changes and Technical Justification

TECHNICAL JUSTIFICATION

Background

The NRC approved and issued Amendment No. 188 to FOL No. NPF-9 for McGuire Unit 1 and Amendment No. 169 to FOL No. NPF-17 for McGuire Unit 2 in 1999 (Reference 1). Also at that time, the NRC approved and issued Amendment No. 180 to FOL No. NPF-35 for Catawba Unit 1 and Amendment No. 172 to FOL NPF-52 for Catawba Unit 2 (Ref. 2). These amendments revised various sections of the McGuire and Catawba Technical Specifications (TS) to permit use of Westinghouse Robust Fuel Assemblies (RFA) for core reloads at both McGuire and Catawba. Concurrent with the approval of the referenced amendments, the NRC also approved Topical Report DPC-NE-2009-P-A, *Duke Power Company Westinghouse Fuel Transition Report* (Ref. 3). Following its review of the referenced amendments and topical report, the NRC found that the Duke design limits and thermal-mechanical analysis methodologies discussed in DPC-NE-2009-P-A were acceptable for application by Duke to the RFA fuel design up to the then-current approved rod average burnup limit of 62 GWd/mtU. However at that time, the NRC had performed an environmental assessment for fuel burnup only up to 60 GWd/mtU. Consequently, due to this limitation from the environmental perspective, Duke proposed a license condition limiting rod burnup to the 60 GWd/mtU value (Ref. 4). Because the NRC has now completed an environmental assessment which supports extending fuel burnup above 60 GWd/mtU, Duke is proposing to delete the current FOL condition which limits burnup at both McGuire and Catawba. The NRC environmental assessment is contained in NUREG/CR-6703, *Environmental Effects of Extending Fuel Burnup Above 60 GWd/MTU* (Ref. 5).

McGuire FOL Section 2.E and Catawba FOL Section 2.F currently provide requirements for Duke to make initial notification to the NRC followed by written follow-up for various events. The NRC's requirements for immediate notification with written follow-up requirements (Licensee Event Reports) of events at operating nuclear power plants are contained in the 10 CFR 50.72 regulation (Ref. 6) and the 10 CFR 50.73 regulation (Ref. 7). The NRC's requirements for the reporting of safeguards matters are contained in the 10 CFR 73, Appendix G regulation (Ref. 8). The NRC regulations that address plant changes, tests,

experiments, maintenance of records, and making of reports are contained in the 10 CFR 50.59 regulation (Ref. 9) and the 10 CFR 50.71 regulation (Ref. 10). Also, the regulations of 10 CFR 50.72, along with requirements in the National Pollutant Discharge Elimination System (NPDES) Permit (Ref. 11) that is administered by the U. S. Environmental Protection Agency (EPA), address the reporting of matters related to environmental protection. These regulations are listed in the Reference Section of Attachment 2, and they encompass the reporting requirements currently contained in McGuire FOL Section 2.E and Catawba FOL Section 2.F. Therefore, the reporting requirements of the stated FOL sections are adequately controlled by the reporting requirements of the referenced regulations, thus the FOL reporting requirements are considered an unnecessary redundancy.

Discussion

An additional license condition limiting the maximum rod average burnup for any rod to 60 GWd/mtU was imposed upon the McGuire and Catawba FOLs in 1999. This additional condition was to remain in effect until the completion of an NRC environmental assessment supporting an increased limit and appropriate LARs were submitted by licensees and approved by the NRC. The NRC has completed its environmental assessment of the effects of extending fuel burnup limits above 60 GWd/mtU. As mentioned earlier, the results of the NRC's environmental assessment have been published in NUREG/CR-6703, and it has been concluded that there are no significant adverse environmental or economic impacts of increasing fuel burnup to 62 GWd/mtU. Consequently, Duke is proposing that the existing condition in the McGuire and Catawba FOLs be deleted. The 62 GWd/mtU limit is now part of the McGuire and Catawba license bases and is controlled by the NRC SER accompanying the approval of Duke Topical Report DPC-2009-P-A. Additionally, this topical report is listed in the McGuire and Catawba TS 5.6.5, Core Operating Limits Report (COLR), as an analytical method that has been reviewed and approved by the NRC.

Implementation of this LAR at McGuire and Catawba will result in the need to revise both of the station's Updated Final Safety Analysis Reports (UFSAR). Section 4.0 of the McGuire and

Attachment 2

Description of Proposed Changes and Technical Justification

Catawba UFSARs will be revised to include a new discussion of the fuel burnup limit. Permanent revisions to the UFSARs will be made in accordance with 10 CFR 50.71(e), as stated in the discussion of commitments contained in the cover letter for this LAR submittal package. Additionally, following NRC approval of this LAR, Duke will make an administrative revision to Duke Topical Report DPC-NE-2009-P-A, Revision 2. This administrative revision will reference the NRC's approval of this LAR and will reflect removal of the current license condition. Duke will submit this revised topical report to the NRC.

McGuire FOL Section 2.E lists reporting requirements in regard to Maximum Power level, Fire Protection, Protection of the Environment (Unit 2 FOL only), and Physical Protection. FOL Section 2.E requires that McGuire report violations of these requirements by telephone within 24 hours with follow-up written reporting to be made within 14 days. The requirements of FOL Section 2.E are adequately addressed by the reporting requirements contained in 10 CFR 50.72, 10 CFR 50.73, 10 CFR 73, Appendix G, and NPDES as specified below.

Maximum Power Level - 10 CFR 50.72 and 10 CFR 50.73

Fire Protection - 10 CFR 50.72 and 10 CFR 50.73

Protection of the Environment (Unit 2 FOL only) - 10 CFR 50.72 and the NPDES Permit

Physical Protection - 10 CFR 73, Appendix G

As such, McGuire FOL Section 2.E is not needed.

Catawba FOL Section 2.F lists reporting requirements in regard to Maximum Power level, Updated Final Safety Analysis Report, Antitrust Conditions, Fire Protection, and Additional Conditions. FOL Section 2.F requires that Catawba report violations of these requirements by telephone within 24 hours with written follow-up to be made within 30 days. The requirements of FOL Section 2.F are adequately addressed by the reporting requirements contained in 10 CFR 50.59, 10 CFR 50.71, 10 CFR 50.72, and 10 CFR 50.73 as specified below.

Maximum Power Level - 10 CFR 50.72 and 10 CFR 50.73

Updated Final Safety Analysis Report - 10 CFR 50.59 and 10 CFR 50.71

Fire Protection - 10 CFR 50.72 and 10 CFR 50.73

Additional Conditions - 10 CFR 50.72 and 10 CFR 50.73 (Note there are currently no specific reporting requirements listed in the additional conditions contained in Appendix B of the Catawba FOLs.)

As such, Catawba FOL Section 2.F is not needed. Note that the item regarding Antitrust is an administrative issue and has no safety significance. Therefore, it is not of importance in regard to the reporting and notification requirements at issue in the proposed deletion of Catawba FOL Section 2.F.

Applicable Regulatory Requirement/Criteria

The changes which delete an additional condition currently contained in the McGuire and Catawba FOLs are being proposed in accordance with the timeframe contained in the condition itself. The proposed changes delete a condition which limits fuel burnup, consistent with NUREG/CR-6703. This document provides the regulatory basis for extending fuel burnup at nuclear power plants.

The applicable regulatory requirements that are of importance in regard to deleting the reporting requirements from the FOL are listed in the Discussion Section and the References Section of Attachment 2 of this LAR submittal package. These regulations form the basis for justifying the deletion of the redundant reporting requirements from the FOLs.

Precedent Licensing Actions

There are NRC-approved precedent licensing actions for allowing the deletion of FOL Section 2.E (McGuire) and FOL Section 2.F (Catawba). The Beaver Valley Nuclear Power Station, Units 1 and 2 (Amendments 220/97, March 26, 1999), the Wolf Creek Nuclear Power Station FOL (Amendment 141, September 24, 2001), and the

Attachment 2

Description of Proposed Changes and Technical Justification

Fermi 2 Nuclear Facility (Amendment 155, May 16, 2003) FOLs have been amended to make this deletion.

Conclusion

This LAR deletes an existing condition contained in the McGuire and Catawba FOLs in order to permit an increase in the fuel burnup limits for both of these nuclear power plants. This proposed change is consistent with the conclusions reached in a supporting NRC environmental assessment, as well as NRC safety evaluation reports for previous McGuire and Catawba LARs. This application for deletion is also consistent with the expiration timeframe as originally stated in the FOL condition.

This LAR also deletes several reporting requirements from the McGuire and Catawba FOLs. These reporting requirements have been shown to be redundant with other reporting requirements contained in NRC regulations. As such, the affected FOL sections are not needed.

REFERENCES

1. F. Rinaldi, USNRC, Letter to H. B. Barron, Duke, Dated September 22, 1999, SUBJECT: McGuire Nuclear Station Units 1 and 2, Re: Issuance of Amendments (TAC Nos. MA2411 and MA2412).

2. P. S. Tam, USNRC, Letter to G. R. Peterson, Duke, Dated September 22, 1999, SUBJECT: Catawba Nuclear Station Units 1 and 2, Re: Issuance of Amendments (TAC Nos. MA2359 and MA2361).

3. Topical Report DPC-NE-2009-P-A, *Duke Power Company Westinghouse Fuel Transition Report*, Revision 2.

4. M. S. Tuckman, Duke Energy Corporation, Letter to the NRC Document Control Desk Dated September 15, 1999, SUBJECT: McGuire Nuclear Station and Catawba Nuclear Station, Supplement to License Amendment Request for Revisions to the Technical Specifications for Implementation of Westinghouse Fuel as Described in Topical Report DPC-NE-

2009/DPC-NE-2009-P, *Duke Power Company Westinghouse Fuel Transition Report.*

5. NUREG/CR-6703, *Environmental Effects of Extending Fuel Burnup Above 60 GWd/MTU,* Published January 2001.

6. Code of Federal Regulations, 10 CFR 50.72, "Immediate notification requirements for operating nuclear power reactors."

7. Code of Federal Regulations, 10 CFR 50.73, "Licensee event report system."

8. Code of Federal Regulations, Appendix G to 10 CFR 73 - Reportable Safeguards Events.

9. Code of Federal Regulations, 10 CFR 50.59, "Changes, tests, and experiments."

10. Code of Federal Regulations, 10 CFR 50.71, "Maintenance of records, making of reports."

11. National Pollutant Discharge Elimination System.

Attachment 3

No Significant Hazards Consideration Determination

Duke Energy Corporation (Duke) has made the determination that this license amendment request (LAR) involves No Significant Hazards Consideration by applying 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, deletion of the fuel burnup limit currently stated as an additional license condition in the McGuire and Catawba Facility Operating Licenses has no impact on accident probabilities. Further, as determined in the NRC's environmetal assessment which supports the increased burnup limit (NUREG/CR-6703, *Environmental Effects of Extending Fuel Burnup Above 60 GWd/mtU*), the potential environmental consequences of postulated accidents are not expected to increase significantly with increased burnup. Duke concurs with this assessment conclusion for the burnup range in this LAR.

   The deletion of the reporting requirements from the FOLs is solely administrative. No plant equipment or accident analyses will be affected by this deletion.

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, implementation of this amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated. No new accident causal mechanisms will be created as a result of the NRC approval of this LAR. No changes are being made to the plant which will introduce any new accident causal mechanisms. This amendment does not otherwise impact any plant structures, systems, or components that are accident initiators; therefore, no new accident types are being created.

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

   No, margin of safety is related to the confidence in the ability of the fission product barriers to perform their

design functions during and following an accident situation. These barriers include the fuel cladding, the reactor coolant system, and the containment system. These barriers are not significantly affected by the changes proposed in this LAR. The effect of the increased burnup on fuel cladding was considered in the NRC's environmental assessment supporting the increase in the fuel burnup limit. Further, the proposed limit is equal to that approved for the fuel rod cladding at McGuire and Catawba.

The deletion of the reporting requirements from the FOLs is solely administrative in nature. No plant equipment or accident analyses will be affected by this deletion.

The margin of safety is established through the design of the plant structures, systems, components, the parameters within which the plant is operated, and the establishment of the setpoints for the actuation of equipment relied upon to respond to an event, and thereby protect the fission product barriers. The proposed changes have no significant impact on any of these considerations in regard to the physical plant or the manner in which it is operated.

Conclusion

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

Attachment 4

Environmental Assessment/Impact Statement

The proposed license amendment request is supported by a formal NRC environmental assessment as documented in NUREG/CR-6703, *Environmental Effects of Extending Fuel Burnup Above 60 GWd/mtU.* Further, the proposed amendment does not involve a significant hazards consideration (see Attachment 3), nor significantly increase the types and amounts of effluents that may be released offsite, nor significantly 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/Impact Statement.