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MCGUIRE NUCLEAR STATION

RECORD RETENTION # 005893

TECHNICAL SPECIFICATIONS (TS)

AND

TECHNICAL SPECIFICATION BASES

(TSB)

Page 2A of 3B

Date: **05/11/09**

Document Transmittal #: **DUK091310069**

QA CONDITION ☐ Yes ■ No

OTHER ACKNOWLEDGEMENT REQUIRED ■ Yes

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DOCUMENT NO	QA COND	REV #/ DATE	DISTR CODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTAL
TS & TSB MEMORANDUM	NA	--- 04/13/09	MADM-04B	V1	V1	V1	V1	V1	X	V1	V1	V1	V3	V8	V1	V1	V2	V1	47
FOL UNIT 1 NPF-9 AMEND. 245	NA	--- 04/13/09																	
FOL UNIT 2 NPF-17 AMEND. 225	NA	--- 04/13/09																	
TS LIST OF EFFECTIVE PAGES	NA	082 04/13/09																	
TS 3.3.1-2 AMENDMENT 248/228	NA	-- 04/13/09																	
TS 3.3.1-3 AMENDMENT 248/228	NA	-- 04/13/09																	
TS 3.3.1-5 AMENDMENT 250/230	NA	-- 04/13/09																	
TS 3.3.1-6 AMENDMENT 248/228	NA	-- 04/13/09																	
TS 3.3.1-7 AMENDMENT 248/228	NA	-- 04/13/09																	
TS 3.3.1-10 AMENDMENT 248/228	NA	-- 04/13/09																	
TS 3.3.1-11 AMENDMENT 248/228	NA	-- 04/13/09																	
TS 3.3.2-2 AMENDMENT 250/230	NA	-- 04/13/09																	
TS 3.3.2-3 AMENDMENT 248/228	NA	-- 04/13/09																	
TS 3.3.2-4 AMENDMENT 248/228	NA	-- 04/13/09																	
TS 3.3.2-5 AMENDMENT 248/228	NA	-- 04/13/09																	

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RECIPIENT # 00422 PREVIOUSLY COMPLETED

B H HAMILTON
VICE PRESIDENT
MCGUIRE NUCLEAR STATION

BY:

B C BEAVER MG01RC BCB/TLC

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TS 3.3.2-8 AMENDMENT 250/230	NA	-- 04/13/09	MADM-04B	V1	V1	V1	V1	V1	X	V1	V1	V1	V3	V8	V1	V1	V2	V1	47
TS 3.7.9-1 AMENDMENT 249/229	NA	-- 04/17/09																	
TS 3.7.9-2 AMENDMENT 249/229	NA	-- 04/17/09																	
TS 3.7.9-3 AMENDMENT 249/229	NA	-- 04/17/09																	
TS 5.5-14 AMENDMENT 249/229	NA	-- 04/17/09																	
TS 5.5-15 AMENDMENT 249/229	NA	-- 04/17/09																	

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B H HAMILTON
VICE PRESIDENT
MCGUIRE NUCLEAR STATION

BY:

B C BEAVER MG01RC BCB/TLC

April 13, 2009

MEMORANDUM

To: All McGuire Nuclear Station Technical Specification (TS) Manual Holders

Subject: McGuire Technical Specifications Updates

IMPORTANT NOTE: Included in this distribution, is a **new copy of the Unit 1 and Unit 2 Facility Operating License (FOL).** You should already have the FOLs filed in the front of your Technical Specification's Book. Please **remove** your Unit 1 and Unit 2 copies and **replace** them with the Unit 1 and Unit 2 copies provided with this package.

REMOVE	INSERT
TS List of Affected Pages (entire doc)	TS List of Affected Pages (entire doc) Rev 82
TS 3.3.1	
Page: 3.3.1-2	Page: 3.3.1-2 (Amendment 248/228)
Page: 3.3.1-3	Page: 3.3.1-3 (Amendment 248/228)
Page: 3.3.1-5	Page: 3.3.1-5 (Amendment 250/230)
Page: 3.3.1-6	Page: 3.3.1-6 (Amendment 248/228)
Page: 3.3.1-7	Page: 3.3.1-7 (Amendment 248/228)
Page: 3.3.1-10	Page: 3.3.1-10 (Amendment 248/228)
Page: 3.3.1-11	Page: 3.3.1-11 (Amendment 248/228)
TS 3.3.2	
Page: 3.3.2-2	Page: 3.3.2-2 (Amendment 250/230)
Page: 3.3.2-3	Page: 3.3.2-3 (Amendment 248/228)
Page: 3.3.2-4	Page: 3.3.2-4 (Amendment 248/228)
Page: 3.3.2-5	Page: 3.3.2-5 (Amendment 248/228)
Page: 3.3.2-8	Page: 3.3.2-8 (Amendment 250/230)
TS 3.7.9	
Page: 3.7.9-1	Page: 3.7.9-1 (Amendment 249/229)
Page: 3.7.9-2	Page: 3.7.9-2 (Amendment 249/229)
Page: 3.7.9-3	Page: 3.7.9-3 (Amendment 249/229)
TS 5.5	
Page: 5.5-14	Page: 5.5-14 (Amendment 249/229)
Page: 5.5-15	Page: 5.5-15 (Amendment 249/229)

Revision numbers may skip numbers due to Regulatory Compliance Filing System.

Please call me if you have questions.

Bonnie Beaver

Bonnie Beaver
Regulatory Compliance
875-4180

DUKE ENERGY CAROLINAS, LLC

DOCKET NO. 50-369

MCGUIRE NUCLEAR STATION, UNIT 1

RENEWED FACILITY OPERATING LICENSE

Renewed License No. NPF-9

1. The U.S. Nuclear Regulatory Commission (Commission), having previously made the findings set forth in License No. NPF-9 issued on June 12, 1981, has now found that:

   A. The application for renewed operating license filed by the Duke Energy Corporation* complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;

   B. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1), and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21 (c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the McGuire Nuclear Station, Unit 1 (facility or plant), and that any changes made to the plant's current licensing basis in order to comply with 10 CFR 54.29(a) are in accord with the Act and the Commission's regulations;

   C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;

   D. There is reasonable assurance: (i) that the activities authorized by this renewed operating license 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;

   E. The licensee is technically and financially qualified to engage in the activities authorized by this renewed operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

---

* Duke Energy Corporation converted to Duke Power Company LLC on April 3, 2006 and was re-named Duke Energy Carolinas, LLC as of October 1, 2006. Duke Energy Carolinas, LLC is the owner and operator of McGuire Nuclear Station, Unit 1. References to the "licensee" or "Duke" are to Duke Energy Carolinas, LLC.

F. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;

G. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;

H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Renewed Facility Operating License No. NFP-9 is in accordance with 10 CFR Part 51, of the Commission's regulations and all applicable requirements have been satisfied; and,

I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this renewed operating license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.

2. Based on the foregoing findings, and pursuant to approval by the Nuclear Regulatory Commission at a meeting on June 9, 1981, the License for Fuel-Loading and Zero Power Testing issued on January 23, 1981, as amended, is superseded by Renewed Facility Operating License No. NPF-9 which is hereby issued to Duke Energy Carolinas, LLC to read as follows:

A. This renewed operating license applies to the McGuire Nuclear Station, Unit 1, a pressurized water reactor and associated equipment (the facility) owned and operated by Duke Energy Carolinas, LLC. The facility is located on the licensee's site in Mecklenburg County, North Carolina, on the shore of Lake Norman approximately 17 miles northwest of Charlotte, North Carolina and is described in the Updated Final Safety Analysis Report, as supplemented and amended, and in the Environmental Report, as supplemented and amended.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Duke Energy Carolinas, LLC:

(1) Pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in Mecklenburg County, North Carolina, in accordance with the procedures and limitations set forth in the renewed operating license;

(2) Pursuant to the Act and 10 CFR Part 70 to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended;

(3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;

(5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproducts and special nuclear materials as may be produced by the operation of McGuire Nuclear Station, Units 1 and 2, and;

(6) Pursuant to the Act and 10 CFR Parts 30 and 40, to receive, possess and process for release or transfer such byproduct material as may be produced by the Duke Training and Technology Center.

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at a reactor core full steady state power level of 3411 megawatts thermal (100%).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 250, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on December 16, 2002, describes certain future activities to be completed before the period of extended operation. Duke shall complete these activities no later than June 12, 2021, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on December 16, 2002, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following issuance of this renewed operating license. Until that update is complete, Duke may make changes to the programs described in such supplement without prior Commission approval, provided that Duke evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

(4) Fire Protection Program

Duke Energy Carolinas, LLC 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 Carolinas, LLC shall operate the facility in accordance with the Additional Conditions.

(6) Antitrust Conditions

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

(7) Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

A) Fire fighting response strategy with the following elements:
   1. Pre-defined coordinated fire response strategy and guidance
   2. Assessment of mutual aid fire fighting assets
   3. Designated staging areas for equipment and materials
   4. Command and control
   5. Training of response personnel

B) Operations to mitigate fuel damage considering the following:
   1. Protection and use of personnel assets
   2. Communications
   3. Minimizing fire spread
   4. Procedures for implementing integrated fire response strategy
   5. Identification of readily-available pre-staged equipment
   6. Training on integrated fire response strategy
   7. Spent fuel pool mitigation measures

C) Actions to minimize release to include consideration of:
   1. Water spray scrubbing
   2. Dose to onsite responders

D. Physical Protection

Duke Energy Carolinas, LLC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification and safeguards contingency 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 combined set of plans, which contains safeguards information protected under 10 CFR 73.21, is entitled: "Duke Energy Physical Security Plan" submitted by letter dated September 8, 2004, and supplemented on September 30, 2004, October 15, 2004, October 21, 2004, and October 27, 2004.

E. Deleted by Amendment No. 233.

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. 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.

3. This renewed operating license is effective as of the date of issuance and shall expire at midnight on June 12, 2041.

FOR THE NUCLEAR REGULATORY COMMISSION

J.E. Dyer, Director
Office of Nuclear Reactor Regulation

Attachment:
1. Appendix A - Technical Specifications
2. Appendix B - Additional Conditions
3. Appendix C - Antitrust Conditions

Date of Issuance: December 5, 2003

APPENDIX B

ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. NPF-9

Duke Energy Carolinas, LLC 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

APPENDIX B

ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. NPF-9

Duke Power Power Company LLC shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Conditions	Implementation Date
249	Upon implementation of the Amendment adopting TSTF-448, Revision 3, the determination of control room envelope (CRE) unfiltered inleakage as required by SR 3.7.9.4, in accordance with TS 5.5.16.c.(i), the assessment of CRE habitability as required by TS 5.5.16.c.(ii), and the measurement of CRE pressure as required by TS 5.5.16.d, shall be considered met. Following implementation: (a) The first performance of SR 3.7.9.4 in accordance with TS 5.5.16.c.(i), shall be within the specified Frequency of 6 years, plus the 18 month allowance of SR 3.0.2, as measured from October 2003, the date of the most recent successful tracer gas test, as stated in the February 19, 2004 letter response to Generic Letter 2003-01, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years. (b) The first performance of the periodic assessment of CRE habitability, TS 5.5.16.c.(ii), shall be within 3 years, plus the 9 month allowance of SR 3.0.2 as measured from October 2003, the date of the most recent successful tracer gas test, as stated in the February 19, 2004 letter response to Generic Letter 2003-01, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years. (c) The first performance of the periodic measurement of CRE pressure, TS 5.5.16.d, shall be within 18 months, plus the 138 days allowed by SR 3.0.2, as measured from January 2007, the date of the most recent successful pressure measurement test, or within 138 days if not performed previously.	See Condition

APPENDIX C

ANTITRUST CONDITIONS

Pursuant to an Order by the Atomic Safety and Licensing Board, dated April 23, 1975, the Nuclear Regulatory Commission incorporates in Renewed Operating License NPF-9 the following antitrust conditions:

a. The licensee makes the commitments contained herein, recognizing that bulk power supply arrangements between neighboring entities normally tend to serve the public interest. In addition, where there are net benefits to all participants such arrangements also serve the best interests of each of the participants. Among the benefits of such transactions are increased electric system reliability, a reduction in the cost of electric power, and minimization of the environmental effects of the production and sale of electricity.

   Any particular bulk power supply transaction may afford greater benefits to one participant than to another. The benefits realized by a small system may be proportionately greater than those realized by a larger system. The relative benefits to be derived by the parties from a proposed transaction, however, should not be controlling upon a decision with respect to the desirability of participating in the transaction. Accordingly, the licensee will enter into proposed bulk power transactions of the types hereinafter described which, on balance, provide net benefits to the licensee. There are net benefits in a transaction if the licensee recovers the cost of the transaction, (as defined in subparagraph (1)(d) hereof) and there is no demonstrable net detriment to the licensee arising from the transaction.

(1) As used herein:

   (a) "Bulk Power" means electric power and any attendant energy, supplied or made available at transmission or sub-transmission voltage by one electric system to another.

   (b) "Neighboring Entity" means a private or public corporation, a governmental agency or authority, a municipality, a cooperative, or a lawful association of any of the foregoing owning or operating, or proposing to own or operate, facilities for the generation and transmission of electricity which meets each of the following criteria: (1) its existing or proposed facilities are economically and technically feasible of interconnection with those of the licensee and (2) with the exception of municipalities, cooperatives, governmental agencies or authorities, and associations, it is, or upon commencement of operations will be, a public utility and subject to regulation with respect to rates and service under the laws of North Carolina or South Carolina or under the Federal Power Act; provided, however, that as to associations, each member of such association is either a public utility as discussed in this clause (2) or a municipality, a cooperative or

a governmental agency or authority.

(c) Where the phrase "neighboring entity" is intended to include entities engaging or proposing to engage only in the distribution of electricity, this is indicated by adding the phrase "including distribution systems."

(d) "Cost" means any appropriate operating and maintenance expenses, together with all other costs, including a reasonable return on the licensee's investment, which are reasonably allocable to a transaction. However, no value shall be included for loss of revenue due to the loss of any wholesale or retail customer as a result of any transaction hereafter described.

(2) (a) The licensee will interconnect and coordinate reserves by means of the sale and exchange of emergency and scheduled maintenance bulk power with any neighboring entity(ies), when there are net benefits to each party, on terms that will provide for all of the licensee's properly assignable costs as may be determined by the Federal Energy Regulatory Commission and consistent with such cost assignment will allow the other party the fullest possible benefits of such coordination.

(b) Emergency service and/or scheduled maintenance service to be provided by each party will be furnished to the fullest extent available from the supplying party and desired by the party in need. The licensee and each party will provide to the other emergency service and/or scheduled maintenance service if and when available from its own generation and, in accordance with recognized industry practice, from generation of other to the extent it can do so without impairing service to its customers, including other electric systems to whom it has firm commitments.

(c) Each party to a reserve coordination arrangement will establish its own reserve criteria, but in no event shall the minimum installed reserve on each system be less than 15%, calculated as a percentage of estimated peak load responsibility. Either party, if it has, or has firmly planned, installed reserves in excess of the amount called for by its own reserve criterion, will offer any such excess as may in fact be available at the time for which it is sought and for such period as the selling party shall determine for purchase in accordance with reasonable industry practice by the other party to meet such other party's own reserve requirements. The parties will provide such amounts of spinning reserve as may be adequate to avoid the imposition of unreasonable demands on the other part(ies) in meeting the normal contingencies of operating its (their) system(s). However, in no circumstances shall such spinning reserve requirement exceed the installed reserve requirement.

(d) Interconnections will not be limited to low voltages when higher voltages are available from the licensee's installed facilities in the area where interconnection is desired and when the proposed arrangement is found to be technically and economically feasible.

(e) Interconnection and reserve coordination agreements will not embody provisions which impose limitations upon the use or resale of power and energy sold or exchanged pursuant to the agreement. Further, such arrangements will not prohibit the participants from entering into other interconnection and coordination arrangements, but may include appropriate provisions to assure that (i) the licensee receives adequate notice of such additional interconnection or coordination, (ii) the parties will jointly consider and agree upon such measures, if any, as are reasonably necessary to protect the reliability of the interconnected systems and to prevent undue burdens from being imposed on any system, and (iii) the licensee will be fully compensated for its costs. Reasonable industry practice as developed in the area from time to time will satisfy this provision.

(3) The licensee currently has on file, and may hereafter file, with the Federal Energy Regulatory Commission contracts with neighboring entity(ies) providing for the sale and exchange of short-term power and energy, limited term power and energy, economy energy, non-displacement energy, and emergency capacity and energy. The Licensee will enter into contracts providing for the same or for like transactions with any neighboring entity on terms which enable the licensee to recover the full costs allocable to such transaction.

(4) The licensee currently sells capacity and energy in bulk on a full requirements basis to several entities engaging in the distribution of electric power at retail. In addition, the licensee supplies electricity directly to ultimate users in a number of municipalities. Should any such entity(ies) or municipality(ies) desire to become a neighboring entity as defined in subparagraph (1)(b) hereof (either alone or through combination with others), the licensee will assist in facilitating the necessary transition through the sale of partial requirements firm power and energy to the extent that, except for such transition, the licensee would otherwise be supplying firm power and energy. The provision of such firm partial requirements service shall be under such rates, terms and conditions as shall be found by the Federal Energy Regulatory Commission to provide for the recovery of the licensee's cost. The licensee will sell capacity and energy in bulk on a full requirements basis to any municipality currently served by the licensee when such municipality lawfully engages in the distribution of electric power at retail.

(5) (a) The licensee will facilitate the exchange of electric power in bulk in wholesale transactions over its transmission facilities (1) between or

among two or more neighboring entities including distribution systems with which it is interconnected or may be interconnected in the future, and (2) between any such entity(ies) and any other electric system engaging in bulk power supply between whose facilities the licensee's transmission lines and other transmission lines would form a continuous electric path, provided that permission to utilize such other transmission lines has been obtained. Such transaction shall be undertaken provided that the particular transaction reasonably can be accommodated by the licensee's transmission system from a functional and technical standpoint and does not constitute the wheeling of power to a retail customer. Such transmission shall be on terms that fully compensate the licensee for its cost. Any entity(ies) requesting such transmission arrangements shall give reasonable notice of its (their) schedule and requirements.

(b) The licensee will include in its planning and construction program sufficient transmission capacity as required for the transactions referred to in subparagraph (a) of this paragraph, provided that (1) the neighboring entity(ies) gives the licensee sufficient advance notice as may be necessary reasonably to accommodate its (their) requirements from a functional and technical standpoint and (2) that such entity(ies) fully compensate the licensee for its cost. In carrying out this subparagraph (b), however, the licensee shall not be required to construct or add transmission facilities which (a) will be of no demonstrable present or future benefit to the licensee, or (b) which could be constructed by the requesting entity(ies) without duplicating any portion of the licensee's existing transmission lines, or (c) which would jeopardize the licensee's ability to finance or construct on reasonable terms facilities needed to meet its own anticipated system requirements. Where regulatory or environmental approvals are required for the construction or addition of transmission facilities needed for the transactions referred to in subparagraph (a) of this paragraph it shall be the responsibility of the entity(ies) seeking the transaction to participate in obtaining such approvals, including sharing in the cost thereof.

(6) To increase the possibility of achieving greater reliability and economy of electric generation and transmission facilities, the licensee will discuss load projections and system development plans with any neighboring entity(ies).

(7) When the licensee's plans for future nuclear generating units (for which application will hereafter be made to the Nuclear Regulatory commission) have reached the stage of serious planning, but before firm decisions have been made as to the size and desired completion date of the proposed nuclear units, the licensee will notify all neighboring entities including distribution systems with peak loads smaller than the licensee's that the licensee plans to construct such

nuclear units. Neither the timing nor the information provided need be such as to jeopardize obtaining the required site at the lowest possible cost.

(8) The foregoing commitments shall be implemented in a manner consistent with the provisions of the Federal Power Act and all other lawful local, state and Federal regulation and authority. Nothing in these commitments is intended to determine in advance the resolution of issues which are properly raised at the Federal Energy Regulatory Commission concerning such commitments, including allocation of costs or the rates to be charged. The licensee will negotiate (including the execution of a contingent statement of intent) with respect to the foregoing commitments with any neighboring entity including distribution systems where applicable engaging in or proposing to engage in bulk power supply transactions, but the licensee shall not be required to enter into any final arrangement prior to resolution of any substantial questions as to the lawful authority of an entity to engage in the transactions.

In addition, the licensee shall not be obligated to enter into a given bulk power supply transaction if: (1) to do so would violate, or incapacitate it from performing, and existing lawful contracts it has with a third party; (2) there is contemporaneously available to it a competing or alternate arrangement which affords it greater benefits which would be mutually exclusive of such arrangement; (3) to do so would adversely affect its system operations or the reliability of power supply to its customers, or (4) if to do so would jeopardize the licensee's ability to finance or construct on reasonable terms facilities needed to meet its own anticipated system requirements.

DUKE ENERGY CAROLINAS, LLC

DOCKET NO. 50-370

MCGUIRE NUCLEAR STATION, UNIT 2

RENEWED FACILITY OPERATING LICENSE

Renewed License No. NPF-17

1. The U.S. Nuclear Regulatory Commission (Commission), having previously made the findings set forth in License No. NPF-17 issued on March 3, 1983, has now found that:

   A. The application for renewed operating license filed by the Duke Energy Corporation* complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;

   B. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1), and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21 (c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the McGuire Nuclear Station, Unit 2 (facility or plant), and that any changes made to the plant's current licensing basis in order to comply with 10 CFR 54.29(a) are in accord with the Act and the Commission's regulations;

   C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;

   D. There is reasonable assurance: (i) that the activities authorized by this renewed operating license 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;

   E. The licensee is technically qualified to engage in the activities authorized by this renewed operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

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* Duke Energy Corporation converted to Duke Power Company LLC on April 3, 2006 and was re-named Duke Energy Carolinas, LLC as of October 1, 2006. Duke Energy Carolinas, LLC is the owner and operator of McGuire Nuclear Station, Unit 2. References to the "licensee" or "Duke" are to Duke Energy Carolinas, LLC.

F. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

G. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;

H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Renewed Facility Operating License No. NPF-17 is in accordance with 10 CFR Part 51, of the Commission's regulations and all applicable requirements have been satisfied; and,

I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this renewed operating license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.

2. Based on the foregoing findings and the Initial Decisions issued by the Atomic Safety and Licensing Board dated April 18, 1979, and May 26, 1981, and the Decision of the Atomic Safety and Licensing Appeal Board dated March 30, 1982, regarding this facility, Renewed Facility Operating License No. NPF-17 is hereby issued to Duke Energy Carolinas, LLC to read as follows:

A. This renewed operating license applies to the McGuire Nuclear Station, Unit 2, a pressurized water reactor and associated equipment (the facility) owned and operated by Duke Energy Carolinas, LLC. The facility is located on the site in Mecklenburg County, North Carolina, on the shore of Lake Norman approximately 17 miles northwest of Charlotte, North Carolina, and is described in the Updated Final Safety Analysis Report, as supplemented and amended, and in the Environmental Report, as supplemented and amended.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Duke Energy Carolinas, LLC:

(1) Pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in Mecklenburg County, North Carolina, in accordance with the procedures and limitations set forth in this renewed operating license;

(2) Pursuant to the Act and 10 CFR Part 70 to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended;

(3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;

(5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproducts and special nuclear materials as may be produced by the operation of McGuire Nuclear Station, Units 1 and 2; and,

(6) Pursuant to the Act and 10 CFR Parts 30 and 40, to receive, possess and process for release or transfer such byproduct material as may be produced by the Duke Training and Technology Center.

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at a reactor core full steady state power level of 3411 megawatts thermal (100%).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 230, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on December 16, 2002, describes certain future activities to be completed before the period of extended operation. Duke shall complete these activities no later than March 3, 2023, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on December 16, 2002, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following issuance of this renewed operating license. Until that update is complete, Duke may make changes to the programs described in such supplement without prior Commission approval, provided that Duke evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59, and otherwise complies with the requirements in that section.

(4) Fire Protection Program

Duke Energy Carolinas, LLC 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 provisions:

The licensee 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) Protection of the Environment

Before engaging in additional construction or operational activities which may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the Final Environmental Statement dated April 1976, the licensee shall provide written notification to the Office of Nuclear Reactor Regulation.

(6) Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. 181, are hereby incorporated into this renewed operating license. Duke Energy Carolinas, LLC shall operate the facility in accordance with the Additional Conditions.

(7) Antitrust Conditions

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

(8) Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

A) Fire fighting response strategy with the following elements:
   1. Pre-defined coordinated fire response strategy and guidance
   2. Assessment of mutual aid fire fighting assets
   3. Designated staging areas for equipment and materials
   4. Command and control
   5. Training of response personnel

B) Operations to mitigate fuel damage considering the following:
   1. Protection and use of personnel assets
   2. Communications
   3. Minimizing fire spread

4. Procedures for implementing integrated fire response strategy
5. Identification of readily-available pre-staged equipment
6. Training on integrated fire response strategy
7. Spent fuel pool mitigation measures

C) Actions to minimize release to include consideration of:
1. Water spray scrubbing
2. Dose to onsite responders

D. Physical Protection

Duke Energy Carolinas, LLC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification and safeguards contingency 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 combined set of plans, which contains safeguards information protected under 10 CFR 73.21, is entitled: "Duke Energy Physical Security Plan" submitted by letter dated September 8, 2004, and supplemented on September 30, 2004, October 15, 2004, October 21, 2004, and October 27, 2004.

E. Deleted by Amendment No. 215.

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.

3. This renewed operating license is effective as of the date of issuance and shall expire at midnight on March 3, 2043.

FOR THE NUCLEAR REGULATORY COMMISSION

J.E. Dyer, Director
Office of Nuclear Reactor Regulation

Attachment:
1. Appendix A - Technical Specifications
2. Appendix B - Additional Conditions
3. Appendix C - Antitrust Conditions

Date of Issuance: December 5, 2003

APPENDIX B

ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. NPF-17

Duke Energy Carolinas, LLC 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

APPENDIX B

ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. NPF-17

Duke Power Power Company LLC shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Conditions	Implementation Date
229	Upon implementation of the Amendment adopting TSTF-448, Revision 3, the determination of control room envelope (CRE) unfiltered inleakage as required by SR 3.7.9.4, in accordance with TS 5.5.16.c.(i), the assessment of CRE habitability as required by TS 5.5.16.c.(ii), and the measurement of CRE pressure as required by TS 5.5.16.d, shall be considered met. Following implementation: (a) The first performance of SR 3.7.9.4 in accordance with TS 5.5.16.c.(i), shall be within the specified Frequency of 6 years, plus the 18 month allowance of SR 3.0.2, as measured from October 2003, the date of the most recent successful tracer gas test, as stated in the February 19, 2004 letter response to Generic Letter 2003-01, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years. (b) The first performance of the periodic assessment of CRE habitability, TS 5.5.16.c.(ii), shall be within 3 years, plus the 9 month allowance of SR 3.0.2 as measured from October 2003, the date of the most recent successful tracer gas test, as stated in the February 19, 2004 letter response to Generic Letter 2003-01, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years. (c) The first performance of the periodic measurement of CRE pressure, TS 5.5.16.d, shall be within 18 months, plus the 138 days allowed by SR 3.0.2, as measured from January 2007, the date of the most recent successful pressure measurement test, or within 138 days if not performed previously.	See Condition

APPENDIX C

ANTITRUST CONDITIONS

Pursuant to an Order by the Atomic Safety and Licensing Board, dated April 23, 1975, the Nuclear Regulatory Commission incorporates in Operating License NPF-17 the following antitrust conditions:

a. The licensee makes the commitments contained herein, recognizing that bulk power supply arrangements between neighboring entities normally tend to serve the public interest. In addition, where there are net benefits to all participants such arrangements also serve the best interests of each of the participants. Among the benefits of such transactions are increased electric system reliability, a reduction in the cost of electric power, and minimization of the environmental effects of the production and sale of electricity.

   Any particular bulk power supply transaction may afford greater benefits to one participant than to another. The benefits realized by a small system may be proportionately greater than those realized by a larger system. The relative benefits to be derived by the parties from a proposed transaction, however, should not be controlling upon a decision with respect to the desirability of participating in the transaction. Accordingly, the licensee will enter into proposed bulk power transactions of the types hereinafter described which, on balance, provide net benefits to the licensee. There are net benefits in a transaction if the licensee recovers the cost of the transaction (as defined in subparagraph (1)(d) hereof) and there is no demonstrable net detriment to the licensee arising from the transaction.

(1) As used herein:

   (a) "Bulk Power" means electric power and any attendant energy, supplied or made available at transmission or sub-transmission voltage by one electric system to another.

   (b) "Neighboring Entity" means a private or public corporation, a governmental agency or authority, a municipality, a cooperative, or a lawful association of any of the foregoing owning or operating, or proposing to own or operate, facilities for the generation and transmission of electricity which meets each of the following criteria: (1) its existing or proposed facilities are economically and technically feasible of interconnection with those of the licensee and (2) with the exception of municipalities, cooperatives, governmental agencies or authorities, and associations, it is, or upon commencement of operations will be, a public utility and subject to regulation with respect to rates and service under the laws of North Carolina or South Carolina or under the Federal Power Act; provided, however, that as to associations, each member of such association is either a public utility as discussed in this clause (2) or

a municipality, a cooperative or a governmental agency or authority.

(c) Where the phrase "neighboring entity" is intended to include entities engaging or proposing to engage only in the distribution of electricity, this is indicated by adding the phrase "including distribution systems."

(d) "Cost means any appropriate operating and maintenance expenses, together with all other costs, including a reasonable return on the licensee's investment, which are reasonably allocable to a transaction. However, no value shall be included for loss of revenue due to the loss of any wholesale or retail customer as a result of any transaction hereafter described.

(2) (a) The licensee will interconnect and coordinate reserves by means of the sale and exchange of emergency and scheduled maintenance bulk power with any neighboring entity(ies), when there are net benefits to each party, on terms that will provide for all of the licensee's properly assignable costs as may be determined by the Federal Energy Regulatory Commission and consistent with such cost assignment will allow the other party the fullest possible benefits of such coordination.

(b) Emergency service and/or scheduled maintenance service to be provided by each party will be furnished to the fullest extent available from the supplying party and desired by the party in need. The licensee and each party will provide to the other emergency service and/or scheduled maintenance service if and when available from its own generation and, in accordance with recognized industry practice, from generation of other to the extent it can do so without impairing service to its customers, including other electric systems to whom it has firm commitments.

(c) Each party to a reserve coordination arrangement will establish its own reserve criteria, but in no event shall the minimum installed reserve on each system be less than 15%, calculated as a percentage of estimated peak load responsibility. Either party, if it has, or has firmly planned, installed reserves in excess of the amount called for by its own reserve criterion, will offer any such excess as may in fact be available at the time for which it is sought and for such period as the selling party shall determine for purchase in accordance with reasonable industry practice by the other party to meet such other party's own reserve requirements. The parties will provide such amounts of spinning reserve as may be adequate to avoid the imposition of unreasonable demands on the other part(ies) in meeting the normal contingencies of operating its (their) system(s). However, in no circumstances shall such spinning reserve requirement exceed the installed reserve requirement.

(d) Interconnections will not be limited to low voltages when higher voltages are

available from the licensee's installed facilities in the area where interconnection is desired and when the proposed arrangement is found to be technically and economically feasible.

(e) Interconnection and reserve coordination agreements will not embody provisions which impose limitations upon the use or resale of power and energy sold or exchanged pursuant to the agreement. Further, such arrangements will not prohibit the participants from entering into other interconnection and coordination arrangements, but may include appropriate provisions to assure that (i) the licensee receives adequate notice of such additional interconnection or coordination, (ii) the parties will jointly consider and agree upon such measures, if any, as are reasonably necessary to protect the reliability of the interconnected systems and to prevent undue burdens from being imposed on any system, and (iii) the licensee will be fully compensated for its costs. Reasonable industry practice as developed in the area from time to time will satisfy this provision.

(3) The licensee currently has on file, and may hereafter file, with the Federal Energy Regulatory Commission contracts with neighboring entity(ies) providing for the sale and exchange of short-term power and energy, limited term power and energy, economy energy, non- displacement energy, and emergency capacity and energy. The Licensee will enter into contracts providing for the same or for like transactions with any neighboring entity on terms which enable the licensee to recover the full costs allocable to such transaction.

(4) The licensee currently sells capacity and energy in bulk on a full requirements basis to several entities engaging in the distribution of electric power at retail. In addition, the licensee supplies electricity directly to ultimate users in a number of municipalities. Should any such entity(ies) or municipality(ies) desire to become a neighboring entity as defined in subparagraph (1)(b) hereof (either alone or through combination with others), the licensee will assist in facilitating the necessary transition through the sale of partial requirements firm power and energy to the extent that, except for such transition, the licensee would otherwise be supplying firm power and energy. The provision of such firm partial requirements service shall be under such rates, terms and conditions as shall be found by the Federal Energy Regulatory Commission to provide for the recovery of the licensee's cost. The licensee will sell capacity and energy in bulk on a full requirements basis to any municipality currently served by the licensee when such municipality lawfully engages in the distribution of electric power at retail.

(5) (a) The licensee will facilitate the exchange of electric power in bulk in wholesale transactions over its transmission facilities (1) between or among two or more neighboring entities including distribution systems with which it is interconnected or may be interconnected in the future, and (2) between any such entity(ies) and any other electric system engaging in bulk power supply between whose facilities the licensee's transmission

lines and other transmission lines would form a continuous electric path, provided that permission to utilize such other transmission lines has been obtained. Such transaction shall be undertaken provided that the particular transaction reasonably can be accommodated by the licensee's transmission system from a functional and technical standpoint and does not constitute the wheeling of power to a retail customer. Such transmission shall be on terms that fully compensate the licensee for its cost. Any entity(ies) requesting such transmission arrangements shall give reasonable notice of its (their) schedule and requirements.

(b) The licensee will include in its planning and construction program sufficient transmission capacity as required for the transactions referred to in subparagraph (a) of this paragraph, provided that (1) the neighboring entity(ies) gives the licensee sufficient advance notice as may be necessary reasonably to accommodate its (their) requirements from a functional and technical standpoint and (2) that such entity(ies) fully compensate the licensee for its cost. In carrying out this subparagraph (b), however, the licensee shall not be required to construct or add transmission facilities which (a) will be of no demonstrable present or future benefit to the licensee, or (b) which could be constructed by the requesting entity(ies) without duplicating any portion of the licensee's existing transmission lines, or (c) which would jeopardize the licensee's ability to finance or construct on reasonable terms facilities needed to meet its own anticipated system requirements. Where regulatory or environmental approvals are required for the construction or addition of transmission facilities needed for the transactions referred to in subparagraph (a) of this paragraph it shall be the responsibility of the entity(ies) seeking the transaction to participate in obtaining such approvals, including sharing in the cost thereof.

(6) To increase the possibility of achieving greater reliability and economy of electric generation and transmission facilities, the licensee will discuss load projections and system development plans with any neighboring entity(ies).

(7) When the licensee's plans for future nuclear generating units (for which application will hereafter be made to the Nuclear Regulatory commission) have reached the stage of serious planning, but before firm decisions have been made as to the size and desired completion date of the proposed nuclear units, the licensee will notify all neighboring entities including distribution systems with peak loads smaller than the licensee's that the licensee plans to construct such nuclear units. Neither the timing nor the information provided need be such as to jeopardize obtaining the required site at the lowest possible cost.

The foregoing commitments shall be implemented in a manner consistent with the provisions of the Federal Power Act and all other lawful local, state and Federal regulation and authority. Nothing in these commitments is intended to determine in advance the resolution of issues which are properly raised at the Federal Energy Regulatory Commission concerning such commitments,

including allocation of costs or the rates to be charged. The licensee will negotiate (including the execution of a contingent statement of intent) with respect to the foregoing commitments with any neighboring entity including distribution systems where applicable engaging in or proposing to engage in bulk power supply transactions, but the licensee shall not be required to enter into any final arrangement prior to resolution of any substantial questions as to the lawful authority of an entity to engage in the transactions.

In addition, the licensee shall not be obligated to enter into a given bulk power supply transaction if: (1) to do so would violate, or incapacitate it from performing, and existing lawful contracts it has with a third party; (2) there is contemporaneously available to it a competing or alternate arrangement which affords it greater benefits which would be mutually exclusive of such arrangement; (3) to do so would adversely affect its system operations or the reliability of power supply to its customers, or (4) if to do so would jeopardize the licensee's ability to finance or construct on reasonable terms facilities needed to meet its own anticipated system requirements.

McGuire Nuclear Station Technical Specifications
LOEP

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ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. One channel inoperable.	----------NOTE---------- One channel may be bypassed for up to 12 hours for surveillance testing and setpoint adjustment. ----------	
	D.1.1 ----------NOTE---------- Only required to be performed when the Power Range Neutron Flux input to QPTR is inoperable ----------	
	Perform SR 3.2.4.2	12 hours from discovery of THERMAL POWER > 75% RTP AND Once per 12 hours thereafter
	AND	
	D.1.2 Place channel in trip.	72 hours
	OR	
	D.2 Be in MODE 3.	78 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. One channel inoperable.	----------NOTE---------- One channel may be bypassed for up to 12 hours for surveillance testing. ---------- E.1 Place channel in trip. OR E.2 Be in MODE 3.	 72 hours 78 hours
F. THERMAL POWER > P-6 and < P-10, one Intermediate Range Neutron Flux channel inoperable.	F.1 Reduce THERMAL POWER to < P-6. OR F.2 Increase THERMAL POWER to > P-10.	24 hours 24 hours
G. THERMAL POWER > P-6 and < P-10, two Intermediate Range Neutron Flux channels inoperable.	----------NOTE---------- Limited boron concentration changes associated with RCS inventory control or limited plant temperature changes are allowed. ---------- G.1 Suspend operations involving positive reactivity additions. AND G.2 Reduce THERMAL POWER to < P-6.	 Immediately 2 hours
H. THERMAL POWER < P-6, one or two Intermediate Range Neutron Flux channels inoperable.	H.1 Restore channel(s) to OPERABLE status.	Prior to increasing THERMAL POWER to > P-6

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
M. One channel inoperable.	----------NOTE---------- One channel may be bypassed for up to 12 hours for surveillance testing. ----------	
	M.1 Place channel in trip.	72 hours
	OR	
	M.2 Reduce THERMAL POWER to < P-7.	78 hours
N. One Reactor Coolant Flow - Low (Single Loop) channel inoperable.	----------NOTE---------- One channel may be bypassed for up to 12 hours for surveillance testing. ----------	
	N.1 Place channel in trip.	72 hours
	OR	
	N.2 Reduce THERMAL POWER to < P-8.	76 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
O. One Turbine Trip - Low Fluid Oil Pressure channel inoperable.	----------NOTE---------- One channel may be bypassed for up to 12 hours for surveillance testing. ----------	
	O.1 Place channel in trip.	72 hours
	OR	
	O.2 Reduce THERMAL POWER to < P-8.	76 hours
P. One or more Turbine Trip - Turbine Stop Valve Closure channels inoperable.	P.1 Place channel(s) in trip.	72 hours
	OR	
	P.2 Reduce THERMAL POWER to < P-8.	76 hours
Q. One train inoperable.	----------NOTE---------- One train may be bypassed for up to 4 hours for surveillance testing provided the other train is OPERABLE. ----------	
	Q.1 Restore train to OPERABLE status.	24 hours
	OR	
	Q.2 Be in MODE 3.	30 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
R. One RTB train inoperable.	----------NOTE---------- One train may be bypassed for up to 4 hours for surveillance testing, provided the other train is OPERABLE. ----------	
	R.1 Restore train to OPERABLE status.	24 hours
	OR	
	R.2 Be in MODE 3.	30 hours
S. One or more channel(s) inoperable.	S.1 Verify interlock is in required state for existing unit conditions.	1 hour
	OR	
	S.2 Be in MODE 3.	7 hours

(continued)

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.3.1.4	----------NOTES---------- This Surveillance must be performed on the reactor trip bypass breaker prior to placing the bypass breaker in service. ---------- Perform TADOT.	62 days on a STAGGERED TEST BASIS
SR 3.3.1.5	Perform ACTUATION LOGIC TEST.	92 days on a STAGGERED TEST BASIS
SR 3.3.1.6	----------NOTES---------- Not required to be performed until 24 hours after THERMAL POWER is $\geq$ 75% RTP. ---------- Calibrate excore channels to agree with incore detector measurements.	92 EFPD
SR 3.3.1.7	----------NOTES---------- Not required to be performed for source range instrumentation prior to entering MODE 3 from MODE 2 until 4 hours after entry into MODE 3. ---------- Perform COT.	184 days

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.3.1.8 ----------NOTES---------- This Surveillance shall include verification that interlocks P-6 (for the Intermediate Range channels) and P-10 (for the Power Range channels) are in their required state for existing unit conditions. ----------	
Perform COT.	--------NOTE------- Only required when not performed within previous 184 days ---------- Prior to reactor startup AND Four hours after reducing power below P-10 for power and intermediate range instrumentation AND Four hours after reducing power below P-6 for source range instrumentation AND Every 184 days thereafter

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One train inoperable.	C.1 ----------NOTE---------- One train may be bypassed for up to 4 hours for surveillance testing provided the other train is OPERABLE. ---------- Restore train to OPERABLE status.	24 hours
	OR	
	C.2.1 Be in MODE 3.	30 hours
	AND	
	C.2.2 Be in MODE 5.	60 hours
D. One channel inoperable.	D.1 ----------NOTE---------- One channel may be bypassed for up to 12 hours for surveillance testing. ---------- Place channel in trip.	72 hours
	OR	
	D.2.1 Be in MODE 3.	78 hours
	AND	
	D.2.2 Be in MODE 4.	84 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. One Containment Pressure channel inoperable.	E.1 ----------NOTE---------- One additional channel may be bypassed for up to 12 hours for surveillance testing. ---------- Place channel in bypass.	72 hours
	OR	
	E.2.1 Be in MODE 3.	78 hours
	AND	
	E.2.2 Be in MODE 4.	84 hours
F. One channel or train inoperable.	F.1 Restore channel or train to OPERABLE status.	48 hours
	OR	
	F.2.1 Be in MODE 3.	54 hours
	AND	
	F.2.2 Be in MODE 4.	60 hours
G. One Steam Line Isolation Manual Initiation - individual channel inoperable.	G.1 Restore channel to OPERABLE status.	48 hours
	OR	
	G.2 Declare associated steam line isolation valve inoperable.	48 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
H. One train inoperable.	H.1 ----------NOTE---------- One train may be bypassed for up to 4 hours for surveillance testing provided the other train is OPERABLE. ---------- Restore train to OPERABLE status.	24 hours
	OR	
	H.2.1 Be in MODE 3.	30 hours
	AND	
	H.2.2 Be in MODE 4.	36 hours
I. One train inoperable.	I.1 ----------NOTE---------- One train may be bypassed for up to 4 hours for surveillance testing provided the other train is OPERABLE. ---------- Restore train to OPERABLE status.	24 hours
	OR	
	I.2 Be in MODE 3.	30 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
J. One channel inoperable.	J.1 ----------NOTE---------- One channel may be bypassed for up to 12 hours for surveillance testing. ---------- Place channel in trip.	72 hours
	OR	
	J.2 Be in MODE 3.	78 hours
K. One Main Feedwater Pumps trip channel inoperable.	K.1 Place channel in trip.	1 hours
	OR	
	K.2 Be in MODE 3.	7 hours
L. One required channel in one train of Doghouse Water Level-High High inoperable.	L.1 Restore the inoperable train to OPERABLE status.	72 hours
	OR	
	L.2 Perform continuous monitoring of Doghouse water level.	73 hours
M. Two trains of Doghouse Water Level-High High inoperable.	M.1 Perform continuous monitoring of Doghouse water level..	1 hour

(continued)

SURVEILLANCE REQUIREMENTS

----------NOTE----------
Refer to Table 3.3.2-1 to determine which SRs apply for each ESFAS Function.

SURVEILLANCE		FREQUENCY
SR 3.3.2.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.2.2	Perform ACTUATION LOGIC TEST.	92 days on a STAGGERED TEST BASIS
SR 3.3.2.3	Perform COT.	31 days
SR 3.3.2.4	Perform MASTER RELAY TEST.	92 days on a STAGGERED TEST BASIS
SR 3.3.2.5	Perform COT.	184 days
SR 3.3.2.6	Perform SLAVE RELAY TEST.	92 days
SR 3.3.2.7	----------NOTE---------- Verification of setpoint not required for manual initiation functions. --- Perform TADOT.	18 months

(continued)

3.7 PLANT SYSTEMS

3.7.9 Control Room Area Ventilation System (CRAVS)

LCO 3.7.9 Two CRAVS trains shall be OPERABLE.

---NOTE---
The control room envelope (CRE) boundary may be opened intermittently under administrative control.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
During movement of irradiated fuel assemblies,
During CORE ALTERATIONS.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CRAVS train inoperable for reasons other than Condition B.	A.1 Restore CRAVS train to OPERABLE status.	7 days
B. One or more CRAVS trains inoperable due to inoperable CRE boundary in MODE 1,2,3, or 4.	B.1 Initiate action to implement mitigating actions. AND B.2 Verify mitigating actions ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits. AND B.3 Restore CRE boundary to OPERABLE status.	Immediately 24 hours 90 days
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, 3, or 4.	C.1 Be in MODE 3. AND C.2 Be in MODE 5.	6 hours 36 hours

(continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Required Action and associated Completion Time of Condition A not met in MODE 5 or 6, or during movement of irradiated fuel assemblies, or during CORE ALTERATIONS.	D.1 Place OPERABLE CRAVS train in emergency mode. OR D.2.1 Suspend CORE ALTERATIONS. AND D.2.2 Suspend movement of irradiated fuel assemblies.	Immediately Immediately Immediately
E. Two CRAVS trains inoperable in MODE 5 or 6, or during movement of irradiated fuel assemblies, or during CORE ALTERATIONS. OR One or more CRAVS trains inoperable due to an inoperable CRE boundary in MODE 5 or 6, or during movement of irradiated fuel assemblies, or during CORE ALTERATIONS.	E.1 Suspend CORE ALTERATIONS. AND E.2 Suspend movement of irradiated fuel assemblies.	Immediately Immediately
F. Two CRAVS trains inoperable in MODE 1, 2, 3, or 4 (for reasons other than Condition B).	F.1 Enter LCO 3.0.3.	Immediately

(continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. One or more CRAVS train(s) heater inoperable.	G.1 Restore CRAVS train(s) heater to OPERABLE status. OR G.2 Initiate action in accordance with Specification 5.6.6.	7 days 7 days

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.9.1	Operate each CRAVS train for ≥ 10 continuous hours with the heaters operating.	31 days
SR 3.7.9.2	Perform required CRAVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.9.3	Verify each CRAVS train actuates on an actual or simulated actuation signal.	18 months
SR 3.7.9.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

5.5 Programs and Manuals

5.5.15 Safety Function Determination Program (SFDP) (continued)

a. Provisions for cross train checks to ensure a loss of the capability to perform the safety function assumed in the accident analysis does not go undetected;

b. Provisions for ensuring the plant is maintained in a safe condition if a loss of function condition exists;

c. Provisions to ensure that an inoperable supported system's Completion Time is not inappropriately extended as a result of multiple support system inoperabilities; and

d. Other appropriate limitations and remedial or compensatory actions.

A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to the system(s) supported by the inoperable support system is also inoperable; or

b. A required system redundant to the system(s) in turn supported by the inoperable supported system is also inoperable; or

c. A required system redundant to the support system(s) for the supported systems (a) and (b) above is also inoperable.

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.5.16 Control Room Envelope Habitability Program

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Control Room Area Ventilation System (CRAVS), CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem whole body or its equivalent to any part of the body for the duration of the accident. The program shall include the following elements:

a. The definition of the CRE and the CRE boundary.

(continued)

5.5 Programs and Manuals

5.5.16 Control Room Envelope Habitability Program (continued)

b. Requirements for maintaining the CRE boundary in its design condition including configuration control and preventive maintenance.

c. Requirements for (i) determining the unfiltered air inleakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing CRE habitability at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, Revision 0.

d. Measurement, at designated locations, of the CRE pressure relative to atmospheric pressure during the pressurization mode of operation by one train of the CRAVS, operating at a makeup flow rate of $\leq$ 2200 cfm, at a Frequency of 18 months on a STAGGERED TEST BASIS. The results shall be trended and used as part of the periodic assessment of the CRE boundary in accordance with Regulatory Guide 1.197, Figure 1.

e. The quantitative limits on unfiltered air inleakage into the CRE. These limits shall be stated in a manner to allow direct comparison to the unfiltered air inleakage measured by the testing described in paragraph c. The unfiltered air inleakage limit for radiological challenges is the inleakage flow rate assumed in the licensing basis analyses of DBA consequences. Unfiltered air inleakage limits for hazardous chemicals must ensure that exposure of CRE occupants to these hazards will be within the assumptions in the licensing basis.

f. The provisions of SR 3.0.2 are applicable to the Frequencies for assessing CRE habitability, determining CRE unfiltered inleakage, and measuring CRE pressure and assessing the CRE boundary as required by paragraphs c and d, respectively.