

DUKE ENERGY CORPORATION
DUKE ENERGY NUCLEAR, LLC
DOCKET NO. 50-369
MCGUIRE NUCLEAR STATION, UNIT 1
FACILITY OPERATING LICENSE

License No. NPF-9

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
 - A. The application for license filed by the Duke Energy Corporation¹ 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. Construction of the McGuire Nuclear Station, Unit 1 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-83 and the application, as amended, the provisions of the Act and the regulations of the Commission;
 - 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 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. Duke Energy Corporation is financially qualified, and Duke Energy Nuclear, LLC is technically and financially qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. The licensees have 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 license will not be inimical to the common defense and security or to the health and safety of the public;

¹ Duke Energy Nuclear, LLC, succeeds Duke Energy Corporation as operator of McGuire Nuclear Station, Unit 1, and is authorized to act as agent for Duke Energy Corporation and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

Amendment No.

- 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 Facility Operating License No. NPF-9 is in accordance with 10 CFR Part 51, of the Commission's regulations and all applicable requirements have been satisfied;
 - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
2. 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 Facility Operating License No. NPF-9 which is hereby issued to the Duke Energy Corporation and Duke Energy Nuclear, LLC (the licensees) to read as follows:
- A. This license applies to the McGuire Nuclear Station, Unit 1, a pressurized water reactor and associated equipment (the facility) owned by the Duke Energy Corporation and operated by Duke Energy Nuclear, 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 "Final Safety Analysis Report," as supplemented and amended, and in its Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) Duke Energy Nuclear, LLC, 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 limitations set forth in the license;
 - (2) Duke Energy Corporation, pursuant to Section 103 of the Act and 10 CFR Part 50, to possess the facility at the designated location in Mecklenburg County, North Carolina, in accordance with the limitations set forth in this license;
 - (3) Duke Energy Nuclear, LLC, 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 Final Safety Analysis Report, as supplemented and amended;
 - (4) Duke Energy Nuclear, LLC, 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;

- (5) Duke Energy Nuclear, LLC, 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; and
 - (6) Duke Energy Nuclear, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of McGuire Nuclear Station, Units 1 and 2.
 - (7) Duke Energy Nuclear, LLC, 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 Energy Corporation Training and Technology Center.
- C. This 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

Duke Energy Nuclear, LLC, 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. , are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications.
 - (3) Deleted
 - (4) Fire Protection Program

Duke Energy Nuclear, LLC, shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report, as updated, 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: 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) Deleted
- (6) Deleted
- (7) Deleted
- (8) Deleted
- (9) Deleted
- (10) Deleted
- (11) Deleted
- (12) Deleted

(13) Additional Conditions

The Additional Conditions contained in Appendix C, as revised through Amendment No. _____, are hereby incorporated into this license. Duke Energy Nuclear, LLC shall operate the facility in accordance with the Additional Conditions.

D. Deleted

2.E. Duke Energy Nuclear, LLC, 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.

2.F Deleted

G. Duke Energy Nuclear, LLC shall report any violations of the requirements contained in Section 2 Items C.(1), C.(4) and E of this 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.

H. Deleted

I. 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 No.

- J. Pursuant to an Order by the Atomic Safety and Licensing Board, dated April 23, 1975, the Nuclear Regulatory Commission incorporates herein the following antitrust conditions applicable to Duke Energy Corporation:

- 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 revenues 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 others 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 arrangements 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, any existing lawful contracts it has with a third party; (2) there is contemporaneously available to it a competing or alternative 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.

- K. Duke Energy Nuclear, LLC 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.

2.L. This license is effective as of the date of issuance and shall expire at midnight on June 12, 2021.

FOR THE NUCLEAR REGULATORY COMMISSION

EDSON G. CASE for/

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Attachment:

1. Appendix A -
Technical Specifications
2. Appendix B –
DELETED (by Amendment No. 164)
3. Appendix C –
Additional Conditions

Date of Issuance: June 12, 1981

APPENDIX C

ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. NPF-9

Duke Energy Nuclear, LLC shall comply with the following conditions on the schedules noted below:

<u>Amendment Number</u>	<u>Additional Conditions</u>	<u>Implementation Date</u>
Deleted	Deleted	Deleted
184	<p>The schedule for the performance of new and revised surveillance requirements shall be as follows:</p> <p>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.</p>	Within 90 days of the date of this amendment
188	<p>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.</p>	Within 30 days of date of this amendment

Amendment No.

DUKE ENERGY CORPORATION
DUKE ENERGY NUCLEAR, LLC
DOCKET NO. 50-370
MCGUIRE NUCLEAR STATION, UNIT 2
FACILITY OPERATING LICENSE

LICENSE NO. NPF-17

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for license filed by the Duke Energy Corporation² 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. Construction of the McGuire Nuclear Station, Unit 2 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-84 and the application, as amended, the provisions of the Act and the regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
 - D. There is reasonable assurance: (i) that the activities authorized by this 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 (except as exempted from compliance in Section 2.D. below);
 - E. Duke Energy Nuclear, LLC is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

² Duke Energy Nuclear, LLC succeeds Duke Energy Corporation as operator of McGuire Nuclear Station, Unit 2, and is authorized to act as agent for Duke Energy Corporation and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

- G. The issuance of this 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 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;
 - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this 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, Facility Operating License No. NPF-17 is hereby issued to the Duke Energy Corporation and Duke Energy Nuclear, LLC (the licensees) to read as follows:
- A. This license applies to the McGuire Nuclear Station, Unit 2, a pressurized water reactor and associated equipment (the facility) owned by the Duke Energy Corporation and operated by Duke Energy Nuclear, 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 "Final Safety Analysis Report," as supplemented and amended through Revision No. 45, and in its Environmental Report, as supplemented and amended through Revision No. 6;
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) Duke Energy Nuclear, LLC, 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 license;
 - (2) Duke Energy Corporation, pursuant to Section 103 of the Act and 10 CFR Part 50, to possess the facility at the designated location in Mecklenburg County, North Carolina, in accordance with the limitations set forth in this license;
 - (3) Duke Energy Nuclear, LLC, 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 Final Safety Analysis Report, as supplemented and amended through Revision No. 45;

- (4) Duke Energy Nuclear, LLC, 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;
- (5) Duke Energy Nuclear, LLC, 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;
- (6) Duke Energy Nuclear, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of McGuire Nuclear Station, Units 1 and 2; and
- (7) Duke Energy Nuclear, LLC, pursuant to the Act and 10 CFR Part 30 and 40, to receive, possess and process for release or transfer such byproduct material as may be produced by the Duke Energy Corporation Training and Technology Center.

C. This 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

Duke Energy Nuclear, LLC 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. are hereby incorporated into license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Antitrust Conditions

Duke Energy Corporation shall comply with the antitrust conditions delineated in Appendix C to this license;

(4) Deleted

Amendment No.

- (5) Deleted
- (6) Deleted

(7) Fire Protection Program

Duke Energy Nuclear, LLC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report, as updated, 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: 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.

- (8) Deleted
- (9) Deleted
- (10) Deleted

(11) 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, Duke Energy Nuclear, LLC shall provide written notification to the Office of Nuclear Reactor Regulation.

- (12) Deleted

(13) Additional Conditions

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

- D. Deleted

- E. Duke Energy Nuclear, LLC 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

Amendment No.

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.

- F. Duke Energy Nuclear, LLC shall report any violation of the requirements contained in Section 2 Items C.(1), C.(7), C.(11) and E of this license within 24 hours by telephone and confirm by telegram, mailgram, or facsimile transmission to the NRC Regional Administrator, Reg. II, or his designate, no later than the first working day following the violation, with a written followup report within 14 days;
- G. Deleted
- H. 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;
- I. 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 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); and
- J. Duke Energy Nuclear, LLC 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, Units 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.
- 2.K. This license is effective as of the date of issuance and shall expire at midnight on March 3, 2023.

FOR THE NUCLEAR REGULATORY COMMISSION

DARRELL EISENHUT for

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Attachment 1 - Deleted
- 2. Appendix A
Technical Specifications
- 3. Appendix B
Deleted (by Amendment No. 146)
- 4. Appendix C
Antitrust Conditions
- 5. Appendix D
Additional Conditions

Date of Issuance: March 3, 1983

Amendment No.

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 applicable to Duke Energy Corporation:

- 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

APPENDIX D

ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. NPF-17

Duke Energy Nuclear, LLC shall comply with the following conditions on the schedules noted below:

<u>Amendment Number</u>	<u>Additional Conditions</u>	<u>Implementation Date</u>
Deleted	Deleted	Deleted
166	<p>The schedule for the performance of new and revised surveillance requirements shall be as follows:</p> <p>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.</p>	Within 90 days of the date of this amendment.
169	<p>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.</p>	Within 30 days of date of amendment.

Amendment No.