

General Electric Company

Docket No. 72-1

General Electric Morris Operation

Amendment to Materials License

Amendment No. 6  
License No. SNM-2500

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the General Electric Company (the licensee) dated July 7, 1988, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The General Electric Morris Operation will continue to operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment 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;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by the enclosed changes to page 2 and page 4 of Materials License No. SNM-2500, and page 2 of Appendix A of the license.
3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*Leland C. Rouse*

Leland C. Rouse, Chief  
Fuel Cycle Safety Branch  
Division of Industrial and  
Medical Nuclear Safety, NMSS

Enclosure:

1. Revised License pages 2 and 4  
and page 2 of Appendix A

Date  
of Issuance MAR 30 1989

*890-100395 4pp.*

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Part 72, and in reliance on statements and representations heretofore made by the licensee a license is hereby issued authorizing the licensee to receive, acquire, and possess the power reactor spent fuel and other radioactive materials associated with spent fuel storage designated below; to use such materials for the purposes and at the place designated below; to deliver or transfer such materials to persons authorized to receive these materials in accordance with the regulations of the applicable parts of this chapter. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified herein.

Licensee

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| 1. General Electric Company  | 3. License Number: SNM-2500<br>Amendment No. 6   |
| 2. Address: General Electric Company<br>7555 East Collins Road<br>Morris, Illinois | <p style="text-align: center;"><del>MAR 30 1989</del></p> <hr/> 4. Expiration Date: May 31, 2002<br><hr/> 5. Docket Number: 72-1 |

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|--|---|--|
| 6. Byproduct, source, and/or special nuclear material  | 7. Chemical and/or physical form  | 8. Maximum amount that licensee may possess at any one time under this license                                       |
| A. Fuel Assemblies from reactors using natural water for cooling and enriched not greater than 5 percent U-235. These fuels and associated radioactive materials related to receipt, storage, and transfer of the fuel assemblies will possibly contain: <ol style="list-style-type: none"> <li>1. Uranium 235</li> <li>2. Plutonium</li> <li>3. Fission Products</li> </ol> | A. As UO <sub>2</sub> clad with zirconium or zirconium alloys or stainless steel.           | A. <ol style="list-style-type: none"> <li>1. 37.5 MT</li> <li>2. 9.0 MT</li> <li>3. 2.5X10<sup>9</sup> Ci</li> </ol> |
| B. Byproduct and special nuclear material  | B. As solutions, calibration discs, sealed source or in other form as specified in Table A. | B. Quantities possessed be no greater than that specified in Table A.  |

and Safeguards, and the NRC Regional III Office a report containing a description of each change.

13. The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 6, attached hereto are incorporated in this license. The licensee shall operate the installation in accordance with the Technical Specifications.
14. The Safeguards License Conditions contained in Appendix C attached hereto are hereby incorporated in this License. The licensee shall maintain a facility physical security program in accordance with those conditions.
15. This license is effective as of the date of issuance shown below.

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For the U.S. Nuclear Regulatory Commission

Date  
of Issuance May 4, 1982

*Leland C. Rouse*  
by Leland C. Rouse  
Division of Industrial and  
Medical Nuclear Safety, NMSS  
Washington, DC 20555

As amended by  
Amendment No. 6 dated MAR 30 1989

## 1.2 GENERAL LICENSE CONDITIONS

### 1.2.1 Quality Assurance

Activities at Morris Operation shall be conducted in accordance with requirements of Appendix B, 10 CFR Part 50, as described in Morris Operation Quality Assurance Plan, NEDE-31559, (see Appendix B.8 of the CSAR).

### 1.2.2 Fuel Transfer Canal Closure

The upper end of the transfer canal (CSAR Figure 1-5) has been sealed by welding a stainless steel plate, 1/4-inch thick, to imbedded steel angles framing the opening. There are no protrusions from the plate that could be used to facilitate removal. The fuel basket transfer arm has been rendered inoperative by welding a block in place to prevent arm movement, and by disabling the arm hydraulic system. These conditions shall not be changed without prior approval by the Nuclear Regulatory Commission staff.

## 2.0 FUNCTIONAL AND OPERATING LIMITS

### 2.1 AUTHORIZED MATERIALS

#### 2.1.1 Specification

- a. Light-water reactor nuclear fuel to be received and stored at Morris Operation shall meet the following requirements:
  - (1) Fuel shall contain uranium as uranium dioxide ( $UO_2$ ).
  - (2) Fuel shall be clad with stainless steel, zirconium, or zirconium alloys.
  - (3) Maximum average exposure of reactor discharge batch (fuel) shall be 44,000 megawatt-days per TeU.
  - (4) Fuel shall have cooled a minimum of one year after reactor shutdown and prior to receipt at Morris Operation.
  - (5) Rod lattice  $k_{\infty}$  limits without allowance for burnup shall not exceed:
    - o 1.37 for 15x15 PWR (<8.55 inches square)
    - o 1.38 for 10x10 BWR (<5.65 inches square)
    - o 1.40 for 7x7 or 8x8 BWR
    - o 1.41 for 14x14 PWR (<7.80 inches square)
- b. Fuel parameters shall be within the ranges defined in Figures 2-1 (a and b) and 2-2 (a and b), or as otherwise specified in this specification.

Morris Operation is authorized to store stainless steel clad LaCrosse 10x10 BWR fuel, pellet diameter of 0.35 inch, a pitch of 0.565 and enriched to a maximum of 3.93% U-235.