

## LICENSE FOR INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

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 1, 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 material for the purpose(s) and at the place(s) designated below; and to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). 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 1. GE-Hitachi Nuclear Energy Americas, LLC	3. License No. SNM-2500  Amendment No. 14
2. GE-Hitachi Nuclear Energy Americas, LLC 7555 East Collins Road Morris, Illinois 60450	4. Expiration Date May 31, 2022  Renewed December 21, 2004
	5. Docket or Reference No. 72-1

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| 6. Byproduct, Source, and/or Special Nuclear Material<br><br>A. Fuel assemblies from reactors using natural water for cooling and enriched not greater than 5 percent U-235. These fuels and associated materials related to storage and transfer of fuel assemblies will possibly contain:<br><br>1. Uranium 235<br>2. Plutonium<br>3. Fission Products | 7. Chemical or Physical Form<br><br>A. As UO <sub>2</sub> clad with zirconium or zirconium alloys.<br><br>B. As solutions, calibration discs sealed source or in other form specific in Table A | 8. Maximum Amount That Licensee May Possess at Any One Time Under This License<br><br>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. Quantities possessed be no greater than that specified in Table A |
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9. Authorized Use: The material identified in 6.A and 7.A above is authorized for possession and storage at the Morris Operation, and transfer as described in NEDO-21326, the approved General Electric Morris Operation Consolidated Safety Analysis Report (CSAR), as supplemented and amended in accordance with 10 CFR 72.70 and 10 CFR 72.48. Material identified in 6.B, 7.B and 8.B is to be used for calibration and standardization purposes.

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10. Authorized Place of Use: The licensed material is to be possessed, transferred, and stored at the Morris Operation located in Grundy County, Illinois, near Morris, Illinois. This site is described in Chapter 1 and 3 of the licensee's CSAR for the Morris Operation.

Table A. Authorized materials – instrument, calibration, and laboratory sources

Materials	Chemical and/or Physical Form	Quantity
Radionuclides with atomic numbers ranging from 1 to 83	Solution or calibration disc	Total Aggregate of 5 curies
Cobalt-60	Sealed source	10 curies
Cesium-137	Sealed source	10 curies
Thorium-230	Any	1 millicurie
Neptunium	Any	20 grams
Plutonium	Any	50 grams
Uranium-235	Any	250 grams
(In uranium or any enrichment)		
Americium-241	Any	200 µCi
Americium-241	Sealed source	40 curies
Plutonium-Beryllium	Sealed source	2 curies
Uranium-natural	Any	15 kilograms

11. Pursuant to 10 CFR Part 40 the licensee is authorized to possess, store, and transfer a combined quantity of unirradiated natural and unirradiated depleted uranium not to exceed 42 tonnes. This limitation does not include uranium in stored fuel or uranium used in construction of shipping casks. Natural UO<sub>3</sub>, UO<sub>2</sub>, UNH, and UF<sub>6</sub>, used during Midwest Fuel Recovery Plant (MFRP) testing may be stored in process vessels in the Canyon area or in the site warehouse.
12. No changes shall be made to the Radiological Emergency Plan for Morris Operation, NEDO-31995, which would decrease the effectiveness of the emergency plan without the prior approval of the Commission as evidenced by a license amendment. The licensee shall maintain implementing procedures for the Radiological Emergency Plan as necessary. The licensee shall maintain records of changes that are made to the plan without prior approval for a period of two years from the date of the change. Within six months of such change the licensee shall furnish the Director, Office of Nuclear Materials Safety and Safeguards, and the NRC Region III Office a report containing a description of each change.
13. The Technical Specifications contained in Appendix A attached hereto, as revised through Amendment 14, are incorporated into the license. The licensee shall operate the installation in accordance with the Technical Specifications in Appendix A. Appendix A contains Technical Specifications related to Environmental Protection to satisfy the requirements of 10 CFR 72.44(d)(2).
14. The licensee shall follow the physical protection plan entitled "Physical Security Plan for Morris Operation, NEDS-14507," Revision D5, dated April 1995; and as it may be further amended under the provisions of 10 CFR 72.44(e) and 72.180. The requirements of 10 CFR Part 73, Appendix B for guard training and qualification are incorporated in Section 3.4, "Security Force Training and Qualification," of the approved security plan. The requirements of 10 CFR Part 73, Appendix C, for contingency planning are addressed in Section 9.0 of the physical security plan.

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15. This license is effective as of the date of issuance shown below.

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FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Michele M. Sampson, Chief  
 Spent Fuel Licensing Branch  
 Division of Spent Fuel Management  
 Office of Nuclear Material Safety  
 and Safeguards  
 Washington, DC 20555

Date of Issuance: April 16, 2015

Renewed License: Dated December 21, 2004

Attachment: Technical Specifications

