NRC FORM 374



U.S. NUCLEAR REGULATORY COMMISSION

# MATERIALS LICENSE

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, Parts 11, 30, 31, 32, 33, 34, 35, 36, 39, 40, 70, 73, and 74 and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; 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 U.S. Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

| Licensee | |
|---|---|
| 1. GE-Hitachi Nuclear Energy Americas, LLC | 3. License Number: SNM-960, Amendment 1 |
| 2. 6705 Vallecitos Road<br>Sunol, California 94586 | 4. Expiration Date: August 9, 2027<br>5. Docket No. 70-754 |

| 6. Source, Special Nuclear Material, By-product Material | 7. Chemical and/or Physical Form | 8. Maximum amount that Licensee May Possess at Any One Time Under This License |
|---|---|---|
| A. Uranium enriched to less than 5 percent $^{235}U$ | A. Solid form; unirradiated or mixed oxide fuel; irradiated with its attendant byproduct and reactor-produced transuranics | A. **[Security-Related Information – Withheld Under 10 CFR 2.390]** |
| B. Uranium enriched from 5 percent to less than 20 percent $^{235}U$ | B. Solid form; unirradiated or mixed oxide fuel; irradiated with its attendant byproduct and reactor-produced transuranics | B. **[Security-Related Information – Withheld Under 10 CFR 2.390]** |
| C. Uranium enriched to greater than 80 percent $^{235}U$ | C. Solid form; unirradiated or mixed oxide fuel; irradiated with its attendant byproduct and reactor-produced transuranics | C. **[Security-Related Information – Withheld Under 10 CFR 2.390]** |
| D. Plutonium | D. Solid form | D. **[Security-Related Information – Withheld Under 10 CFR 2.390]** |
| E. Special Nuclear Material | E. In any form. | E. **[Security-Related Information – Withheld Under 10 CFR 2.390]** |

9. Authorized use:

Enclosure 2

**MATERIALS LICENSE SUPPLEMENTARY SHEET**

License Number
SNM-960, Amendment 1

Docket or Reference Number
70-754

a) 6A through 6D: for storage only

b) 6E: in process or storage for lab analysis/engineering studies or in radioactive waste

10. Authorized Place of Use: The licensee's facilities in the Vallecitos Nuclear Center located near Pleasanton, California, as described in Section 1.1.1 of GE-Hitachi Nuclear Energy Americas, LLC's, March 18, 2015, license renewal application and revision dated February 26, 2016.

11. The licensee shall conduct authorized activities at the Vallecitos Nuclear Center located near Pleasanton, California, in accordance with the statements, representations, and conditions in its March 18, 2015, license renewal application and revision dated February 26, 2016.

12. This license shall be deemed to contain three sections: Safety Conditions, Safeguards Conditions, and Transportation Conditions. All these sections are part of the license, and the licensee is subject to compliance with all listed conditions in each section.

13. The licensee is hereby granted the special authorizations and exemptions identified in Section 1.3 of the license renewal application dated February 26, 2016.

14. At intervals not to exceed 3 years from its approval by the U.S. Nuclear Regulatory Commission (NRC), the licensee shall update the Decommissioning Funding Plan and provide it to the NRC for review and approval. After resolution of any NRC comments, the licensee shall submit final executed copies of the financial assurance instruments to the NRC.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: May 17, 2019

By: ***/RA/***
Jacob I. Zimmerman, Chief
Fuel Facility Licensing Branch
Division of Fuel Cycle Safety, Safeguards, and Environmental Review
Office of Nuclear Material Safety and Safeguards

| NRC FORM 374A U.S. NUCLEAR REGULATORY COMMISSION | Page 3 of 6 |
|---|---|
| **MATERIALS LICENSE SUPPLEMENTARY SHEET** | License Number<br>SNM-960, Amendment 1<br>Docket or Reference Number<br>70-754 |

## SAFETY CONDITIONS

S-1. The licensee shall conduct activities at the Vallecitos Nuclear Center in accordance with statements, representations and conditions as described in the following documents:

a. License renewal application dated March 18, 2015, and its subsequent revision dated February 26, 2016.

b. Decommissioning Funding Plan dated January 31, 2014; Decommissioning Funding Plan Supplemental Information dated August 1, 2014; and Revised Decommissioning Funding Plan dated February 7, 2017, as amended.

S-2. Sealed Plutonium sources shall be subject to the leak testing and actions specified in the attached "License Condition for Leak Testing Sealed Plutonium Sources," dated April 1993.

S-3. Release of equipment or materials for unrestricted use shall be in accordance with the attached "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," April 1993.

S-4. The licensee shall provide to the Commission copies of its annual report summarizing the effluent monitoring and environmental surveillance programs at the Vallecitos Nuclear Center. This report shall be sent to the Division of Fuel Cycle Safety, Safeguards, and Environmental Review; Office of Nuclear Material Safety and Safeguards; U.S. Nuclear Regulatory Commission, Washington, DC 20555, and the NRC Regional Office-Region IV at the address specified in Appendix D of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20.

S-5. Exemptions to the requirements of 10 CFR Section 70.24, “Criticality Accident Requirements,” are hereby granted according to 10 CFR Paragraph 70.24(d). The exemptions are granted in accordance with Section 1.3.2, “Exemptions to Criticality Monitoring System Requirements,” of the February 26, 2016, license renewal application as follows:

The following areas are exempted from monitor alarm requirements:

a. Areas where special nuclear material (SNM) is stored in locations within the United States provided that the SNM is fully packaged as for transport in containers meeting all of the general license requirements of 10 CFR Part 71 or in containers owned by the General Electric Company and certified for transport under the provisions of 10 CFR Part 71 in accordance with the conditions of a Certificate of Compliance authorizing delivery of such containers to a carrier for

**MATERIALS LICENSE**
**SUPPLEMENTARY SHEET**

License Number
SNM-960, Amendment 1

Docket or Reference Number
70-754

Fissile Class I transport,

b. Individual areas where there is negligible risk of criticality due to the amount or configuration of fissile material. In these areas, an evaluation has determined the risk of criticality is very low such that no credible accident sequence can be identified that results in criticality.

S-6. The licensee is hereby authorized to release radioactive materials in accordance with the Enclosure to this license.

Enclosure: Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material (April 1993)

| NRC FORM 374A U.S. NUCLEAR REGULATORY COMMISSION | Page **5** of **6** |
|---|---|
| **MATERIALS LICENSE SUPPLEMENTARY SHEET** | License Number<br>SNM-960, Amendment 1 |
| | Docket or Reference Number<br>70-754 |

## SAFEGUARDS CONDITIONS

SG-1.0 PHYSICAL PROTECTION REQUIREMENTS

SG-1.1: The licensee is authorized to possess or use SNM at the Vallecitos Nuclear Center, in accordance with the Physical Security Plan dated March 21, 2016, as approved by the Commission and as it may be further revised in accordance with the provisions of 10 CFR 70.32(e). The licensee shall maintain and follow the Physical Security Plan in accordance with Confirmatory Order EA-14-144, dated April 22, 2015.

SG-2.0 FACILITY OPERATION

SG-2.1: Notwithstanding those sections within 10 CFR Parts 70 and 74 which establish requirements for licensees authorized to possess unirradiated SNM in quantities exceeding one effective kilogram, the licensee may follow the applicable requirements of 10 CFR Part 74 as though only authorized to possess less than one effective kilogram of SNM, provided that the licensee does not possess at any one time unirradiated SNM in quantity equal to or greater than one effective kilogram.

SG-2.2: A Fundamental Nuclear Material Control Plan which addresses the material control and accounting requirements of 10 CFR 74.31, 74.41, 74.43, 74.45, 74.51, 74.53, 74.55, 74.57, and 74.59, as appropriate, shall be submitted to and approved by the NRC prior to increasing the actual holdings of unirradiated SNM under License SNM-960 beyond one effective kilogram.

SG-2.3: The licensee shall maintain and follow its Material Control and Accounting (MC&A) Program Description for GE-Hitachi Nuclear Energy Americas, LLC, Vallecitos Nuclear Center, Revision 0, dated June 17, 2015, in accordance with Confirmatory Order EA-14-144 dated April 22, 2015. Changes to the MC&A Program Description shall be submitted to the Commission for review and approval prior to implementation.

| NRC FORM 374A U.S. NUCLEAR REGULATORY COMMISSION | Page **6** of **6** |
|---|---|
| **MATERIALS LICENSE SUPPLEMENTARY SHEET** | License Number<br>SNM-960, Amendment 1 |
| | Docket or Reference Number<br>70-754 |

## TRANSPORTATION CONDITIONS

T-1.0 TRANSPORTATION SECURITY

T-1.1: The licensee shall not import, export, transport in a single shipment, or take delivery of a single shipment free on board at the point where it is delivered to an agent or carrier, quantities of SNM as specified in 10 CFR 73.1(b)(2) until a detailed plan as described in 10 CFR 70.22(g) has been submitted and approved by the NRC.