

**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 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, 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 Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

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|---|--|
| Licensee  |  |
| 1. Global Nuclear Fuel - Americas, L.L.C.           | 3. License Number SNM-1097, Amendment 39 |
| 2. P.O. Box 780<br>Wilmington, North Carolina 28402 | 4. Expiration Date June 30, 2007         |
|   | 5. Docket No. 70-1113<br>Reference No.   |

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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. Uranium enriched to <5% U-235                     | A. Uranium - any form            | A. 50,000 kgs U-235  |
| B. Uranium enriched in U-235                         | B. Any                           | B. 0.35 kg U-235   |
| C. Uranium enriched from 5% to <10% U-235            | C. Uranium compounds             | C. 0.35 kg U-235   |
| D. Uranium-233                                       | D. Uranium compounds             | D. 50 mg U-233   |
| E. Plutonium   | E. Sealed neutron sources        | E. 20 g Pu   |
| F. Plutonium   | F. Analytical samples            | F. 0.002 g Pu  |
| G. Plutonium   | G. In nuclear fuel rods          | G. <1E-6 g Pu/g U-235  |
9. Authorized place of use: The licensee's existing facilities at Wilmington, North Carolina.
10. This license shall be deemed to contain two sections: Safety Conditions and Safeguards Conditions. Both sections are part of the license and the licensee is subject to compliance with all listed conditions in each section.
11. Deleted by Amendment 32, August 2002.
12. Deleted by Amendment 32, August 2002.
13. Deleted by Amendment 21, December 2000.

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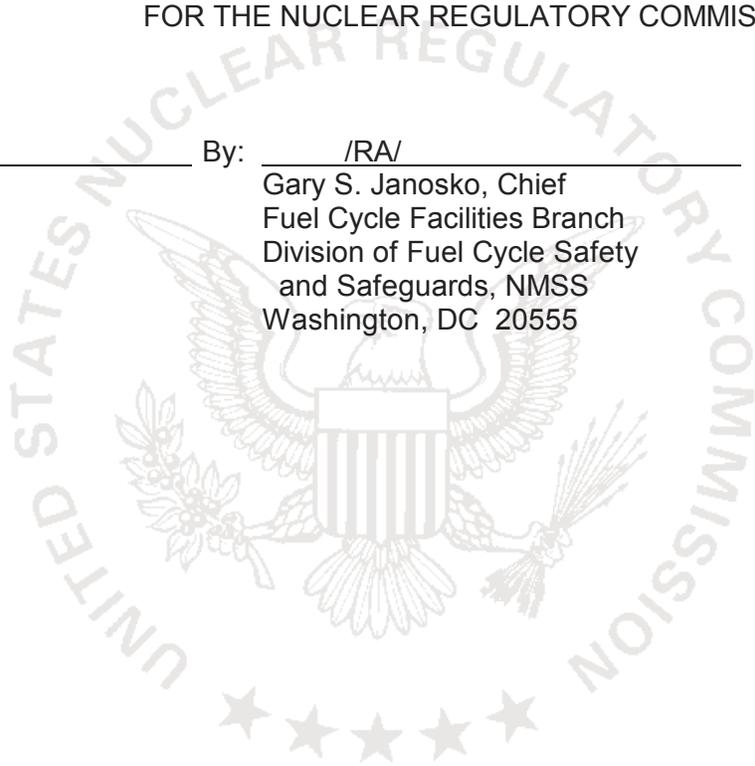
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14. In accordance with the provisions of 10 CFR 70.17, "Specific Exemptions" and notwithstanding the requirements of 10 CFR 70.5, "Communications," the licensee is hereby authorized to submit electronically any communication or report concerning the regulations in Part 70 and any application filed under these regulations.

FOR THE NUCLEAR REGULATORY COMMISSION

Date: 03/22/06 By: /RA/

Gary S. Janosko, Chief  
Fuel Cycle Facilities Branch  
Division of Fuel Cycle Safety  
and Safeguards, NMSS  
Washington, DC 20555



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## SAFETY CONDITIONS

- S-1 Authorized use: For use in accordance with statements, representations, and conditions of application dated June 5, 1997 and December 7, 1999; and supplements dated June 11, June 27, September 19, and December 5, 1997; March 10 and May 13, 1998; August 6, October 14, October 15, December 8, and December 17, 1999; August 28, 2000; and May 20 and August 1, 2002.
- S-2 The licensee is hereby granted exemptions and special authorizations in Section 1.3 of the application.
- S-3 The licensee shall maintain and execute the response measures in Revision 11 of the Radiological Contingency and Emergency Plan, dated May 31, 2002. This Plan may be further revised by the licensee consistent with 10 CR 70.32(i).
- S-4 Notwithstanding the requirements of 10 CFR 70.22(i)(3)(xii) to conduct a biennial emergency exercise (BEE), the licensee may delay until August 31, 1997, its next scheduled BEE. All future BEEs shall be based on the August 31, 1997, date.
- S-5 Deleted by Amendment 31, June 2002.
- S-6 The licensee is exempt from fissile material classification and from the fissile material package standards of 10 CFR 71.55 and 71.59, but is subject to all other requirements of 10 CFR Part 71, for the transport of approximately 800 containers of legacy materials as described in the exemption request dated April 19, 2004. This material must meet the following requirements:
- (1) Low concentrations of solid fissile material commingled with solid nonfissile material, provided that:
    - (i) There is at least 2000 grams of solid nonfissile material for every gram of fissile material, and
    - (ii) There is no more than 180 grams of fissile material distributed within 360 kilograms of contiguous nonfissile material.
  - (2) Lead, beryllium, graphite, and hydrogenous material enriched in deuterium may be present in the package, but must not be included in determining the required mass of solid nonfissile material.
  - (3) The shipment must be exclusive use.

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## SAFEGUARDS CONDITIONS

SECTION 1.0 -- MATERIAL CONTROL AND ACCOUNTING

- SG-1.1 The licensee shall follow Chapters 1.0 through 9.0 of its Fundamental Nuclear Material Control Plan dated December 16, 1987, which has been partially revised as indicated by Revision 43 of Page 1 (dated July 7, 2005, and titled "Revisions by Chapter") of said Plan. This Plan may be further revised in accordance with, and pursuant to, the provisions of either 10 CFR 70.32(c)(1)(iii) or 70.34.
- SG-1.2 Notwithstanding the requirements of Sections 6.1 and 7.1 of the Plan identified in Condition SG-1.1, the licensee may (1) utilize a computer system independent of its Manufacturing Information and Control System (MICS) to track the SNM contained in fuel bundles and loose fuel rods received from the Wurgassen plant in Germany; and (2) have up to 90 days for completing shipper-receiver differences determinations and evaluations associated with the initial shipment of fuel assemblies from the Wurgassen plant, and up to six calendar months for subsequent shipments of loose rods. Receipt measurements and item controls associated with these fuel assemblies and rods shall be in accordance with the commitments contained in the licensee's letter (from Dr. R. J. Reda to Mr. R. C. Pierson) dated January 24, 1996.
- SG-1.3 Deleted by Amendment 8, May 1999.
- SG-1.4 Deleted by Amendment 8, May 1999.
- SG-1.5 Deleted by Amendment 8, May 1999.
- SG-1.6 Deleted by Amendment 15, March 2000.
- SG-1.7 Deleted by Amendment 15, March 2000.
- SG-1.8 Deleted by Amendment 18, October 2000.
- SG-1.9 Deleted by Amendment 37, December 2003
- SG-1.10 Deleted by Amendment 23, March 2001.
- SG-1.11 Deleted by Amendment 25, April 2001. This Condition expired March 31, 2001.
- SG-1.12 Deleted by Amendment 27, June 2001. This Condition expired April 30, 2001.
- SG-1.13 Deleted by Amendment 27, June 2001. This Condition expired May 14, 2001.
- SG-1.14 Deleted by Amendment 35, May 2003. This Condition expired December 2002.
- SG-1.15 Deleted by Amendment 35, May 2003.

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SG-1.16 Deleted by Amendment 37, December 2003

SG-1.17 Deleted by Amendment 37, December 2003. This Condition expired October 20, 2003.

**SECTION 2.0 -- PHYSICAL PROTECTION FOR SNM OF LOW STRATEGIC SIGNIFICANCE**

SG-2.1 The licensee shall follow the physical protection plan entitled, "Physical Security Plan," Revision 6, dated December 7, 1999 (letter dated December 7, 1999); and as it may be further revised in accordance with the provisions of 10 CFR 73.32(e).

**SECTION 3.0 -- INTERNATIONAL SAFEGUARDS**

SG-3.1 The licensee shall follow all sub-codes within Codes 1 through 8 of the 19-page Transitional Facility Attachment No. 11A, dated January 24, 1996, to the US/IAEA Safeguards Agreement.

SG-3.2 Notwithstanding the requirements of 10 CFR 75.11(d) to submit facility data on forms supplied by the Commission (including IAEA DIQs), the licensee may submit the required data on internally-generated forms that follow the IAEA's DIQ format.

SG-3.3 Notwithstanding 10 CFR 70.54(a) and 74.15, the licensee may include the IAEA MBA Code for Import/Export transactions on the DOE/NRC Form 740M in lieu of the instructions to insert it parenthetically after the RIS in Block 1 and 2 of the DOE/NRC Form 741.

SG-3.4 Notwithstanding 10 CFR 70.54(a) and 74.15, the licensee may include the IAEA Country Code for Import/Export transactions on the DOE/NRC Form 740M in lieu of the instructions to insert it in Block 20A and C of the DOE/NRC Form 741.

SG-3.5 Notwithstanding the requirements of 10 CFR 75.35(a) to submit Material Balance Reports on DOE/NRC Form 742, Physical Inventory Listings on DOE/NRC Form 742C and Concise Notes on DOE/NRC Form 740, the licensee may use computer generated facsimiles for the report forms specified in 10 CFR 75.35(a). The facsimiles must as nearly as possible approximate the referenced DOE/NRC Forms in format and contain the information specified in NUREG/BR-0007 unless otherwise excepted by license condition.

SG-3.6 The licensee may disregard, for IAEA reporting purposes, the printed instructions contained in NUREG/BR-0007 relating to block 6H and 6M of DOE/NRC Form 742-C, "Physical Inventory Listing (PIL)." The licensee may use Code "J" in block 6H of the PIL regardless of nuclear material ownership and may use Code "M" in block 6M of the PIL regardless of the basis of the measurement source data.