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	Docket or Reference Number: 070-00036
	Amendment No. 63

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and the applicable parts of Title 10, Code of Federal Regulations, Chapter I, Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 51, 70, and 71, and in reliance on statements and representations heretofore made by the licensee, a licensee 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.

	Licensee				
1	Westinghouse Electric Company LLC			3. License Number	SNM-00033
2.	3300 State Road P Festus, Missouri 63028			4. Expiration Date	License is continued until decommissioning is complete and the U.S. Nuclear Regulatory Commission notifies Westinghouse Electric Company LLC in writing that the license is terminated.
				5. Docket or Reference Number	070-00036
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 a maximum of less than 10 weight percent in the U-235 isotope	A.	Any (including only metal powders existing at the Hematite Site on July 1, 2001)	A.	10,000 kilograms U-235
B.	Uranium enriched greater than or equal 10 weight percent and less than 20 weight percent in the U-235 isotope	B.	Any (including only metal powders existing at the Hematite Site on July 1, 2001)	B.	9,999 grams U-235
C.	Uranium enriched greater than or equal to 20 weight percent in the U-235 isotope	C.	Any (including only metal powders existing at the Hematite Site on July 1, 2001)	C.	4,999 grams U-235*

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D. Uranium (natural or depleted)	C. Any (including only metal powders existing at the Hematite Site on July 1, 2001)	C. 2,000 kilograms
E. Co-60	E. Sealed sources	E. 40 millicuries
F. Cs-137	F. Sealed sources	F. 500 millicuries
G. Byproduct material, including Am-241	G. Any	G. 400 microcuries
H. Special, Source, and Byproduct Material as residual contamination	H. Any (residual contamination)	H. Existing at the Hematite site On July 1, 2001

*License conditions for Category III HEU (for less than 1000 grams U-235) and Category II HEU (1000 to 4999 grams of U-235) are defined in the Fundamental Nuclear Material Control Plan and the Physical Security Plan.

9. Authorized Use: Items A through H. Uses as described in August 12, 2009 Decommissioning Plan and associated supporting documents noted in Hematite Decommissioning Plan SER (ADAMS Accession No. ML112101630) and July 5, 2011 License Application (ADAMS Accession No. ML111880290).

CONDITIONS

10. The licensee is hereby granted the following special authorization from Chapter 1, Section 1.6.1 of the July 5, 2011, License Application.

Release of equipment and materials from restricted areas to controlled areas or offsite in accordance with the NRC's "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," dated April 1993.

11. The licensee shall follow the revision dated February 18, 2011 of its Fundamental Nuclear Material Control Plan. This Plan may be further revised in accordance with, and pursuant to, the provisions of either 10 CFR Part 70.32(c) or 70.34.

12. The licensee shall follow the physical protection plans entitled, Physical Security Plan, October 10, 2012 Revision, Category I Contingency Safeguards Contingency Response Plan, dated July 28, 2011 and Category I Contingency Security Training and Qualification Plan, dated July 28, 2011.

13. Licensee is hereby granted permission to demolish or dismantle buildings including building slabs and foundations.

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14. Notwithstanding the requirement of 10 CFR 70.24, the licensee shall be exempted from the "monitoring system" requirements in the areas, and under the conditions specified below:

A. Low concentration materials (1.4 g U-235/L for solids, and 11.6 g U-235/L for liquids) that are safely subcritical by virtue of their low concentration, irrespective of any other physical conditions, including mass, geometry, moderation, reflection, etc.

B. Materials that are contained in authorized packages as defined in NRC/DOT regulations, including 10 CFR 71 and 49 CFR 173.

C. Materials within neutronically separate areas containing less than the following isotopic mass amount per separate area:

1. 700 g U-235 in uranium enriched to more than 5 wt.% U-235/U, and
2. 1640 g U-235 in uranium enriched to no more than 5 wt.% U-235/U.

Notes: (1) Structure surfaces within the separate area that contain residual U-235 surface contamination below an areal density of 10 g U-235/ft^2 are not included in the mass amount for the separate area.

(2) Any U-235 in undisturbed subsurface areas is not included in the isotopic mass amount for the separate area.

(3) Neutronically separated areas are to be considered effectively neutronically isolated from all other areas used to store fissile material when either of the following conditions are satisfied:

a. A minimum edge-to-edge separation distance of 12 feet is maintained between each area used to store fissile material; or

b. The configuration of each area used to store fissile material, in conjunction with any fixed shielding that may be present (e.g., concrete block walls) between the areas, is demonstrated by neutron transport calculations to result in effective neutron isolation between each area.

D. Residual materials on surfaces of the site buildings or installed equipment in those buildings including removal and transit of those SNM-bearing materials from the buildings. (Any SNM-bearing materials brought into site buildings must satisfy another provision in this Section 1.6.2 to meet the exemption.)

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E. A Contingency Hot Spot that is in secure storage, is neutronically isolated from other SNM, and is intrinsically safe due to two of its physical parameters (e.g., mass, volume, enrichment, geometry, moderation) being in a known state that is sufficient to render the item safely subcritical. The term 'Contingency Hot Spot' is defined in the *Nuclear Criticality Safety Contingency Plan for Remediating Contingency Hot Spots*. The term 'secure storage' is defined as an area in which dual controlled entry is required as well as tandem operations with oversight.

F. NCS Exempt Materials not otherwise exempted by paragraph 14.A above. NCS Exempt Materials are defined as: "Unless otherwise defined and justified within a nuclear criticality safety evaluation, NCS Exempt Material is conservatively defined as material containing ^{235}U with an average nuclide fissile concentration not exceeding 0.1 g $^{235}U/L$, or material that comprises no greater than 15 g^{235}U and is enclosed within a container with a volume of at least 5 liters."

G. Non-NCS Exempt Materials in the process of exhumation from a burial area and characterization (e.g., in a Waste Evaluation Area and/or Material Assay Area), that have an unknown or indeterminate fissile material content (e.g., intact drums), provided the following criteria are met:

1. In-situ radiological survey equipment does not identify the item as a Contingency Hot Spot, and
2. The item is not consistent with the calibration basis of the radiological survey equipment used (e.g., dense shielded items, intact drums), and
3. A 12 foot separation distance (effective neutronic isolation) is maintained between the exhumed item and other exhumed items that are not exempt from Nuclear Criticality Safety (NCS) control (distance may be between 3 feet and 12 feet if effective neutronic isolation at the smaller distance is demonstrated by neutron transport calculations), and
4. The item is moved from exhumation to a Waste Evaluation Area and/or Material Assay Area without being placed in a storage area in-between, and
5. Only one container (or one item if it is too large for a collared drum) not exempt from NCS control is allowed at a time in a Waste Evaluation Area or Material Assay Area with minimum separation of 12 feet from other Non-NCS Exempt material (distance may be between 3 feet and 12 feet if effective neutronic isolation at the smaller distance is demonstrated by neutron transport calculations), and
6. Controls for a Contingency Hot Spot per Condition 16 are applied if the additional characterization (e.g., shielding removed) determines that a Contingency Hot Spot is present.

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15. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and the following correspondence are more restrictive than the regulations.

    A. Westinghouse HEM-11-96, "Final Supplemental Response to NRC Request for Additional Information on the Hematite Decommissioning Plan and Related Revision to a Pending Licensing Action", July 5, 2011 except for Attachment 18. (ADAMS Accession Nos. ML111880290 and ML111880292)

    B. Documents identified in Chapter 1 of NRC Decommissioning Plan SER ADAMS Accession No. (ML112101630).

    C. Westinghouse HEM-11-56, "*Evaluation of Technetium-99 Under the Process Buildings*", May 5, 2011. (ADAMS Accession No. ML111260624).

    D. Documents identified in the NRC's 10 CFR 20.2002 SERs associated with Amendment Nos. 58, 60, and 63. (ADAMS Accession Nos. ML111441087, ML12158A401, and ML13280A368)

    E. Westinghouse HEM-12-101, "Special Nuclear Material License Application for the Hematite Decommissioning Project", August 16, 2012. (ADAMS Accession No. ML12233A362)

16. Notwithstanding the requirement of 10 CFR 70.22(a)(4), the licensee shall be exempted from the possession limit requirements of requirements of 6.C, 7.C and 8.C above with respect to the SNM covered by the Settlement Agreement, Consent Order and Final Judgment entered by the United States District Court for the Eastern District of Missouri – Eastern Division in *Westinghouse Electric Company, LLC v. the United States of America*, et al, Case 4:03-cv-00861-CDP (ML112630111) subject to the conditions specified below:

    If the licensee discovers any such SNM during decommissioning, the SNM shall be handled in accordance with the approved Physical Security Plan, Fundamental Nuclear Material Control Plan, and Nuclear Criticality Contingency Plan for Remediating Contingency Hot Spots.

17. Pursuant to 10 CFR 20.2002, the licensee may dispose of solid materials [consisting of a total of 44,809 m^3 of soils, soil-like material (dewatered sanitary sludge) and associated debris and 23,000 m^3 of concrete/asphalt, piping, soil and miscellaneous equipment] provided the total inventory of Tc-99 based on the average concentration and total mass shipped remains below 1.3 Ci or 2.05 Ci based upon the 95th upper confidence limit as waste at the US Ecology Idaho facility in Grand View, ID. Pursuant to 10 CFR 30.11 and 10 CFR 70.17, this material is exempt from the requirements in 10 CFR 30.3 and 10 CFR 70.3. Any waste material which will be chemically treated at the US Ecology Idaho facility in Grand View Idaho will be shipped in a rail car and total U-235 content per rail car will be limited to 700 grams or less. In

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addition, Westinghouse will ensure that any chemical treatment which occurs at US Ecology Idaho is limited so that no treated batch contains more than the contents of one railcar.

18. The licensee SHALL evaluate the impact of any change to its methods or procedures for performing surveys or visual inspection of buried or exhumed waste and/or contaminated soil, whether in situ or ex situ, on its ability to comply with the applicable criticality safety mass and concentration limits and associated controls established in a nuclear criticality safety assessment/evaluation or in Condition 14. If, based upon this evaluation, the licensee determines that the change has the potential to increase or decrease the effectiveness or efficiency of the licensee's methods for complying with these limits, then the licensee SHALL provide the NRC a copy of the procedure and the evaluation within 48 hours after its approval.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: 1/14/2014

/RA/

Andrew Persinko, Deputy Director
Decommissioning and Uranium
Recovery Licensing Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs