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SAFEGUARDS EVALUATION REPORT

OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE

WESTINGHOUSE ELECTRIC COMPANY LLC

COLUMBIA FUEL FABRICATION FACILITY

5801 BLUFF ROAD, HOPKINS, SC 29061

DOCKET NUMBER 70-1151

LICENSE NUMBER SNM-1107

TAC L33317

1.0 INTRODUCTION AND BACKGROUND

By letter dated November 20, 2015 (Agencywide Documents Access and Management System Accession No. ML15324A010), Westinghouse Electric Company (WEC) submitted Revision 45 to the Physical Security Plan (PSP) for its Columbia Fuel Fabrication Facility (CFFF) for review and approval by the U.S. Nuclear Regulatory Commission (NRC) in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 70.33.

2.0 REGULATORY EVALUATION

The purpose of this review was to determine that the physical security program met all applicable regulations in 10 CFR 73.40, 73.67, 73.71, and the Interim Compensatory Measures Order.

3.0 TECHNICAL EVALUATION

- 3.1 The provisions in 10 CFR 73.40 require that the licensee shall provide physical protection at a fixed site, or contiguous sites where licensed activities are conducted, against radiological sabotage, or against theft of special nuclear material, or against both, in accordance with the applicable sections of this Part for each specific class of facility or material license. If applicable, the licensee shall establish and maintain physical security in accordance with security plans approved by the NRC.

The NRC staff has reviewed the applicant's description of the physical protection of SNM in Chapter 1 of the PSP and finds that it meets the requirements of 10 CFR 73.40.

- 3.2 The provisions of 10 CFR 73.67(a) require that the licensee shall (1) establish and maintain a physical protection system that will achieve the following

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objectives: (i) Minimize the possibilities for unauthorized removal of special nuclear material consistent with the potential consequences of such actions; and (ii) Facilitate the location and recovery of missing special nuclear material. (2) To achieve these objectives, the physical protection system shall provide: (i) Early detection and assessment of unauthorized access or activities by an external adversary within the controlled access area containing special nuclear material; (ii) Early detection of removal of special nuclear material by an external adversary from a controlled access area; (iii) Assure proper placement and transfer of custody of special nuclear material; and (iv) Respond to indications of an unauthorized removal of special nuclear material and then notify the appropriate response forces of its removal in order to facilitate its recovery.

The NRC staff has reviewed the applicant's description of the physical protection of SNM in Chapter 1 of the PSP and finds that it meets the requirements of 10 CFR 73.67(a).

- 3.3 The provisions of 10 CFR 73.67(c) require that the licensee shall: (1) Submit a security plan or an amended security plan describing how the licensee will comply with all the requirements of paragraphs (f), and (g) of this section, as appropriate, including schedules of implementation. The licensee shall retain a copy of the effective security plan as a record for three years after the close of period for which the licensee possesses the special nuclear material under each license for which the original plan was submitted. Copies of superseded material must be retained for three years after each change. (2) Within 30 days after the plan submitted pursuant to paragraph (c)(1) of this section is approved, or when specified by the NRC in writing, implement the approved security plan.

The NRC staff has reviewed the applicant's description of the physical protection of SNM in Chapter 1 of the PSP and finds that it meets the requirements of 10 CFR 73.67(c).

- 3.4 The provisions of 10 CFR 73.67(f) require that the licensee shall: (1) Store or use the material only within a controlled access area, (2) Monitor with an intrusion alarm or other device or procedures the controlled access areas to detect unauthorized penetrations or activities, (3) Assure that a watchman or offsite response force will respond to all unauthorized penetrations or activities, and (4) Establish and maintain response procedures for dealing with threats of thefts or thefts of this material. The licensee shall retain a copy of the current response procedures as a record for three years after the close of period for which the licensee possesses the special nuclear material under each license for which the procedures were established. Copies of superseded material must be retained for three years after each change.

The NRC staff has reviewed the applicant's description of the physical protection of SNM in Chapters 3, 4, 5, and 6 of the PSP and finds that it meets the requirements of 10 CFR 73.67(f).

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- 3.5 The provisions of 10 CFR 73.67(g)(1) and (2) require that the licensee that transports or receives material, including material for export or import shall: Notify and confirm shipment and receipt of material, transport the material in a tamper indicating sealed container, check the integrity of the containers and seals prior to shipment, and arrange for the in-transit physical protection of the material. The provisions of 10 CFR 73.67(g)(3) require that the licensee shall: establish and maintain response procedures for dealing with threats or thefts of the material. The licensee shall retain a copy of the current response procedures as a record for three years after the close of period for which the licensee possesses the special nuclear material under each license for which the procedures were established. Copies of superseded material must be retained for three years after each change. The licensee shall make arrangements to be notified immediately of the arrival of the shipment at its destination, or of any such shipment that is lost or unaccounted for after the estimated time of arrival at its destination and conduct immediately a trace investigation of any shipment that is lost or unaccounted for after the estimated arrival time and notify the NRC Operations Center within one hour after the discovery of the loss of the shipment and within one hour after recovery of or accounting for such lost shipment in accordance with the provisions of § 73.71 of this part.

The NRC staff has reviewed the applicant's description of the physical protection of SNM in Chapter 7 of the PSP and finds that it meets the requirements of 10 CFR 73.67(g).

- 3.6 The provisions of 10 CFR 73.71(a) require that the licensee shall notify the NRC Operations Center within one hour after discovery of the loss of any shipment of SNM or spent fuel, and within one hour after recovery of or accounting for such lost shipment.

The NRC staff has reviewed the applicant's description of the physical protection of SNM in Chapter 7 of the PSP and finds that it meets the requirements of 10 CFR 73.71(a).

- 3.7 The provisions of 10 CFR 73.71(b) require that the licensee shall (1) notify the NRC Operations Center within 1 hour of discovery of the safeguards events described in paragraph I(a)(1) of appendix G to this part and (2) this notification must be made in accordance with the requirements of paragraphs (a) (2), (3), (4), and (5) of this section.

The NRC staff has reviewed the applicant's description of the physical protection of SNM in Chapter 6 of the PSP and finds that it meets the requirements of 10 CFR 73.71(b).

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- 3.8 The provisions of the Interim Compensatory Measures Order, dated February 6, 2003, are marked as “Safeguards Information” and withheld pursuant to 10 CFR 73.21.

The NRC staff has reviewed the applicant’s description of the physical protection of SNM in Chapters 3, 4, 5, and 6 of the PSP and finds that it meets the requirements of the Interim Compensatory Measures Order, dated February 6, 2003.

4.0 CONCLUSION

The physical security program, described in CFFF’s PSP Revision 45, satisfies the performance objectives, systems capabilities, and reporting requirements specified in 10 CFR 73.40, 73.67, 73.71, and the Interim Compensatory Measures Order. Therefore, NRC staff finds the CFFF physical security program is acceptable and provides reasonable assurance that the requirements for the physical protection of Special Nuclear Materials of Low Strategic Significance will be met. The NRC staff’s review of the applicant’s physical security program contains information that has been marked as “Official Use Only – Security Related Information” by the applicant, and is therefore withheld from public disclosure.

5.0 REFERENCES

10 CFR 73.40, “Physical Protection: General Requirements at Fixed Sites.”

10 CFR 73.67, “Licensee fixed site and in-transit requirements for the physical protection of special nuclear material of moderate and low strategic significance.”

10 CFR 73.71, “Reporting of safeguards events.”

Interim Compensatory Measures Order, dated February 6, 2003. (SGI)

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