

SUBJECT: Safeguards Evaluation Report GE-Hitachi Laser Enrichment LLC Commercial Facility, P.O. Box 780 Wilmington, NC 28402. Docket No: 70-7016, License No: n/a, Physical Security and Nuclear Material Transportation Security Plans for Protection of Category III Low Enriched Uranium, Revision 1, Dated March 18, 2010, hereafter referred to as the Physical Security Plan and Transportation Security Plan. (TAC L32857)

BACKGROUND

By letter dated June 26, 2009, GE-Hitachi submitted Revision 0 of the Physical Security Plan (PSP) and Transportation Security Plan (TSP) 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) 70.5(a) and 70.21. (MFN-09-403) In accordance with 10 CFR Sections 70.5(a) and 70.21, GE-Hitachi Global Laser Enrichment LLC (GLE) submitted an application for the construction and operation of the GLE Commercial Facility in accordance with the requirements of 10 CFR Parts 30, 40, and 70. This proposed uranium enrichment facility will utilize a laser-based isotope separation technology to enrich uranium hexafluoride up to 8 percent and will have a normal capacity of up to six million separative work units.

On November 19, 2009, NRC Staff issued a Request for Additional Information (RAI). (ML093030046)

On January 12, 2010, NRC Staff conducted a conference call with M. Venters, A. Kennedy, S. Painter, and J. Oliver from GE-Hitachi to discuss the RAIs. (ML100150160)

On January 13, 2010, GE-Hitachi provided responses to the RAIs. (MFN-10-008)

On March 24, 2010, GE-Hitachi provided Revision 1 to the PSP and TSP. (MFN-10-021)

REGULATION

Fixed Site Security:

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

REGULATORY GUIDANCE

Regulatory Guide 5.59, "Standard Format and Content for a Licensee Physical Security Plan for the Protection of Special Nuclear Material of Moderate or Low Strategic Significance" (1983)

NRC Regulatory Issue Summary 2005-22, "Requirements for the Physical Protection During Transportation of Special Nuclear Material of Moderate and Low Strategic Significance: 10 CFR Part 73 vs. Regulatory Guide 5.59 (1983)" (2005)

ACTION REQUESTED

The Office of Nuclear Material Safety and Safeguards requested that the Office of Nuclear Security and Incident Response staff:

- (1) review the PSP and TSP submitted by the Applicant

Enclosure

- (2) prepare RAIs, if necessary;
- (3) evaluate additional information submitted;
- (4) participate in meetings, conference calls, and site visits, if necessary; and
- (5) prepare input for the Safeguards Evaluation Report.

DISCUSSION

By letter dated June 26, 2009, GE-Hitachi submitted Revision 0 of the License Application for review and approval by the NRC in accordance with 10 CFR 70.5(a) and 70.21. Upon completion of a review, an RAI was submitted by letter on November 19, 2009. The RAI contained issues to be addressed by GE-Hitachi. On January 12, 2010, a conference call was conducted between NRC Staff and GE-Hitachi to discuss the RAIs and provide clarification, if needed. GE-Hitachi provided a response to the RAI by letter dated January 13, 2010. By letter dated March 24, 2010, GE-Hitachi submitted PSP and TSP Revision 1, which incorporated the responses to the RAI. Staff reviewed the PSP and TSP to ensure the applicant has an acceptable understanding of the security requirements outlined in 10 CFR Part 73 and to ensure that the applicant is committed to implementing the general performance objectives of 10 CFR 73.67(a), the specific fixed site and in-transit security requirements of 10 CFR 73.67(c), (f), and (g), and other applicable requirements set forth in 10 CFR parts 70, 73, and 74.

Staff reviewed the PSP to ensure the applicant committed to ensuring that SNM will be stored only in a controlled access area, will be monitored by an intrusion detection system or other approved procedures, and will have a guard force and an offsite response force available to respond to unauthorized penetrations or activities, and that the applicant will establish and maintain response procedures for dealing with threats of theft or theft of SNM and reporting safeguards events as required by regulation.

Staff reviewed the TSP to ensure that the applicant committed to providing advance notification, receiving confirmation from receivers prior to shipping material, providing in-transit security, transporting the material in tamper-indicating sealed containers, verifying the integrity of seals on shipments received, notifying shippers of receipt of shipment, and implementing the proper reporting and investigations in the event of lost or unaccounted for material.

CONCLUSIONS

The NRC Staff's review of the applicant's PSP for the protection of SNM of Low Strategic Significance (LSS) contains information that has been marked as "Security Related Information" by the applicant, pursuant to 10 CFR 2.390. NRC staff reviewed the applicant's PSP for fixed site physical protection of SNM-LSS. The methods and procedures outlined in the PSP satisfy the performance objectives, systems capabilities, and reporting requirements specified in 10 CFR 73.67 and 73.71. The PSP for the facility is acceptable and provides reasonable assurance that the requirements for the physical protection of SNM-LSS will be met.

The NRC Staff's review of the applicant's TSP for the transportation of SNM of LSS contains information that has been marked as "Security Related Information" by the applicant, pursuant to 10 CFR 2.390. NRC staff reviewed the applicant's TSP for SNM-LSS shipments originating from, or arriving at, the facility. The approaches and procedures outlined in the TSP satisfy the performance objectives, systems capabilities, and event and advance notification requirements specified in 10 CFR 73.67(a), 73.67(f)(g)(1)-(5), 73.71, 73.73, and 73.74. The TSP for the

facility is acceptable and provides reasonable assurance that the requirements for the in-transit physical protection of SNM-LSS will be met.

The staff concludes that Revision 1 provides reasonable assurance that the safeguards effectiveness of the PSP and TSP has not been decreased.

PRINCIPAL CONTRIBUTOR(S)

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