[7509-01-P]

NUCLEAR REGULATORY COMMISSION

[NRC-2009-0157]

General Electric-Hitachi Global Laser Enrichment, LLC,

Proposed Laser-Based Uranium Enrichment Facility,

Wilmington, North Carolina

AGENCY: Nuclear Regulatory Commission.

ACTION: Final environmental impact statement; issuance.

SUMMARY: Notice is hereby given that the U.S. Nuclear Regulatory Commission (NRC or the Commission) has published the Final Environmental Impact Statement (EIS) for the proposed General Electric-Hitachi Global Laser Enrichment, LLC (GLE) Uranium Enrichment Facility. On June 26, 2009, GLE submitted a license application that proposes the construction, operation, and decommissioning of a laser-based uranium enrichment facility (the "proposed action"). The GLE proposes to locate the facility on the existing General Electric Company (GE) site near Wilmington, North Carolina (Wilmington Site). This application is for a license to possess and use byproduct material, source material, and special nuclear material at the proposed uranium enrichment facility.

ADDRESSES: Please refer to Docket ID **NRC-2009-0157** when contacting the NRC about the availability of information regarding this document. You may access information related to this document using the following methods:

- **Federal Rulemaking Web site:** Go to *http://www.regulations.gov*.and search for Docket ID **NRC-2009-0157**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-492-3668; e-mail: *Carol.Gallagher@nrc.gov*.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may access publicly-available documents online in the NRC Library at *http://www.nrc.gov/reading-rm/adams.html*. To begin the search, select "*ADAMS Public Documents*" and then select "*Begin Web-based ADAMS Search*." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to *pdr.resource@nrc.gov*. Additional information regarding accessing materials related to this action is under the Document Availability heading in the **SUPPLEMENTARY INFORMATION** section of this document.

- **NRC's PDR**: You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: For information about the Final EIS or the environmental review process, please contact Jennifer A. Davis, telephone: 301-415-3835; e-mail: *Jennifer.Davis@nrc.gov*. Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. For general or technical information associated with the licensing process as it relates to the GLE application, please contact Tim Johnson, telephone: 301-492-3121; e-mail: *Timothy.Johnson@nrc.gov;* Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

SUPPLEMENTARY INFORMATION:

Discussion

The GLE submitted an Environmental Report (ER) in support of the proposed facility on January 30, 2009, and its license application on June 26, 2009. On May 8, 2009, the NRC granted an exemption to authorize GLE to conduct certain preconstruction activities (e.g., site preparation) on the Wilmington Site prior to the NRC's decision on whether to grant or deny a license. The GLE submitted Supplement 1 to its ER on July 22, 2009, *GLE Environmental Report Supplement 1—Early Construction*. Supplement 1 distinguishes between the environmental impacts of preconstruction activities covered by the May 8, 2009, exemption and NRC-licensed construction activities, which cannot be undertaken unless a license is granted. On November 13, 2009, GLE submitted Supplement 2 to its ER, *GLE Environmental Report Supplement 2—Revised Roadway and Entrance*. Supplement 2 provides information describing the environmental impacts associated with developing an entrance and roadway into the Wilmington Site that are different from those proposed in the original ER.

The Final EIS is being issued as part of the NRC's process to decide whether to issue a license to GLE, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Parts 30, 40, and 70, to construct and operate the proposed uranium enrichment facility. Specifically, GLE proposes to use a laser-based technology to enrich the uranium-235 isotope found in natural uranium to concentrations up to 8 percent by weight. The enriched uranium would be used to manufacture nuclear fuel for commercial nuclear power reactors. In the Final EIS, the NRC staff assessed the potential environmental impacts from the preconstruction, construction, operation, and decommissioning of the proposed GLE project.

The Final EIS was prepared in compliance with the *National Environmental Policy Act of 1969*, as amended (NEPA), and the NRC's regulations for implementing NEPA in 10 CFR Part 51. The NRC staff assessed the impacts of the proposed action on land use, historic and

cultural resources, visual and scenic resources, air quality, geology and soils, water resources, ecological resources, noise, transportation, public and occupational health, waste management, socioeconomics, and environmental justice. Additionally, the NRC staff analyzed and compared the benefits and costs of the proposed action. In preparing this Final EIS, the NRC staff also reviewed, considered, evaluated, and addressed the public comments received on the Draft EIS.

In addition to the proposed action, the NRC staff considered a reasonable range of alternatives, including the no-action alternative. Under the no-action alternative, the NRC would deny GLE's request to construct and operate a uranium enrichment facility at the Wilmington Site. The no-action alternative serves as a baseline for comparison of the potential environmental impacts of the proposed action. Other alternatives the NRC staff considered but eliminated from further analysis include: (1) alternative sites; (2) alternative sources of enriched uranium; and (3) alternative technologies for uranium enrichment. These alternatives, except the gas centrifuge technology, were eliminated from further analysis due to economic, environmental, national security, technological maturity, or other reasons. The environmental impacts of gas centrifuge technology were qualitatively evaluated, relative to those of the proposed laser-based technology.

The Final EIS also discusses alternatives for the disposition of depleted uranium hexafluoride (UF_6) resulting from enrichment operations over the lifetime of the proposed project.

After weighing the impacts of the proposed action and comparing alternatives, the NRC staff, in accordance with 10 CFR 51.91(d), sets forth its recommendation regarding the proposed action. The NRC staff recommends that, unless safety issues mandate otherwise, the proposed license be issued to GLE. In this regard, the NRC staff has concluded that the environmental impacts of the proposed action are generally small, and taken in combination

with the proposed GLE environmental monitoring program and proposed mitigation measures discussed in the Final EIS would eliminate or substantially lessen any adverse environmental impacts associated with the proposed action.

Document Availability

One appendix of the Final EIS contains Sensitive Unclassified Non-Safeguards Information (SUNSI) and has been withheld from public inspection in accordance with 10 CFR 2.390, "Availability of Public Records." This appendix contains proprietary business information as well as security-related information. The NRC staff has considered the information in this appendix in forming the conclusions presented in the Final EIS. Procedures for obtaining access to SUNSI were previously published in the NRC's Notice of Hearing and Commission Order related to GLE's license application. *GE-Hitachi Global Laser Enrichment LLC; (GLE Commercial Facility); Notice of Receipt of Application for License; Notice of Consideration of Issuance of License; Notice of Hearing and Commission Order; and Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation*, 75 FR 1819 (January 13, 2010).

Documents related to this notice are available on the NRC's GE Laser Enrichment Facility Licensing Web site at *http://www.nrc.gov/materials/fuel-cycle-fac/laser.html*. The Final EIS for the proposed GLE project may also be accessed on the internet at *http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff* by selecting "NUREG-1938."

The GLE's license application, the exemption authorizing certain preconstruction activities, the GLE's Environmental Report, Supplement 1 to the Environmental Report, Supplement 2 to the Environmental Report, and Volumes 1 and 2 of the NRC's Final EIS are available in ADAMS under Accession Numbers ML091871003, ML083510647, ML090910573, ML092100577, ML093240135, ML12047A040, and ML12047A042, respectively.

A copy of the Final EIS will be available at the New Hanover County Library, 201 Chestnut Street, Wilmington, North Carolina, 28401.

Dated at Rockville, Maryland, this 28th day of February, 2012.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Christepher McKenney, Acting Deputy Director
Environmental Protection and
Performance Assessment Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs