

NUCLEAR REGULATORY COMMISSION

**Notice of Intent to Prepare an Environmental Impact Statement for the Proposed General Electric—Hitachi Global Laser Enrichment Uranium Enrichment Facility**

**[NRC-2009-0157]**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice of Intent (NOI).

**SUMMARY:** General Electric—Hitachi Global Laser Enrichment, LLC (GLE) submitted an Environmental Report (ER) on January 30, 2009, that proposes the construction, operation, and decommissioning of a laser-based uranium enrichment facility. GLE proposes to locate the facility on the existing General Electric Company (GE)/Global Nuclear Fuel—Americas (GNF-A) site near Wilmington, North Carolina. The U.S. Nuclear Regulatory Commission (NRC), in accordance with the National Environmental Policy Act (NEPA) and its regulations at 10 CFR Part 51, announces its intent to prepare an Environmental Impact Statement (EIS) evaluating this proposed action. The EIS will examine the potential environmental impacts of the proposed GLE facility.

**DATES:** NRC invites public comments on the appropriate scope of issues to be considered in the EIS. The public scoping process begins with publication of this NOI. Written comments submitted by mail should be postmarked by no later June 8, 2009, to ensure consideration. Comments mailed after that date will be considered to the extent practical.

The NRC will conduct two public scoping meetings in Wilmington, North Carolina, to assist in defining the appropriate scope of the EIS, and to help identify the significant environmental issues that need to be addressed in detail. The meeting date, times, and location are listed below:

- Date: May 19, 2009
- Times: 1:00 p.m. to 4:00 p.m. and 7:00 p.m. to 10:00 p.m.
- Location: Warwick Center, Ballroom 1, University of North Carolina at Wilmington, North Carolina 28403

**ADDRESSES:** Members of the public are invited and encouraged to submit written comments regarding the appropriate scope and content of the EIS. Comments may be sent to the Chief, Rules and Directives Branch, Mail Stop TWB 5B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001. Please note Docket No. 70-7016 when submitting comments. Commenters also may send comments electronically to [GLE.EIS@nrc.gov](mailto:GLE.EIS@nrc.gov).

**FOR FURTHER INFORMATION CONTACT:** For general or technical information associated with the licensing review of the GLE application, please contact Tim Johnson at (301) 492-3121 or [Timothy.Johnson@NRC.gov](mailto:Timothy.Johnson@NRC.gov). For general information on the NRC NEPA process, or the environmental review process related to the GLE application, please contact Christianne Ridge at (301) 415-5673 or [Christianne.Ridge@NRC.gov](mailto:Christianne.Ridge@NRC.gov).

Information and documents associated with the GLE project, including the GLE ER (submitted on January 30, 2009), are available for public review through NRC's electronic reading room at <http://www.nrc.gov/reading-rm/adams.html>. Members of the public may access the applicant's ER in NRC's Agencywide Documents Access and Management System (ADAMS) at accession number ML090910573.

A copy of the applicant's ER is available for public inspection at the New Hanover County Library, located at 201 Chestnut Street, Wilmington, North Carolina 28401. Documents also may be obtained from NRC's Public Document Room at U.S. Nuclear Regulatory Commission Headquarters, 11555 Rockville Pike (first floor), Rockville, Maryland.

## **SUPPLEMENTARY INFORMATION:**

### **1.0 Background**

On January 30, 2009, GLE submitted an ER to NRC as part of its application for authorization to construct and operate a laser-based uranium enrichment facility. To complete its license application, GLE must submit additional information related to facility safety in accordance with the Atomic Energy Act. The EIS will evaluate the potential environmental impacts associated with the proposed GLE enrichment facility. The results of the NRC's safety review will be documented separately in a Safety Evaluation Report. The environmental

evaluation will be documented in draft and final EISs in accordance with NEPA and NRC's implementing regulations at 10 CFR Part 51.

If NRC later finds GLE's complete license application to be acceptable for review, a Notice of Hearing and Opportunity to Petition for Leave to Intervene will be published in a future *Federal Register* notice. The purpose of the present notice is to inform the public that the NRC staff will prepare an EIS as part of the review of the application, and to encourage the public to participate in the environmental scoping process as defined in 10 CFR 51.29.

## **2.0 Proposed GLE Enrichment Facility**

The GLE facility, if licensed, would enrich uranium for use in manufacturing commercial nuclear fuel for use in power reactors. Feed material would be natural (not enriched) uranium in the form of uranium hexafluoride ( $\text{UF}_6$ ) which contains the uranium-235 isotope. GLE proposes to use a laser-based technology to enrich this isotope in the  $\text{UF}_6$  to up to 8 percent by weight. The capacity of the plant would be up to 6 million separative work units (SWU) [SWU relates to a measure of the work used to enrich uranium]. The enriched  $\text{UF}_6$  would be used on-site by GNF-A in its fuel fabrication facility and transported off-site to additional fuel fabrication facilities. The depleted  $\text{UF}_6$  would be stored on site until it is either sold, disposed of commercially, or taken by the Department of Energy.

## **3.0 Alternatives to be Evaluated**

*No-Action* – The no-action alternative would be to not build the proposed uranium enrichment facility. Under this alternative, the NRC would not approve the license application. This serves as a baseline for comparison.

*Proposed action* – The proposed action involves the construction, operation, and decommissioning of a laser-based uranium enrichment facility to be located near Wilmington, North Carolina. The applicant would be issued an NRC license under the provisions of 10 CFR Parts 30, 40, and 70.

Other alternatives not listed here may be identified through the scoping process.

## **4.0 Environmental Impact Areas to be Analyzed**

The following areas have been tentatively identified for detailed analysis in the EIS:

- *Land Use*: plans, policies and controls;
- *Transportation*: transportation modes, routes, quantities, and risk estimates;

- *Geology and Soils*: physical geography, topography, geology and soil characteristics;
- *Water Resources*: surface and groundwater hydrology, water use and quality, and the potential for degradation;
- *Ecology*: wetlands, aquatic, terrestrial, economically and recreationally important species, and threatened and endangered species;
- *Air Quality*: meteorological conditions, ambient background, pollutant sources, and the potential for degradation;
- *Noise*: ambient, sources, and sensitive receptors;
- *Historical and Cultural Resources*: historical, archaeological, and traditional cultural resources;
- *Visual and Scenic Resources*: landscape characteristics, manmade features, and viewshed;
- *Socioeconomics*: demography, economic base, labor pool, housing, transportation, utilities, public services and facilities, education, recreation, and cultural resources;
- *Environmental Justice*: potential disproportionately high and adverse impacts to minority and low-income populations;
- *Public and Occupational Health*: potential public and occupational consequences from construction, routine operation, transportation, and credible accident scenarios (including natural events);
- *Waste Management*: types of wastes expected to be generated, handled, and stored; and
- *Cumulative Effects*: impacts from past, present and reasonably foreseeable actions at and near the site.

This list is not intended to be all inclusive, nor is it a predetermination of potential environmental impacts. The list is presented to facilitate comments on the scope of the EIS. Changes to this list may occur as a result of the public scoping process.

## 5.0 Scoping Meetings

One purpose of this notice is to solicit public comments on the proposed scope and content of the EIS. Scoping is an early and open process designed to determine the range of actions, alternatives, and potential impacts to be considered in the EIS, and to identify significant issues related to the proposed action. It is intended to solicit input from the public and other agencies so that the analysis can be more clearly focused on issues of genuine concern. The principal goals of the scoping process are to:

- Ensure that concerns are identified early and are properly studied;
- Identify alternatives to be examined;

- Identify significant issues to be analyzed;
- Eliminate unimportant issues from detailed consideration; and
- Identify public concerns.

On May 19, 2009, the NRC will hold two public scoping meetings in Wilmington, North Carolina, to solicit both oral and written comments from interested parties. Both meetings will be transcribed to record public comments. The first meeting will convene at 1:00 p.m. and will continue until approximately 4:00 p.m. The second meeting will convene at 7:00 p.m. and will continue until approximately 10:00 p.m. Both meetings will begin with NRC staff providing a description of the NRC's role and mission. A brief overview of the licensing process will be followed by a brief description of the environmental review process. Most of the meeting time will be allotted for attendees to make oral comments.

In addition, the NRC staff will host informal discussions for one hour prior to the start of each public meeting. No formal comments on the proposed scope of the EIS will be accepted during the informal discussions. To be considered, comments must be provided either at one of the transcribed public meetings or in writing, as discussed below.

Persons may register to attend or present oral comments at the scoping meetings by contacting Christianne Ridge at (301) 415-5673, or by sending email to [GLE.EIS@nrc.gov](mailto:GLE.EIS@nrc.gov) no later than April 30, 2009. Members of the public may also register to speak at the meeting prior to the start of the session. Individual oral comments may be limited by the time available, depending on the number of persons who register. Members of the public who have not registered may also have an opportunity to speak, if time permits. If special equipment or accommodations are needed to attend or present information at the public meeting, please contact Christianne Ridge no later than April 23, 2009, so that the NRC staff can determine whether the request can be accommodated.

## **6.0 Scoping Comments**

Members of the public may provide comments orally at one of the transcribed public scoping meetings or in writing. Written comments may be sent by email to [GLE.EIS@nrc.gov](mailto:GLE.EIS@nrc.gov) or mailed to the address listed above in the ADDRESSES Section.

At the conclusion of the scoping process, the NRC staff will prepare a summary of public comments regarding the scope of the environmental review and significant issues identified. NRC staff will send this summary to each participant in the scoping process for whom the staff

has an address. This summary and project-related material will be available for public review through our electronic reading room: <http://www.nrc.gov/reading-rm/adams.html>. The scoping meeting summaries and project-related materials will also be available on NRC's GLE web page: <http://www.nrc.gov/materials/fuel-cycle-fac/laser.html> (case sensitive).

## 7.0 The NEPA Process

The EIS for the GLE facility will be prepared pursuant to the National Environmental Policy Act of 1969 and NRC's NEPA Regulations at 10 CFR Part 51. After the scoping process is complete, NRC and its contractor will prepare and publish a draft EIS. A 45-day public comment period on the draft EIS is planned, and public meetings to receive comments will be held approximately three weeks after publication of the draft EIS. Availability of the draft EIS, the dates of the public comment period, and information about the public meetings will be announced in the *Federal Register*, on NRC's GLE web page, and in the local news media. The final EIS will include responses to any comments received on the draft EIS.

Signed in Rockville, Maryland, this 2<sup>nd</sup> day of April 2009.

FOR THE NUCLEAR REGULATORY COMMISSION

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and Performance Assessment Directorate  
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