September 16, 2010

MEMORANDUM TO: David Skeen, 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

FROM: Jennifer A. Davis, Senior Project Manager **/RA/**
Environmental Review Branch B
Environmental Protection
and Performance Assessment Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

SUBJECT: JULY 22, 2010, PUBLIC MEETING SUMMARY: MEETINGS TO DISCUSS THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED GENERAL ELECTRIC-HITACHI GLOBAL LASER ENRICHMENT FACILITY

On July 22, 2010, U.S. Nuclear Regulatory Commission staff conducted two public meetings in Wilmington, North Carolina, to discuss the preliminary findings in the draft Environmental Impact Statement for the Proposed General Electric-Hitachi Global Laser LLC Enrichment Facility in Wilmington, North Carolina (NUREG-1938). A summary of the meetings is enclosed for your use. This summary contains no proprietary or classified information.

Docket No.: 70-7016

Enclosure:
General Electric-Hitachi Public
Meeting Summary

cc w/enclosure, w/o attachments:
See next page

CONTACT: Jennifer A. Davis, FSME/DWMEP
301-415-3835

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ML102510761

OFC	ERB-B	ERB-B	NMSS/FCSS	ERB-B	ERB-B
NAME	JDavis	AWalker-Smith	BSmith via email	KHsueh	JDavis
DATE	09/14/10	09/14/10	09/15/10	09/16/10	09/16/10

OFFICIAL RECORD COPY

cc w/enclosure, w/o attachments:

William Szymanski/DOE
Patricia Campbell/GEH
Jerald Head/GEH
Tammy Orr/GEH
Mike Giles/CFC
Tom Clements/FOTE
David Springer/CFRW
Stephen Rynas/NCDENR
Jennifer Braswell/New Hanover County
Christopher O'Keefe/New Hanover County
Lafayette Atkinson/NCOSH
Bruce Shell/New Hanover County
Marty Lawing/Brunswick County
George Brown/Pender County
Bill Saffo/Wilmington
Malissa Talbert/Wilmington
Wanda Lagoe/NCOSH
Cameron Weaver/NCDENR
Emily Hughes/USACE
Lee Cox/NCDENR
David Weaver/New Hanover County
Julie Olivier/GEH

SUMMARY OF U.S. NUCLEAR REGULATORY COMMISSION MEETINGS FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED GENERAL ELECTRIC-HITACHI GLOBAL LASER ENRICHMENT FACILITY

Date: July 22, 2010

Place: Warwick Center, University of North Carolina at Wilmington
Wilmington, North Carolina

Attendees: See Attachment 1

Purpose:

The purpose of these meetings was for U.S. Nuclear Regulatory Commission (NRC) staff to present the preliminary findings from the draft *Environmental Impact Statement for the Proposed GE-Hitachi Global Laser Enrichment LLC Facility in Wilmington, North Carolina* (DEIS, NUREG-1938) and to solicit public comments.

Discussion:

On July 22, 2010, members of the U.S. Nuclear Regulatory Commission (NRC or the staff) held public meetings in Wilmington, North Carolina, regarding the staff's environmental review of the application submitted by General Electric-Hitachi (GEH) Global Laser Enrichment, LLC for construction, operation, and decommissioning of the proposed GLE Facility. The purpose of the meetings was to provide the public with an opportunity to comment on the draft environmental impact statement (DEIS) which was issued on June 18, 2010. Formal presentations were made by the NRC staff.

The NRC staff briefly described the NRC's licensing process, provided a description of the environmental review process, and provided a status of the review to date. The NRC staff also described the preliminary results of the environmental analyses. Most environmental impacts associated with constructing, operating and decommissioning of the proposed GLE facility were preliminarily characterized as small. For five resource areas (transportation, ecology, air quality, noise and historic and cultural resources), the impacts ranged from small to moderate. The impacts of alternatives (including the no-action alternative) were preliminarily characterized as potentially reaching moderate to large significance in at least some environmental areas.

After the formal presentations were given by the NRC staff, members of the public were invited to provide comments. Approximately 50 people attended the two sessions. Attendees included members of the public, local representatives and NRC staff, the applicant, State environmental agencies, and the news media. Issues raised by the public included economic concerns, for example, the need for jobs and tax revenue; shipment of uranium; waste transportation; and increased truck traffic on local roadways associated with the construction of the Titan Cement Facility.

Enclosure

Each meeting was preceded by an hour-long open house; during which NRC staff answered questions about the licensing process, the environmental review process, and the staff's preliminary findings. Two posters were also displayed to summarize the licensing and environmental review processes. The posters are available in NRC's Agencywide Documents Access and Management System (ADAMS) with accession numbers ML102510811.

A combined list of attendees for both public meetings is provided in Attachment 1. The official corrected transcripts for the afternoon and evening meetings are publicly available at the NRC Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852, or from the NRC's Agencywide Documents Access and Management System (ADAMS). The ADAMS Public Electronic Reading Room is accessible at http://adamswebsearch.nrc.gov/dologin.htm. The transcripts for the afternoon and evening meetings are listed under Accession Nos. ML102510820 and ML102510822, respectively. A copy of the slides used during the NRC's presentation is also available in ADAMS under Accession No. ML102510733.

The comment period for the DEIS ended on August 9, 2010. The NRC staff will consider all comments on the DEIS and make any necessary revisions to the document prior to issuing its final environmental impact statement, scheduled for February 2011.

Action Items:

None

NRC Staff Attending:

William Burton
Larry Camper
Jennifer Davis
Roger Hannah
Kevin Hsueh
Tim Johnson
Michael Tschiltz
Antoinette Walker-Smith
Haimanot Yilma

Attachments:

1. Attendee list (ML102510733)
2. Meeting presentation slides (ML102510733)
3. Public comment form (ML102510788)

U.S. Nuclear Regulatory Commission Public Meetings on the Draft Environmental Impact Statement for the Proposed GE-Hitachi Global Laser Enrichment Facility

July 22, 2010

Attendee List – Afternoon Session

NAME	AFFILIATION
Joe Alexander	RTI International
Lafayette Atkinson	NC Department of Labor
Halil Avci	Argonne National Laboratory
Roderick Bell	GE
Brian Bellamy	None
Deborah Butler	Wilmington Resident
Wilhelm G. Christophersen	Wilmington Resident
Robert Crate	GLE
Jennie Delles	GE
Carlton Barrett English, Sr.	Petrochemicals Risk Management – DuPont (retired)
Dr. Steve Everhart	NC Division of Coastal Management
Karl Fischer	Argonne National Laboratory
Bill Fry	GEH
Paul Gallagher	Parsons
Thom Goolsby	Lawyer
Emily Hughes	U.S. Army Corps of Engineers
Kenji Kanamori	Hitachi
Elli Klein	New Hanover County Resident
Simon Klein	CH2MHill
John Magyaz	Parsons
Robert Mayo	No affiliation given
David Michael	Wilmington Resident
Cornelius Milmoe	Nuclear Infrastructure Council
Charles F. Mincey	Wilmington Resident
John Monroe	Wilmington Resident
Jason Nelson	GE
Chris Newton	Wilmington Resident/Contractor
Julie Olivier	GLE
Kristy Ondo	WECT-TV (NBC)
Tammy Orr	GLE

Attachment 1

Jay Pace	No affiliation given
Lon Paulson	GEH
Bob Philpot	Cape Fear Community College
Shawn Ralston	New Hanover County
Burrows Smith	River Bluffs Development Company
Huck Smith	Southern Industrial
Steven Still	New Hanover County Planning and Inspection
Mike Tetuan	GE
Kevin Walsh	GEH
Emerson Whitted	Citizen of adjacent neighborhood to site
Andy Yates	Pantano for Congress

Attendee List – Evening Session

NAME	**AFFILIATION**
Joe Alexander	RTI International
Halil Avci	Argonne National Laboratory
Joel Bing	Cape Fear Public Utility Authority
Beth Dawson	Citizen
Terri V. Forthing	GLE
Karl Fisher	Argonne National Laboratory
Paul Gallagher	Parsons
Weston Lundiff	Public
John Magyaz	Parsons
Priti Mathur	GEH
Julie Olivier	GLE
Tammy Orr	GLE
Lon Paulson	GEH
Erin Shubol	GEH
Ronald Sparks	Wilmington City Council
Herb Strickler	Retired
Mike Tetuan	GE
Kevin Walsh	GEH

NRC Environmental Review Process for the Proposed General Electric-Hitachi Global Laser Enrichment Facility

Larry W. Camper, Director
Division of Waste Management and Environmental Protection

July 22, 2010

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Role of NRC

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

- Independent government agency
- Ensuring protection of public and worker health and safety in the use of radioactive materials
- NRC does not build, operate, or promote nuclear facilities

NRC Involvement

- GE-Hitachi Global Laser Enrichment LLC proposes to build a uranium enrichment facility
- Proposed location on GE property north of Wilmington
- License required from NRC

Environmental Review

- Part of NRC's decision regarding GEH license
- Required by the National Environmental Policy Act of 1969, as amended (NEPA)
- Product is an Environmental Impact Statement (EIS)

Meeting Purpose

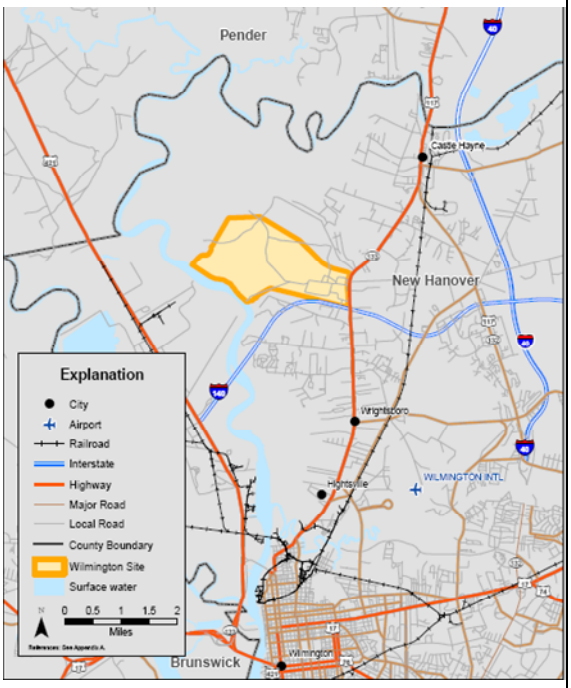
- Present results of NRC Draft EIS
- Listen to your comments
- Comments will be addressed in Final EIS

Draft Environmental Impact Statement for the Proposed General Electric-Hitachi Global Laser Enrichment Facility

Jennifer Davis, NRC
Sr. Environmental Project Manager

July 22, 2010

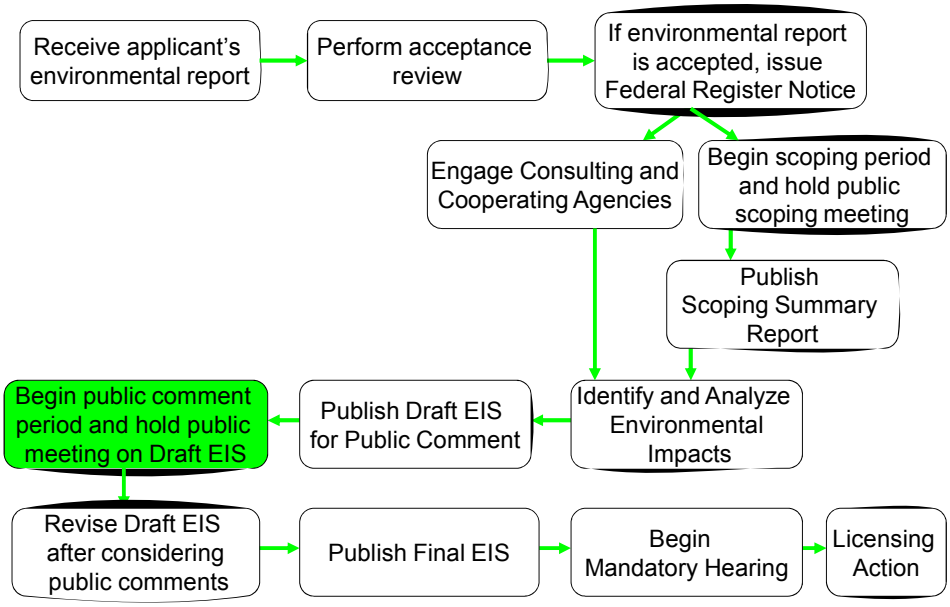
Proposed Site



[GE-Hitachi Global Laser Enrichment, LLC. Environmental Report for the GLE Commercial Facility, January 2009]

Accessible at:
http://www.nrc.gov/reading-rm/adams.html
Accession number ML090910573

Environmental Review Process



Environmental Impact Statement (EIS) Topics

- The proposed action, including its purpose and the need
- Alternatives, including no action
- Affected environment
- Environmental impacts (direct, indirect, and cumulative)
- Cost-benefit analysis
- Mitigative measures

Purpose and Need

- Supply enriched uranium for nuclear fuel for commercial nuclear power plants to fulfill electricity demand
- Provide a domestic supply of enriched uranium for national energy security

Alternatives

- Alternatives include gas centrifuge technology and no action
- Other alternatives (e.g., alternative locations and other technologies) were considered but eliminated detailed analysis

Environmental Impacts

- The NRC defines three impact levels
  - Small: *Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.*
  - Moderate: *Environmental effects are sufficient to alter noticeably, but not destabilize, important attributes of the resource.*
  - Large: *Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.*

Resource Areas

- *Land Use*
- ***Transportation***
- *Geology and Soils*
- *Water Resources*
- ***Ecology***
- ***Air Quality***
- ***Noise***
- ***Historical and Cultural Resources***
- *Visual and Scenic Resources*
- *Socioeconomics*
- *Environmental Justice*
- *Public and Occupational Health*
- *Waste Management*

Transportation

- Construction truck traffic
  - Local Impacts could be SMALL to MODERATE
  - Regional impacts expected to be SMALL
- Commuter traffic during operations
  - Local impacts could be SMALL to MODERATE
  - Regional impacts expected to be SMALL
- Accident and cargo-related impacts expected to be SMALL

Ecology

- Construction is expected to have a SMALL to MODERATE impact on site ecology
- Construction is expected to impact vegetation, wildlife, and wetlands
- No population-level effects are expected on any Federally or State-listed threatened, endangered, or other special status species
- No environmentally sensitive areas are expected to be impacted by operations

Air Quality

- Local impacts during construction could be MODERATE because of dust emissions
- The applicant has committed to take measures to limit dust emissions
- Impacts during operations are expected to be SMALL
- Operational impacts would be limited by stack controls and cylinder maintenance

Noise

- Impacts on the nearest residences during road construction could be MODERATE
- Primary construction noise source is expected to be diesel engine noise
- Noise impacts during operations are expected to be SMALL

Historic and Cultural Resources

- Construction impacts to historic and cultural resources would be SMALL
- Applicant has a plan to address unexpected discoveries
- State Historic Preservation Office has requested that GLE develop a management plan for an archaeological site
  - Operations impacts could range from SMALL to MODERATE

Basis for Recommendation

- The NRC staff has preliminarily concluded the overall benefits of the proposed GLE Facility outweigh the environmental disadvantages and costs based on consideration of the following:
  - The need for an additional, economical, domestic source of enrichment services; and
  - The environmental impacts from the proposed action are generally SMALL, but could be MODERATE in the areas of historic and cultural resources, ecological resources, and transportation.

Preliminary Recommendation

The NRC staff preliminarily recommends that, unless safety issues mandate otherwise, the proposed license be issued to GLE.

DEIS Availability

- http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1938
- NRC's electronic reading room http://www.nrc.gov/reading-rm/adams.html (Accession Number ML101680345)
- New Hanover County Library 201 Chestnut Street, Wilmington

Additional Information

- Project Website (case sensitive) http://www.nrc.gov/materials/fuel-cycle-fac/laser.html
- NRC's electronic reading room (Docket No. 70-7016) http://www.nrc.gov/reading-rm/adams.html
- Contact NRC
  - Licensing and Safety Review: Tim Johnson 301-492-3121 Timothy.Johnson@nrc.gov
  - Environmental Review: Jennifer Davis 301-415-3835 Jennifer.Davis@nrc.gov

How to Comment

- Comment at this meeting
- Write a email to GLE.EIS@nrc.gov
- Write to NRC (note Docket No. 70-7016)

  Chief, Rules and Directives Branch (RDB)
  Mail Stop TWB-05-B01M
  U.S. Nuclear Regulatory Commission
  Washington, DC 20555–0001
- Fax to RDB at (301) 492-3446
- Comment period ends August 9, 2010

General Electric Hitachi Laser-Based Uranium Enrichment Facility Licensing

Tim Johnson, NRC Licensing Project Manager

July 22, 2010

Objectives

- Provide brief summary of
  - Proposed General Electric-Hitachi (GEH) enrichment facility
  - U.S. Nuclear Regulatory Commission (NRC) licensing process

Project Background

- GEH is proposing to enrich uranium using a laser-based process at its site in Wilmington, NC
- Enriched uranium is needed for fuel for nuclear power plants
- After mining and initial processing of ores, uranium is converted into uranium hexafluoride. Uranium hexafluoride is then shipped to an enrichment plant.

Project Background

- The laser-based system separates the U-235 and U-238 isotopes and increases the U-235 content from 0.7 percent to up to 8 percent.
- These enrichment levels are well below that needed to make nuclear weapons.
- The enriched uranium is then shipped to a fuel fabricator that will produce fuel pellets and fuel assemblies for nuclear power plants.

Project Background

- In May 2008, NRC issued GEH a license to operate a laboratory-scale test loop to demonstrate the laser separation equipment at the Wilmington site.
- The test loop is currently under construction and bench-scale experiments are being conducted.

NRC Licensing Process

- NRC is an independent agency responsible for ensuring protection of public and worker health and safety in use of radioactive materials.
- NRC is not a promoter of proposed project.
- Enrichment facility construction under NRC jurisdiction cannot begin until a license for construction and operation is issued.
- Laser safety is regulated by State of North Carolina Department of Labor

NRC Licensing Process

- GEH submitted an Environmental Report on January 30, 2009, and a license application was submitted on June 24, 2009.
- NRC will perform a technical review of the application to ensure it meets NRC health and safety requirements (10 CFR Parts 40 and 70).
- NRC will prepare an Environmental Impact Statement.

NRC Licensing Process

- NRC technical review is expected to take 18 months.
  - NRC will review application
  - Request additional information, if needed
  - Document safety review in a Safety Evaluation Report
- Hearing is required for uranium enrichment plants

NRC Licensing Process

- Public will have several opportunities to provide input to the licensing process.
  - Opportunity to petition for a hearing was offered on January 7, 2010. No petitions for a contested hearing were received.
  - Environmental review process
    - Scoping meeting
    - Draft EIS

NRC Licensing Process

- Staff will conduct a public meeting to discuss results of the Final EIS and Safety Evaluation Report.
- If license is issued, staff will conduct a public meeting to discuss its inspection program for facility construction.

NRC Licensing Process

- NRC has Uranium Enrichment and GEH project web sites.
- http://www.nrc.gov/materials/fuel-cycle-fac/ur-enrichment.html
- http://www/nrc.gov/materials/fuel-cycle-fac/laser.html

NRC Licensing Process

- **NRC Contacts:**
  - **Tim Johnson, Licensing Project Manager; 301-492-3121; Timothy.Johnson@nrc.gov**
  - **Jennifer Davis, Environmental Project Manager; 301-415-3835; Jennifer.Davis@nrc.gov**