

## GEHitachiUELAPem Resource

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**From:** Ridge, Christianne  
**Sent:** Tuesday, November 10, 2009 6:56 AM  
**To:** GEHitachiHrgFile Resource  
**Subject:** FW: White Papers & Transmittal Letter  
**Attachments:** GE\_UEF\_ -- White Paper Construction Activities for GE Ura..pdf; AEK 08-001 USNRC.pdf; GE\_UEF\_ -- White Paper Advocating NRC Adoption of 24-Mont..pdf

-----Original Message-----

From: Christianne Ridge  
Sent: Tuesday, May 13, 2008 8:32 AM  
To: Gloria Kulesa  
Subject: FW: White Papers & Transmittal Letter

FYI

-----Original Message-----

From: Timothy Johnson  
Sent: Monday, May 12, 2008 5:46 PM  
To: Catherine Marco; Bradley Jones; John Hull; Lisa Clark; Scott Flanders; Christianne Ridge  
Cc: Brian Smith; Robert Pierson; Michael Tschiltz; Michael Weber  
Subject: FW: White Papers & Transmittal Letter

See attached white papers from GE.

-----Original Message-----

From: Kennedy, Albert E (GE Infra, Energy) [mailto:albertE.kennedy@ge.com]  
Sent: Monday, May 12, 2008 5:21 PM  
To: Timothy Johnson  
Cc: Brian Smith  
Subject: White Papers & Transmittal Letter

Attached are the transmittal letter & subject white papers we have previously discussed with you and counsel. Can you provide the email addresses for the NRC ccs?

<<GE\_UEF\_ -- White Paper Construction Activities for GE Ura....pdf>> <<AEK 08-001 USNRC.pdf>> <<GE\_UEF\_ -- White Paper Advocating NRC Adoption of 24-Mont....pdf>>

Thanx,

Al Kennedy  
GE-Hitachi Nuclear Energy  
Facility Licensing Manager

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**Hearing Identifier:** GEHitachiUE\_LicenseApplication\_Public  
**Email Number:** 105

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**From:** Ridge, Christianne

**Created By:** Christianne.Ridge@nrc.gov

**Recipients:**  
"GEHitachiHrgFile Resource" <GEHitachiHrgFile.Resource@nrc.gov>  
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MESSAGE	1199	11/10/2009 6:56:14 AM	
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AEK 08-001 USNRC.pdf	58910		
GE_UEF_ -- White Paper Advocating NRC Adoption of 24-Mont..pdf			67009

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**ISSUES ASSOCIATED WITH THE LICENSING OF THE  
GE-HITACHI GLOBAL LASER ENRICHMENT  
URANIUM ENRICHMENT FACILITY**

**ISSUE 1: PRELICENSING SITE-RELATED ACTIVITIES**

**ISSUE PRESENTED**

The purpose of this White Paper is to discuss the need and basis for the Nuclear Regulatory Commission (NRC or Commission), in its initial Hearing Order defining the parameters of the adjudicatory hearing on the licensing of a uranium enrichment facility, to authorize GE-Hitachi Global Laser Enrichment LLC (GLE) to commence certain site-related activities prior to license issuance without the approval of the NRC.<sup>1</sup> This memorandum discusses the recent changes to 10 C.F.R. Part 50 regarding the definition of “commencement of construction,” and recommends that a similar approach be adopted, via a Commission Order, with regard to the construction and licensing of the planned GLE uranium enrichment facility.

**PROJECT BACKGROUND**

By letter dated October 11, 2006, General Electric (GE) formally notified the NRC of its intention to seek a license to build and operate in the U.S. an enrichment facility using the Separation of Isotopes Laser Excitation (SILEX) technology.<sup>2</sup> GE signed an exclusive agreement with Australia’s SILEX Systems Limited in May 2006 to license the technology and develop the company’s next generation low-enriched uranium manufacturing process in the U.S. GE and Hitachi subsequently formed GLE after the two companies agreed to create a global alliance of their nuclear businesses in May 2007. The SILEX technology uses lasers to separate or enrich the naturally occurring isotopes of uranium. GLE intends to submit a complete license application for a full-scale enrichment facility later this year.

**DISCUSSION**

Under current NRC regulations, an applicant seeking an enrichment facility license pursuant to 10 C.F.R. Part 70 can perform only very limited activities onsite prior to license issuance. This is because “construction” activities are foreclosed by Section 193 of the Atomic Energy Act (AEA) of 1954, as amended.<sup>3</sup> Section 193 states, in part, that “an environmental impact statement . . . shall be prepared before the hearing on the issuance of a license for the

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<sup>1</sup> While a rulemaking could achieve the same objective, it might well take two years and thus would not afford the prompt relief necessary to meet GLE’s project goals and timetables. Accordingly, GLE requests a case-specific Order to allow it to proceed for the reasons discussed herein. Given the obvious parallels in the purpose and rationale for the rulemaking here and that just completed regarding Parts 50/52, a prompt direct final rulemaking might also achieve the desired objective.

<sup>2</sup> See Letter from R. Brown, GE, to J. Strosnider, NRC, “Letter of Intent, Enrichment Facility Project Licensing” (Oct. 11, 2006); see also SECY-07-0031, “Status of the SILEX Project Proposed by General Electric Nuclear” (Feb. 9, 2007).

<sup>3</sup> See 42 U.S.C. § 2243.

*construction and operation of a uranium enrichment facility is completed,” and that “a single adjudicatory hearing on the record . . . shall be completed and a decision issued before the issuance of a license for such construction and operation.”*<sup>4</sup>

In keeping with Section 193, 10 C.F.R. § 70.23(a)(7) provides that an applicant may not commence construction of a uranium enrichment facility until the Director of Nuclear Material Safety and Safeguards makes certain environmental findings pursuant to 10 C.F.R. Part 51. As defined in Section 70.4, “commencement of construction” means “any clearing of land, excavation, or other substantial action that would adversely affect the natural environment of the site.”<sup>5</sup> An applicant may perform the following activities, as they are *not* considered to be construction: “site exploration, roads necessary for site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the site or the protection of environmental values.”<sup>6</sup> In sum, under Sections 70.4 and 70.23(a)(7), uranium enrichment facility license applicants are limited to performing activities related to site suitability assessment and preconstruction environmental monitoring.

Recently, the Commission approved a final rule which amends Parts 50 and 52 to revise the requirements for Limited Work Authorizations (LWAs) and site preparation activities at a prospective site of a new commercial nuclear power plant.<sup>7</sup> An LWA is the mechanism by which the NRC authorizes a nuclear reactor license applicant to commence certain construction activities prior to issuance of a construction permit (CP) or a combined construction permit and operating license (COL). Although Section 50.10(c) of the final rule maintains the current requirement that certain construction activities cannot be performed without prior NRC approval,<sup>8</sup> the final rule significantly narrows the definition and scope of “construction,” thereby permitting a broad range of activities to be performed without any NRC approval.<sup>9</sup>

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<sup>4</sup> 42 U.S.C. § 2243(a)(2), (b)(1)-(2) (emphasis added).

<sup>5</sup> 10 C.F.R. §§ 70.4, 70.23(a)(7).

<sup>6</sup> 10 C.F.R. § 70.23(a)(7).

<sup>7</sup> See *LWAs for Nuclear Power Plants*, 72 Fed. Reg. 57,416 (Oct. 9, 2007).

<sup>8</sup> 10 C.F.R. § 50.10(c), Requirement for construction permit, early site permit authorizing limited work authorization activities, combined license, or limited work authorization” states:

“No person may begin the construction of a production or utilization facility on a site on which the facility is to be operated until that person has been issued either a construction permit under [Part 50], a [COL] under part 52 of [Chapter I], an early site permit authorizing the activities under paragraph (d) of [Section 50.10], or a [LWA] under paragraph (d) of [Section 50.10].

*Id.* at 57,442.

<sup>9</sup> The final rule also provides for a phased approach for obtaining an LWA, using a limited-scope environmental impact statement (EIS). Under this approach, the LWA may be applied for in advance of a complete application for a CP or COL, and the corresponding EIS may be limited to consideration of the activities to be authorized. Given GLE’s current schedule, it does not appear that this would be a valuable option for GLE to pursue at this time. However, should the schedule change, we may wish to pursue this option at a later date and would inform the Commission accordingly.

The final rule provides that NRC approval would be necessary – in the form of an LWA – for the driving of piles; subsurface preparation; placement of backfill, concrete, or permanent retaining walls within an excavation, installation of foundations, or in-place assembly, erection, fabrication, or testing.<sup>10</sup> The structures, systems, and components (SSCs) that are within the scope of the definition of construction, set forth in 10 C.F.R. § 50.10(a), are only those facility SSCs which have a reasonable nexus to radiological health and safety or common defense and security.<sup>11</sup>

Thus, Part 50 and 52 license applicants can proceed with certain “private, preparatory actions,” including those related to SSCs not essential to radiological health and safety or common defense and security without prior NRC review or approval.<sup>12</sup> Specifically, the final rule states in Section 50.10(a) that the following activities are not construction and, therefore, can be performed without NRC approval:

- (i) Changes for temporary use of the land for public recreational purposes;
- (ii) Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values;
- (iii) Preparation of a site for construction of a facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;
- (iv) Erection of fences and other access control measures;
- (v) Excavation;
- (vi) Erection of support buildings (such as construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;
- (vii) Building of service facilities, such as paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, transmission lines;
- (viii) Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility;

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<sup>10</sup> See *LWAs for Nuclear Power Plants*, 72 Fed. Reg. at 57,441.

<sup>11</sup> See *id.* at 57,432.

<sup>12</sup> See *id.* at 57,420.

- (ix) Manufacture of a nuclear power reactor under a manufacturing license subpart F of part 52 of [Chapter 1] to be installed at the proposed site and to be part of the proposed facility; or
- (x) With respect to production or utilization facilities, other than testing facilities and nuclear power plants, required to be licensed under Section 104.a or Section 104.c of the Act, the erection of buildings which will be used for activities other than operation of a facility and which may also be used to house a facility (e.g., the construction of a college laboratory building with space for installation of a training reactor).<sup>13</sup>

By promulgating these amendments, the Commission has narrowed its view of its AEA-derived jurisdiction over certain construction activities. Specifically, the Commission concluded that its jurisdiction does not extend to site preparation activities that lack a nexus to radiological health and safety or common defense and security. Moreover, the Commission concluded that the National Environmental Policy Act of 1969 (NEPA) cannot be construed to expand the Commission's authority over such activities, as discussed more fully below.

In the Statements of Consideration (SOCs) for the final rule, the Commission discussed the evolution of its definition of "commencement of construction" and its current position regarding its obligations under the AEA and the NEPA.<sup>14</sup> The Commission pointed out that the term "construction" is not defined anywhere in the AEA or in the legislative history of the Act.<sup>15</sup> Prior to 1972, the definition of construction was limited to the activities defined as construction in the current 10 C.F.R. § 50.10(b).<sup>16</sup> Section 50.10(b) prohibits the commencement of construction of a reactor facility, which includes activities such as pouring the foundation and the installation of any portion of the permanent facility, but permits certain activities such as site exploration and preparation of the site for construction.<sup>17</sup>

Following the enactment of NEPA, the NRC made significant modifications to the rule by expanding the definition of construction with the enactment of 10 C.F.R. § 50.10(c).<sup>18</sup> Section 50.10(c) expanded the definition of construction to include "any clearing of land, excavation or other substantial action that would adversely affect the environment of a

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<sup>13</sup> *LWAs for Nuclear Power Plants*, 72 Fed. Reg. at 57,443. As the Commission noted, "it does not have the ability or discretion to influence or control the non-Federal, site preparation activities to the extent that its influence or control would constitute practical or factual veto power over the non-Federal action." 72 Fed. Reg. at 57,427. Thus, in conducting early site preparation activities, GLE would obtain any necessary approvals from other cognizant Federal, State, or local agencies that might have jurisdiction over those activities.

<sup>14</sup> *See id.* at 57,425-28.

<sup>15</sup> *See id.* at 57,425.

<sup>16</sup> *See id.*

<sup>17</sup> *See* 10 C.F.R. 50.10(b).

<sup>18</sup> *See LWAs for Nuclear Power Plants*, 72 Fed. Reg. at 57,426 (*citing* 37 Fed. Reg. 5745 (March 21, 1972)).

site . . . .”<sup>19</sup> The Commission explained that the expansion of the definition in 1972 was driven by the Commission’s understanding of its obligation under NEPA, not the AEA.<sup>20</sup>

In the final rule, the Commission sets forth its basis for the current rule change and maintains that the NRC’s concept of construction is consistent with the AEA and NEPA.<sup>21</sup> The Commission indicated that since the 1972 rule change, evolving jurisprudence has fleshed out the legal effect of NEPA, indicating that NEPA is a procedural statute that does not expand the substantive authority assigned to the agency by its organic statute. As such,

[W]hile NEPA may require the NRC to consider the environmental effects caused by the exercise of its permitting/licensing authority, the statute cannot be the source of the expansion of the NRC’s authority to require construction permits or other forms of permission . . . for activities *that are not related to radiological health and safety or preservation of the common defense and security.*<sup>22</sup>

Since NEPA cannot expand the agency’s authority under the AEA, the Commission reasoned that the elimination of the blanket inclusion of site preparation activities in 10 C.F.R. § 50.10(c) does not violate NEPA. The Commission also emphasized that the redefinition of construction would not negatively impact radiological health and safety or common defense and security.<sup>23</sup> Rather, the final rule aligns the definition of construction with the agency’s responsibilities under the AEA “by including only those activities with a reasonable nexus to radiological health and safety or common defense and security.”<sup>24</sup>

The context in which the rule was developed is limited to prospective nuclear power plants.<sup>25</sup> The rulemaking associated with this regulation simply did not contemplate or address modifications to 10 C.F.R. Part 70 that would benefit materials licensees. Without apparent intent to do so, the result of the rulemaking was to create an inconsistency between the NRC’s definition of “commencement of construction,” as that term applies to reactor and materials licensees, notwithstanding the fact that the legal justification underlying the Commission’s proposed redefinition of construction applies equally well to facilities licensed under 10 C.F.R. Part 70, as further explained below.

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<sup>19</sup> 10 C.F.R. § 50.10(c).

<sup>20</sup> *See LWAs for Nuclear Power Plants*, 72 Fed. Reg. at 57,427.

<sup>21</sup> *See id.*

<sup>22</sup> SECY-07-0030, Final Rulemaking on LWAs, Regulatory Analysis for Final Rule at 5 (Feb. 7, 2007) (emphasis added).

<sup>23</sup> *See id.*

<sup>24</sup> *See id.*; *see also* 72 Fed. Reg. at 57,420 (stating that “NEPA does not provide independent statutory authority to extend the agency’s jurisdiction solely for the purpose of assuring that adverse environmental impacts are considered and mitigated,” and that “the NRC may not lawfully act in such a manner, absent additional statutory authority which is not currently provided by either NEPA or the AEA”).

<sup>25</sup> *See LWAs for Nuclear Power Plants*, 72 Fed. Reg. at 57,416.

In terms of the parallels between the term “commencement of construction” in Parts 50 and 70, the definitions are virtually identical.<sup>26</sup> In fact, the Commission implemented Sections 70.4, 70.23(a)(7) and 50.10(a) as part of the same rulemaking in 1972.<sup>27</sup> As explained above, the Commission indicated in the SOCs for the 1972 rulemaking that the impetus for the change to the definition of construction was the implementation of NEPA.<sup>28</sup>

Because the definition of “commencement of construction” is virtually identical in Parts 50 and 70, and because these provisions governing construction activities serve the same purpose, the same logic used by the Commission in the recent change to Part 50 should be applied to Part 70 in order to ensure consistency with regard to the scope of the Commission’s jurisdiction.<sup>29</sup> As the Commission has indicated, NEPA is a procedural statute that does not expand the authority of the agency beyond that delineated in the AEA. While NEPA requires the NRC to consider the environmental impacts caused by the exercise of its licensing authority, NEPA cannot expand the NRC’s authority beyond activities that are related to radiological health and safety or common defense and security. As such, the definition of construction should be narrowed for a Part 70 facility, as it has been for Part 50 facilities, in order to align the definition with the agency’s responsibilities under the AEA – regulating only those activities with a reasonable nexus to radiological health and safety or common defense and security.<sup>30</sup>

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<sup>26</sup> Cf. 10 C.F.R. §§ 70.4, 70.23(a)(7) and 50.10(c).

<sup>27</sup> See *Prohibition of Site Preparation and Related Activities*, 37 Fed. Reg. 5745 (Mar. 21, 1972).

<sup>28</sup> See *id.* at 5746. The Commission indicated that the amendments to the regulations would “provide a more significant mechanism for protecting the environment during the early stages of a project for which a facility or materials license is being sought.”

<sup>29</sup> Indeed, the Commission itself has noted limitations regarding its authority over prelicensing construction activities for a nuclear materials facility. See *Nuclear Fuel Services, Inc.* (Erwin, Tennessee), CLI-03-3, 57 NRC 239, 246-50 (2003) (distinguishing between those actions the Commission can discourage by its authority over licensing, and those actions it can prohibit outright); see also *Pacific Gas & Elec. Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-06-23, 64 NRC 107, 108 (2006), n.9 (“As a legal matter, PG&E does not need an NRC license for [ISFSI-related] construction activity....”).

<sup>30</sup> In the past, the Commission has taken a conservative view regarding the types of activities that constitute “commencement of construction” in the context of a Part 70 license application. See *e.g.*, Letter from E. Leeds, NRC, to P. Hastings, Duke Cogema Stone and Webster (DCS), dated May 15, 2001, ADAMS Accession No. ML011360221. The NRC did not allow DCS to perform pre-licensing activities such as removing an overhead power line, clearing and grading, building temporary construction facilities, and constructing an administration building, warehouse and diesel generator building for the mixed oxide fuel fabrication facility. Under the Commission’s current logic, an applicant should now be able to perform these activities without NRC permission, as they have no reasonable nexus to radiological health and safety or common defense and security.



## RECOMMENDATIONS

Based upon the foregoing reasons, the Commission, in its initial Order on the application, should expressly permit GLE to engage in the following prelicensing activities because they are private, preparatory actions that have no reasonable nexus to radiological health and safety or common defense and security for a uranium enrichment facility:

- Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction and operation, or the protection of environmental values;
- Preparation of the site for construction of a facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;
- Erection of fences and other access control measures;
- Excavation;
- Erection of support buildings (such as construction equipment storage sheds, warehouse and shop facilities, secure warehouse facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with construction of the facility;
- Building of service facilities, such as paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, and sanitary sewerage treatment facilities; and
- Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility.



**HITACHI**

**GE-Hitachi Nuclear Energy**

**Tammy G. Orr**

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May 8, 2008

AEK 08-001

ATTN: Document Control Desk  
Office of the Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Reference: Letter, Tammy Orr (GE Hitachi Global Laser Enrichment LLC) to Michael F. Weber, NRC (December 20, 2007) (proprietary)

Subject: Submittal of White Papers Related to Licensing and Hearing Processes for Proposed Uranium Enrichment Facility

In accordance with the above-referenced letter, later this year, GE Hitachi Global Laser Enrichment LLC (GLE) will submit to the Nuclear Regulatory Commission (NRC) a license application for a full-scale uranium enrichment facility deploying laser isotope separation technology. It is our understanding that once the NRC Staff has accepted that application for docketing and detailed technical review, the Commission will issue a Notice of Hearing and Commission Order ("Hearing Order") pursuant to 10 C.F.R. § 2.104.

GLE anticipates that the Commission will issue a Hearing Order comparable to the Hearing Orders it issued at the outset of the recent Louisiana Energy Services, L.P. (LES) and United States Enrichment Corporation Inc. (USEC) licensing proceedings for the proposed National Enrichment Facility (NEF) and American Centrifuge Plant (ACP), respectively. See 69 Fed. Reg. 5873 (Feb. 6, 2004) (LES Hearing Order); 69 Fed. Reg. 61,411 (Oct. 18, 2004) (USEC Hearing Order). In both Hearing Orders, the Commission provided explicit procedural and substantive guidance that proved crucial to the expeditious conduct of those proceedings.

For example, the Commission delineated the specific matters of fact and law to be decided in the proceedings; reserved certain rulings for the Commission (e.g., rulings on standing and the admissibility of environmental justice contentions); identified applicable legal precedent from prior proceedings; endorsed NRC Staff use of environmental impact statements prepared by the Department of Energy; directed the presiding officer to certify novel legal and policy issues to the Commission for resolution; provided substantive legal guidance on key topics (e.g., depleted uranium disposition, financial qualifications, foreign ownership, etc.), and directed the presiding officer and parties to develop a hearing schedule based on very specific procedural milestones incorporated by the Commission into the Hearing Orders.

May 9, 2008

Page 2

GLE respectfully requests that the Commission issue a comparable Hearing Order (updated to reflect relevant developments and precedent associated with subsequent proceedings, including the LES and USEC matters) for the hearing on GLE's proposed uranium enrichment facility license application. In developing its Hearing Order, GLE asks that the Commission add two significant enhancements to the previous Hearing Orders.

First, GLE requests that the Commission clarify in its Hearing Order that GLE can undertake site preparation and pre-construction activities, consistent with those permitted by the NRC's recent Limited Work Authorization rule for new reactor license applicants, *prior* to license issuance. See "LWAs for Nuclear Power Plants," 72 Fed. Reg. 57,416 (Oct. 9, 2007). The LWA rule modified the definition of facility "construction" to exclude certain private, preparatory actions (*e.g.*, site clearing, excavation, installation of roads and ancillary buildings) that have no reasonable nexus to radiological health and safety or the common defense and security. The Commission did not amend the corresponding provisions of the NRC's materials licensing regulations. GLE believes, however, that the legal rationale underlying the NRC's Part 50/52 LWA rulemaking applies equally to uranium enrichment facilities licensed under 10 C.F.R. Parts 30, 40, and 70.

Second, GLE requests that, in its Hearing Order, the Commission establish a 24-month "milestone" schedule as the initial planning basis for the Presiding Officer's development of a detailed schedule for the proceeding. Moreover, the Hearing Order should address both the contested and uncontested "mandatory" hearing components of the proceeding. GLE believes that this proposal warrants serious consideration in light of the clear need for additional domestic enrichment capacity and related market considerations, and the ability to take advantage of the valuable "lessons learned" from the LES and USEC proceedings.

In support of the foregoing requests, and to help the Commission better understand the rationale for those requests; GLE has enclosed two detailed white papers (not unlike the papers previously submitted by LES). The first paper addresses the conduct of site preparation or pre-construction activities before license issuance. The second paper addresses the 24-month licensing schedule.

GLE greatly appreciates the Commission's consideration of these matters. Please contact Al Kennedy (910.602.1925) or me if you have questions concerning these matters.

Sincerely,



Tammy G. Orr  
President  
Global Laser Enrichment, LLC

#### Attachments

cc: Robert Pierson (NRC/NMSS)	Brian Smith (NRC/NMSS)	Tim Johnson (NRC/NMSS)
Scott Flanders (NRC/NMSS)	Catherine Marco (NRC/OGC)	Bradley Jones (NRC/OGC)
Chris Monetta (GEH)	Harold Neems (GEH)	Bob Brown (GEH)
Don Silverman (Morgan Lewis)	Martin O'Neill (Morgan Lewis)	

**ISSUES ASSOCIATED WITH THE LICENSING OF THE  
GE-HITACHI GLOBAL LASER ENRICHMENT  
URANIUM ENRICHMENT FACILITY**

**ISSUE 2:     **ADOPTION OF A 24-MONTH MILESTONE SCHEDULE****

**ISSUE PRESENTED**

The purpose of this White Paper is to discuss the need for the U.S. Nuclear Regulatory Commission (NRC or Commission) to establish, in the Notice of Hearing and Commission Order (Hearing Order) for GE-Hitachi Laser Enrichment's (GLE) forthcoming license application for a uranium enrichment facility, case-specific schedule milestones for the completion of the associated adjudicatory proceeding and issuance of the license. Specifically, this White Paper recommends that the Commission adopt a 24-month milestone schedule for the proceeding, pursuant to which the NRC may reach a decision on license issuance within two years of receiving the application.

**PROJECT BACKGROUND**

By letter dated October 11, 2006, General Electric (GE) formally notified the NRC of its intention to seek a license to build and operate in the U.S. an enrichment facility using the Separation of Isotopes Laser Excitation (SILEX) technology.<sup>1</sup> The SILEX technology uses lasers to separate or enrich the naturally occurring isotopes of uranium. GE signed an exclusive agreement with Australia's SILEX Systems Limited in May 2006 to license the technology and develop the company's next generation low-enriched uranium manufacturing process in the U.S. GE and Hitachi subsequently formed GLE after the two companies agreed to create a global alliance of their nuclear businesses in June 2007. GLE intends to submit a complete license application for a full-scale enrichment facility later this year.

**DISCUSSION**

**A.     **Overview of Licensing and Hearing Processes for Uranium Enrichment Facilities****

The licensing of a uranium enrichment facility is a single-step licensing process under which the NRC issues a combined license to construct and operate the facility. Section 193 of the Atomic Energy Act (AEA) of 1954, as amended, and regulations in 10 C.F.R. Parts 30, 40, and 70 govern the licensing process for enrichment facilities. These provisions require, among other things, publication of a final environmental impact statement (FEIS), a formal (*i.e.*, "on the record") hearing, and inspection of the proposed facility before operation.

As a license applicant, GLE will be required to submit detailed safety and environmental information to the NRC Staff in its license application, including an integrated safety analysis

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<sup>1</sup> See Letter from R. Brown, GE, to J. Strosnider, NRC, "Letter of Intent, Enrichment Facility Project Licensing" (Oct. 11, 2006); see also SECY-07-0031, "Status of the SILEX Project Proposed by General Electric Nuclear" (Feb. 9, 2007).

(ISA) summary and an environmental report (ER). This information provides the basis for the NRC Staff's safety and environmental reviews. The NRC Staff's reviews are ultimately documented in the safety evaluation report (SER) and FEIS for the proposed facility. The NRC discharges its obligations under the National Environmental Policy Act (NEPA) and 10 CFR Part 51 through publication of the FEIS.

Adjudicatory hearings on uranium enrichment facility license applications are conducted in accordance with the NRC's Rules of Practice (10 CFR Part 2). Those regulations offer members of the public and interested states an opportunity to contest the adequacy of the license application through the submittal of proposed contentions. The AEA also requires that, for license applications for uranium enrichment facilities, the NRC hold a hearing even when an application is not contested. In such "mandatory" uncontested hearings, the Presiding Officer is required to conduct a "sufficiency review" (as opposed to a *de novo* review) to decide whether the safety and environmental record is sufficient to support license issuance. Specifically, the Presiding Officer considers whether the NRC Staff performed an adequate review and made findings with reasonable support in logic and fact. As discussed below, the inclusion of firm schedule milestones and related procedural guidance in the Hearing Order for both the contested and uncontested portions of a proceeding is critical to an expeditious hearing process.

## **B. Recent Commission Efforts to Ensure an Efficient Hearing Process**

The goals of the NRC adjudicatory process are threefold: (1) to provide a fair hearing, (2) to avoid unnecessary delays, and (3) to produce an informed adjudicatory record that supports the licensing determination to be made in the proceeding.<sup>2</sup> The Commission has taken numerous steps in recent years to increase the effectiveness and efficiency of the hearing process. For example, the Commission issued the 1998 Policy Statement (as an extension of the Commission's 1981 policy statement) to provide specific guidance to Licensing Boards and Presiding Officers on methods that can be used to ensure sound management and timely completion of adjudicatory proceedings. As to hearing schedules, the Commission stated that it "expects licensing boards to establish schedules for promptly deciding the issues before them, with due regard to the complexity of the issues and the interests of the parties."<sup>3</sup> The Commission added that it "intends to monitor its proceedings to ensure that they are being concluded in a fair and timely fashion," and that it would "take action in individual proceedings, as appropriate, to provide guidance to the boards and parties to decide issues in the interest of a prompt and effective resolution of the matters set for adjudication."<sup>4</sup>

In January 2004, in furtherance of its goal "to make the NRC's hearing process more effective and efficient," the Commission amended its Rules of Practice.<sup>5</sup> The amended rules incorporate many aspects of the guidance set forth in the 1998 Policy Statement. The rules place

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<sup>2</sup> See "Statement of Policy on Conduct of Adjudicatory Proceedings," CLI-98-12, 48 NRC 18 (1998) (hereinafter "1998 Policy Statement").

<sup>3</sup> *Id.* at 20.

<sup>4</sup> *Id.* at 24-25.

<sup>5</sup> *Changes to Adjudicatory Process*, 69 Fed. Reg. 2182 (Jan. 14, 2004).

particular emphasis on the need for the Presiding Officer to establish a detailed schedule at the outset of each hearing, and the duty of the Presiding Officer to maintain that schedule through appropriate case management techniques.<sup>6</sup> To this end, in an April 2005 rulemaking, the Commission also adopted “model milestones” (as Appendix B to 10 C.F.R. Part 2) for its adjudicatory proceedings.<sup>7</sup> The Commission’s rules specifically direct the Presiding Officer to refer to the model milestones as a “starting point” in establishing a hearing schedule for an adjudicatory proceeding and to manage the case in accordance with that schedule.<sup>8</sup>

### **C. The Need and Basis for Case-Specific Milestones in the GLE Licensing Proceeding**

The Appendix B model milestones do not address uranium enrichment facility licensing proceedings. Section 2.310(c) of the NRC’s regulations specifies the use of Subpart G hearing procedures in proceedings on the licensing of the construction and operation of uranium enrichment facilities.<sup>9</sup> Appendix B, however, contains model milestones only for *enforcement* proceedings conducted under Subpart G and proceedings under other subparts of Part 2; it does not address *licensing* proceedings subject to Subpart G procedures. Thus, an enrichment facility licensing proceeding does not fall within any of the categories of proceedings for which the NRC has established model milestones. Accordingly, the Commission will need to provide case-specific milestones in the Hearing Order for the GLE enrichment facility proceeding.

There is ample precedent supporting such an approach. The Commission has imposed case-specific milestones in numerous proceedings that preceded the NRC’s adoption of the model milestones in Appendix B to Part 2.<sup>10</sup> The recent Louisiana Energy Services, L.P. (LES) and United States Enrichment Corporation Inc. (USEC) enrichment facility proceedings provide two particularly germane examples. Those proceedings involved the licensing of two proposed uranium enrichment facilities – the National Enrichment Facility (NEF) and American Centrifuge Plant (ACP), respectively. In both cases, the Commission, in the Hearing Order, imposed a 30-month milestone schedule for the proceeding.<sup>11</sup> The Commission characterized

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<sup>6</sup> See 10 C.F.R. §§ 2.319, 2.332, 2.333, and 2.334.

<sup>7</sup> *Model Milestones for NRC Adjudicatory Proceedings*, 70 Fed. Reg. 20,457 (Apr. 20, 2005).

<sup>8</sup> 10 C.F.R. § 2.332 (b).

<sup>9</sup> As the Commission recognized in the 2004 rulemaking, “Section 193 of the AEA requires that hearings on uranium enrichment facility construction and operation be ‘on-the-record,’ thus requiring formal trial-type [*i.e.*, Subpart G] hearing procedures to be used.” *Changes to Adjudicatory Process*, 69 Fed. Reg. at 2203.

<sup>10</sup> See, e.g., *Baltimore Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 NRC 39 (1998); *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-01-13, 53 NRC 478 (2001).

<sup>11</sup> See 69 Fed. Reg. 5873 (Feb. 6, 2004) (LES Hearing Order); 69 Fed. Reg. 61,411 (Oct. 18, 2004) (USEC Hearing Order). The Commission’s schedules in the LES and USEC proceedings addressed, among others, such milestones as the Commission’s order determining standing, the Atomic Safety and Licensing Board’s (“ASLB”) ruling on the admissibility of proposed contentions, preparation of the NRC Staff’s hearing file, the completion of discovery on admitted contentions, the filing and resolution of summary disposition motions, the filing and disposition of late-filed contentions, the filing of direct testimony, the completion of evidentiary hearings, and the issuance of ASLB initial decisions.

this as “a reasonably-achievable schedule [that] would result in a final NRC decision on the pending application within about two and a half years of the date the application was received.”<sup>12</sup>

#### **D. Request and Justification for a 24-Month Milestone Schedule**

GLE requests that the Commission impose a case-specific milestone schedule in its Hearing Order for the GLE uranium enrichment facility licensing proceeding. GLE specifically requests that the Commission establish a 24-month milestone schedule as the initial goal or planning basis for the Presiding Officer’s development of a detailed schedule for the proceeding. A proposed schedule is attached to this White Paper. Such a schedule is both warranted and reasonably achievable for the reasons set forth below.

##### **1. Basis for Seeking a 24-Month Milestone Schedule**

GLE’s request that the Commission adopt a 24-month milestone schedule in its Hearing Order is rooted in a combination of important national policy and commercial considerations. As with the proposed NEF and ACP facilities, construction and operation of the GLE enrichment facility would help achieve an important objective of national energy security policy long recognized by Congress, the Department of Energy (DOE), and other federal agencies. That objective is to assure the availability of diverse *domestic* sources of enriched uranium, in order to lessen dependence on foreign sources and to increase security of supply, through the use of more advanced and energy-efficient technologies than are currently available in the United States.<sup>13</sup> The NRC staff explicitly recognized this important national policy objective in its FEISs for the NEF and ACP licensing actions,<sup>14</sup> as did the Licensing Board and the Commission in related adjudicatory decisions.<sup>15</sup> This objective has taken on even greater significance in view of the Global Nuclear Energy Partnership (GNEP).<sup>16</sup>

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<sup>12</sup> *LES Hearing Order*, 69 Fed. Reg. at 5875.

<sup>13</sup> Congress has noted that “domestic enrichment capability is essential for maintaining energy security” (S. REP. No. 101-60, at 20 (1989)), and that “a healthy and strong uranium enrichment program is of vital national interest” (H.R. REP. No. 102-474, pt. 2, at 76 (1992)). Specifically, national security interests require assurance that “the nuclear energy industry in the United States does not become unduly dependent on foreign sources of uranium or uranium enrichment services.” S. REP. No. 102-72, at 144-45 (1991). The Energy Policy Act of 1992 expressly cites the “national need to avoid dependence on imports.” 42 U.S.C. 2296b-6. In a 2002 letter to the NRC that references interagency discussions led by the National Security Council, the DOE cited the need to promote and maintain a viable and competitive domestic uranium enrichment industry for the foreseeable future. *See* Letter from W. Magwood, DOE, to M. Virgilio, NRC (July 25, 2002) (NRC ADAMS Accession No. ML022350130). To enable the potential commercial deployment of the SILEX technology in the United States, the U.S. and Australian governments entered into an Agreement for Cooperation that came into force in May 2001.

<sup>14</sup> *See* NUREG-1790, Vol. 1, Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico, at 1-2 (June 2005), NUREG-1834, Environmental Impact Statement for the Proposed American Centrifuge Plant in Piketon, Ohio, Vol. 1, at 1-5 to -6 (Apr. 2006).

<sup>15</sup> *See Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-05-13, 61 NRC 385, 442 (2005), *aff’d*, CLI-05-28, 62 NRC 721, 726 (2005).

<sup>16</sup> GNEP seeks to expand the use of nuclear energy by “having nations with secure, advanced nuclear capabilities provide fuel services – fresh fuel and recovery of used fuel – to other nations who agree to employ nuclear energy for power generation purposes only.” The DOE’s Strategic Plan states that to help assure access to

The industry has previously conveyed to the NRC the importance of having multiple domestic enrichment facilities – owned by different entities and deploying different enrichment technologies – to assuring a diverse and reliable fuel supply.<sup>17</sup> The need for prompt deployment of additional domestic enrichment capacity is critical given current projections of supply and demand, and the clear need to expand the nation’s nuclear infrastructure to accommodate numerous planned new U.S. reactors. Market forecasts indicate that U.S. and global enrichment requirements and base supply will be in close balance after 2010, with a clear risk of supply shortfall after 2013, even with increased Russian commercial sales to Europe, allowance of some Russian commercial sales to the U.S.,<sup>18</sup> and the combined output of the proposed NEF and ACP at or above their proposed license capacities.<sup>19</sup> As a potential domestic provider of enrichment services, GLE is seeking to deploy its enrichment technology on a commercial scale before that timeframe to facilitate its entry into the market and to help meet the growing demand for enrichment services. A highly efficient licensing schedule is critical for these reasons.

The foregoing considerations justify the Commission’s imposition of a 24-month milestone schedule for the GLE enrichment facility licensing proceeding. Indeed, the Commission has previously imposed a similarly aggressive milestone schedule in a fuel cycle facility proceeding for reasons related to national security policy. In an initial order related to Duke Cogema Stone & Webster’s application for NRC authorization to build a mixed oxide fuel fabrication facility at the Savannah River Site, the Commission stated as follows:

The Commission believes that this proceeding should be completed in a timely and efficient manner *because the applicant is seeking authorization to build a facility that would implement a significant objective of national security and policy*: reducing the inventory of plutonium in the nation’s nuclear weapons inventory in accordance with the U.S.-Russian Federal Plutonium Disposition Agreement. Accordingly, the Commission directs the [P]residing [O]fficer to set a schedule for any hearing granted in this proceeding that establishes as a goal the issuance of an initial

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nuclear fuel to countries entering the nuclear arena, the U.S. must have the capability to provide the needed fuel cycle services (*i.e.*, an assured fuel supply). As the DOE noted, such a capability does *not* now exist insofar as the U.S. depends on foreign sources for more than 80% of its enriched uranium requirements. *See* <http://www.gnep.energy.gov/gnepProgram.html>.

<sup>17</sup> Letter from J. O’Neill and C. Peterson, Shaw Pittman, LLP. to M. Lesar, NRC (Nov. 13, 2002) (NRC ADAMS Accession No. ML023250521).

<sup>18</sup> *See, e.g.*, U.S. Department of Commerce, Office of Public Affairs, Press Release, “United States and Russian Uranium Agreement Reached”(Feb. 1, 2008) (announcing that the U.S. and Russia have signed a long-term suspension agreement governing trade in nuclear fuel), available at <http://www.commerce.gov/NewsRoom>.

<sup>19</sup> *See, e.g.*, NUREG-1834 at 1-4 to -5 (including various enrichment demand and supply forecasts cited therein); James C. Cornell, President and CEO, NUKEM, Inc., Global Nuclear Renaissance Summit, Washington DC: Can Supply Catch Up to High Case Demand? (Dec. 5, 2006) (presentation materials available at <http://www.nukeminc.com/speeches-presentations.cfm>)



decision on the CAR within approximately two years from the date that the NRC received the request.<sup>20</sup>

## 2. Measures to Accomplish a 24-Month Licensing Schedule

GLE recognizes that completing a licensing proceeding in 24 months is an ambitious task. Nonetheless, it believes that a Commission-imposed 24-month milestone schedule would provide a reasonable planning basis for the Presiding Officer's establishment of a detailed hearing schedule. As the Commission has observed, case-specific circumstances and considerations ultimately will dictate the viability of such a milestone schedule.<sup>21</sup> These include, for example, the number of participants in the proceeding, the number and complexity of admitted (including late-filed) contentions, and the Staff's schedule for completion of its safety and environmental reviews. GLE thus agrees with the Commission that the Presiding Officer must retain "the necessary flexibility to adjust to the specific requirements of each hearing."<sup>22</sup> That being said, GLE submits that a 24-month milestone schedule remains a viable template, especially given the recommendations recently offered by the Commission's Combined License Review Task Force and lessons learned from the recent NEF and ACP proceedings.

Last fall, the Commission formed a task force to identify opportunities for "further efficiencies" in the new reactor license review process.<sup>23</sup> Although this task force focused its efforts on the licensing process for new power reactors, many of the task force's insights and recommendations apply equally to the licensing of uranium enrichment facilities. The task force concluded that implementation of its recommendations could result in an overall reduction of approximately 6 to 15 months in the estimated 42-month schedule for review of a combined license application referencing a certified design.<sup>24</sup> GLE believes that implementation of the applicable recommendations (as summarized below) in the Part 70 licensing process could help achieve similar efficiencies and attainment of the 24-month schedule proposed herein.

### *a. Application Preparation and Review Considerations*

As the task force noted, the success of the licensing process rests on a number of key assumptions and factors, some of which are within an applicant's control. They include, for example, pre-application discussions on key safety and environmental issues; continued funding and technical support by the applicant during the NRC's review of the license application; frequent and open communication between the Staff and the applicant; completeness and technical quality of the application, which will affect the need for and number of Staff requests

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<sup>20</sup> *Savannah River*, CLI-01-13, 53 NRC at 484 (emphasis added).

<sup>21</sup> *See Changes to Adjudicatory Process*, 69 Fed. Reg. at 2197; *Model Milestones For NRC Adjudicatory Proceedings*, 70 Fed. Reg. at 20,458-59.

<sup>22</sup> *Model Milestones For NRC Adjudicatory Proceeding*, 70 Fed. Reg. at 20,459.

<sup>23</sup> "Report of the Combined License Review Task Force" (Apr. 18, 2007) (hereinafter "Task Force Report") (attached to Memorandum from A. Vietti-Cook to L. Reyes *et al.*, "Staff Requirements – COMDEK-07-0001/COMJSM-07-0001 – Report of the Combined License Review Task Force" (June 22, 2007)).

<sup>24</sup> Task Force Report at 3.

for additional information (RAIs); the timeliness, completeness, and technical quality of the applicant's responses to RAIs; and the number of revisions/supplements to the application that are submitted for reasons not related to RAI responses (*e.g.*, design changes).<sup>25</sup>

GLE has assembled the technical and financial resources necessary to support preparation of the application and is seeking to submit a complete and technically sufficient application. GLE is adhering to NRC guidance (particularly NUREG-1520 and NUREG-1748) and looking to the NRC-approved LES and USEC applications as models. GLE is reviewing prior RAIs to identify issues of key concern to the Staff. As a current fuel-cycle facility licensee, GLE also will borrow from existing programs to the extent practicable. The intended result is a high-quality application that will expedite the Staff's review process, *e.g.*, by reducing the number of required RAIs. GLE's objective is to lessen the burden on Staff resources and to facilitate the Staff's review,<sup>26</sup> thereby allowing the Staff to establish and maintain an aggressive schedule (*e.g.*, 15-18 months) for the issuance of its FEIS and SER. This is important given that the Commission has kept past milestone schedules to the issuance of the Staff's review documents.

With respect to communications, GLE and the Staff likely will follow the approach used in the LES and USEC proceedings. That approach entails continued pre-application meetings to discuss key safety and environmental issues, and quarterly management meetings to discuss the status of the licensing review process following application submittal. As the task force noted, focused pre-application discussions between the Staff and applicant can promote the development of a complete and high-quality application. Such discussions allow the applicant to seek early guidance on the necessary application content, to identify potential areas of concern, and to enhance the Staff's understanding of application details before the acceptance and detailed technical reviews.<sup>27</sup> Post-application technical and management meetings, in turn, allow for more rapid resolution of Staff RAIs and keep both Staff and applicant management fully informed of key developments in the licensing process.

*b. Hearing Process Considerations – The Contested Hearing*

Based on the recommendations of the task force and lessons learned from the LES and USEC proceedings, there are additional procedural steps that the NRC can take to achieve a 24-month licensing schedule. As in prior proceedings, the Commission should use its Hearing Order to delineate the specific matters of fact and law to be decided in the proceeding; reserve resolution of certain issues for the Commission itself (*e.g.*, standing, admissibility of environmental justice contentions); identify applicable precedent from prior related licensing proceedings; endorse Staff use of EISs completed by other agencies (*e.g.*, DOE), as appropriate;

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<sup>25</sup> See Task Force Report, Enclosure 5.

<sup>26</sup> Consistent with the recommendations of the Combined License Review Task Force, GLE believes that the Staff should assume that a complete and technically sufficient application will require only one round of RAIs that are focused primarily on key technical issues, and that GLE responses will be timely (*i.e.*, submitted within 30 days), complete, and sufficient to resolve the issue. GLE also is very receptive to the Staff's practice of communicating and discussing proposed RAIs with the applicant in advance of their formal issuance. This allows for greater clarity and more expeditious resolution of the Staff's information needs or concerns.

<sup>27</sup> See Task Force Report, Enclosure 3 at 2-3.

direct the Presiding Officer to certify novel legal and policy issues to the Commission for resolution; and direct the Presiding Officer and the parties to adhere to the scheduling milestones.<sup>28</sup>

The foregoing measures will foster efficiency in the licensing process. Certain aspects of the hearing process, however, still present some potential for delay that may be avoided or mitigated by clear Commission direction and oversight. For example, in a contested hearing, under appropriate circumstances, it may be beneficial to permit discovery and evidentiary hearings on contested issues as soon as practicable (*i.e.*, assuming there is no adverse impact on the Staff's safety or environmental review schedule). Indeed, 10 C.F.R § 2.332(d) provides that the Presiding Officer may conduct hearings on safety issues before publication of the final SER if it finds that commencing the hearings at that time would expedite the proceeding.

GLE recognizes that Section 2.332(d) does not contain a similar provision with respect to NEPA-related issues.<sup>29</sup> Indeed, Section 2.332(d) states that "hearings on environmental issues addressed in the EIS may not commence before the issuance of the final EIS." In the LES proceeding, however, the ASLB conducted merits hearings on certain environmental issues *before* issuance of the FEIS. In *Vogtle*, the Commission noted that the LES case involved "special circumstances" and the agreement of all parties involved to proceed with early hearings on environmental issues.<sup>30</sup> Nonetheless, the Commission noted that "an early hearing would [not] necessarily compromise the Staff's NEPA review," and that it is "willing to be flexible in the timing of NEPA hearings where special circumstances are present."<sup>31</sup>

Accordingly, GLE requests that the Commission, in its Hearing Order, explicitly authorize the ASLB, in its sound discretion, to permit discovery, summary disposition, and evidentiary hearings on safety *and* environmental issues before issuance of the final SER and FEIS.<sup>32</sup> The early disposition of issues enables the parties to focus upon matters actually in controversy as the adjudication progresses, and to avoid the need to litigate all admitted

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<sup>28</sup> See, e.g., *LES Hearing Order*, 69 Fed. Reg. at 5874-78. The guidance and milestones provided in the LES Hearing Order proved crucial to the expeditious conduct of that proceeding. For example, the certification process allowed the agency to resolve threshold issues related to the disposition of depleted uranium (DU); the Staff made extensive use of EISs prepared by the DOE on the impacts of DU disposition; and the ASLB issued a firm schedule based on input from the parties to achieve compliance with the Commission's milestones.

<sup>29</sup> See also *Southern Nuclear Operating Company* (Early Site Permit for Vogtle ESP Site), CLI-07-17, 65 NRC 392, 396-97 (2007) (declining, in the context of a reactor early site permit proceeding, to authorize or require a merits hearing prior to the issuance of the FEIS based on the language of 10 C.F.R. §§ 2.332(d)).

<sup>30</sup> *Id.* at 396-97. The Commission also authorized hearings on environmental issues prior to issuance of the Staff's FEIS in the USEC ACP proceeding. No contentions were admitted for hearing in that proceeding.

<sup>31</sup> *Id.* at 396. See also *Changes to Adjudicatory Process*, 69 Fed. Reg. at 2209 (stating that "to avoid delays where litigation of a contention is dependent upon some NRC staff action, the Commission will direct the NRC staff to develop internal management guidance and procedures to support timely NRC staff participation in hearings, including early preparation of evidence to support the NRC staff's position on a contention/controverted matter").

<sup>32</sup> See *LES Hearing Order*, 69 Fed. Reg. at 5876 n.2; *USEC Hearing Order*, 69 Fed. Reg. at 61,413.

contentions in the last stage of the proceeding.<sup>33</sup> Such direction from the Commission here would be consistent with the LES and USEC hearing orders, and preserve the possibility that “many contested issues . . . can be resolved during finalization of the Staff’s [SER] and [EIS].”<sup>34</sup>

c. *Hearing Process Considerations – The Uncontested “Mandatory” Hearing*

GLE respectfully requests that the Commission also consider further opportunities to ensure timely completion of the mandatory hearing process.<sup>35</sup> The LES and USEC hearing orders did not contain scheduling and procedural guidance specific to the mandatory uncontested hearing. In both proceedings (and in various ESP proceedings), the mandatory hearing proved to be critical path and resulted in potentially avoidable delays on the order of several months.<sup>36</sup> Therefore, GLE suggests that the Commission provide explicit guidance in the Hearing Order on the scope and timing of the mandatory hearing. For example, the Commission might direct that the mandatory hearing be held contemporaneously with any contested hearings, or, in an uncontested proceeding, to hold the hearing within a specified time after issuance of the Staff’s FEIS and SER.<sup>37</sup> The Commission also should impose specific procedural milestones for completion of the uncontested mandatory hearing. Such milestones might include, *inter alia*, specified time periods for:

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<sup>33</sup> In the LES proceeding, for example, four environmental contentions were resolved on the basis of the ER and DEIS, thereby allowing the ASLB and parties to focus more effectively on the central issues in the case, *i.e.*, the plausibility, cost, and potential environmental impacts of dispositioning DU byproduct.

<sup>34</sup> Task Force Report at 7. Indeed, the task force concluded that the 12 months allotted for adjudication after issuance of the final SER and EIS in reactor proceedings could be reduced to 6 to 9 months (*i.e.*, saving approximately 3 to 6 months) in the case of hearings on contested issues (assuming no hearing on uncontested issues). *Id.* Similar economies can no doubt be achieved in an enrichment facility licensing proceeding. GLE submits that the need for deployment of additional domestic enrichment capacity remains just as exigent as it was at the time of the NEF and ACP licensing proceedings.

<sup>35</sup> GLE assumes for present purposes that the statutory requirement for such a hearing will remain intact. The Combined License Task Force recommended that the Commission request legislative authority from Congress to eliminate the statutory requirement in AEA Section 189a for a mandatory hearing on uncontested issues. Task Force Report at 11 and Attachment 2. The task force reasoned that the goals of the mandatory hearing requirement in Section 189a. are being met in a variety of other ways under a variety of statutes that were not in existence when the requirement was enacted. These include the Freedom of Information Act, the Federal Advisory Committee Act, the Government in the Sunshine Act, and the public process under NEPA. Also, the Commission’s Rules of Practice provide for various means of public participation. *See* 10 C.F.R. 2.309, 2.315(c). Conceivably, by the same reasoning, the Commission also might in the future consider seeking congressional approval to eliminate the mandatory hearing requirement imposed by Section 193 of the AEA.

<sup>36</sup> Indeed, in the USEC proceeding, the Commission issued an order accelerating the mandatory hearing schedule. The Commission emphasized that, while it did not delineate specific procedural milestones for the uncontested hearing, it nonetheless intended for the agency to issue a final decision within 30 months of application submittal. *See USEC, Inc. (American Centrifuge Plant)*, CLI-07-05, 65 NRC 109 (slip op. Feb. 1, 2007).

<sup>37</sup> In this regard, if the Presiding Officer bifurcates evidentiary hearings on any safety and environmental contentions, it might consider similarly bifurcating the mandatory hearing into safety and environmental components, if such an approach would expedite the hearing process.

- the submittal of any necessary documentation (including the application, FEIS and SER) to the Presiding Officer;<sup>38</sup>
- the identification of specific hearing issues by the Presiding Officer;
- the submittal of prefiled testimony and/or written responses to questions from the Presiding Officer by the NRC Staff and applicant;
- the conduct of the hearing(s) itself; and
- the issuance of the Presiding Officer’s decision concerning the mandatory hearing issues and required safety and environmental findings.<sup>39</sup>

At a minimum, the Commission should specify a timeframe for completion of the whole mandatory hearing process. In fact, the Commission has stated that, “[i]n keeping with [its] expectation that the boards act promptly in concluding the hearing process, the Commission expects the boards in uncontested cases to issue their final initial decisions generally within 4, and at the most 6, months of the Staff’s SER and FEIS issuances.”<sup>40</sup> The Commission added that, “[i]n most cases, we expect that the time would be significantly shorter.”<sup>41</sup> In short, such direction from the Commission would greatly enhance the viability of a 24-month licensing schedule, particularly if the proceeding involves no contested issues.

### **RECOMMENDATION**

For the foregoing reasons, the Commission should consider adopting a 24-month milestone schedule (comparable to the attached proposed schedule) for completion of the proceeding on GLE’s forthcoming uranium enrichment facility license application. Furthermore, to facilitate compliance with a 24-month milestone schedule, the Commission should adopt and oversee implementation of the various measures discussed herein, among any other actions the Commission may deem appropriate to enhance the efficiency and effectiveness of the licensing process for GLE’s proposed uranium enrichment facility.

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<sup>38</sup> In the NRC mandatory hearings conducted to date, the ASLB has acted as the Presiding Officer and held evidentiary-style hearings that involved submittal of prefiled testimony and ASLB examination of Staff and applicant witnesses. GLE recognizes that the Commission has suggested, at least in the Part 52 context, that it has the flexibility to conduct mandatory hearings. See Staff Requirements Memorandum (Apr. 11, 2007), Attachment, “Changes and comments to the final rule in SECY-06-0220,” at 3, ¶ 18.

<sup>39</sup> The Commission previously has provided detailed guidance on the scope of the mandatory hearing, including the level and length of ASLB review required. See *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5 (2005); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-06-20, 64 NRC 15 (2006).

<sup>40</sup> *Clinton*, CLI-06-20, 64 NRC at 26-27.

<sup>41</sup> *Id.* at 27.

**ATTACHMENT**

**PROPOSED 24-MONTH MILESTONE SCHEDULE FOR THE  
GLE URANIUM ENRICHMENT FACILITY LICENSING PROCEEDING**

<b><u>Day</u></b>	<b><u>Event</u></b>	<b><u>Basis/Assumption</u></b>
0	License application filed with the NRC	
<b>30</b>	<b>Application docketed; Notice of Hearing and Commission Order issued</b>	<b>30-day acceptance review [10 CFR 2.101(a)(2)]</b>
90	Petitions to intervene (proposed contentions) filed	60 days to file contentions [10 CFR 2.309(b)(3)]
115	Answers to petition(s) to intervene filed	25 days to file answers [10 CFR 2.309(h)(1)]
122	Reply to answers to petitions to intervene	7 days for petitioner to file reply [10 CFR 2.309(h)(2)]
<b>167</b>	<b>ASLB decision on admissibility of contentions</b>	<b>45 days after petitioner reply [10 CFR 2.309(i)]</b>
197	ASLB issues initial prehearing conference order; NRC Staff prepares hearing file	Within 30 days of ASLB decision [LES/USEC Orders]
242	Mandatory disclosures completed	45 days after prehearing conference order [10 CFR 2.704(a)(3)]
257	Completion of discovery on all admitted contentions (except against Staff)	Within 90 days of ASLB decision [LES/USEC Orders]
<b>275</b>	<b>Draft Environmental Impact Statement (DEIS) issued</b>	<b>Assumes 9 months from filing of Environmental Report (ER)</b>
277	Deadline for summary disposition motions on admitted contentions	Within 110 days of ASLB decision [LES/USEC Orders]
297	Deadline for answers to summary disposition motions	20 days after motions
305	Deadline for amended or late-filed contentions based on DEIS	Assume 30 days to satisfy “good cause” standard
317	ASLB decision on summary disposition motions	Within 150 days of ASLB decision [LES/USEC Orders]
330	Answers to late-filed contentions on DEIS submitted	25 days to file answer [10 CFR 2.309(h)(1)]
337	Replies to answers to late-filed contentions on DEIS	7 days to file reply, if authorized [10 CFR 2.309(h)(2)]
382	ASLB decision on late-filed contentions on DEIS	45 days after reply [10 CFR 2.309(i)]
<b>460</b>	<b>Final Environmental Impact Statement (FEIS) and Safety Evaluation Report (SER) issued</b>	<b>Assumes 15 months for final NRC Staff reviews</b>
480	Deadline for amended or late-filed contentions based on FEIS and SER	Within 20 days of issuance of FEIS/SER [LES/USEC Orders]
500	Completion of answers and replies to motions for amended and late-filed contentions	Within 40 days of issuance of FEIS/SER [LES/USEC Orders]
510	ASLB decision on late-filed FEIS/SER contentions;	Within 50 days of issuance of

<u>Day</u>	<u>Event</u>	<u>Basis/Assumption</u>
	deadline for filing of summary disposition motions	FEIS/SER [LES/USEC Orders]
540	Completion of discovery on late-filed contentions; ASLB decision on summary disposition motions	Within 80 days of issuance of FEIS/SER [LES/USEC Orders]
550	Direct testimony on FEIS/SER contentions filed	Within 90 days of issuance of FEIS/SER [LES/USEC Orders]
560	Cross-examination plans filed	Within 100 days of issuance of FEIS/SER [LES/USEC Orders]
<b>565</b>	<b>Evidentiary hearings on FEIS/SER contentions begin; mandatory hearing immediately follows</b>	<b>Within 105 days of issuance of FEIS/SER [LES/USEC Orders]</b>
595	Contested and mandatory uncontested evidentiary hearings completed; transcript corrections made; evidentiary record closed	Within 135 days of issuance of FEIS/SER [LES/USEC Orders]
640	Completion of all findings and reply findings	Within 180 days of issuance of FEIS/SER [LES/USEC Orders]
<b>700</b>	<b>ASLB Partial Initial Decision on FEIS/SER contentions</b>	<b>240 days from issuance of FEIS/SER (LES/USEC Orders)</b>
<b>720</b>	<b>ASLB Final Initial Decision (FID) (findings required for mandatory hearing)</b>	<b>Assume additional 20 days for preparation of FID</b>
<b>730</b>	<b>License issued within 2 years of application filing</b>	<b>License issued within 10 days of FID [10 CFR 2.340(c)]</b>