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Docket: 70-7033

June 27, 2025

Director, Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-0001

**RE:** Global Laser Enrichment LLC PLEF License Application Submittal

**REF:** Submission of "Global Laser Enrichment Environmental Report Rev. 2 for the Paducah Laser Enrichment Facility", dated June 13, 2025

In compliance with Title 10 *Code of Federal Regulations* (CFR) Sections 70.5(a) *Communications*, and 70.21(h) *Filing*, Global Laser Enrichment LLC (GLE) is submitting an application to possess and use special nuclear material at the Paducah Laser Enrichment Facility (PLEF) in accordance with the requirements of 10 CFR Parts 70, 30, and 40. GLE plans to construct and operate the PLEF adjacent to the Paducah Gaseous Diffusion Plant (PGDP) site. This facility is anticipated to be deployed as part of an agreement between GLE and the U.S. Department of Energy (DOE) to purchase and re-enrich certain DOE inventories of depleted uranium hexafluoride (UF<sub>6</sub>). This proposed uranium enrichment facility will utilize laser-based isotope separation technology to enrich UF<sub>6</sub> up to 8 weight percent <sup>235</sup>U. The PLEF will be located in McCracken County, Kentucky, outside the limits of the City of Paducah.

On December 30, 2024, the Environmental Report for the PLEF was submitted to the U.S. Nuclear Regulatory Commission (NRC) in advance of the remainder of the license application pursuant to an NRC-approved exemption issued on August 19, 2024. GLE hereby submits the remaining portions of the PLEF License Application (LA). Portions of the PLEF LA that contain Classified

Information are being submitted separately in accordance with 10 CFR 95.39, *External Transmission of Documents and Materials*. The PLEF Physical Security Plan contains Safeguards Information and is being submitted separately in accordance with 10 CFR 73.23, *Protection of Safeguards Information-Modified Handling: Specific Requirements*.

Those portions of the enclosed PLEF LA that GLE has identified as containing Security-Related Information (SRI) using the guidance in NRC Regulatory Issue Summary (RIS) 2005-31, *Control of Security-Related Sensitive Unclassified Non-Safeguards Information Handled by Individuals, Firms, and Entities Subject to NRC Regulation of the Use of Source, Byproduct, and Special Nuclear Material*, have been appropriately identified and redacted. Those portions of the enclosed PLEF LA that GLE has identified as containing information that is deemed Export Controlled Information under 10 CFR 810, *Assistance to Foreign Atomic Energy Activities*, and other regulations, have also been appropriately identified and redacted. Lastly, those portions of the enclosed PLEF LA that GLE has identified as containing Proprietary Information as defined in 10 CFR 2.390 have been appropriately identified and redacted. GLE requests that this information be withheld from public disclosure in accordance with 10 CFR 2.390, *Public Inspections, Exemptions, Requests for Withholding*. An affidavit supporting GLE's request to withhold certain information from public disclosure, in accordance with 10 CFR 2.390, is provided as part of this letter.

### **Summary of this Submittal**

GLE hereby submits the safety and safeguards portions of the PLEF LA. The enclosed application meets the applicable requirements of 10 CFR 70.22, *Contents of Applications*, which supports the NRC's evaluation of the PLEF LA. The LA is organized in accordance with NUREG-1520 Revision 2, *Standard Review Plan for Fuel Cycle Facilities License Applications*, dated June 2015. The following document(s) are enclosed with this letter:

- **Affidavit**, as required by 10 CFR 2.390(b) to support GLE's request to withhold the below-mentioned proprietary / financial information.

For the purposes of electronic submittal through the NRC Electronic Information Exchange (EIE) System, the file names and extensions that make up (10) Enclosures are listed below.

- **Enclosure 1a – License Application Chapters 1-13 (not publicly available)** The enclosed License Application, Chapters 1-13, meet the applicable requirements and reflect the applicable NRC guidance, including format, provided in NUREG-1520 Revision 2, *Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility*. Since the PLEF LA contains SRI and Proprietary Information, GLE requests that it be withheld from public disclosure per 10 CFR 2.390.  
Filename: 001a PLEF License Application Chapters 1-13.
- **Enclosure 1b – License Application Chapters 1-13 (publicly available)** This enclosure contains the public redacted version of the PLEF License Application Chapters 1-13.  
Filename: 001b PLEF License Application Chapters 1-13.

- **Enclosure 2 – Fundamental Nuclear Material Control Plan (FNMCP) (not publicly available)**, as required by 10 CFR 70.22(b). The FNMCP describes the program for the control and accounting of special nuclear material and contains information that is considered SRI and Proprietary Information. GLE requests that this document be withheld from public disclosure pursuant to 10 CFR 2.390(a)(4) and NRC RIS 2005-31.  
Filename: 002 Fundamental Nuclear Material Control Plan
- **Enclosure 3 – Physical Security Plan (PSP)**, as required by 10 CFR 70.22(g) and (k). The PSP describing the physical and transportation security programs contains information that is considered Safeguards Information and is being submitted separately in accordance with 10 CFR 73.23, *Protection of Safeguards Information-Modified Handling: Specific Requirements*.
- **Enclosure 4 – Emergency Plan (EP) (not publicly available)** as required by 10 CFR 70.22(i)(1)(ii). The EP contains information that is considered SRI and Proprietary Information, and GLE requests that this document be withheld from public disclosure pursuant to 10 CFR 2.390(a)(4) and NRC RIS 2005-31.  
Filename: 004 Emergency Plan
- **Enclosure 5a – Integrated Safety Analysis Summary (ISAS) (not publicly available)** as required by 10 CFR 70.65. The ISA Summary contains information that is considered Security-Related, Export Controlled, and Proprietary, and GLE requests that this document be withheld from public disclosure pursuant to 10 CFR 2.390(a)(4), 10 CFR 810, and NRC RIS 2005-31.  
Filename:005a Integrated Safety Analysis
- **Enclosure 5b – Integrated Safety Analysis Summary (ISAS) (not publicly available)** as required by 10 CFR 70.65. The section of the ISA Summary contains Classified Information and is being submitted separately in accordance with 10 CFR 95.39.
- **Enclosure 6 – Decommissioning Funding Plan (DFP) (not publicly available)** as required by 10 CFR 70.22(a)(9) and 70.25. The DFP contains information that is considered Proprietary, and GLE requests that this document be withheld from public disclosure pursuant to 10 CFR 2.390(a)(4).  
Filename: 006 Decommissioning Funding Plan
- **Enclosure 7 – Nuclear Material Transportation Security Plan (NMTSP) (not publicly available)** as required by 10 CFR 70.22(g) and (k). This document contains information that is SRI and Proprietary Information, GLE requests that this document be withheld from public disclosure pursuant to 10 CFR 2.390(a)(4).  
Filename: 007 Nuclear Material Transportation Security Plan

As discussed with the NRC staff, the following will not be included with the License Application at this time.

- Standard Practice Procedures Plan (SPPP)
- Program Cyber Security Plan (PCSP)
- Classified Matter Transportation Security Plan (CMTSP)

If there are any questions regarding this letter and its contents, please do not hesitate to contact me.

Sincerely,



Stephen Long  
Chief Executive Officer



Tim Knowles  
Licensing & Regulatory Affairs Manager

Cc: M. Murphy (GLE)

## AFFIDAVIT

I, Tim Knowles, Licensing and Regulatory Affairs Manager of Global Laser Enrichment (GLE), make the following representations that to the best of my knowledge and belief:

1. GLE wishes to have withheld from public disclosure the following document(s):
  - Enclosure 1a – License Application Chapters 1 - 13
  - Enclosure 2 - Fundamental Nuclear Material Control Plan
  - Enclosure 4 - Emergency Plan
  - Enclosure 5a – Integrated Safety Analysis Summary (ISAS)
  - Enclosure 6 – Decommissioning Funding Plan (DFP)
  - Enclosure 7 – Nuclear Material Transportation Security Plan (NMTSP)
2. The information contained in the documents cited in 1 above for which exemption from public disclosure is requested is company proprietary information. GLE requests that this information be exempt from disclosure pursuant to the provisions in 10 CFR Part 2.390(a)(4).
3. Public disclosure of the information in the above enclosures to this submittal has the potential to result in substantial harm to the competitive position of GLE, provide valuable business information to competitors of GLE which they could duplicate without having to expend their own resources to develop, and reduce or foreclose the availability of profit opportunities.
4. The information that GLE requests to be withheld from public disclosure is contained in the entire document(s) as so marked. Non-proprietary versions of the documents would essentially be blank pages and are therefore not provided.
5. The information stated in this affidavit has been submitted in accordance with the applicable parts of 10 CFR 2.390 and the guidance contained in NUREG-1556, Vol. 20, Appendix F.
6. The information sought to be withheld in public sources, to the best of GLE's knowledge and belief.

Tim Knowles  
Tim Knowles  
Licensing & Regulatory Affairs Manager  
STATE OF NORTH CAROLINA  
COUNTY OF NEW HANOVER

June 26, 2025  
Date

I certify the above-named person appeared before me and executed this document on this 26 day of June 2025.

Elizabeth Ogle Anderson  
Notary Public  
My commission expires: 03-04-2028  
REGS-PLEF-NRC-LTR-1000033

