

**NIMA ASHKEBOUSSI**  
*Sr. Director, Fuel and Radiation Safety*

1201 F Street, NW, Suite 1100  
Washington, DC 20004  
P: 202.375.0490  
nxa@nei.org  
nei.org



January 19, 2022

Ms. Shana Helton  
Director, Division of Fuel Management  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** Industry Comments on the NRC Public Meeting Discussing Foreign Obligation Reporting Requirements for Low Enriched Uranium

**Project No.: 689**

Dear Ms. Helton,

On behalf of the Nuclear Energy Institute's (NEI)<sup>1</sup> members, we appreciate the NRC's December 14, 2021 public meeting to discuss foreign obligation reporting requirements for low enriched uranium. NRC NUREGs BR-0006 and BR-0007 provide guidance for reporting material transactions to track movements, uses, and inventories of special nuclear material. The guidance also outlines foreign obligation reporting requirements for low enriched uranium. The commercial industry is actively working to deploy fuel with enrichments between 5%-10% (LEU+) in current operating plants by the mid-2020s. The NRC currently defines material type "E1" as uranium enriched above natural uranium but less than 5 wt.%, while "E2" is defined as uranium enriched between 5 wt.% and 20 wt.%. The blending of "E1" and LEU+ "E2" material will become common practice at fuel cycle facilities. Under current reporting instructions, licensees authorized to possess up to 10% enriched LEU would need to receive pre-approval from the government for each reassignment of obligations from "E1" to "E2" material. The need to request and receive pre-approval for activity that will likely occur daily represents a significant and unnecessary burden to industry that could impede commerce and will also be resource intensive for the NRC and its interagency partners to process.

### **NRC Proposed Path Forward**

Industry appreciates NRC's responsiveness to this issue and staff's work with interagency partners on identifying a path forward. The NRC proposed solution is for licensees to submit a one-time written request for approval to assign foreign obligations to all LEU, up to 10%, in their inventory. While, this idea could work, there is not enough information on the process for industry to make a fully informed decision on its

---

<sup>1</sup> The Nuclear Energy Institute (NEI) is responsible for establishing unified policy on behalf of its members relating to matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect and engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations involved in the nuclear energy industry.

viability. It is not clear the extensiveness of the information NRC and the interagency partners will need and how long approval will take.

Additionally, while this solution may work for facility blending activities, a common practice in the commercial nuclear fuel market is exchanging or "swapping" material where some aspects of the material may change, such as ownership, origin, or obligation, without having it being physically transferred since it is like for like material. This type of transaction benefits security and safeguards by minimizing the physical movement of material around the world. It is not clear how this proposed path forward addresses this scenario.

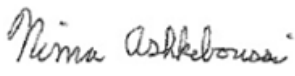
### **Industry's Preferred Solution**

NRC stated a desire to avoid confusion with existing guidance, however, the proposed path forward creates two different reporting frameworks for licensees – those with pre-approval granted and those without. It is unclear how obligation swaps between such licenses could occur, or if they could occur, under the proposal. Industry proposes that a clearer path forward that avoids confusion is a revision to the "E1" and "E2" definitions. The definition of "E1" should be revised to uranium enriched above natural uranium but less than 10 wt.% and "E2" defined as uranium enriched between 10 wt.% and 20 wt.%. These revised definitions align with NRC's current categorization of special nuclear material categories III and II. Industry understands that the definitions of "E1" and "E2" are not linked to regulations or international treaties – the change would strictly be to guidance documents.

Under a definition change, all entities would be operating within the same reporting framework and would not require industry to submit amendment requests for NRC and interagency approval. Industry believes that the schedule for typical NRC NUREG revisions align with industry's timing needs on this issue. Furthermore, industry believes there is a very limited (if any) number of entities that may need to reclassify material in the 5-10% range and be "E1" under a new definition and minimal burden to process this change. Please provide us with an estimate on the number of entities or records impacted if this assumption is incorrect.

We look forward to continued engagement on this issue and would like to achieve a clear understanding of the path forward this calendar year. Understanding the path forward provides licensees time to revise any software or procedures they use to meet reporting requirements. Please reach out to me with any questions and to schedule the next public meeting.

Sincerely,



Nima Ashkeboussi

c: James Rubenstone, NRC/NMSS/DFM/MCAB  
Mirabelle Shoemaker, NRC/NMSS/DFM/MCAB  
NRC Document Control Desk