

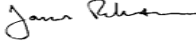


**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001


September 27, 2022

MEMORANDUM TO: Shana Helton, Director
Division of Fuel Management
Office of Nuclear Material Safety
and Safeguards

THRU: James Rubenstone, Chief
Material Control and Accounting Branch
Division of Fuel Management
Office of Nuclear Material Safety
and Safeguards

 Signed by Rubenstone, James
on 09/27/22

FROM: Mirabelle Shoemaker, International Safeguards Analyst
Material Control and Accounting Branch
Division of Fuel Management
Office of Nuclear Material Safety
and Safeguards

 Signed by Shoemaker, Mirabelle
on 09/27/22

SUBJECT: SUMMARY OF THE JUNE 22, 2022, VIRTUAL PUBLIC
MEETING WITH THE NUCLEAR MATERIALS MANAGEMENT
AND SAFEGUARDS SYSTEM (NMMSS) USER COMMUNITY

On June 22, 2022, the U.S. Nuclear Regulation Commission (NRC) staff conducted a virtual public meeting with representatives from Nuclear Energy Institute (NEI), nuclear industry and members of the public. Representatives from the Department of Energy (DOE) and DOE/National Nuclear Security Administration (NNSA) were also in attendance. The purpose of this meeting was to engage the broader NMMSS Users Community following an inquiry from NEI regarding the process for reporting foreign obligated low enriched uranium (LEU) that is greater than 5% enriched, but less than 10%. The public meeting notice and the NRC's presentation are available in the (Agencywide Documents Access and Management System (ADAMS) under Accession Nos. ML22140A002 and ML22172A069), respectively. NEI also gave a presentation that is available via ADAMS, ML22174A282. The enclosure to this document contains the meeting attendance list. The NRC staff made no regulatory decisions or commitments during the meeting.

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Discussion

The meeting promoted an open dialogue with representatives from NEI, the nuclear industry, and members of the public. There were 67 attendees including the NRC staff. The NRC staff opened the meeting with a presentation that identified: the requirements for reporting foreign obligations on nuclear material as expressed in the relevant reporting guidance documents (NUREG/BR-0006 and NUREG/BR-0007); the question raised by NEI and industry regarding obligation exchanges from blending low-enriched uranium (LEU) of different reporting material types, and the process for requesting prior U.S. Government approval for foreign obligation exchanges that do not meet the like-for-like criteria identified in Appendix F of NUREG/BR-0006. The NRC staff presentation also explained the proposed solution, developed by NRC through the U.S. government interagency process, for licensees to seek a one-time prior approval to assign foreign obligations on quantities of low enriched uranium, enriched above 5% but less than 10%.

In the presentation, NRC expressed that it is seeking input from licensees regarding the impact of the proposed interagency solution as well as feedback regarding NEI's proposed redefining of the categories for reporting low enriched uranium so that the material type E1 (currently uranium enriched to less than 5%) includes uranium up to 10% enrichment.

An opportunity for public comment and discussion followed the NRC presentation, during which the following points were raised:

- NEI expressed that it favors modification of the definitions for the E1 and E2 material types rather than use of the one-time request for prior approval, as proposed by the interagency. NEI stated that its approach would provide a better long-term resolution of the question.
- NEI inquired as to the interagency views regarding redefining the E1 material type to include material enriched up to 10%. NRC expressed that redefining the material types involves both technical and policy aspects, as well as consideration of the time and resources needed to implement such a change (e.g., changes to the NMMSS system to accommodate the new categorization, and revision of the guidance documents). DOE/NNSA confirmed that there are policy-related reservations about redefining the material types, including a need for coordination with U.S. nuclear trading partners who supply the obligated material.
- Federal project managers for NMMSS clarified that the program is responsible for implementing policy and will make modifications to the system when it is mandated to do so. The NMMSS managers noted that any changes should be implemented uniformly at a single time, as they would impact reporting by U.S. government sites as well as commercial industry licensees.
- NEI inquired which licensees outside of the fuel cycle possess material that is enriched between 5% and 10% and would therefore be burdened to modify their reporting if the boundary between E1 and E2 material was changed. The NRC and NMMSS confirmed that specific information about licensees' inventories in NMMSS could not be provided during the meeting, as it is official-use-only information, but the types of licensees likely to be affected include, for example, research reactors, greater-than-critical-mass facilities licensed under 10 CFR Part 70, and facilities supporting DOE activities.

- United States Nuclear Industry Council (USNIC) expressed that the advanced reactors community supports a clear, well-defined process to get a one-time prior approval to support fuel production and supply schedules. USNIC supports removing the subcategories for reporting LEU and treating all LEU as E1 material. This position was also supported by some of the fuel facilities present at the meeting, and later identified as the preferred solution by NEI as the discussion continued. The NRC staff noted that such a change may raise further policy issues as it would allow broader obligation exchanges for materials that approach the high-enriched uranium material type.
- Staff from DOE inquired whether the NRC considered the International Atomic Energy Agency (IAEA) INFCIRC/225, Revision 5 for reporting LEU to the IAEA. The NRC clarified that the commitments for foreign obligations accounting are contained within the various nuclear cooperation agreements for international trade and are not defined in the context of the U.S. Safeguards Agreements with the IAEA. The interagency will ensure that any changes to how foreign obligations are reported do not come in conflict with safeguards commitments.

NEI then presented on its request for NRC to redefine the E1 material type to include material enriched up to 10%. NEI's presentation focused on its initial request for this definition change. NEI further stated that it now supports reclassification of all LEU as E1 material, claiming that this is a more transformational and forward-thinking solution.

A second opportunity for public comment and discussion followed the NEI presentation, during which the following points were raised:

- NRC staff sought clarification as to whether the proposed interagency solution alleviated the "significant burden" of foreign obligations accounting as expressed by NEI in its presentation. NEI confirmed that the proposed solution provides a remedy, but their opinion is that a change to the material type definitions in the NUREGs will provide a clearer, long-term solution.
- NRC staff asked NEI to clarify whether the interagency should consider the redefinition of E1 material as up to 10% enrichment, or the elimination of the two material types for all LEU, since NEI appeared to support either change as a viable option. During the discussion, industry stakeholders commented that a one-time modification to the E1 category would be preferable. NEI agreed with this comment. USNIC emphasized their position that all LEU should be reported as a single material code and encouraged the consolidation of the E1 and E2 categories.

Action Items/Next Steps

The NRC indicated that additional discussions on this topic were planned with the interagency as it prepares to engage with foreign trading partners this calendar year. The NRC will provide a status of this issue after further engagement with the interagency, following this public meeting.

Enclosure:
List of Attendees

SUBJECT: SUMMARY OF THE JUNE 22, 2022, VIRTUAL PUBLIC MEETING WITH THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS) USER COMMUNITY, DATED September 27, 2022

DISTRIBUTION:

OFFICE	NMSS/DFM	NMSS/DFM	NMSS/DFM
NAME	MShoemaker	JRubenstone	MShoemaker
DATE	9/26/2022	9/27/2022	9/27/2022

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LIST OF ATTENDEES
JUNE 22, 2022, PUBLIC
MEETING
WITH THE NUCLEAR FUEL ENERGY INSTITUTE (NEI), THE NUCLEAR FUEL
INDUSTRY, AND STAKEHOLDERS TO DISCUSS FOREIGN OBLIGATION
REPORTING REQUIREMENTS FOR LOW ENRICHED URANIUM

Name	Affiliation (as provided)
James Rubenstone	Nuclear Regulation Commission (NRC)
Mirabelle Shoemaker	NRC
Shana Helton	NRC
Linda Howell	NRC
Eduardo Sastre	NRC
Santiago Aguilar	NRC
Nicolas Mertz	NRC
Jessica Norles	Department of Energy/National Nuclear Security Administration (DOE/NNSA)
Pete Dessales	DOE/NNSA
Andrea Jenetta	
Alexandra Ziegler	Nuclear Materials Management and Safeguards System (NMMSS)
Genevieve Weaver	NMMSS
Amy Biggs	DOE
Edward Love	Pacific Northwest National Lab (PNNL)
Robert Oelrich	PNNL
Nima Ashkeboussi	NEI
Darryl Gunther	Westinghouse
Michael Wilbricht	Framatome
Julie Hawkins	GE
Janet Schlueter	NEI
Ali Tabatabai	NMMSS
Barry Cooney	
Mick Mastilovic	DOE
Eris Speights	Westinghouse
Timothy Tate	Framatome
Korrie Yetzer	Tennessee Valley Authority (TVA)
John Cettin	NMMSS
Cyril Draffin	US Nuclear Industry Council
RL Carbo	DOE/NNSA
Jim Rickman	Urenco USA
Marty Karr	Centrus Energy
Carla Roque-Cruz	NRC
Katie McGivern	DOE/NNSA
Brian Horn	NMMSS
Scott Murray	GE
Diana Diaz Toro	NRC

Cody Stuchal	
Erin B. Zendel	Centrus Energy
Brasi Luca	
Rebecca Sensabaugh	
Jackie Harvey	NRC
Jason Krumenacker	Centrus Energy
Steven Hazen	Westinghouse
Catherine Ramsey	Savannah River National Lab
Devin Tiernan	GE
John L Talbert	Centrus Energy
Carla Borrelli	TVA
Fred Schofer	NRC
Melanie May	DOE
Haylie Lobeck	DOE/NNSA
Suzanne Ani	NRC
Christopher Bunting	DOE
Donna Hutchinson	NMMSS
David Brown	NRC

*Not all meeting attendees were identified by name, in some cases the only identifying information available was a first name or a phone number.