

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 3, 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

FROM: Mirabelle Shoemaker, International

Safeguards Analyst

Material Control and Accounting Branch

Division of Fuel Management Office of Nuclear Material Safety

and Safeguards

SUBJECT: SUMMARY OF THE DECEMBER 14TH, 2021, VIRTUAL PUBLIC

MEETING WITH REPESENTATIVES OF THE NUCLEAR

INDUSTRY TO DISCUSSS FOREIGN OBLIGATION REPORTING

Moshow

REQUIREMENTS FOR LOW ENRICHED URANIUM

On December 14th, 2021, the U.S. Nuclear Regulation Commission (NRC) staff conducted a virtual public meeting with representatives from Nuclear Energy Institute, nuclear industry and members of the public. The purpose of this meeting was to discuss the current reporting instructions for foreign obligated low enriched uranium (LEU) and provide a recommendation for requesting prior approval from the U.S. Government to assign foreign obligations to LEU that is greater than 5% enriched, but less than 10%. The public meeting notice and NRC presentation are available in the Agencywide Documents Access and Management System (ADAMS) under Accession Nos. ML21335A329 and ML21344A149, respectively. The enclosure to this document contains the meeting attendance list. The NRC staff made no regulatory decisions or commitments during the meeting.

During the public meeting, the NRC staff presented background information regarding the reporting instructions for foreign obligated LEU to the Nuclear Materials Management and Safeguards System (NMMSS), which are described in NUREG/BR-0006 and -0007. The NRC's presentation clarified current reporting requirements and provided a recommended solution for obligation reporting by licensees who in the future may be blending LEU of different enrichments.

CONTACT: Mirabelle Shoemaker, NMSS/DFM

301-415-7363

Guidance in these NUREGs directs licensees possessing LEU that is enriched >5% but <10% to obtain prior approval from the U.S. Government to apply foreign obligations to LEU within this assay range.

Discussion

The meeting promoted an open dialogue with representatives from NEI, the nuclear industry, and members of the public. There were 64 participants including the NRC staff. The NRC's presentation focused on the NUREGs instruction to report LEU in inventory as belonging to one of four material categories:

- E1, for uranium enriched greater than normal but less than 5 percent
- E2, for uranium in enrichment of 5 percent or more but less than 20 percent
- E3, for uranium in enrichment of 20 percent or more but less than 80 percent
- E4, for uranium in enrichment of 80 percent or more

Material transactions (such as blending) that include changes to foreign obligation holdings must follow the like-for-like principles of foreign obligations accounting contained in Appendix F of NUREG/BR-0006. In this section, the instructions indicate that prior-approval from the U.S. Government is needed when assigning foreign obligations from one LEU assay-range to another. Furthermore, foreign obligations reporting that involves changes to holdings of E2, E3, or E4 material require prior approval. The industry requested clarification from the NRC to better understand impacts related to daily operations for Cat III facilities seeking license amendments to possess up to 10% LEU for the production of Accident Tolerant Fuel (ATF).

The NRC's presentation recommended that licensees submit a written request for approval to assign foreign obligations to all LEU in their inventory, which may be enriched up to but less than 10%, and specified in their possession license. The NRC indicated that the request for prior approval is not a requirement of a license and should be submitted separately from a license amendment request. The NRC recommended that licensees submit their requests in parallel with an amendment request to facilitate timely review and consideration by the U.S. Government.

Action Items/Next Steps

The industry asked for clarification as to whether prior approval would apply to material blending, involving different material types, such as the blending of natural or depleted uranium with enriched uranium during fuel fabrication. The NRC staff will follow up with industry to provide clarification.

The meeting also provided members of the public the opportunity to ask questions and provide comments to the NRC staff. Tom Clements inquired whether the recommendation and potential changes to the NUREG instructions to document the process, would have an impact on foreign obligations related to LEU used for weapons tritium production in TVA's Watts Bar and possibly Sequoyah reactors. The NRC clarified that fuel used for tritium production must be free of any foreign obligations accounting to uphold peaceful use commitments under the nuclear cooperation agreements and would therefore not be affected by this recommendation.

Enclosure: List of Attendees S.Helton 3

SUBJECT: SUMMARY OF THE DECEMBER 14TH, 2021, VIRTUAL PUBLIC MEETING WITH REPESENTATIVES OF THE NUCLEAR INDUSTRY TO DISCUSSS FOREIGN OBLIGATION REPORTING REQUIREMENTS FOR LOW ENRICHED URANIUM DOCUMENT DATE: January 3, 2022

DISTRIBUTION:

PUBLIC SHelton, NMSS JRubenston NMSS ESastre, NMSS SAguilar, NMSS MShoemaker, NMSS

ADAMS Accession No.: ML220003A048* via email

OFFICE	NMSS/DFM	NMSS/DFM
NAME	MShoemaker	JRubenstone
DATE	1/3/2022	1/3/2022

OFFICIAL RECORD COPY

LIST OF ATTENDEES

NOVEMBER 9, 2021, PUBLIC MEETING REGARDING EXTREME ENVIRONMENTAL PHENOMENA DURING SHORT TERM OPERATIONS WITHIN 10 CFR PART 72 JURISDICTION

Name	Affiliation
James Rubenstone	Nuclear Regulation Commission
	(NRC)
Mirabelle Shoemaker	NRC
Eduardo Sastre	NRC
Santiago Aguilar	NRC
Nicolas Mertz	NRC
Jessica Norles	Department of Energy/National
	Nuclear Security Administration
W. ()	(DOE/NNSA)
Katelyn Bennett	DOE/NNSA
Alexandra Ziegler	Nuclear Materials Management and
Lorio Procking	Safeguards System (NMMSS) Nuclear Industry
Lorie Brooking Tammi Stambaugh	indicieal industry
Gerard Couture	
Calvin Manning	
Francis Tsang	DOE/NNSA
Haylie Lobeck Blake Bixenman	
	Nuclear Industry
Emily McGuinness	Nuclear Industry
Nima Ashkeboussi	NEI
Tom Clements	Public
Michael Wilbricht	Framatome
Julie Hawkins	GE
Janet Schlueter	NEI
Ali Tabatabai	NMMSS
Mick Mastilovic	DOE
Eris Speights	Westinghouse
Tate Timothy	Framatome
Marty Karr	Centrus Energy
Courtney Danielle Chapman	Exelon
Pearline Teeters	Nuclear Industry
David Hanks	NRC
Kelly Wegener-Gave	Nuclear Industry
Karen Hicks	DOE/ORNL
Justin PPPO	
Carlos Sisco	Nuclear Industry
Kristy Peng	Department of State
Bradley S Williamson	Dominion Energy
Joseph Christensen	GE
Michael Chen	DOE/NNSA
Nanette Founds	DOE/NNSA

Name	Affiliation
Kyle Wilhelm	DOE/NNSA
Cody Stuchal	Nuclear Industry
James DeGolyer	GE
Jan Boudart	
Ellis Gamble	Westinghouse
Shannon Chester	DOE/NNSA
Erin T Boyle	Centrus Energy
Edwin Lyman	UCSUSA
John L. Talbert	Centrus Energy
Rebecca Sensabaugh	
Gary Langlie	NRC
Anonymous callers*	

^{*}Not all meeting attendees were identified by name, in some cases the only identifyinginformation available was a first name or a phone number.