

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 14, 2022

MEMORANDUM TO: Christopher M. Regan, Deputy Director

Division of Fuel Management
Office of Nuclear Material Safety

and Safeguards

FROM: Christian J. Jacobs, Sr. Project Manager

Storage and Transportation Licensing Branch

Division of Fuel Management Office of Nuclear Material Safety

and Safeguards

SUBJECT: SUMMARY OF MARCH 30, 2022, PUBLIC MEETING WITH TN

AMERICAS LLC TO DISCUSS PRE-APPLICATION OF

CERTIFICATE OF COMPLIANCE NO. 1042, AMENDMENT NO. 4

Signed by Jacobs, Chris

On March 30, 2021, an Observation public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and TN Americas LLC (TN, the applicant). The purpose of the meeting was to discuss TN's plans for submittal of Amendment No. 4 to Certificate of Compliance (CoC) No. 1042 for the NUHOMS® EOS System. The meeting notice and agenda, dated March 16, 2022, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML22075A342. During the meeting, the applicant presented slides, which are available at ADAMS Accession No. ML22067A044 and replacement slides 3, 26 & 27 at ML22087A511. The enclosure to this document contains the meeting attendance list.

TN presented the scope of this amendment which includes: add damaged and failed fuel storage capability to the EOS-89BTH; introduce a steel-plate composite option for the EOS-HSM (EOS-HSM-SC); demonstrate MAVRIC software capability for use in dose rate analyses; and apply maximum heat load configuration concept to EOS-37PTH.

NRC staff indicated that the proposed structural changes were extensive (going from concrete to steel composite) and questioned why TN would be submitting this application as an amendment, rather than a new CoC? TN responded that although the EOS-HSM-SC is structurally different compared to the EOS-HSM, it is similar from a thermal and shielding perspective. Also, TN intends to provide drawings that will clearly differentiate the differences, and that changes to the safety analysis report and technical specifications (TS) will be clear for the staff's review and future inspections of the system.

CONTACT: Christian Jacobs, NMSS/DFM

301-415-6825

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NRC staff also suggested that TN's application submittal be clear in differentiating between the steel-plate composite EOS-HSM and the previously approved HSM models, particularly regarding methods of evaluation, TS, and design criteria. NRC staff requested that TN provide clarification in drawings regarding the failed fuel can (FFC) in a Type 2 basket and asked if TN intended to provide a new appendix for the EOS-HSM-SC? TN indicated that they view the EOS-HSM-SC as a variation to the EOS-HSM. Therefore, TN does not intend to submit a completely separate appendix similar to the MATRIX design provided in Amendment No. 1. Rather, some parts (such as thermal and structural evaluations) will be in separate appendices, but not the entire EOS-HSM-SC.

There was an additional question regarding the FFC regarding whether the varying amounts of fuel were mass limited? TN stated that the limits would be provided in the TS. Regarding shielding portions of the application, NRC staff asked if fuel qualification tables (FQTs) would be provided? TN stated that the FQTs would be the same as those in Amendment No. 3. NRC staff stated the importance that the application provide clarity regarding what changes will be requested in this amendment and what TN is seeking approval for, versus "options" or potential future changes that are not being incorporated into this amendment. NRC staff suggested that TN could provide a flow chart or road map with the application that may facilitate the review for technical staff and assist NRC inspectors in the future. TN indicated they would consider this suggestion.

No regulatory decisions or commitments were made during the meeting. TN indicated that they plan to submit the application by the 3rd Quarter 2022, and will be requesting the NRC to approve the application by the 1st Quarter 2024. NRC staff commented that the requested schedule is aggressive, because it assumes a 12 month review by NRC staff. NRC staff stated that in order for staff to support this schedule, TN would need to submit a quality application that could be accepted for review without need for a request for supplemental information. NRC staff also suggested that due to limited staff resource availability, TN should provide justification in their application letter as to why this amendment should be considered a high priority item for review. TN indicated the justification for the priority review of this amendment will be provided within the application letter.

There was one member of the public who attended the meeting, and no members of the public asked questions during the Questions and Answers session. In closing, TN indicated that they may request another pre-application meeting prior to the application submittal in fall of 2022.

CAC: 001028

Docket No.: 72-1042 EPID: L-2022-LLA-0017

Enclosure:

List of Attendees

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SUBJECT: SUMMARY OF MARCH 30, 2022, PUBLIC MEETING WITH TN AMERICAS LLC

TO DISCUSS PRE-APPLICATION OF CERTIFICATE OF COMPLIANCE NO.

1042, AMENDMENT NO. 4

DOCUMENT DATE: April 14, 2022

#### **DISTRIBUTION**:

DFM r/f KJamerson, NMSS NRC Attendees

ADAMS Package No.: ML22102A056

Memo: ML22102A057

Meeting Notice: ML22075A342

Slides: ML22067A044, ML22087A511

Affidavit: ML22067A046

OFFICE	DFM	DFM	DFM
NAME	CJacobs	WWheatley	YDiaz-Sanabria
DATE	04/12/2022	04/13/2022	04/14/2022

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### LIST OF ATTENDEES SELF IDENTIFIED

## MARCH 30, 2022, PUBLIC MEETING REGARDING PRE-APPLICATION OF

### CERTIFICATE OF COMPLIANCE NO. 1042, AMENDMENT NO. 4

Name	Affiliation	
Christian Jacobs	U.S. Nuclear Regulatory Commission (NRC)	
Matt Learn	NRC	
James Chang	NRC	
Chris Bajwa	NRC	
Omar Khan	NRC	
Darrell Dunn	NRC	
Patrick Koch	NRC	
Drew Barto	NRC	
Alexis Sotomayor Rivera	NRC	
Earl Love	NRC	
Tim McCartin	NRC	
Marilyn Diaz Maldonado	NRC	
Yoira Diaz Sanabria	NRC	
Glenn Mathues	TN Americas LLC (TN)	
Prakash Narayanan	TN	
Raheel Haroon	TN	
Venkata Venigalla	TN	
Philippe Pham	TN	
Hoi Yee Tom	TN	
Jake Stefanick	TN	
Hui Liu	TN	
Si Hwan Park	TN	
Rick Migliore	TN	
Carlyn Greene	public	