



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

July 15, 2022

MEMORANDUM TO: William Kennedy, Acting Chief  
Advanced Reactor Licensing Branch 1  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

FROM: Lucieann Vechioli Feliciano, Project Manager *Lucieann Vechioli Feliciano* Signed by Vechioli, L  
Advanced Reactor Licensing Branch 1 on 07/15/22  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE MAY 20, 2022, CLOSED MEETING WITH  
X ENERGY, LLC REGARDING XE-100 TOPICAL REPORT:  
TRISO-X PEBBLE FUEL QUALIFICATION METHODOLOGY  
(EPID NO.: L-2021-TOP-0011)

On May 20, 2022, the U.S. Nuclear Regulatory Commission (NRC) staff held a closed videoconference meeting with X Energy, LLC (X-energy) to discuss the responses submitted by X-energy on February 28, 2022, (Agencywide Documents Access and Management System (ADAMS) No. ML22059A770) to the Requests for Additional Information (RAIs) sent by the NRC staff on December 2, 2021 (ML21334A230 and ML21334A233 (nonpublic)) regarding XE00-R-R1ZZ-RDZZ-L-000633, Revision 2 of "Xe-100 Topical Report: TRISO-X Pebble Fuel Qualification Methodology" (ML21246A289). Participants included personnel from X-energy and the U.S. Department of Energy, Office of Nuclear Energy.

This meeting was originally scheduled for April 29, 2022, and was noticed on April 18, 2022 (ML22108A245). The meeting was subsequently rescheduled to occur on May 20, 2022, and was noticed on May 5, 2022 (ML22125A028). The List of Attendees is provided as an enclosure.

The NRC staff began the meeting with an introduction and pertaining logistical information. During the meeting, X-energy representatives asked the NRC staff questions regarding individual RAI responses. The questions were followed by an open discussion between X-energy and NRC participants to discuss certain aspects of the responses that required clarification. Finally, the X-energy representatives and the NRC staff discussed next steps in the review of the topical report.

Project No. 99902071

Enclosure:  
List of Attendees

CONTACT: Lucieann Vechioli Feliciano, NRR/DANU  
301-415-0673

SUBJECT: SUMMARY OF THE MAY 20, 2022, CLOSED MEETING WITH X ENERGY, LLC  
REGARDING XE-100 TOPICAL REPORT: TRISO-X PEBBLE FUEL  
QUALIFICATION METHODOLOGY (EPID NO.: L-2021-TOP-0011)  
DATED: JULY 15, 2022

**DISTRIBUTION:**

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LVechioli, NRR  
KWagner, NRR  
MOrenak, NRR  
BTravis, NRR  
WKennedy, NRR

**ADAMS Accession Number: ML22166A424**

**NRR-106**

OFFICE	NRR/DANU/UAL1:PM	NRR/DANU/UAL1:PM	NRR/DANU/UAL1:LA
NAME	KWagner	LVechioli	CSmith
DATE	06/16/2022	06/17/2022	07/11/2022
OFFICE	NRR/DANU/UAL1:BC(A)	NRR/DANU/UAL1:PM	
NAME	WKennedy	LVechioli	
DATE	07/ 14/2022	07/15/2022	

**OFFICIAL RECORD COPY**

**List of Attendees**

**Closed Meeting with X Energy, LLC regarding Xe-100 Topical Report: TRISO-X Pebble  
Fuel Qualification Methodology**

**Friday, May 20, 2022  
1:00 p.m. – 2:00 p.m.**

<b><u>Name</u></b>	<b><u>Organization</u></b>
Lucieann Vechioli	U.S. Nuclear Regulatory Commission (NRC)
William Kennedy	NRC
Katherine Wagner	NRC
Michael Orenak	NRC
Boyce Travis	NRC
Travis Chapman	X Energy, LLC (X-energy)
Raymond Wang	X-energy
Ingrid Nordby	X-energy
James Breuninger	U.S. Department of Energy (DOE)
Jeff Ciocco	DOE

Enclosure