



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

November 7, 2024

Mr. Michael Dudek
X Energy, LLC.
801 Thompson Avenue
Rockville, MD 20852

SUBJECT: X-ENERGY LLC., XENITH™ MICRO-REACTOR – NRC FEEDBACK REGARDING
CONCEPT OF OPERATIONS WHITE PAPER (EPID NO. L-2024-LRO-0036)

Dear Mr. Dudek:

By letter dated August 16, 2024 (Agencywide Documents Access and Management System Accession No. ML24229A071), X-Energy, LLC, submitted for U.S. Nuclear Regulatory Commission (NRC) staff review, XE-2024-06, "X-energy, LLC, XENITH™ White Paper on Concept of Operations." This white paper describes the current concept of operations for the X-energy's Next-Generation Integrated Transportable High-Temperature (XENITH™) microreactor. The NRC staff was asked to perform a review of this paper and provide written feedback. The NRC staff completed its review of the submittal and the enclosed letter provides the staff's detailed observations for X-energy to consider.

The Enclosure to this letter contains Export Controlled information. When separated from the Enclosure, this document is DECONTROLLED.

If you have questions about this matter, please contact Patrick Boyle at (301) 415-3936 or by email at Patrick.Boyle@nrc.gov.

Sincerely,

A handwritten signature in cursive script that reads "John Segala".

Signed by Segala, John
on 11/07/24

John Segala, Chief
Advanced Reactor Licensing Branch 2
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Project No.: 99992118

Enclosure:
As stated

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(EPID NO. L-2024-LRO-0036) DATED: NOVEMBER 7, 2024

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NRR-106

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