



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

November 9, 2022

Mr. Travis Chapman  
Manager, U.S. Licensing, Xe-100 Program  
X Energy, LLC  
801 Thompson Avenue  
Rockville, MD 20852

SUBJECT: X ENERGY, LLC – U.S. NUCLEAR REGULATORY COMMISSION STAFF  
FEEDBACK REGARDING XE-100 LICENSING WHITE PAPER: TRAINING  
PROGRAMS, CONTROL ROOM OPERATOR QUALIFICATION, AND  
CONTROL ROOM OPERATOR ELIGIBILITY (EPID NO. L-2022-LRO-0025)

Dear Mr. Chapman:

On June 2, 2022, X Energy LLC (X-energy) submitted a white paper titled, "Training Programs, Control Room Operator Qualification, and Control Room Operator Eligibility" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22153A201), for NRC staff review. This white paper presents X-energy's approach to developing training programs for Xe-100 plant staff, qualifying Control Room Operators, and establishing eligibility requirements for Control Room Operators.

The NRC staff completed its review of the submittal. The NRC staff's comments are provided in the attachment and are specific to the white paper as submitted. The NRC staff encourages further pre-application engagement, especially for novel design features or planned approaches that differ from currently operating reactors. Early discussions help to facilitate the NRC staff understanding of the unique aspects of the X-energy concept of operation.

T. Chapman

- 2 -

If you have questions regarding this matter, please contact Lucieann Vechioli at (301) 415-6035 or via email at [Lucieann.VechioliFeliciano@nrc.gov](mailto:Lucieann.VechioliFeliciano@nrc.gov).

Sincerely,



Signed by Jessup, William  
on 11/09/22

William Jessup, Chief  
Advanced Reactor Licensing Branch 1  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

Project No.: 99902071

Enclosure:  
As stated

cc: [TChapman@x-energy.com](mailto:TChapman@x-energy.com)  
[INordby@x-energy.com](mailto:INordby@x-energy.com)

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DATED: NOVEMBER 9, 2022

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**ADAMS Accession Nos.:**

**Pkg: ML22294A105**

**Letter: ML22294A104**

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**NRR-106**

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<b>NAME</b>	LVechioli	DGreene	LNist	WJessup
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