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

December 12, 2025

Travis Iskierka-Boggs
Manager, Reactor Licensing
X energy, LLC
530 Gaither Road, Suite 700
Rockville, MD 20850

SUBJECT: X-ENERGY, LLC – U.S. NUCLEAR REGULATORY COMMISSION
OBSERVATIONS REGARDING XE-100 WHITE PAPER: APPROACH TO
MEETING SELF-RELIANT MITIGATION FACILITY OPERATING AND
TECHNICAL CHARACTERISTICS (EPID: L-2025-LRO-0052)

Dear Mr. Iskierka-Boggs:

By letter dated September 5, 2025 (Agencywide Documents Access and Management System
Accession No. ML25248A306), X Energy, LLC, submitted for U.S. Nuclear Regulatory
Commission (NRC) staff review the white paper titled "Approach to Meeting Self-Reliant-
Mitigation Facility Operating and Technical Characteristics."

The NRC staff's observations pertaining to this white paper are provided in the enclosure to this
letter. If you have any questions regarding this matter, please contact Adrian Muñiz at (301)
415-4093 or via email at adrian.muniz@nrc.gov

Sincerely,

 /RA/

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

Project No.: 999902071

Enclosure:
As stated

cc: X-energy Xe-100 via GovDelivery

T. Iskiera-Boggs   2

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