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Docket No.: 99902118

XE-2024-08

January 10, 2025

U.S. Nuclear Regulatory Commission Document Control Desk 11555 Rockville Pike Rockville, MD 20852

Re: Submittal of X Energy, LLC, XENITH[™] Microreactor Pre-Application Regulatory Engagement Plan (REP), Revision 2

I am pleased to submit on behalf of X Energy, LLC (X-energy), the enclosed Controlled Unclassified Information (CUI) and Proprietary version of X-Energy's Next-Generation Integrated Transportable High-Temperature (XENITH) microreactor pre-application Regulatory Engagement Plan (REP). This revised submittal covers a brief technology overview and planned pre-application interactions with the NRC in support of future X-energy XENITH microreactor license application(s).

The enclosed REP includes information regarding the current status of the XENITH microreactor's design, and the regulatory strategy envisioned for its deployment. The REP includes our proposed licensing submittals for fiscal year 2025 as well as other key topic areas that we would like to address through pre-application interactions. Through these interactions, X-energy aims to continue it preapplication engagements with the U.S. Nuclear Regulatory Commission (NRC) staff with the primary goal of enhancing communications and reducing regulatory uncertainty by establishing a common understanding of XENITH's licensing deliverables and needed timelines.

This submittal contains CUI and Proprietary information from X-energy and shall not be distributed and/ or disseminated outside of its intended audience without the consent of the Department of Defense's Strategic Capabilities Office. In conformance with the requirement of 10 CFR Section 2.390, as amended, of the NRC's regulations, we are enclosing with this submittal an Affidavit. The Affidavit sets forth the basis on which the information identified as CUI and Proprietary should be withheld from public disclosure.

This letter contains no commitments. Should you have any questions or require additional information, please contact Michael Dudek at mdudek@x-energy.com



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Sincerely,

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Michael I. Dudek Licensing Manager, XENITH Microreactor Program X-energy, LLC

Cc: X-energy, LLC Tom Nixon Hans Gouger Brad Rearden Steve Vaughn Robert Taylor

U.S. Nuclear Regulatory Commission John Segala Patrick Boyle Paul Mourning

Enclosures: (1) Affidavit (2) XENITH Regulatory Engagement Plan Rev2