
April 17, 2024

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

Re: Submittal of X Energy, LLC XENITH™ Pre-Application Engagement Presentation on Proposed Analytical Methods

I am pleased to submit on behalf of X-energy, LLC (X-energy), an enclosed publicly available version of X-energy's Next-Generation Integrated Transportable High-Temperature (XENITH) microreactor pre-application presentation on Proposed Analytical Methods. This preapplication engagement that was requested from the NRC staff will be an NRC Observation Open Hybrid Public Meeting that will be held on May 1, 2024.

The enclosed presentation includes the XENITH microreactor design team's assumptions and description of the code suite associated with a Licensing Topical Report (LTR) on Analytical Methods. As described in the presentation, the objective of the LTR on Analytical Methods will be to: (1) provide a high-level overview of the XENITH design, analysis, and verification and validation (V&V) processes, (2) introduce the nuclear engineering tool suite, and (3) present early-stage V&V results. Through these interactions, X-energy will continue to update its design processes, V&V and documentation associated with Analytical Methods, and will continue to engage the NRC as our design matures.

This submittal contains only publicly available information of X-energy and can be distributed and/or disseminated to any intended audience.

Sincerely,



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

Enclosures:

(1) X-energy XENITH Microreactor Pre-Application Engagement Presentation on Proposed Analytical Methods



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