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26 November 2024 2024-XE-NRC-021

Project No. 99902071

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Submittal of X Energy, LLC (X-energy) Xe-100 Licensing Topical Report Plume Exposure Pathway Emergency Planning Zone Sizing Methodology

The purpose of this letter is to submit the subject licensing topical report (LTR) to the U.S. Nuclear Regulatory Commission (NRC). This LTR describes the methodology to establish a design- and site-specific plume exposure pathway emergency planning zone size for Xe-100 reactor plants. It is provided for NRC review and approval as indicated in the report and is expected to be referenced in future licensing applications using the Xe-100 technology. The specific review schedule will be coordinated by X-energy and NRC project managers.

The subject LTR contains proprietary information. As such, X-energy requests that Enclosure 3 be withheld from public disclosure per 10 CFR 2.390, "Public inspections, exemptions, requests for withholding." Redacted information is identified using [[ ]]^{P}. An affidavit certifying the basis for the request to withhold Enclosure 3 from public disclosure is included as Enclosure 1. Proprietary information has been omitted from the LTR provided in Enclosure 2 that should be made publicly available.

This letter contains no commitments. If you have any questions or require additional information, please contact Jessica Maddocks at jmaddocks@x-energy.com.

Sincerely,

James S Fogarty

James Fogarty
Manager, Licensing (Acting)
X Energy, LLC

Enclosures:
1) Affidavit Supporting Request for Withholding from Public Disclosure (10 CFR 2.390)
2) "Xe-100 Licensing Topical Report Plume Exposure Pathway Emergency Planning Zone Sizing Methodology," Revision 1 (Public)
3) "Xe-100 Licensing Topical Report Plume Exposure Pathway Emergency Planning Zone Sizing Methodology," Revision 1 (Non-Public)

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