



X Energy, LLC
801 Thompson Avenue
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30-Nov-2022

2022-XE-NRC-030

Project No. 99902071

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

X Energy, LLC (X-energy), Proprietary Review of Draft Safety Evaluation for Xe-100 Topical Report "TRISO-X Pebble Fuel Qualification Methodology"

REFERENCES:

- 1) Letter from M. van Staden to U.S. Nuclear Regulatory Commission (NRC) dated 30 April 2021, "Submission of X Energy, LLC (X-energy) Xe-100 Topical Report: TRISO-X Pebble Fuel Qualification Methodology" (ML21120A334)
- 2) Letter from Travis Chapman to NRC dated 2 September 2021, "Re-Submission of X Energy, LLC (X-energy) Xe-100 Topical Report: TRISO-X Pebble Fuel Qualification Methodology" (ML21246A289)
- 3) Email to X Energy LLC, "Transmittal of Requests for Additional Information – Xe-100 Topical Report: TRISO-X Pebble Fuel Qualification Methodology" (ML21334A230)
- 4) Letter from Travis Chapman to NRC, "Submission of X Energy, LLC (X-energy) Responses to Requests for Additional Information for Topical Report, "TRISO-X Pebble Fuel Qualification Methodology"" (ML22059A770)
- 5) Email from NRC to T. Chapman dated 7 November 2022, "Transmittal Email – X Energy, LLC - Draft Safety Evaluation of Xe-100 Topical Report: TRISO-X Pebble Fuel Qualification Methodology, Revision No. 3 (EPID NO. L-2021-TOP-0011)" (ML22194A948)

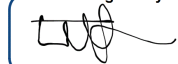
In Reference 5 listed above, NRC transmitted a draft safety evaluation for review by X-energy for proprietary information. Preliminary proprietary markings were included in the transmittal. X-energy has reviewed the draft safety evaluation and has concluded that no additional proprietary information other than the markups in the provided draft is included. No export-controlled information was identified in the review. The draft with proprietary information marked as requested is attached as Enclosure 1. X-energy requests that Enclosure 1 be withheld from the public in accordance with 10 CFR 2.390 until a public and non-public version can be finalized by NRC based on the proprietary information. An affidavit supporting the withholding is attached as Enclosure 2.

If you have any questions or require additional information, please contact Ingrid Nordby at inordby@x-energy.com.



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Sincerely,

DocuSigned by:

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Travis A. Chapman
Manager, U.S. Licensing & Regulatory Affairs, Xe-100
Program
X Energy, LLC

cc:

X-energy, LLC
George Vanderheyden
Steve Miller
Martin van Staden

Nuclear Regulatory Commission

William Jessup
Lucieann Vechioli-Feliciano
Michael Orenak

U.S. Department of Energy

Jeff Ciocco
Carl Friesen

Enclosures:

- 1) Proprietary Markup of X Energy, LLC - Draft Safety Evaluation of Xe-100 Topical Report: TRISO-X Pebble Fuel Qualification Methodology, Revision No. 3 (EPID NO. L-2021-TOP-0011)
- 2) Affidavit Supporting Request for Withholding from Public Disclosure (10 CFR 2.390)



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Enclosure 2

Affidavit Supporting Request for Withholding from Public Disclosure



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Affidavit Supporting Request for Withholding from Public Disclosure (10 CFR 2.390)

I, Travis A. Chapman, Manager, U.S. Licensing, Xe-100 Program, of X Energy, LLC (X-energy) do hereby affirm and state:

1. I am authorized to execute this affidavit on behalf of X-energy. I am further authorized to review information submitted to or discussed with the Nuclear Regulatory Commission (NRC) and apply for the withholding of information from disclosure. The purpose of this affidavit is to provide the information required by 10 CFR 2.390(b) in support of X-energy's request for proprietary treatment of certain commercial information submitted in Enclosure 1 to X-energy's letter XE-NRC-2022-030 from myself to the NRC which provides a Proprietary Markup of X Energy, LLC - Draft Safety Evaluation of Xe-100 Topical Report: TRISO-X Pebble Fuel Qualification Methodology, Revision No. 3 (EPID NO. L-2021-TOP-0011).

2. I have knowledge of the criteria used by X-energy in designating information as sensitive, proprietary, confidential, and export-controlled.

3. Pursuant to the provision of paragraph (b)(4) of 10 CFR 2.390, the following is furnished for consideration by the NRC in determining whether the information sought to be withheld from public disclosure should be withheld.

a. The information sought to be withheld from public disclosure in Enclosure 1 is owned by X-energy. This information was prepared with the explicit understanding that the information itself would be treated as proprietary and confidential and has been held in confidence by X-energy.

b. The information sought to be protected in Enclosures 1 is not available to the public.

c. The information contained in Enclosure 1 is of the type that is customarily held in confidence by X-energy, and there is a rational basis for doing so. The information X-energy is requesting to be withheld from public disclosure includes technical information related to the design, analysis and operations associated with our Xe-100 high-temperature, gas-cooled, pebble bed advanced reactor design that directly impact our business development and commercialization efforts. X-energy limits access to this proprietary and confidential information in order to maintain confidentiality.

d. Enclosure 1 contains information about the planned activities of X-energy related to the development of the Xe-100 design bases, TRISO-X fuel design bases, forecast design development timeframes, and relate to the commercialization strategy for our Xe-100 advanced reactor. Public disclosure of the information contained in Enclosure 1 would create substantial harm to X-energy because it would reveal valuable technical information regarding X-energy's design development, competitive expectations, assumptions, current position and strategy. Its use by a competitor could substantially improve the competitor's position in the design, manufacture, licensing, construction and operation of a similar competing product.




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e. Additionally, Enclosure 1 was reviewed for Export Controlled Information (ECI) under the provisions of 10 CFR 810. I have personal knowledge of the criteria used by X-energy to evaluate documents for ECI and affirm that this document does not contain ECI.

f. The Proprietary Information contained in Enclosure 1 is transmitted to the NRC in confidence and under the provisions of 10 CFR 2.390; it is to be received in confidence by the NRC. The information is properly marked.

I declare under the penalty of perjury that the foregoing is true and correct. Executed on November 30, 2022.

Sincerely,

DocuSigned by:

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Travis Chapman
U.S. Licensing & Regulatory Affairs Manager, Xe-100
Program
X Energy, LLC