X Energy, LLC
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Enclosure 1: Affidavit Supporting Request for Withholding from Public Disclosure (10 CFR 2.390)

I, Stephen Vaughn, Director, Licensing, 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 U.S. 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 3 to X-energy's letter 2024-XE-NRC-017 from myself to the NRC which provides the X-energy Topical Report, "Xe-100 Licensing Topical Report Graphite Core Assembly Material Qualification and Design Methodologies."

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 3 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 Enclosure 3 is not available to the public.
c. The information contained in Enclosure 3 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 3 contains information about the planned activities of X-energy related to the development of the Xe-100 design bases and relate to the commercialization strategy for our Xe-100 advanced reactor. Public disclosure of the information contained in Enclosure 3 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.
e. The Proprietary Information contained in Enclosure 3 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 using [[ ]]^{P}.

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f. The Export-controlled Information contained in Enclosure 3 is transmitted to the NRC in confidence and under the provisions of 10 CFR 810 and 10 CFR 110; it must be withheld from disclosure and is to be received in confidence by the NRC. The information is properly marked using [[ ]]^{E}.

I declare under the penalty of perjury that the foregoing is true and correct. Executed on this 1st day of November 2024.

Sincerely,

Stephen Vaughn
Director, Licensing
X Energy, LLC