



**X Energy, LLC**  
801 Thompson Avenue  
Rockville, MD 20852  
+1 301.358.5600

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Project No. 99902071

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

**Submission of X Energy, LLC (X-energy) Xe-100 White Paper: Licensing Application Content and Regulatory Analysis**

The purpose of this letter is to submit the subject white paper on behalf of X Energy, LLC ("X-energy"). This submission provides X-energy's assessment of regulatory applicability of certain parts of Title 10 of the Code of Federal Regulations (CFR), assessment of anticipated exemptions required under § 50.12, and an annotated outline that forms the basis for on-going Safety Analysis Report development. X-energy intends this white paper to form a basis for on-going discussion with the NRC staff on near-term license application development and requests informal feedback by letter on the NRC staff's observations from this paper. The specific review schedule will continue to be developed with X-energy's NRC project manager and we request a nominal review duration of 6 months be considered.

This report contains commercially sensitive, proprietary information and, as such, we are requesting that this information be withheld from public disclosure in accordance with 10 CFR 2.390, "Public inspections, exemptions, request for withholding," paragraph (a)(4). Enclosure 1 is the Non-Public version of the report which contains non-redacted sensitive information. This proprietary information is appropriately marked and an affidavit providing the basis for this request is provided in Enclosure 2. A redacted copy of the report that contains non-proprietary content will be completed and submitted separately.

If you have any questions or require additional information, please contact Travis Chapman at [tchapman@x-energy.com](mailto:tchapman@x-energy.com).

Sincerely,

DocuSigned by:  
*Martin van Staden*  
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Dr. Martin van Staden  
Vice President, Xe-100 Program Manager  
X Energy, LLC



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801 Thompson Avenue  
Rockville, MD 20852  
+1 301.358.5600

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Cc:

X Energy, LLC

Steve Miller

Travis Chapman

Nuclear Regulatory Commission

Benjamin Beasley

Lucieann Vechioli-Feliciano

Enclosures:

- 1) Xe-100 White Paper: Licensing Application Content and Regulatory Analysis
- 2) Affidavit