



7/13/2020

XE00-R-R1ZZ-RDZZ-X-000590

Docket No. 99902071

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

Subject: X-Energy, LLC (X-Energy)

White Paper Submittal

Reactor Pressure Vessel Construction Code Assessment for the Xe-100 Reactor

Revision 1

This letter submits the subject white paper which provides a regulatory analysis of possible Construction Codes from the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code for use in design, procurement, and fabrication/construction activities associated with the X-Energy Xe-100 high temperature, gas-cooled reactor design. This white paper is provided for NRC review and informal feedback regarding the approach X-Energy has taken with regards to code identification, assessment, and selection, and the adequacy of the regulatory analysis and conclusions made in the code selection as described. This white paper may be developed into a licensing topical report or technical report for reference by future Xe-100 license applicants.

We respectfully request the NRC staff evaluate a suitable review period, scope, and resources. We will continue working with our assigned NRC Project Manager to identify opportunities for one or more closed meetings to discuss the content and conclusions of this white paper and any informal, non-binding feedback from the NRC staff.

This white paper 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). Since commercially proprietary information constitutes the majority of the information contained herein, a public version is not being submitted. Accordingly, Enclosure 1 is the Non-Public version of the white paper 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.

Additionally, certain reactor design information indicated as proprietary is determined to contain Export Controlled Information and must be protected from disclosure in accordance with the requirements of 10 CFR 810.

If you have any questions for need any additional information, please contact Travis Chapman at tchapman@x-energy.com or (240) 495-0651.



Sincerely,

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Dr. Martin van Staden Vice President, Xe-100 Program Manager

Enclosures:

- 1) XE00-R-R1ZZ-MZZ-X-000547 Reactor Pressure Vessel Construction Code Assessment White Paper
- 2) Affidavit Supporting Request for Withholding from Public Disclosure (10 CFR 2.390)

Cc:

X-Energy, LLC. Travis Chapman Kim Lester Theo Odendaal

Nuclear Regulatory Commission

Benjamin Beasley, Chief, Advanced Reactor Licensing Branch Lucieann Vechioli-Feliciano, Project Manager, Advanced Reactor Licensing Branch