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13-Sep-2023 2023-XE-NRC-033

Project No. 99902071

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

Submission of X Energy, LLC (X-energy) Topical Report Quality Assurance Program Description, Revision 6

REFERENCES:

- 1) Letter from H. Bowers to U.S. Nuclear Regulatory Commission (NRC) dated 31 July 2019, "Submittal of X Energy, LLC (X-energy) Quality Assurance Program Description (QAPD) for Design Certification of the X-energy Xe-100 Reactor Non-Proprietary" (ML19213A059)
- 2) Letter from U.S. Nuclear Regulatory Commission to X Energy, LLC, "Request for Additional Information on the NRC Assessment of the Quality Assurance Program Description for the X-Energy XE-100 Nuclear Reactor X-Energy, LLC (EPID L-2019-TOP-0020)" (ML20013G253)
- 3) Letter from H. Bowers to U.S. Nuclear Regulatory Commission dated 3 February 2020, "Submittal of X Energy, LLC (X-energy) Response to NRC Requests for Additional Information Letter (ML20013G253) for the Review of Topical Report Quality Assurance Program Description (XEQAPD 1.0, Revision 0) for Design Certification of the X-energy Xe-100 Reactor Non-Proprietary" (ML20035E617).
- 4) Letter from H. Bowers to U.S. Nuclear Regulatory Commission dated 8 April 2020, "Submittal of Revision 2 to X Energy, LLC (X-energy) Quality Assurance Program Description (QAPD) for Design Certification of the X-energy Xe-100 Reactor Non-Proprietary" (ML20104C134).
- 5) Letter from U.S. Nuclear Regulatory Commission to X Energy, LLC, dated 13 July 2020, "Draft Safety Evaluation Report Regarding the Review of X Energy's Topical Report XEQAPD, "Quality Assurance Program Description" Revision 2 (EPID NO. L-2019-TOP-0020)" (ML20140A333)
- 6) Letter from U.S. Nuclear Regulatory Commission to X Energy, LLC, dated 4 September 2020, "U.S. NUCLEAR REGULATORY COMMISSION FINAL SAFETY EVALUATION FOR X-ENERGY'S TOPICAL REPORT XEQAPD-NP, "QUALITY ASSURANCE PROGRAM DESCRIPTION," REVISION 3 (EPID NO. L-2019-TOP-0020)" (ML20233A910)
- 7) Letter from M. van Staden to U.S. Nuclear Regulatory Commission dated 4 December 2020, "X Energy, LLC (X-energy) Topical Report Submittal Revision 3-A to X Energy, LLC (X-energy), Quality Assurance Program Description (QAPD) Non-Proprietary" (ML20343A088)
- 8) Letter from T. Chapman to U.S. Nuclear Regulatory Commission dated 18 August 2022, "Submission of X Energy, LLC (X-energy) Topical Report Quality Assurance Program Description, Revision 4" (ML22230D075)
- 9) Letter from U.S. Nuclear Regulatory Commission to X Energy, LLC, "2023/03/14 NRR E-mail Capture RAIs for X-energy's QAPD Rev.4 (EPID L-2022-TOP-0035))" (ML23073A295)



10) Letter from T. Chapman to U.S. Nuclear Regulatory Commission dated 14 April 2023, "Submission of X Energy, LLC (X-energy) Responses to Requests for Additional Information for Topical Report, "Quality Assurance Program Description, Revision 4"" (ML23104A426).

The purpose of this letter is to submit Revision 6 of the subject topical report to the U.S Nuclear Regulatory Commission (NRC) on behalf of X Energy, LLC ("X-energy"). The enclosed revision is intended to supersede other revisions. It is provided for NRC review and approval as indicated in the report and is expected to be referenced in future Xe-100 licensing applications. The specific review schedule will continue to be developed with X-energy's NRC project manager.

This letter contains no commitments. If you have any questions or require additional information, please contact Brandon Norris at jnorris@x-energy.com or Maggie Staiger at mstaiger@x-energy.com.

Sincerely,

Stephen Vaughn

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Manager, U.S. Licensing, Xe-100 Program

X Energy, LLC

Enclosure:

1) X Energy, LLC Topical Report, Quality Assurance Program Description – Non-Proprietary (Public)

cc:

X-energy, LLC
David Bannister
Steve Miller
Martin van Staden
Brandon Norris

U.S. Nuclear Regulatory Commission:

Michael Wentzel Adrian Muniz Jorge Hernandez Zackary Stone

<u>Department of Energy – Office of Clean Energy Demonstrations:</u>

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