



**energy**

# **Xe-100 Licensing Topical Report: Training Programs Methodology**

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# Department of Energy Acknowledgement and Disclaimer

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| Topic                                | Time (30 minutes) | Presenter  |
|--------------------------------------|-------------------|--|
| Opening Remarks                      | 2 minutes         | Stephen Vaughn – X-energy<br>Operator Licensing Branch Chief – NRC |
| Introductions and Safety Moment      | 3 minutes         | Brandon Hartle – X-energy  |
| Xe-100 Training Programs Methodology | 5 minutes         | Brandon Hartle   |
| Update on Scope of Submittal         | 5 minutes         | Brandon Hartle   |
| NRC Questions and Feedback           | 10 minutes        | Brandon Hartle   |
| Public Comments and Feedback         | 5 minutes         | All  |

- Provides the **methodology** for establishing, implementing and maintaining Xe-100 Training Programs:
  - Demonstrates compliance with 10 CFR 50.120(b) and 10 CFR 55.4
  - Describes the Xe-100 Systems Approach to Training (SAT) process
  - The **methodology** addresses initial training and continuing training for all Xe-100 plant personnel, including Control Room Operators (CROs)
- Xe-100 Training Program outputs produced from this **methodology** will:
  - Apply to 10 CFR 50, 10 CFR 52, and future 10 CFR 53
  - Support future site or design-specific licensing applications
  - Allow an Xe-100 licensee to train and qualify Xe-100 plant personnel to meet required 10 CFR 50.120 categories of personnel
  - Incorporate the instructional requirements necessary to provide qualified personnel to operate and maintain the Xe-100 plant in a safe manner in all modes of operation
- Xe-100 Training Programs are facility training programs
- Supports the licensing basis for Project Long Mott PSAR Chapter 11.4, *Training Programs*

- X-energy submitted Revision 2 of the Xe-100 Training Programs Methodology Licensing Topical Report (LTR) in December 2022
- The NRC issued a letter of non-accept with opportunity to supplement in March 2023:
  - Provided the regulatory bases for the non-accept finding
- X-energy provided the NRC with Revision 3 of the LTR in September 2023 for a pre-submittal readiness review:
  - NRC completed its readiness review and provided feedback to X-energy in October 2023
- For Revision 4 of the LTR, X-energy has:
  - Addressed the regulatory bases for non-accept from Revision 2 of the LTR
  - Incorporated the NRC comments from the pre-submittal readiness review of Revision 3 of the LTR
  - Provided clarity that X-energy is implementing SAT methodology using the guidance in DRO-ISG-2023-04, "Facility Developed Training Programs"
  - Provided clarity that X-energy is requesting a safety evaluation that the Xe-100 SAT methodology meets the SAT requirements of 10 CFR 50.120(b) and 10 CFR 55.4
  - Provided clarity that X-energy is not pursuing INPO accreditation

- Scheduled submission of Revision 4 of the LTR on 3/29/2024
- X-energy is requesting the following from the review:
  - 12 month or less review time
  - Safety evaluation approving X-energy's Training Program **Methodology** for establishing, implementing, and maintaining Xe-100 facility training programs
- Request for approval of the full Xe-100 Training Program will occur during the Operating License Application by the facility licensee

