



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

**X ENERGY, LLC – AUDIT PLAN FOR TOPICAL REPORT  
“XE-100 TRAINING PROGRAMS METHODOLOGY”, REVISION 3  
(CAC / EPID NO.000431 / L-2024-TOP-0008)**

**APPLICANT INFORMATION**

**Applicant:** X Energy, LLC  
**Applicant Address:** 801 Thompson Avenue, Rockville, MD 20852  
**Design Name:** Xe-100  
**Project No.:** 99902071

**Background:**

By letter dated March 27, 2024, X Energy, LLC (X-energy) submitted topical report (TR) 2024-XE-NRC-008, Xe-100 Licensing Topical Report, Revision 3, “Xe-100 Training Programs Methodology” (Agencywide Documents Access and Management System (ADAMS) Accession No. ML24089A244). This TR provides the methodology for establishing, implementing, and maintaining Xe-100 training programs in support of future licensing applications regarding the Xe-100 technology.

This audit is in support of the U.S. Nuclear Regulatory Commission (NRC) staff’s safety review of the topical report submitted by X-energy.

**Purpose:**

The purpose of the audit is for the NRC staff to gain a more detailed understanding of X-energy’s training program methodology and to identify any information that will require docketing to support the NRC staff’s safety evaluation of the subject TR. Therefore, the NRC staff is requesting access to X-energy documents associated with the training program methodology as referenced in the TR.

**Regulatory Audit Bases:**

The regulatory basis for this audit includes the following regulatory requirements: 10 CFR 50.120, “Training and Qualification of nuclear power plant personnel” and 10 CFR 55.4, “Definitions”, which defines the Systems Approach to Training (SAT).

**Regulatory Audit Scope:**

The audit will follow the guidance in NRR Office Instruction LIC-111 (ML19226A274), “Regulatory Audits,” and focus on information provided by X-energy through the electronic reading room, and, if necessary, an onsite visit.

### **Information and Other Material Necessary for the Regulatory Audit:**

The NRC staff is requesting access to documents associated with the Xe-100 training program development. In addition, the staff is requesting access to documents referenced in the training program methodology topical report that are not readily available to the staff. Specifically, the NRC staff request to audit the following documents:

- TMX procedures (all)
- Training Program Manuals
- Training program curriculum/materials
- Learning Object program/process described in Figure 1 “Learning Object Model” of the Xe-100 Training Programs Methodology TR

Additional documents may be requested as needed.

### **Team Assignments**

Jeff Correll	Reactor Engineer, Audit Technical Lead
Adrian Muñiz	Senior Project Manager
Ondra Dukes	Project Manager

### **Logistics:**

Entrance Meeting	August 19, 2024
Exit Meeting	Week of August 26, 2024 (estimate)

Audit meetings will take place in a virtual format, using Microsoft Teams, or another similar platform. Audit meetings will be scheduled as needed after the entrance meeting. The audit will begin on August 19, 2024, and continue as necessary, with activities occurring intermittently during the audit period. The audit period may be reduced or extended, depending on the progress made by the NRC staff and X-energy in addressing audit questions.

### **Special Requests:**

The NRC staff request that X-Energy staff involved with training program development are available to answer questions during the audit. The NRC staff also request that X-energy provides access to supporting documents via the X-energy electronic reading room.

### **Deliverables:**

At the completion of the audit, the NRC staff will issue an audit summary within 90 days after the exit meeting. The audit summary will be made publicly available in ADAMS.


### **References:**

Title 10 of the *Code of Federal Regulations*.

If you have any questions about this audit, please contact me at (301) 415-4093 or by email at [Adrian.Muniz@nrc.gov](mailto:Adrian.Muniz@nrc.gov).

Date: August 14, 2024

Sincerely,

 Signed by Muniz Gonzalez, Adrian  
on 08/14/24

Adrian Muñoz, Senior Project Manager  
Advanced Reactor Licensing Branch 2  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

Project No.: 99902071

cc: X-Energy Xe-100 via GovDelivery

SUBJECT: X ENERGY LLC - AUDIT PLAN FOR TOPICAL REPORT "XE-100 TRAINING PROGRAMS METHODOLOGY", REVISION 3 (CAC / EPID NO.000431 / L-2024-TOP-0008) DATED: AUGUST 14, 2024

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CSmith, NRR

**ADAMS Accession No.: ML24212A030**

**NRR-106**

<b>OFFICE</b>	NRR/DANU/UARL/PM	NRR/DRO/IOLB/BC	NRR/DANU/UAL2/(A)BC	NRR/DANU/UAL2/PM
<b>NAME</b>	AMuñiz	JAnderson	SPhilpott	AMuñiz
<b>DATE</b>	07/30/2024	08/02/2024	08/09/2024	08/14/2024

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