



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

June 25, 2025

**LONG MOTT ENERGY, LLC. - PLAN FOR AN AUDIT REGARDING CHAPTER 2 AND
SECTIONS 3.7, 6.4.1, AND 7.3.1, OF THE PRELIMINARY SAFETY ANALYSIS REPORT
FOR THE LONG MOTT GENERATING STATION CONSTRUCTION PERMIT APPLICATION
(EPID NO.: L-2025-CPS-0000)**

Applicant: Long Mott Energy, LLC.

Applicant Address: 530 Gaither Road, Suite 700
Rockville, MD 20850

Plant Name and Units: Long Mott Generating Station (4 units)

Docket No.: 50-614

Background:

By letter dated March 31, 2025, (Agencywide Documents Access and Management System (ADAMS) Package Accession No. ML25090A057) Long Mott Energy, LLC. (LME), submitted a construction permit (CP) application and corresponding preliminary safety analysis report (PSAR) to the U.S. Nuclear Regulatory Commission (NRC) staff for a reactor facility pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, "Domestic Licensing of Production and Utilization Facilities," and section 103, "Commercial Licenses," of the Atomic Energy Act of 1954, as amended. The facility, referred to as Long Mott Generating Station (LMGS), would be built in Calhoun County, Texas. On May 12, 2025 (ML25115A247), the NRC staff accepted LME's CP application for docketing. The NRC staff is conducting a detailed review of the LMGS CP application. This regulatory audit is intended to assist the NRC staff in its review of the LMGS CP application.

Purpose:

The purpose of this audit is for the NRC staff to gain a better understanding of the LMGS CP application by providing an opportunity to review and discuss the material used to support statements or conclusions in PSAR chapter 2, "Site Characteristics," and section 3.7, "Civil and Structural Analyses," section 6.4.1, "Reactor Building," and section 7.3.1, "Civil Structures." The audit is expected to facilitate a more effective and efficient review by allowing the NRC staff to review and discuss the supporting material with the objective of improving communication and eliminating unnecessary requests for additional information. If the NRC staff identifies information that is needed to support a regulatory finding pertaining to the review of the CP application, LME will need to submit that information on the application docket.

Enclosure

Regulatory Audit Basis:

The basis for the audit are the regulations in 10 CFR pertinent to the NRC staff's review of the CP application, including 10 CFR 50.34, "Contents of applications; technical information," 10 CFR 50.35, "Issuance of construction permits," 10 CFR 100.20, "Factors to be considered when evaluating sites," 10 CFR 100.21, "Non-seismic site criteria," 10 CFR 100.23, "Geologic and seismic siting criteria," and Appendix S to Part 50, "Earthquake Engineering Criteria for Nuclear Power Plants."

Regulatory Audit Scope:

This audit will focus on information provided by LME in the electronic reading room (eRR) and during meetings and interactions with LME. This audit will provide the NRC staff with information related to the review of the LMGS CP application, specifically related to chapter 2, section 3.7, section 6.4.1, and section 7.3.1 of the PSAR. Specific objectives and topics to be discussed will be identified in subsequent correspondence (such as an email) and dates will be proposed for discussion of the information.

Information and Other Material Necessary for the Regulatory Audit:

LME should be prepared to provide documents, reports, calculations, computer code verification, and other material, as applicable, supporting the analyses documented in the PSAR chapter and sections detailed in the Regulatory Audit Scope. The NRC staff may request that LME make these additional materials available in the eRR or during a site visit, if one is conducted. Information requests and discussion items will be provided separately throughout the audit.

Team Assignments:

Adrian Muñiz	Senior (Sr.) Project Manager, Audit Lead
Timothy Drzewiecki	Sr. Reactor Systems Engineer, Lead Technical Reviewer
Denise McGovern	Sr. Project Manager, Audit Support
Ondra Dukes	Project Manager, Audit Support
Richard Rivera	Project Manager, Audit Support
Amitiva Ghosh	Physical Scientist – Hazards Analyst
Carol Dye	Geologist
Jason White	Physical Scientist – Meteorologist
Jenise Thompson	Geologist
Nebiyu Tiruneh	Hydrologist
Hosung Ahn	Hydrologist
Rosalynn Wang	Geophysicist
Vladimir Graizer	Seismologist
Ian Jung	Sr. Reliability and Risk Analyst
Robert Roche-Rivera	Sr. Civil Engineer – Structural
Center for Nuclear Waste Regulatory Analyses (CNWRA)	Contractor Support

Additional audit team members will be added, as needed.

Logistics:

Entrance Meeting: June 30, 2025

Exit Meeting: September 2026; precise date and time are to be determined.

The audit will follow the guidance in the Office of Nuclear Reactor Regulation's (NRR) Office Instruction LIC-111, Revision 2, "Regulatory Audits," (ML24309A281). Audit meetings will take place mainly in a virtual format, using Microsoft Teams or other similar platform. Audit meetings will be scheduled on an as needed basis and, if applicable, once the NRC staff has had the opportunity to review documents placed in the eRR. If a site visit is needed, review topics will be provided to LME, and mutually agreeable dates will be established. The audit will begin on June 30, 2025, and continue for approximately 16 months, with activities occurring intermittently during that period. Interim status report(s) on topics being addressed by the audit will be provided to LME.

The audit period may be reduced or extended, depending on the progress made by the NRC staff and LME in addressing audit questions. Additional audit activities may be planned as necessary to support the NRC staff's understanding of information needed to complete the review of the LMGS CP application.

To improve the efficiency of the audit, LME and the NRC staff discussed the use of an eRR, established by LME, that would allow the NRC staff read-only access to the technical information provided by LME. Use of the eRR is acceptable provided that LME establishes measures to limit access to specific NRC staff (e.g., based on NRC email addresses or the use of passwords which will only be assigned to the NRC staff directly involved in the audit on a need-to-know basis), and to make the documents view-only (i.e., prevent the NRC staff from saving, copying, downloading, or printing any documents). The conditions associated with the eRR must be maintained throughout the audit process. The NRC audit project managers will provide LME with the names of the NRC staff audit team that will require access to the eRR.

Special Requests:

The NRC staff requests that LME subject matter experts are available to answer questions during the audit. LME should track the NRC staff's audit questions and make the responses available in the eRR. If any changes, such as PSAR revisions, are identified during the audit, the NRC staff requests LME to share the draft in the eRR for discussion before formal submission.

Deliverables:

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

If you have any questions related to this audit, please contact Richard Rivera at 301-415-7190 or via email at Richard.Rivera@nrc.gov.

Date: June 25, 2025



Signed by Philpott, Stephen
on 06/25/25

Stephen Philpott, Acting Chief
Advanced Reactor Licensing Branch 2
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Docket No.: 50-614

cc: Long Mott Energy, LLC via GovDelivery
svaughn@x-energy.com
jmaddocks@x-energy.com

SUBJECT: LONG MOTT ENERGY, LLC. - PLAN FOR AN AUDIT REGARDING
CHAPTER 2 AND SECTIONS 3.7, 6.4.1, AND 7.3.1, OF THE PRELIMINARY
SAFETY ANALYSIS REPORT FOR THE LONG MOTT GENERATING STATION
CONSTRUCTION PERMIT APPLICATION (EPID NO.: L-2025-CPS-0000)
DATED: JUNE 25, 2026

DISTRIBUTION:

PUBLIC

RidsNrrDanu Resource

RidsNrrDanuUal2 Resource

RidsACRSMailCTR Resource

RidsOgcMailCenter Resource

RidsOpaMailCenter

RidsOcaMailCenter

JBowen, NRR

JGreives, NRR

MReisiFard, NRR

AMuniz, NRR

CSmith, NRR

ODukes, NRR

DMcGovern, NRR

RRivera, NRR

TDrzewiecki, NRR

IJung, NRR

TTate, NRR

SPhilpott, NRR

JOhara, NMSS

RHoffman, NMSS

DBarnhurst, NMSS

JPetrucelli, NSIR

AMoreno, OCA

NChandran, NMSS

ADAMS Accession No.: ML25169A392

NRR-106

OFFICE	NRR/DANU/UAL2:PM	NRR/DANU/UAL2:LA	NRR/DANU/UAL2:BC (A)
NAME	RRivera	CSmith	SPhilpott
DATE	06/20/2025	06/24/2025	6/25/2025

OFFICIAL RECORD COPY