



Long Mott Energy, LLC  
221 H. H. Dow Way  
Midland, MI 48674

2 February 2026

2026-PLM-NRC-003

Docket No. 50-614

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

**Subject: Supplement #6 to the Preliminary Safety Analysis Report for the Long Mott  
Generating Station Construction Permit Application**

References:

- 1) Long Mott Energy, LLC, 2025, "Long Mott Generating Station Construction Permit Application," 2025-PLM-NRC-003, March 31, 2025 (ML25090A057)
- 2) U.S. Nuclear Regulatory Commission, 2025, "Acceptance for Docketing of the Long Mott Generating Station Construction Permit Application," May 12, 2025 (ML25115A247)
- 3) Long Mott Energy, LLC, 2025, "Supplement #2 to the Preliminary Safety Analysis Report for the Long Mott Generating Station Construction Permit Application," 2025-PLM-NRC-013, November 20, 2025 (ML25324A307)
- 4) Long Mott Energy, LLC, 2025, "Supplement #3 to the Preliminary Safety Analysis Report for the Long Mott Generating Station Construction Permit Application," 2025-PLM-NRC-015, December 4, 2025 (ML25338A310)
- 5) Long Mott Energy, LLC, 2025, "Supplement #4 to the Preliminary Safety Analysis Report for the Long Mott Generating Station Construction Permit Application," 2025-PLM-NRC-016, December 12, 2025 (ML25346A256)
- 6) Long Mott Energy, LLC, 2025, "Supplement #5 to the Preliminary Safety Analysis Report for the Long Mott Generating Station Construction Permit Application," 2025-PLM-NRC-017, December 17, 2025 (ML25351A147)

Long Mott Energy, LLC (LME), hereby submits the enclosed Supplement #6 to the Preliminary Safety Analysis Report (PSAR) for the Long Mott Generating Station (LMGS) Construction Permit Application. As described in Attachment 4, "Planned Submittals of Supporting Site-Specific Information for LMGS Preliminary Safety Analysis Report Chapter 2," of the cover letter to Reference 1, LME previously identified its plans to submit additional site-specific information to the Nuclear Regulatory Commission (NRC) to support the descriptions of LMGS site geotechnical, seismological, and hydrological characteristics and associated data collection, testing, analysis, and modeling that are contained in Section 2.4 and Section 2.5 of the LMGS PSAR. The NRC, as described in Reference 2, noted that LME expected this additional site-specific information to be confirmatory in nature.



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Accordingly, this Supplement #6 includes redlined markups of certain Subsections to PSAR Chapter 2.4, “Hydrology,” based on additional site-specific information and analyses, as presented in Enclosures 1 thru 3. Additional details for each Enclosure are described below:

- Enclosure 1: Provides a redlined markup of Subsection 2.4.12, “Groundwater,” and describes additional site-specific data to update and recalibrate the groundwater model. Revisions to Subsection 2.4.12.1.4, Site-Specific Hydrogeology, 2.4.12.2.4.1, Hydrogeological Parameters, 2.4.12.2.4.2, Geotechnical Parameters, 2.4.12.3.1.1, Hydrogeologic Conceptual Site Model, and 2.4.12.3.1.2.1, Description of Hydro-lithologic Units, include updates related to site-specific data and groundwater model recalibration. Editorial markups are also noted.
- Enclosure 2: Provides a redlined markup of Subsection 2.4.13, “Accidental Releases of Liquid Effluents into Ground and Surface Waters.” Revisions to Subsection 2.4.13 incorporate site-specific data and the recalibrated groundwater model referenced in Enclosure 1. Editorial changes are also noted.
- Enclosure 3: Provides a redlined markup of PSAR Table 2.0-1, Long Mott Generating Station (LMGS) Site Characteristics, to reflect the information contained in the updates of Enclosures 1 and 2.

“Clean” pages reflecting the enclosed site-specific analyses and associated information are expected to be included in a future revision of the entire Reference 1.

This letter contains no commitments. Should you have any questions or require additional information, please contact Jessica Maddocks at [jmaddocks@x-energy.com](mailto:jmaddocks@x-energy.com).

I declare under penalty of perjury that the foregoing is true and accurate. Executed on this 2<sup>nd</sup> day of February 2026.

Sincerely,

DocuSigned by:  
A handwritten signature in black ink that reads "Charles R. O'Connor".  
7DB1A2114768476...

Charles R. O'Connor  
Sr. Director, Engineering and Projects  
Long Mott Energy, LLC



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Enclosures:

Enclosure 1: PSAR Subsection 2.4.12, "Groundwater" (public)

Enclosure 2: PSAR Subsection 2.4.13, "Accidental Releases of Liquid Effluents into Ground and Surface Waters" (public)

Enclosure 3: PSAR Table 2.0-1, "Long Mott Generating Station (LMGS) Site Characteristics" (public)

cc:

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