

## Staff Report

**To:** Board of Directors  
**From:** Colin Woodrow  
**Date:** February 26, 2026

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**Agenda Item:** 5.3 Department of Environmental Quality Funded New Facility Microgrid Study

**Attachments:**

- None.

**Recommendation:**

Authorize the CEO and general manager to enter into a contract with Cushing Terrell to conduct a microgrid study for the new facility (MOAB, Maintenance Operations Administration Base).

**Discussion:**

This winter the agency was granted a MT DEQ Innovative Energy Engineering Studies for Local Governments grant. The agency applied for this grant with the intention of partnering with Cushing Terrell to conduct a study of a power microgrid that would provide electrical power to the new facility and charging stations.

The microgrid system will integrate a large-scale, ground-mounted solar photovoltaic system and existing utility grid with a battery energy storage system located at the MOAB. The batteries will charge during the day using a combination of solar and grid power, then discharge overnight to charge the returning bus fleet.

Components of the microgrid feasibility study:

- A comprehensive economic evaluation and estimated payback analysis of the proposed microgrid system.
- Evaluation of the ownership opportunities, reviewing a power purchase agreement, and/or joint battery electric storage system ownership with Missoula Electric Cooperative.
- Sizing evaluation of the solar PV and the BESS.

The project scope has an estimated timeline of 13-15 weeks following the MT DEQ funding obligation.

Benefits from implementing a microgrid powering system:

The microgrid system aligns with MUTD's commitment to a zero emissions fleet by 2035. In the short-term, this work will help Mountain Line in pursuing LEED gold certification. This study will scale and optimize the next phase of electrification for the MOAB following the existing scope that achieves LEED Gold certification. If constructed, a microgrid will help offset the immense strain that the charging process puts on the grid in the evenings and could lower operating costs while reducing emissions and dependencies.

**Financial Impact and Funding Source:**

The DEQ grant was announced and the grant agreement will be between Mountain Line and the MT DEQ. Mountain Line will reimburse Cushing Terrell for the study, totaling \$32,915, funded 100% by the grant and no local match. This contract with Cushing Terrell is contingent on finalizing the grant agreement.

**DBE Certified:**

No.