

QUICK FACTS

- Engineering staff design, estimate, and/or manage about \$2-5M of maintenance, renovation, and upgrade projects annually.
- Engineering staff provides support and review for about \$20-50M of renovation and new construction projects annually.
- MSU typically spends \$8M annually for energy and utility services.
- MSU has invested over \$3M in energy conservation projects in recent years. The current biennium has \$7M of energy conservation projects in planning which are anticipated to save \$500K annually.
- During warm weather, the heating plant is cycled off at night, saving over \$100K/year.
- MSU negotiated a 15 year power supply contract for 30% of our electricity from WAPA hydroelectric power resources in 2006, saving about \$250K/year.
- MSU aggressively pursues energy conservation projects that qualify for funding through the USB program, reclaiming \$50K/year in energy rebates from NWE.
- MSU is presently working with an energy service contractor to implement behavioral modification based energy savings.

Engineering and Utilities

Summary

The Engineering and Utilities management area of Facilities Services provides engineering support for installation, operation, and maintenance of heating plant, mechanical, plumbing, electrical, utilities, and related systems for the MSU campus.

Engineering staff provide design, cost estimating, contracting, and/or construction management for operations, maintenance, renovations, and upgrade projects related to engineering and utility systems.

Engineering staff are heavily involved in energy conservation efforts, and have taken a leadership role in identifying ways for MSU to meet the Governor's 2010 Plan to reduce energy consumption by 20% by the year 2010. Engineering staff are providing guidance to help ensure that MSU can meet the goals of the President's Climate Commitment which include identifying, documenting, and completing efforts to reduce greenhouse gas emissions and become a "climate neutral" campus.

Engineering staff also provide guidance to the State Legislature for Long Range Building Projects related to engineering and utilities systems. Staff review engineered systems in all buildings at all MSU campuses and provide data for the facility condition inventory (FCI) program, which is used by the State Legislature to determine deferred maintenance liabilities of State of Montana facilities.

Engineering services can be obtained by contacting Facilities Services main number (994-2001) or Work Control (994-2107). Engineering staff are not State supported, which requires that campus entities be charged for their services. Billing rates can be obtained by contacting Work Control.

Functional Responsibilities/Service Areas

Operations and Maintenance:

- Heating Plant Steam, Instrument Compressed Air, and Electricity Generation
- Heating, Ventilating, Air-Conditioning, and Building Automatic Control Systems
- Plumbing, Fire Protection, Compressed Air, and Vacuum Systems
- High Voltage Primary Electrical Systems
- Medium Voltage Building Electrical, Lighting, and Power Systems
- Emergency Power, Emergency Lighting, Fire Alarm, and Life Safety Systems

Utilities Procurement and Management:

- Natural Gas and Propane
- Electricity
- Domestic Water and Sewer
- Storm Drain

Construction Services:

- Design
- Cost Estimating
- Outsource Contracting
- Construction Management
- Contract Administration

Campus Sustainability Initiatives:

- President's Climate Commitment
- Mayor's Climate Change Task Force
- Greenhouse Gas Inventory
- ASMSU Sustainability Initiatives