



3410 Taft Boulevard, Wichita Falls, Texas 76308-2099
Office: (940) 397-4648 Fax (940) 397-4859

Memorandum

Date: October 6, 2014

To: Legislative Budget Board (LBB)

From: Kyle Owen

Subject: Energy Management Master Plan Update

Re: Midwestern State University's Strategic Management Master Plan, 2012-2017,
Originally Submitted November 9, 2012

Midwestern State University (MSU) provided an energy management master plan to the LBB in November 2012 in compliance with Executive Order RP 49. A yearly status report is to be provided so the following updates to items in the master plan are presented regarding changes since the 2012 submission:

1. Expansion of the McCoy Engineering Hall was completed in May 2014. Utilities for the expansion were supplied by the existing Central Plant equipment and operations.
2. Replacement of T12 light fixtures to T8 in McCullough-Trigg dormitory and the Regional Simulation Center: Funding limitations have slowed the conversion in the residence hall with ~15% of the fixtures converted in 2014. The T12 light fixtures in the Regional Simulation Center were converted this past year.
3. Well water of irrigation of athletic fields: In June of 2013, a pumping and a distribution system for well water to irrigate two sand-based football practice fields. In June of 2014, the installation of a reverse osmosis unit was installed as part of the well water system so the water could be used on clay-based competition fields (soccer and softball) as well as for hand watering select vegetation around campus. A response to the water rights application submitted in August of 2013 to the TCEQ for the permanent use of a pond located on university property to irrigate clay-based competition softball and soccer fields has not been received.
4. Installed fifty-three water saving flush valves in higher traffic buildings to conserve water.

5. Redirected the blow-down water from the boiler system to drain into our cooling tower. Previous piping required mixing this hot water with domestic water prior to introducing it into the city sewer system to achieve a temperature of <140F.
6. Procurement of favorable energy commodity contracts: MSU is in the early years of multi-year energy contracts obtained through the RFP process.
7. Continuous self-commissioning of the newly updated energy management control system: Continue this ongoing effort to maximize efficiency and comfort level.
8. The SECO LoanSTAR Energy Conservation Project discussed in the master plan stated MSU anticipated an additional 2% reduction in energy consumption over each of the next five years. For FY14 compared to FY13, MSU observed a 2% increase in electricity usage, a 2% reduction in gas usage, and a 23% reduction in water usage. For FY14 compared to FY12, MSU observed a 9% reduction in electricity usage, an 8% reduction in gas usage, and a 57% reduction in water usage. (The large reduction in water usage is primarily a result of limited irrigation due to the region's severe drought.)