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Memorandum

Date: 8/6/08
To: Allen Goldapp
From: Kyle Owen
Subject: MSU Energy Conservation Update

The Physical Plant is committed to saving energy dollars and has recently pursued the following items in this effort:

- Negotiated a 33% savings in kwh cost through the GLO in cooperation with Reliant Energy.
- Investigating possible energy performance contracts through Nouveau, Siemens, and Chevron Energy Solutions.
- Contacted the Stated Energy Conservation Office to perform an energy survey of the campus; report due in September.
- Replacing two in-house fabricated kilns with new ones which utilize burner management software instead of manual control. Will reduce kiln gas consumption by at least 1/3.
- Building construction for the Rec Center, McCoy Engineering Hall, Band Hall, Ligon, and Martin all incorporate high efficiency equipment (motors, pumps, variable speed drives, demand-based ventilation controls, economizer controls, motion detector light switching, and low flow plumbing fixtures).
- Investigated installation of capacitor banks to improve the university's power factor; was not cost effective.
- Modified the chill water system to improve storage capacity of chill water in the tunnels.
- Continue to monitor and update the computer controlled energy management system to control setbacks for non-occupied room conditions.
- Improved preventative maintenance program on HVAC equipment and fleet vehicles.
- Plan to replace incandescent lighting to more efficient high intensity discharge (HID) lights at the annual Fantasy of Lights Christmas display.
- Investigating installation of a centralized irrigation controller to save water.
- Past activities of significance include:

1. Installation of two high efficiency chillers, a cooling tower, and a boiler.
2. Implemented “free cooling” on a new heat exchanger thereby reducing the need to operate a chiller in the winter.
3. Replaced 12,000 40-kilowatt bulbs and ballasts throughout campus with 32-kilowatt bulbs.
4. Installed a new, smaller, and more efficient steam deaerator boiler feed water system.