INFORMATION ITEM Energy Conservation Projects – MSU (Bozeman Campus)

THAT

Montana State University hereby provides the Board of Regents with an update on the energy audit of its Auxiliary Facilities, and outlines a Plan of Action and Timeline for proceeding with critical cost saving energy conservation projects in the near future.

EXPLANATION

- At the May 2010 Regents meeting, MSU was authorized to enter into a contract to perform an energy audit of all of our Auxiliaries facilities, which encompass over 2,000,000 square feet of facilities including the SUB, Student Health Center, Student Fitness Center, Fieldhouse, 10 major Residence Halls, and over 80 Family Housing complexes and homes.
 - a. In that Board Item MSU advised the Regents that after the completion of the energy audit, the scope of practical energy conservation projects would be established, and MSU would return to the Regents to seek approval to enter into an energy performance contract.
- 2. Energy Performance Contracts are authorized by MCA Title 90 Chapter 4 Part 11, and the Montana DEQ is the State Agency responsible for overseeing this element of the Montana Code.
- 3. In June 2010, with the support and assistance of Louise Moore, from the Montana Department of Environmental Quality, MSU entered into an Energy Services Performance Audit contract with McKinstry, a firm with 50 years of experience in the design, construction, maintenance and operations of large healthcare, educational and scientific facilities.
- 4. By mid January 2011, MSU expects to receive a final report of all <u>Potential</u> Energy Projects; and, by late February, we will likely have established our selected set of <u>Practical</u> Payback Energy Projects that we would like to move forward with.
- 5. The initial Potential Projects List will likely have 100 or more suggested projects. However, once we filter this list with various considerations, we will likely end up with a Practical Payback list of perhaps 25-30 projects, requiring \$6-8 Million in construction costs, over a construction period of 3-4 years, and with an Investment Recovery Period of about 12 years.
- 6. Based upon preliminary conversations with our engineers, there are some very significant energy conservation projects we would like to complete during the 2011 Summer construction period. These involve large facilities, relatively short term investment recovery periods, and areas that can only be worked in during the Summer months. The projects that will likely be on this list are:
 - a. Fieldhouse Lighting Replacement
 - b. Residence Hall Lighting Replacement (Hapner, Langford and Hedges)
 - c. Window Replacement (Hapner & Langford)
 - d. Room Climate Control Replacement (Hapner & Langford)

- 7. In order to be able to move forward with these projects this coming Summer, MSU will need to secure <u>Regents Approval</u>, during their <u>March 2011</u> meeting, to:
 - a. finalize an Energy Performance Contract with McKinstry; and,
 - b. arrange financial agreements (e.g. InterCap Loans) as necessary to the completion of all Practical Projects.
- 8. The way MSU would like to proceed with this effort is to secure Regent Authorization (during their March meeting) for a Total Contract Not to Exceed \$9 Million, for a Construction Period of no more than 5 years, and for Loan Service Terms of no more than 15 years. After the March meeting we would finalize a contract with McKinstry, but probably only finalize the details of the initial projects, and then add future year projects on a "task order" or "addendum" basis.
- 9. The Energy Performance Contract would establish McKinstry as the General Contractor and Construction Manager for all of the selected energy conservation projects.
 - a. For each project, McKinstry will provide MSU with a Guaranteed Maximum Price, and any savings on the actual final construction cost will be returned to MSU; conversely, any construction cost overrun will be absorbed by McKinstry.
 - b. Also for each project McKinstry will provide MSU with an Energy Savings Guarantee, calculated against a baseline energy consumption model agreed on prior to a formal commitment to the project.
 - c. The Guaranteed Maximum Price for construction and the Guaranteed Energy/Cost Savings commitment will provide MSU with the factors necessary to determine the practicality of each project, and the necessary financing terms.
 - d. If the post-retrofit performance from the project does not deliver the guaranteed results, McKinstry will either rectify the problem so the guarantee is reached, or financially compensate MSU for the difference between the guaranteed performance and actual performance.
- 10. MSU is very excited about this initiative's potential to reduce energy consumption and utilities costs in our Auxiliary facilities throughout campus; and, we are hopeful that, during their March meeting, the Regents will support our proposal to move forward with this effort.

Attachments: Government entities in the NW United States that have utilized Performance Contracts.

Government Entities in the Northwest United States That Have Utilized Performance Contracts

University of Washington	McKinstry client	2003
The Evergreen State College	McKinstry client	2007
Eastern Washington University	McKinstry client	2001
approx \$17M of work to date		
Western Washington University	McKinstry client	2002
Central Washington University		1992
Washington State University	McKinstry client	2001
approx \$40M of work to date, \$10M more pending		
University of Idaho	McKinstry client	2006
ongoing \$35M project: HVAC, lighting, CHW plant & infrastructure improvements		
Boise State University		2004
BSU considering a second phase for 2011/2012		
Idaho State University		2002
ISU believed to be issuing an RFQ for a second phase, likely in 2011		
University of Montana	McKinstry client	2010
Carrol College		mid-2000
University of Utah		1998
Idaho National Laboratories		
DOE - Hanford (WA)		
National Renewable Energy Laboratory (CO)		
Hill Airforce Base (UT)		
State of Washington	McKinstry client	2003
State of Montana - Dept of Transportation	McKinstry client	2009
State of Idaho - Capitol Complex		early 2000