ITEM 157-2009-R1112
Authorization to Construct Phase II Energy Conservation Projects for Auxiliaries Facilities — MSU (Bozeman Campus)

THAT
Consistent with provisions of MCA § 20-25-302, the Board of Regents authorizes Montana State University to proceed with construction authority of Phase II of energy conservation projects in various Auxiliaries Facilities for a project total of $6.5 million and to secure a loan from the Montana Board of Investments.

EXPLANATION
1. In January 2012, Regents Item 154-2005-R0112 authorized MSU to finalize and enter into an Energy Performance Contract with McKinstry Company Inc. and execute construction of Phase I projects with McKinstry identified as the General Contractor as part of said contract. The Energy Performance Contract was fully executed April 2012.

2. Phase I work is nearing completion and is anticipated to be completed by December of 2012.

3. In May 2010, Regents Item 147-2004-R0510 authorized MSU to contract for an energy audit of Auxiliary Facilities, the result of which would lead to a defined set of potential energy conservation projects and associated energy savings. This work was completed in Fall 2011.

4. MSU has begun formulating a Phase II set of energy conservation projects based upon information from the aforementioned energy audit to be conducted beginning in the spring of 2013 with completion of projects by December 2013.

5. The Phase II projects includes energy conservation projects as follows:
   a. Digital control Upgrades includes Hapner, Koch and Langford Halls.
   b. Retro-Commissioning of Mechanical Systems includes Hoseaus Fitness Center, Hannon, Johnstone, South Hedges & Strand Union.
   c. Energy Insulation improvements and upgrades include Miller Dining, Roskie, South Hedges & Koch.
   d. Irrigation System Conversion from Domestic Water sources for Family/ Graduate Housing complexes.
   e. Mechanical System Upgrades include Fieldhouse and Johnstone.
   f. Window Upgrade for North Hedges.
   g. And associated soft costs.

6. The associated annual energy savings is currently calculated at $390,000.

7. The funding of Phase II projects will come from two sources:
   a. Bond proceeds associated with borrowing authorized by Regent Item 152-2010-R0911 in the amount of $2M.
   b. Board of Investments InterCap loan of $4.5M to be repaid with the energy savings generated.
8. This Regent Item authorizes MSU to finalize Phase II of energy conservation projects, for up to $6.5 million and authorizes MSU to negotiate the financial agreements, with a term of no more than 15 years, as necessary to finance up to $4.5 million of the work. The borrowed funds are intended to be secured through the Board of Investments (BOI) Intercap Loan Program and repaid with Net Pledged Revenues, in excess of current debt requirements, in accordance with the INTERCAP Program Agreement dated January 2, 2007 by and between BOI and the BOR. Net Pledged Revenues include, but are not limited to, non-state funds from Auxiliary Operations Revenue.

ATTACHMENTS

  Project Cost Breakdown

  Physical Plant B Section 1003.7
Board of Regents Policy: Physical Plant B Section 1003.7

This Authority request is for an amount greater than $150,000, which requires the following additional information:

(a) **Project Description:**
This project will provide energy conservation projects within Auxiliaries Facilities at MSU-Bozeman as follows:

1. Digital Controls Upgrades ($459,262) includes Hapner, Koch & Langford Halls
2. Retro-Commissioning of Mechanical Systems ($178,428) includes Hoseaus Fitness Center, Hannon, Johnstone, South Hedges & Strand Union.
3. Energy Insulation Improvements and Upgrades ($420,250) includes Miller Dining, Roskie, South Hedges & Koch.
4. Irrigation Conversion ($2,485,379) from domestic water sources within the areas occupied by Family/Graduate Housing complexes.
5. Mechanical Systems Upgrades ($1,132,288) includes the Fieldhouse and Johnstone.
6. Windows Upgrade ($1,480,335) for North Hedges.

(b) **Cost Estimate and Funding Sources:**

<table>
<thead>
<tr>
<th>Estimated Cost</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design/Construction Admin/Owner Costs</td>
<td>394,050</td>
</tr>
<tr>
<td>Construction</td>
<td>6,155,942</td>
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<tr>
<td>Contingency</td>
<td>55,000</td>
</tr>
<tr>
<td>Total estimate</td>
<td>$6,499,992</td>
</tr>
</tbody>
</table>

**Funding Source:** This project will be financed with previous bond proceeds ($2M) earmarked for such and borrowed funds ($4.5M) via the Board of Investments INTERCAP Loan Program. Debt service will come from net operating revenues after bond payments are met.

(c) **Programs Served, Enrollment Data, Projected Enrollments:**
The Auxiliaries Services program provides housing, food services, sports facilities, other non-academic resources and facilities and accommodates events such as sports, music and other performances for students, staff, faculty and the public.

(Enrollment data is not applicable to this authority request.)

(d) **Space Utilization Data**
Residence facilities occupancy rates are consistently above 90%. Other Auxiliaries Facilities are heavily utilized. Annual utilization will not be impacted by this major maintenance project.

(e) **Projected use for available residual space**
(Not Applicable to this request)