REGISTER OF UNIVERSITY OF IOWA
CAPITAL IMPROVEMENT BUSINESS TRANSACTIONS

Actions Requested: Consider:

1. Approval of project descriptions and budgets for the Power Plant – Install Boiler 10 Natural Gas Burners ($5,500,000) and Utilities Distribution System – Connect Boyd Law Building to Chilled Water System ($3,125,000) projects.

2. Receipt of the University of Iowa Health Care Facilities Master Plan – Building Iowa’s Health Care Future as part of the University of Iowa Hospitals and Clinics Committee.

Executive Summary:

To reduce dependency on a single fuel supply, the University requests approval of the project description and budget for the Power Plant – Install Boiler 10 Natural Gas Burners project. Adding natural gas burners with flue gas recirculation to Boiler 10, a coal-fired boiler installed in 1975, would provide the ability to operate the unit entirely on coal or natural gas, as well as cofire natural gas with either coal or biomass. The project budget of $5,500,000 would be funded by utility system bond proceeds, and utility system renewal and improvement funds. (A map showing the location of the proposed project is included in Attachment A.)

The Utilities Distribution System – Connect Boyd Law Building to Chilled Water System project, for which the University requests approval of the project description and budget, would connect the Boyd Law Building to the campus chilled water distribution system, replacing cooling by the Building’s cooling towers which are in need of significant repair or replacement. The project budget of $3,125,000 would be funded by utility system renewal and improvement funds, and building renewal funds. (Attachment B shows the location of the Boyd Law Building and the project.)

Details of the Projects:

Power Plant – Install Boiler 10 Natural Gas Burners

<table>
<thead>
<tr>
<th>Project Summary</th>
<th>Amount</th>
<th>Date</th>
<th>Board Action</th>
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<tbody>
<tr>
<td>Permission to Proceed</td>
<td></td>
<td>Oct. 2011</td>
<td>Approved</td>
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<tr>
<td>Design Professional Agreement (PRVN Consultants, Muscatine)</td>
<td>$ 515,000</td>
<td>Dec. 2011</td>
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<tr>
<td>Project Description and Budget</td>
<td>5,500,000</td>
<td>Feb. 2012</td>
<td>Requested</td>
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The installation of natural gas burners will also increase flexibility in meeting new air emission regulations.
Project Budget

Construction $4,182,333
Design and Supervision 900,527
Project Contingencies 417,140
TOTAL $5,500,000

Source of Funds:
Utility System Bond Proceeds and Utility System Renewal & Improvement Funds

Utilities Distribution System – Connect Boyd Law Building to Chilled Water System

Project Summary

<table>
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<tr>
<th>Project</th>
<th>Amount</th>
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<th>Board Action</th>
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<tbody>
<tr>
<td>Permission to Proceed with Project Planning</td>
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<tr>
<td>Selection of Design Professional</td>
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<tr>
<td>(Shive-Hattery, Iowa City)</td>
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<td>Design Professional Agreement</td>
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<tr>
<td>Project Description and Budget</td>
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<td>Feb. 2012</td>
<td>Requested</td>
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*Approved by Executive Director, consistent with Board policies

The cooling towers serving Boyd Law Building, which was constructed prior to the development of the University’s central chilled water system, are in need of significant repair or replacement. Building projects in the general area have extended the chilled water pipe network to the general vicinity of the Building, making it more economically viable to connect it to the system. The University believes that connecting the Building to the chilled water distribution system is a more cost effective solution than replacing the towers and maintaining an independent cooling system. The project includes extending the chilled water distribution piping, replacing chilled water coils, and removing existing building chilled water generation equipment.

Project Budget

Construction $2,448,531
Design and Supervision 432,287
Project Contingencies 244,182
TOTAL $3,125,000

Source of Funds:
Utility System Renewal & Improvement Funds and Building Renewal Funds
**Power Plant Project Location**

**Location Map:**

Power Plant – Install Boiler 10
Natural Gas Burners
\textbf{Project Location}\n
\textbf{Utilities Distribution System}\n
Connect Boyd Law Building to Chilled Water