Energy Conservation Initiative (ECI) Project Summary
Cornell Store, Facility 2088

What We Did: Installation of new control system, including variable speed drives, digital air handling unit (AHU) and hydronic heating/cooling controllers, control valves, space temperature and carbon dioxide sensors, outside air flow temperature and humidity sensors. Perform system commissioning.

What It Cost: $227,000


What We Saved: Cost savings for fiscal year 2011 is approximately $67,000 (based on billed utility rates) and reflect the impact of just ½ year with the upgraded system. Total energy savings for FY 2011 is 3,100 MMBtu, a reduction of over 35%. Savings based on comparing the average energy consumption for fiscal years 2006-2010 with FY 2011. Annual savings for FY 2012, with a full 12 month after completion should exceed $100,000. See energy savings table for details.

The energy conservation project has reduced our energy usage dramatically while maintaining and improving indoor environmental conditions. We are very excited about the results.

Kevin Drake, Cornell Store, Assistant Director

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**Cornell Store: ECI Savings Table**

<table>
<thead>
<tr>
<th>Utility</th>
<th>Historical Energy Use (MMBtu)</th>
<th>FY 2011 Energy Use (MMBtu)</th>
<th>Energy Savings (MMBtu)</th>
<th>% REDUCTION</th>
<th>Historical Cost (billed rates)</th>
<th>FY 2011 Cost (billed)</th>
<th>Savings $</th>
<th>Equivalent # Homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>2480</td>
<td>2000</td>
<td>480</td>
<td>19%</td>
<td>$51,000</td>
<td>$41,000</td>
<td>$10,000</td>
<td>23</td>
</tr>
<tr>
<td>Steam</td>
<td>2760</td>
<td>1320</td>
<td>1440</td>
<td>52%</td>
<td>$70,000</td>
<td>$34,000</td>
<td>$36,000</td>
<td>23</td>
</tr>
<tr>
<td>Chilled Water</td>
<td>2650</td>
<td>1390</td>
<td>1260</td>
<td>48%</td>
<td>$44,000</td>
<td>$23,000</td>
<td>$21,000</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>7890</strong></td>
<td><strong>4710</strong></td>
<td><strong>3180</strong></td>
<td><strong>40%</strong></td>
<td><strong>$165,000</strong></td>
<td><strong>$98,000</strong></td>
<td><strong>$67,000</strong></td>
<td><strong>46</strong></td>
</tr>
</tbody>
</table>

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Map
Cornell Store Utilities Costs and Use

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Map
Cornell Store Utilities Costs and Use