MEEA Conference: Facing the EE/COVID Challenge

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Hennepin County
Facility Services

- 79 buildings
- 6.5 million square feet
- $9 million in utility costs
- 3% annual energy reduction
- 20% from 2013 baseline

Hennepin County
ASHRAE Guidelines

• More ventilation
• More fresh air
• Cleaner/filtered air
Challenges

• How?
  • Turning off library computers
  • Adjusting open/close signs
  • Disabling carbon dioxide sensors
  • Increasing fresh air
  • Installing MERV 13 filters
  • Modifying lighting and HVAC
Flexible

• Now what?
  • What’s open? Partial or full?
  • How many people? And when?
  • Educating users
  • Maintaining vacant buildings
  • Buying new buildings
## Rolling 12-Month Performance

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Cost</th>
<th>Use</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$3,019,430</td>
<td>▼11%</td>
<td>▼14%</td>
</tr>
<tr>
<td>Electric</td>
<td>$1,587,149</td>
<td>▼13%</td>
<td>▼17%</td>
</tr>
<tr>
<td>Chilled Water</td>
<td>$633,769</td>
<td>▲5%</td>
<td>▲4%</td>
</tr>
<tr>
<td>Steam</td>
<td>$379,975</td>
<td>▼12%</td>
<td>▼14%</td>
</tr>
<tr>
<td>Water</td>
<td>$276,456</td>
<td>▼20%</td>
<td>▼33%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$142,082</td>
<td>▼26%</td>
<td>▼18%</td>
</tr>
</tbody>
</table>

March 2019-July 2019 vs. March 2020-July 2020
Considerations

• Plug loads down
• Internal heat load down
  • Reduce cooling load
  • Increase heating load
• Reduced/increased hours
• Increase ventilation/pressure drop
• Lights off
• Water use significantly down
Opportunities

• Maintenance work
• LED light retrofits
• Reduced vehicle miles traveled
• Re-evaluate our future business model
Efficient Buildings Collaborative

• Regional benchmarking program
  • Communication challenges
  • Access to invoices
  • Limited staff
  • Energy Star score comparisons
  • Compliance rates
THANK YOU

COVID-19
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