The Energy Management Program

Purpose: To avoid wasting utilities in order to save money to be used for instructional needs.

Guiding Rules:

- Do not interfere with the classroom instructional program.
- Do not light areas that are not in use.
- Do not heat or cool unoccupied areas. Establish and practice equipment shutdown procedures for daily and holiday savings.

Three Steps to Energy Savings

1. Turn off lights when you leave the room.
2. Turn off all electronic equipment at the end of the day.
3. Turn off or setback the thermostat every day.

Settings for Setback: Heating 55 Degrees
Cooling 90 Degrees
(Fans set on Auto.)

Special points of interest:

- The four year contract the district had with Energy Education, Inc. has ended. The district will no longer be required to pay the consulting fee which will result in an additional $78,000 savings each year.
- Energy Education Inc. works for and with only K-12 public schools nation wide. They currently have over 300 contracts, 4 in Washington State.
- There was a total reduction of $105,000 in energy costs in the 1st year of the Energy management program.
- The Energy Management program uses Energy CAP software to track utilities and Automated Logic: Supervision to control energy systems.
- Utilities Tracked: Electricity, Gas, Water / Sewer, Sanitation.
- There are three phases to the Energy Management Program: Management, Education and Accounting.
- The positive spirit and accountability of the Energy Manager, Principals, Custodians and Teachers will contribute to the success of the program.
- Energy efficiency is brought about by conservation strategies and

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<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>ADMINISTRATION</td>
<td>16%</td>
</tr>
<tr>
<td>BERNEY ELEMENTARY</td>
<td>20%</td>
</tr>
<tr>
<td>BLUE RIDGE ELEMENTARY</td>
<td>22%</td>
</tr>
<tr>
<td>EDISON ELEMENTARY</td>
<td>25%</td>
</tr>
<tr>
<td>GARRISON MIDDLE SCHOOL</td>
<td>18%</td>
</tr>
<tr>
<td>GREEN PARK</td>
<td>18%</td>
</tr>
<tr>
<td>PAINES CAMPUS</td>
<td>34%</td>
</tr>
<tr>
<td>PIONEER MIDDLE SCHOOL</td>
<td>24%</td>
</tr>
<tr>
<td>PROSPECT POINT</td>
<td>27%</td>
</tr>
<tr>
<td>SHARPESTIN</td>
<td>1%</td>
</tr>
<tr>
<td>SUPPORT SERVICES</td>
<td>13%</td>
</tr>
<tr>
<td>WALLA WALLA HIGH SCH.</td>
<td>27%</td>
</tr>
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</table>

Grand Totals: 27%

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Year 4 Costs: $767,412

<table>
<thead>
<tr>
<th>Electric</th>
<th>Natural Gas</th>
<th>Water/Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>$199,176</td>
<td>$429,026</td>
<td>$139,210</td>
</tr>
</tbody>
</table>

Base Year Costs: $748,288
Year 1 Costs: $645,033
Year 2 Costs: $681,280
Year 3 Costs: $749,180
**Consumption Comparison**

- **Electricity**
  - Saved: 1,679,472 kWh
  - 30%

- **Natural Gas**
  - Saved: 48,809 therms
  - 16%

- **Water/Sewer**
  - Saved: 16,714 Kgal
  - 19%

**FULL PROGRAM SAVINGS**

<table>
<thead>
<tr>
<th>Building</th>
<th>Adjusted Building Cost</th>
<th>Actual Cost</th>
<th>Cost Avoidance</th>
<th>Percent Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMINISTRATION</td>
<td>$89,168</td>
<td>$75,535</td>
<td>$13,632</td>
<td>15%</td>
</tr>
<tr>
<td>BERNEY ELEM.</td>
<td>$238,926</td>
<td>$182,949</td>
<td>$55,977</td>
<td>23%</td>
</tr>
<tr>
<td>BLUE RIDGE ELEM.</td>
<td>$240,344</td>
<td>$198,586</td>
<td>$41,758</td>
<td>17%</td>
</tr>
<tr>
<td>EDISON ELEM.</td>
<td>$128,703</td>
<td>$97,128</td>
<td>$31,576</td>
<td>24%</td>
</tr>
<tr>
<td>GARRISON M. S.</td>
<td>$333,318</td>
<td>$264,125</td>
<td>$69,194</td>
<td>21%</td>
</tr>
<tr>
<td>GREEN PARK ELEM.</td>
<td>$205,122</td>
<td>$173,425</td>
<td>$31,697</td>
<td>15%</td>
</tr>
<tr>
<td>PAINCE CAMPUS</td>
<td>$157,340</td>
<td>$103,356</td>
<td>$53,983</td>
<td>34%</td>
</tr>
<tr>
<td>PIONEER M. S.</td>
<td>$379,362</td>
<td>$287,147</td>
<td>$92,214</td>
<td>24%</td>
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<tr>
<td>PROSPECT POINT ELEM.</td>
<td>$252,149</td>
<td>$194,471</td>
<td>$57,678</td>
<td>23%</td>
</tr>
<tr>
<td>REFUNDS AND REBATES</td>
<td>$110,365</td>
<td>$110,365</td>
<td></td>
<td></td>
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<tr>
<td>SHARPSTEIN ELEM.</td>
<td>$70,053</td>
<td>$64,381</td>
<td>$5,672</td>
<td>8%</td>
</tr>
<tr>
<td>SUPPORT SERVICES</td>
<td>$98,837</td>
<td>$83,905</td>
<td>$14,931</td>
<td>15%</td>
</tr>
<tr>
<td>WALLA WALLA H. S.</td>
<td>$1,363,063</td>
<td>$990,887</td>
<td>$372,176</td>
<td>27%</td>
</tr>
</tbody>
</table>

Grand Totals: $3,666,751 | $2,715,897 | $950,854 | 26%

**Year One Savings**

  - **Electric** 25%
  - **Natural Gas** 10%
  - **Water** 29%
  - Total: 24%

**Year Two Savings**

  - **Electric** 23%
  - **Natural Gas** 18%
  - **Water** 42%
  - Total: 27%

**Year Three Savings**

- **Oct. 2001—Sept. 2002**
  - **Electric** 26%
  - **Natural Gas** 18%
  - **Water** 36%
  - Grand Total: 27.3%

**Year Four Savings**

  - **Electric** 30%
  - **Natural Gas** 16%
  - **Water** 38%
  - Grand Total: 25%

**DID YOU KNOW?**

- The benefits of turning equipment off include financial savings, longer equipment life and reduced risk of damage to motors, computers and lighting caused by power fluctuations/lightening.
- It takes 20 times the energy to keep a classroom at 68 degrees for 14 hrs., then it does to set it back to 55 degrees for 14 hrs. and then bringing it back to 68 degrees in 10 degree weather.
- It is more economical to turn incandescent and fluorescent lights off each time you leave the room.
- A F40 rapid start fluorescent lamp operating continuously lasts 4.3 yrs. The same lamp used for a normal 40 hr. work week, lasts 10 ½ yrs. You cut Power Consumption and Replacement Costs.
- A computer left on 24 hrs. Per. day is wearing out its components at least 3 to 4 times faster then necessary. A computer operating continuously will have an average life of 2.3 yrs. Turned off nights and weekends it increases to 9.6 yrs.
- Experts in the computer industry have determined that turning them off will not hurt them. They have determined that heat is the primary reason for failure. A computer left on for 8 hrs. a day will cost the district about $50.00 annually, 24 hrs. = $150.00 annually.
- WWPS uses Vending Misers on vending machines and the Watt Stopper: Isole Occupancy Power Strips and all desktops.

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**Websites of Interest:**

- **Local Weather:** www.wrh.noaa.gov/pendleton/climate/climateindex.html
- **POWERhouse Home Energy Calculator:** http://www.article19.com/shockwave/ph.htm
- **WWPS Energy Management:** http://www.wwps.org/support/energy_management.htm

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**FULL PROGRAM SAVINGS**

- **Electric** 28%
- **Natural Gas** 17%
- **Water** 27%

Grand Total: 26%