

# St Helens Mill



# Energy Reduction

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- ◆ Mill Management Steering Team prioritizes large opportunities and allocates resources
- ◆ Focus on finding and implementing “low hanging fruit” opportunities
- ◆ **Key variables tracked continuously for energy efficiency in each process and millwide.**

# Energy Reduction

**What you want:**



# Energy Reduction

What you get:

**MMBTU**

**Klbs**

**KWH**

tons  
**tons**

**Barrels**

**Cubic feet**

**Therms**

**gallons**





January 11, 2005 4:04:00 PM

Rollup Type is TOPS.

Expand Expand Show Out  
 Top of Control  
 All Level Only

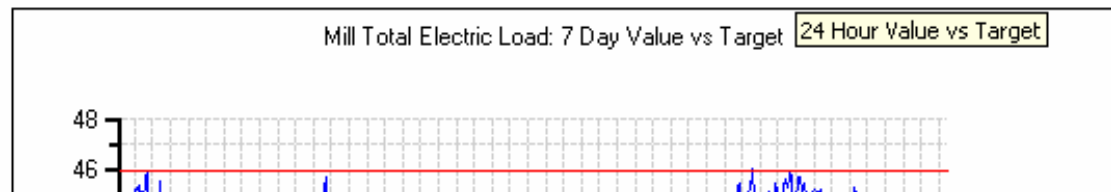
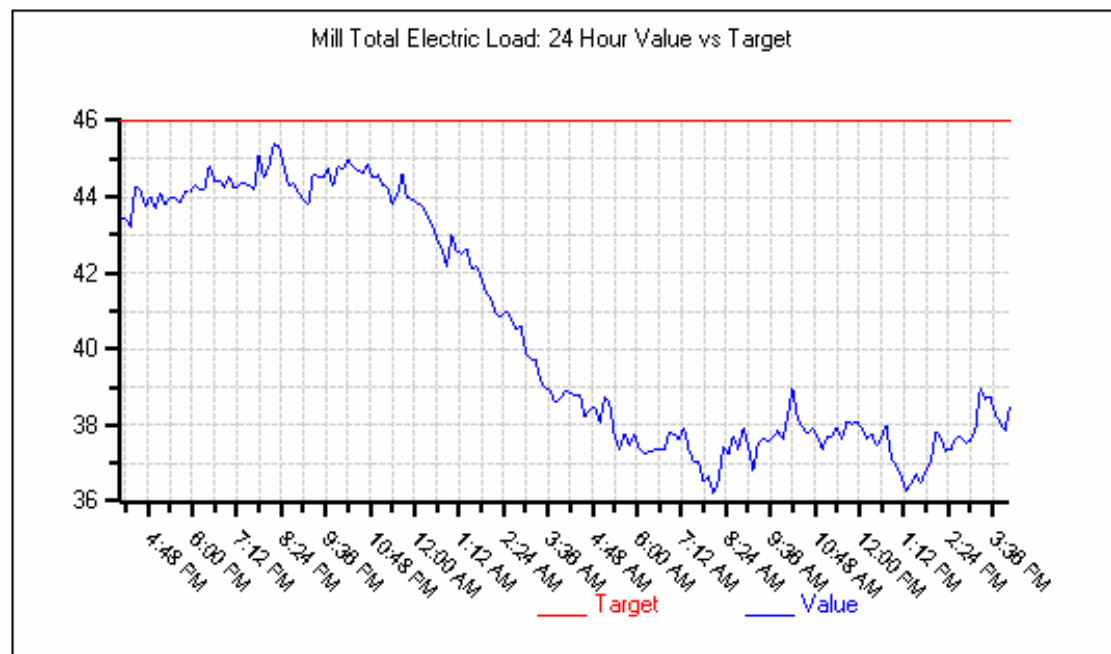
Mill wide->Energy

**Mill Total Electric Load**

	Current Value	Units	Target	5-Minute Opportunity	24-hour forecast	30-day forecast
<b>Mill Total Electric Load</b>	38.48	MW	46.00			

Legend:

- Mill wide
- Energy
- Mill Influent Flow
- Mill Effluent Flow
- Energy to Sewer
- Millwide Condensate F
- Mill Total Electric Load
- Purchased Fuel Steam
- HX4 Steam Flow
- H1 Total Steam/Gross
- H2 Total Steam/Gross
- H4 Total Steam/Gross
- Mill Total Energy/Gross
- Mill Purchased Energy.
- Environmental
- H1 On/Off Reel
- H2 On/Off Reel
- H3 On/Off Reel
- H4 On/Off Reel
- Outside Temperature
- Paper Production
- Pulp Production



# Selected Energy Reduction Activities

- ◆ **Large Projects**



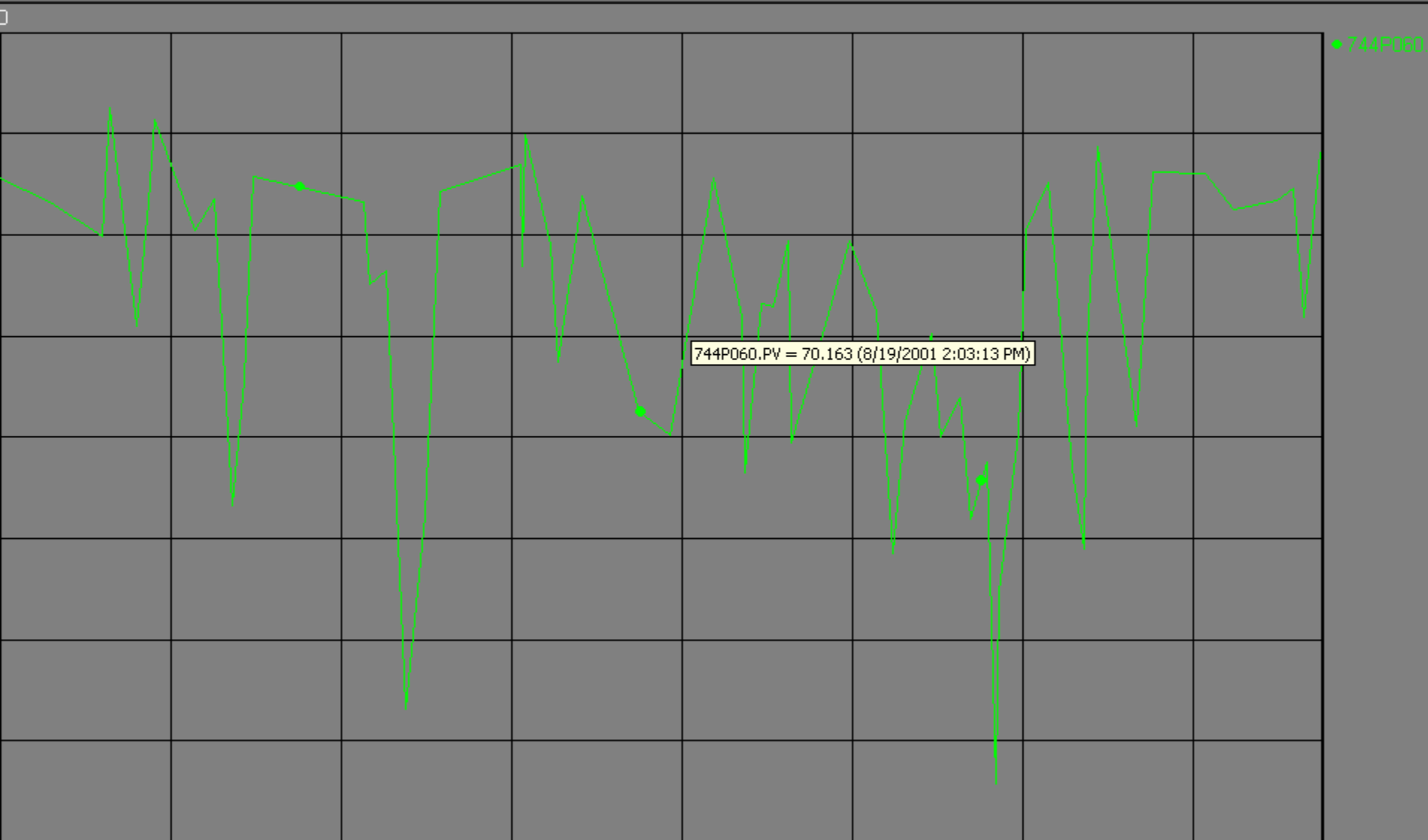
# Selected Energy Reduction Activities

- ◆ Large Projects
- ◆ **Modeling**



# Selected Energy Reduction Activities

- ◆ Large Projects
- ◆ Modeling
- ◆ **Compressed air**



744P060.PV = 70.163 (8/19/2001 2:03:13 PM)

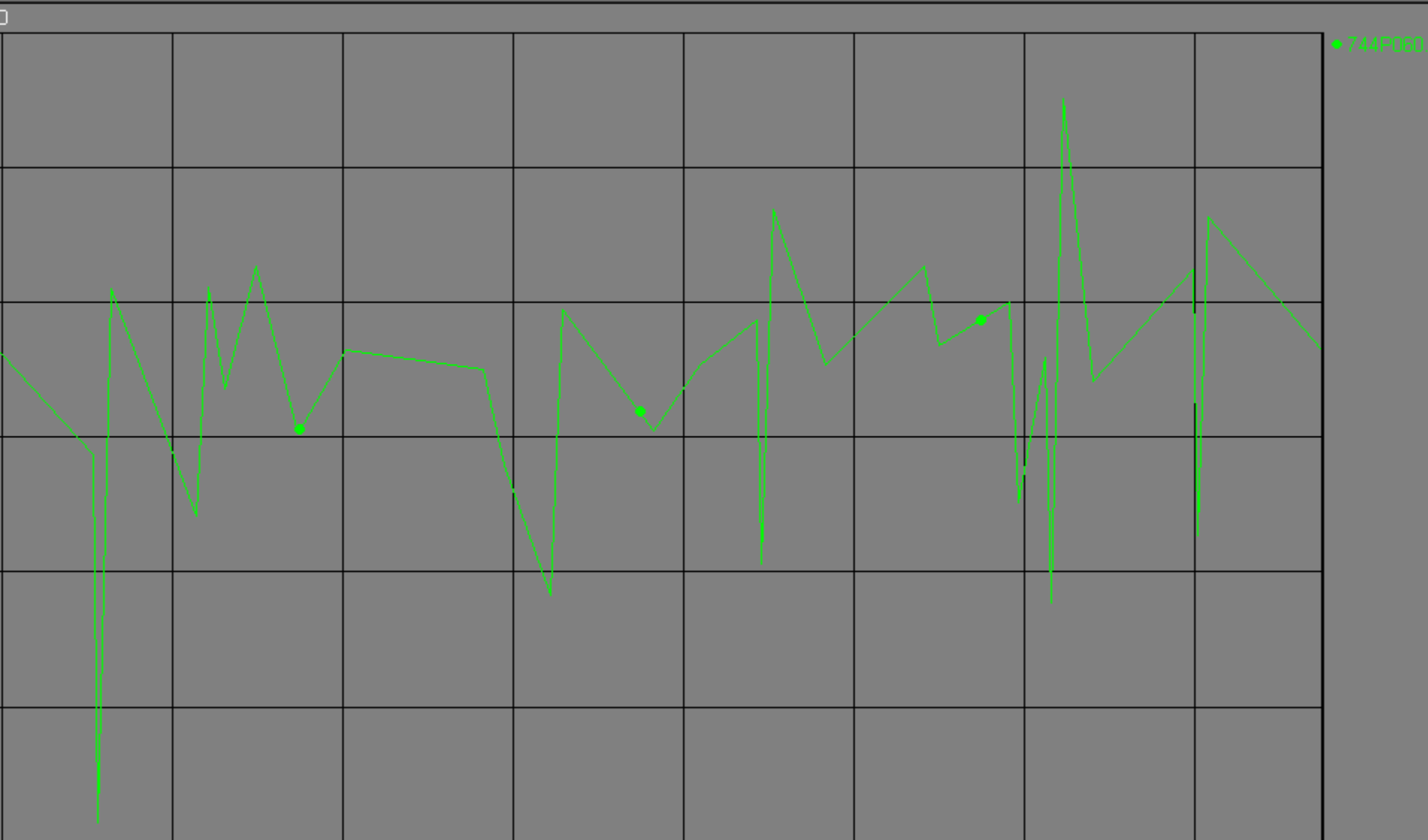
744P060

2001 9:45:46 AM

8.00 Hour(s)

8/19/2001 5:45:46 PM

ALL AIR



744P060

2002 12:45:25 AM

8.00 Hour(s)

8/18/2002 8:45:25 AM

ALL AIR

# **Energy Trust of Oregon Electrical Savings Projects**

## **Recently completed projects**

- ◆ **Blow Heat Warm Water Pump VFD**
- ◆ **Recovery Boiler ID Fan VFD**

**These 2 projects will reduce our annual usage  
by 3,869,000 KWh per year!**





# Energy Opportunities

## Summary

**Get organized**



# Energy Opportunities

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Get organized

**Keep looking**



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**Measurement systems**



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**Outside resources**



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**Best Practices**



# Questions?

