

An aerial view of a city skyline, likely New York City, featuring numerous skyscrapers under a clear blue sky. The Empire State Building is prominent in the center. The text 'STEAM MONITORING' is overlaid in large, white, bold, sans-serif capital letters.

STEAM MONITORING

Mosto Technologies, Inc.

An aerial photograph of the New York City skyline at sunset. The sky is a mix of orange, pink, and blue, with scattered clouds. The city is densely packed with skyscrapers, many of which have their lights on. The Empire State Building is prominent in the center, with its green spire. The title 'HP STEAM TRAP MONITORING' is overlaid in large, white, bold, sans-serif font across the middle of the image.

HP STEAM TRAP MONITORING

HP Steam Trap Monitoring



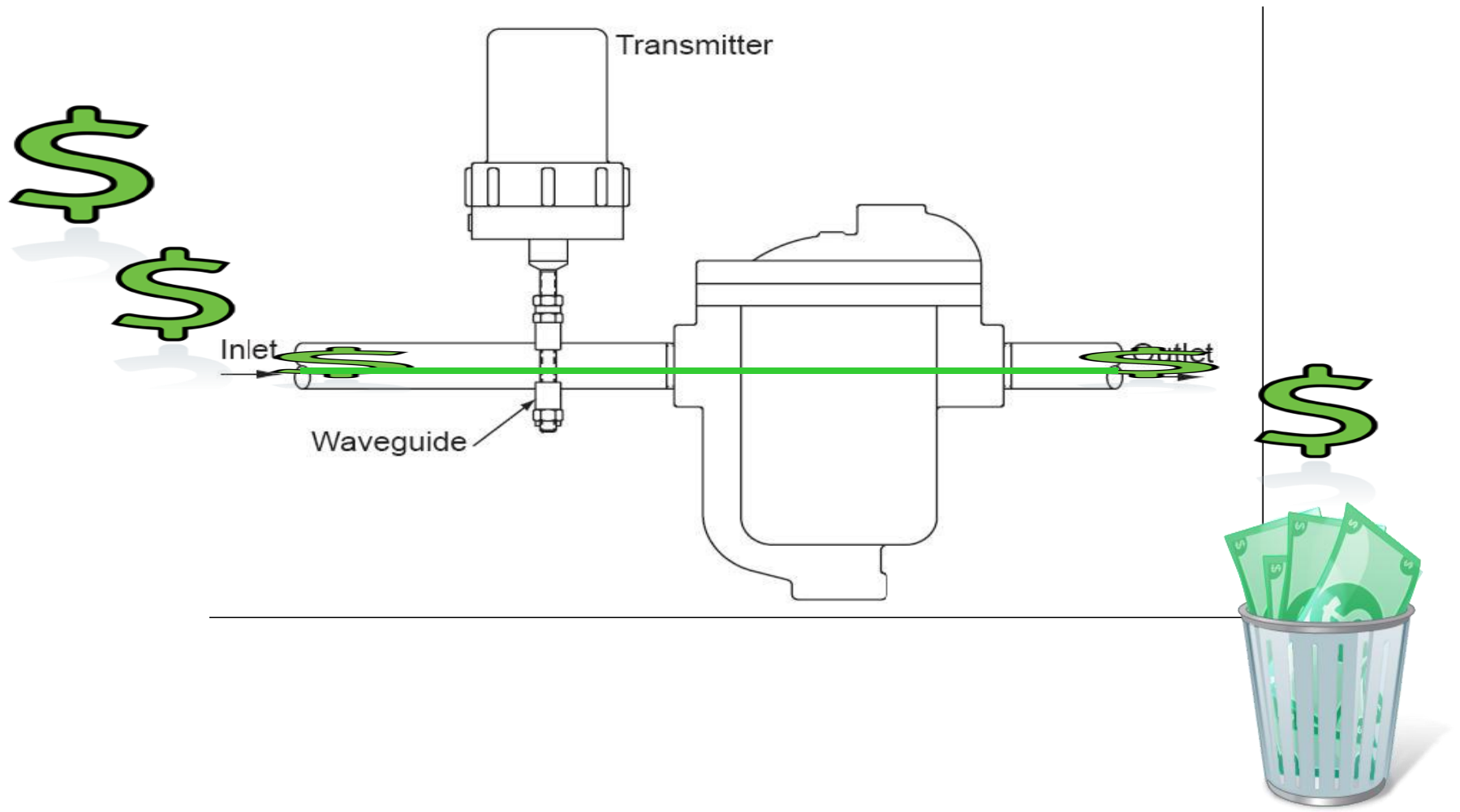
- **12-18 months payback!**
- **3-5%** permanent reduction in consumption
- **LEED Pt.**– Innovation in Operations EB O&M
- **Saved** clients over **\$1,000,000** Annual consumption

Steam Trap Monitoring

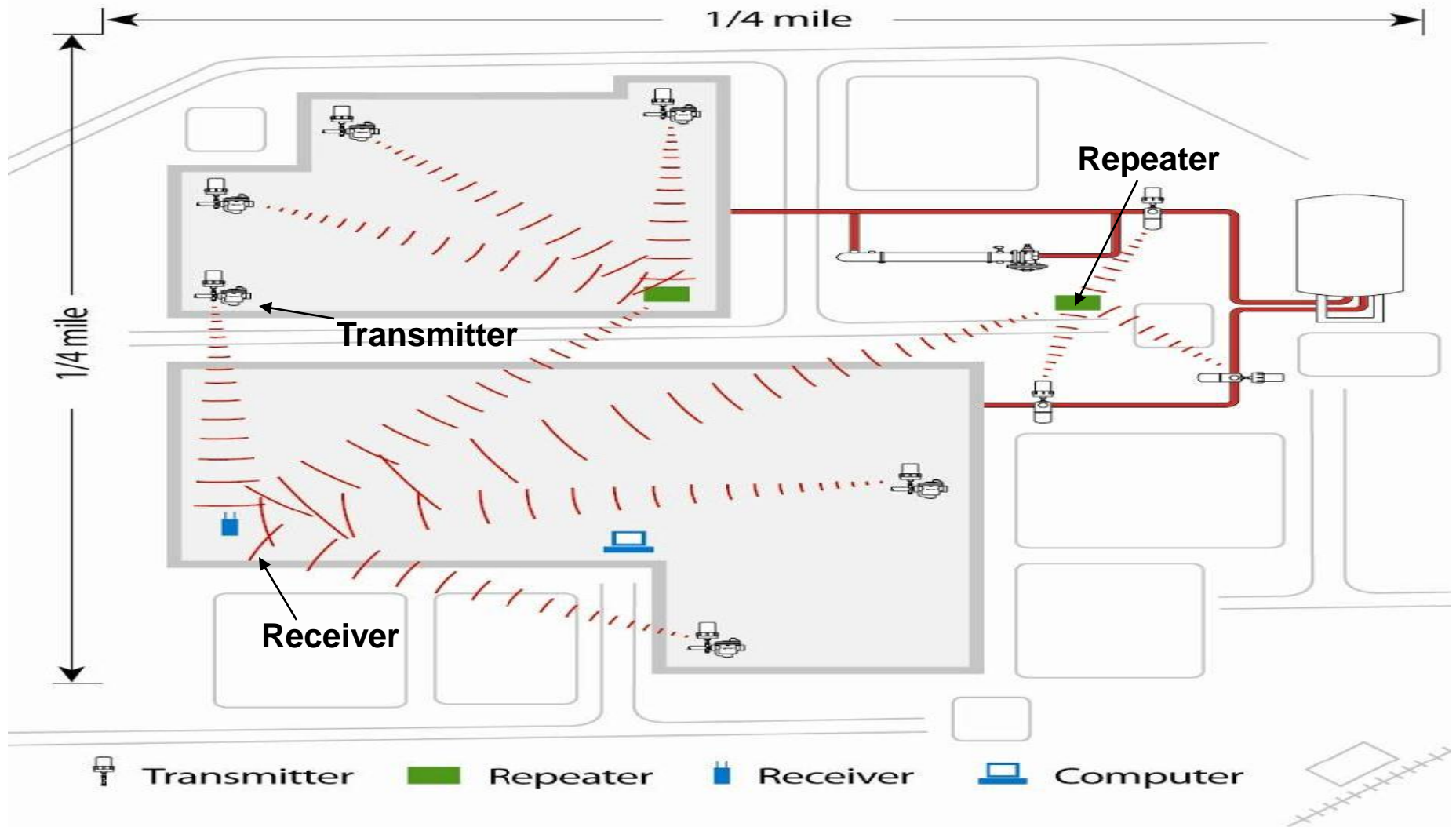


- Real-time monitoring for high-pressure critical traps (>15 PSIG)
- Average total system cost \$25K - \$50K
- Web-Based or Modbus/BMS Integration

Basic Installation



Wireless Signal



Trap Inventory

[Edit Location](#) [Trap Surveys](#) **Trap Inventory** [Event History](#) [Location Reports](#) [User List](#)

The Trap Inventory should be used to show the repairs made since the survey. To add a new trap, use the **Add New Trap** li

Trap Inventory Listing : Mosto Technologies

Tag Number Defective Condition
Location In Service Unit

Tag Number	Manufacturer	Model	Unit Location	Last Survey	Condition	Steam Loss (lb/yr)	Annual Cost (USD)	CO2 Emissions (lb/yr)	Fuel Loss(MMBTU/yr)
1	Armstrong	2010	HP Header 1		Good				
2	Armstrong	2011	HP Header 2		Cold				
3	Armstrong	2010	HP Feed to RM B		Blow Thru				
4	Armstrong	2010	HP PRV to RM B		Blow Thru				
5	Armstrong	2010	HP PRV TO RM A		Good				

Total for 5 items: 0 0 0 0

Event History

[Home](#)[Location Info](#)[Best Practices Package](#)[Administration](#)[Edit Location](#)[Trap Surveys](#)[Trap Inventory](#)[Event History](#)[Location Reports](#)[User List](#)[Help](#)[Logout](#)

Event History : Mosto Technologies

Tag Number

Transmitter Number

Condition

Any



(1 - 6 of 6)

Event Timestamp	Event Type	Tag Number	Transmitter Number	Trap Condition
2007-04-12 16:01:36	Condition changed	2	2	Cold
2007-04-12 16:00:01	Condition changed	3	3	Cold
2007-04-12 15:59:18	Condition changed	1	1	Cold
2007-04-12 15:56:15	Condition changed	2	2	Cold
2007-04-12 15:53:42	Condition changed	3	3	Cold
2007-04-12 15:53:05	Condition changed	1	1	Cold

(1 - 6 of 6)

Email Alarms

Trap with tag number 148 has changed state.
Transmitter Number : 1519914
Previous State: Cold
New State : Good
Trap Location : Memorial 20fl flash tank
Siteid : 2308
Location Name : Memorial / Bobst
Remote Host Name : SK1_SteamEye
Change detected : Fri Oct 03 14:36:54 EDT 2008



[← Reply](#) [↶ Reply to all](#) [→ Forward](#)

Total Trap Monitoring Losses Tracking Through 2011

Building	Yrs In Service	# Traps Being Monitored	# Traps Passing Steam	Total Losses
Hospital (8 Buildings)**	3 / 1	199	16	\$196,134.00
Office Building 1	4	19	7	\$74,934.00
Office Building 2 (4 buildings)	3	55	8	\$117,202.00
Office Building 3	4	34	16	\$206,352.00
Office Building 4	2	12	5	\$35,071.00
Office Building 5	4	19	5	\$69,412.00
Office Building 6	3	10	3	\$22,007.00
Office Building 7	2	18	3	\$38,499.00
Office Building 8	2	24	6	\$72,602.00
Office Building 9	1	23	2	\$64,162.00
Office Building 10 (2 Buildings)	Less Than 1	25	4	\$46,191.00
Office Building 11	1	32	2	\$29,292.00
Office Building 12	Less Than 1	29	2	\$33,124.00
Office Building 13	Less Than 1	5	1	\$5,375.00
Office Building 14 (4 Buildings)	Just Put Online	37	0	\$0.00
Totals For All Buildings		541	80	\$1,010,357

** Hospital 70 Traps to the System 1 year ago

Losses based on \$27 per Mlbs

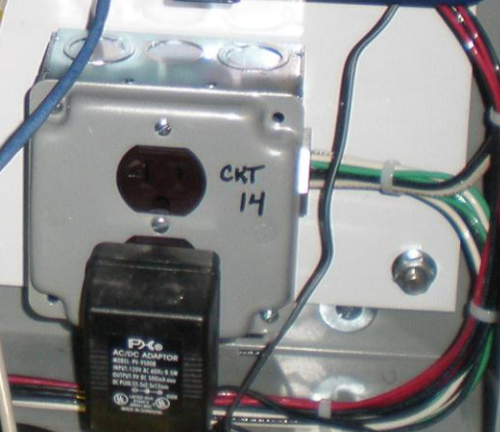
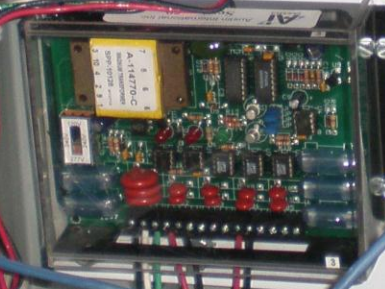
A nighttime photograph of the New York City skyline, featuring the Empire State Building prominently in the center, illuminated with yellow lights. The city lights are visible in the background under a dark sky. In the foreground, a white, rectangular object, likely a steam meter, is partially visible at the bottom edge of the frame.

STEAM METER MONITORING

Steam Meter Monitoring



- Con Ed provides pulses from meters to the building to develop real time consumption profile
- Established baseline using 2 years of historical interval data
- Peak demand and consumption management
- Metering and Verification



Real Time Consumption



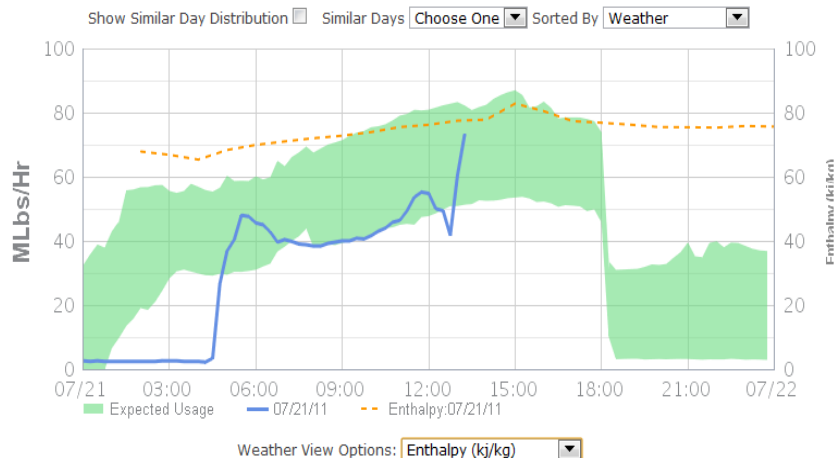
Analysis

Forecast Analysis

Building Owner:
 Building Operator:
 Building Engineer:
 Account:
 Forecast Date:

Description

The Forecast Analysis page calculates an Expected Operating Envelope (EOE) based on up to 5 days of predicted weather. The forecast Expected Operating Envelope provides operations staff with the insight into how the building has historically run for the predicted weather, allowing them to develop operating strategies to reduce energy costs. Comparison days from the EOE can be displayed from a pull down menu that provides sorts based on weather, peak energy demand, total usage, or total cost. These historical comparisons provide the information needed to needed optimize building operations for start time and equipment operations.



Detailed Information

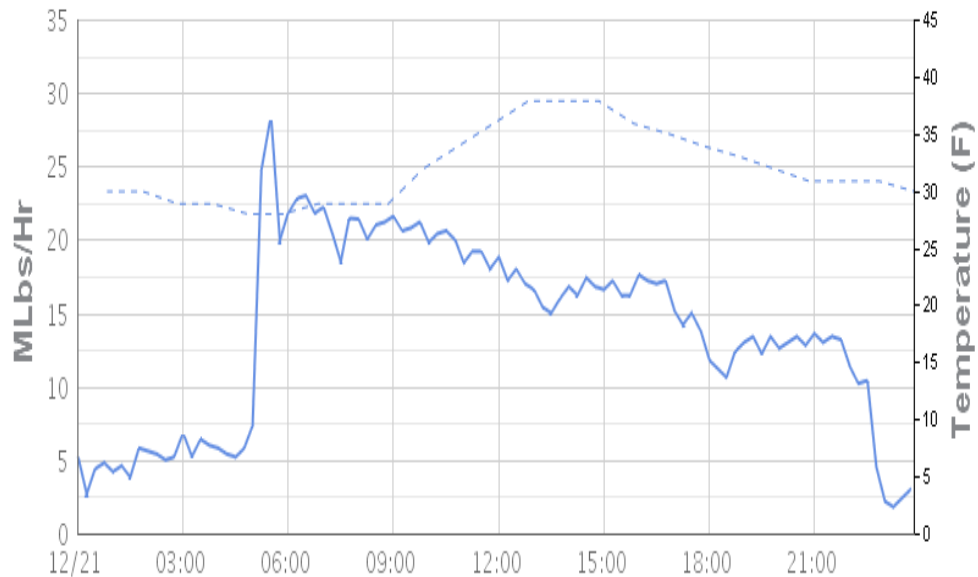
	Expected
MLbs Total	1,082
Peak MLbs/Hr	70
Total Cost *	\$14,956

Peak Demand Mgt

View By: [Intervals](#) [Day](#) [Week](#) [Month](#)

Weather Type: [Hide](#) [Temp](#) [Humidity](#) [Enthalpy](#) [Wetbulb](#)

Units: [\\$](#) [kBtu](#) [kWh](#) [MLbs](#) [Therms](#) [Tons](#)



<< Prev Range

Date Range

Next Range >>

12/21/2010 - 12/21/2010

[☆ Energy Star Report](#)
[View Notes](#)
[Download Data](#)
[Print Report](#)

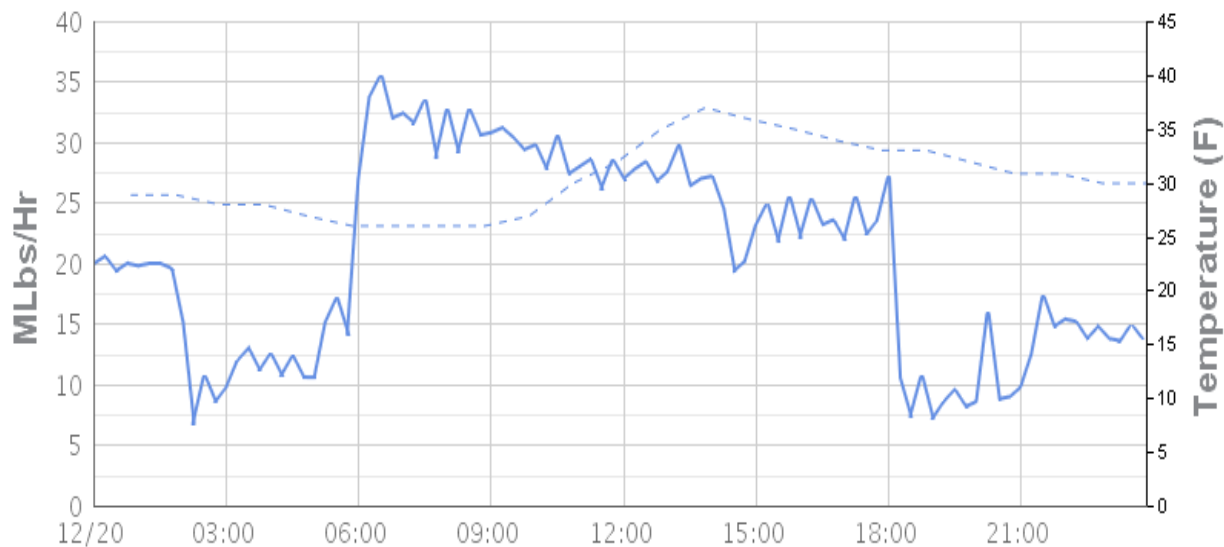
Weather Station	Total MLbs	Non-Coincident Peak Occurred At	Non-Coincident Peak MLbs/Hr	Remove
<input checked="" type="checkbox"/> KNYC <input checked="" type="checkbox"/>	331	12/21/10 05:30	28	<input checked="" type="checkbox"/>

Peak Demand Mgt

View By: [Intervals](#) [Day](#) [Week](#) [Month](#)

Weather Type: [Hide](#) [Temp](#) [Humidity](#) [Enthalpy](#) [Wetbulb](#)

Units: \$ [kBtu](#) [kWh](#) [MLbs](#) [Therms](#) [Tons](#)



<< Prev Range

Date Range

12/20/2010 - 12/20/2010

Next Range >>

☆ Energy Star Report

View Notes

Download Data

Print Report

Weather Station

Total MLbs

Non-Coincident Peak Occured At

Non-Coincident Peak MLbs/Hr ?

Remove

NYC

494

12/20/10 06:30

36

X

Similar Weather Day Analysis

MACH ENERGY

Home Analysis Tracking Planning Reporting Organize

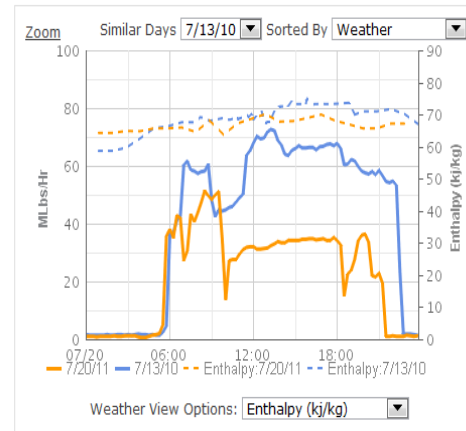
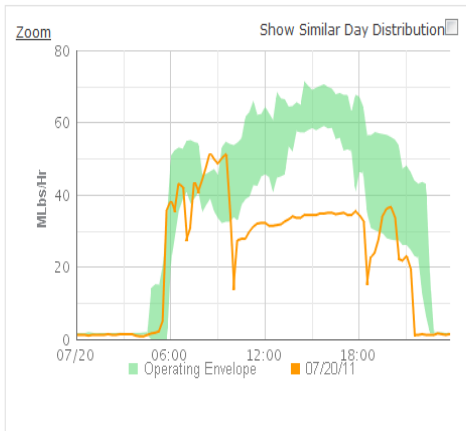
Analysis

Similar Weather Days

Building Owner:
 Building Operator:
 Building Engineer:
 Account:
 Analysis Date:

Description

The day to be analyzed is entered in the Analysis Date box to the left. MACH Energy's Similar weather Day Analysis tool develops an expected operating envelope based on historic behavior of this building under similar weather conditions. The operating envelope is overlaid with the building's usage for the day you selected (below left). Building energy use is displayed for days with similar weather conditions to those of the day you selected (below right).



Similar Weather Day Alert For 07/20/2011

The costs below represent the energy charges (all \$/kWh charges) for your building. The expected energy charges are calculated using the mean of the kWh range represented by the operating envelope.

Description

Energy use was less than expected at 1 Liberty Plaza - Steam - Total on Wednesday, 07-20-2011 reducing estimated energy expense by \$4317.

Associated Dollars

Daily Energy Charges (\$)	
Expected	12,367
Actual	8,050
Difference	-4,317

Metering and Verification

Admin

MACH Asset Manager



- Home
- Analysis ▾
- Tracking ▾
- Planning ▾
- Reporting ▾
- Organize ▾

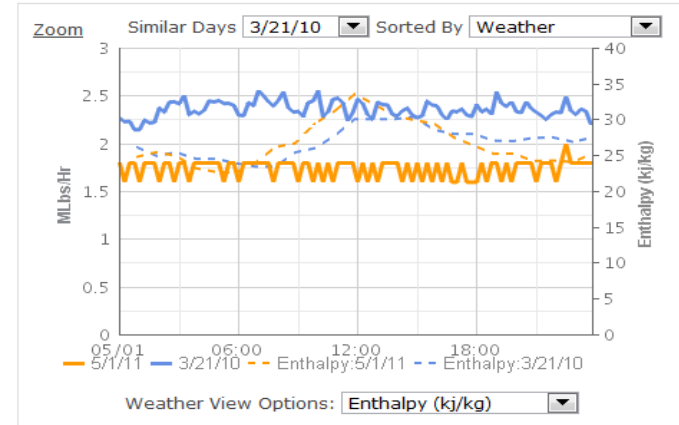
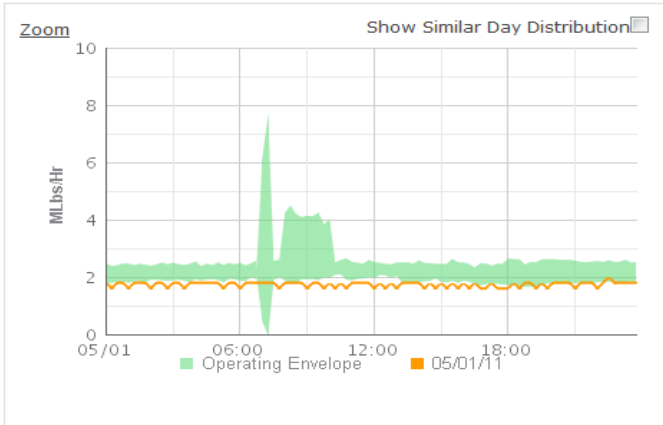
Analysis

Similar Weather Days

Building Owner: ▾
 Building Operator: ▾
 Building Engineer: ▾
 Account: ▾
 Analysis Date:

Description

The day to be analyzed is entered in the Analysis Date box to the left. The expected operating envelope based on historic behavior of this building overlaid with the building's usage for the day you selected (below left). conditions to those of the day you selected (below right).



Similar Weather Day Alert For 05/01/2011

The costs below represent the energy charges (all \$/kWh charges) for your building. The expected energy charges are calculated using the mean of the kWh range represented by the operating envelope.

Description
Energy use was less than expected at 1 Liberty Plaza - Steam - Total on Sunday, 05-01-2011 reducing estimated energy expense by \$311.

Associated Dollars

Daily Energy Charges (\$)	
Expected	1,266
Actual	954
Difference	-311

Steam Meter Monitoring

- Peak Demand Management
- Steam Consumption Management
- Steam Bill Verification
- Measurement and Verification

