

OSIsoft®

# REGIONAL SEMINAR

The Power of Data

THRIVING  
IN A  
WORLD OF  
CHANGE



# Gaining and Sharing Insights Across the Enterprise from Anywhere

Presented by **Rami Antoun**, Customer Support Engineer



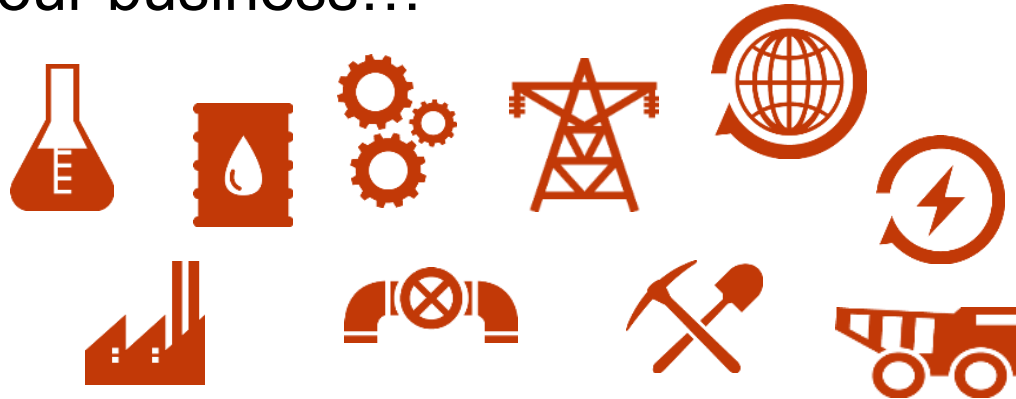
## Data-driven Decisions

A recent **study at MIT** showed that organizations **relying on data** to make decisions **performed** at rates 4-6 % **higher** than their peers.\*

*\*Erik Brynjolfsson,  
MIT Professor*

# Sharing Insights Across the Enterprise

Operational **insights** are discovered frequently throughout your business...



...but is everyone able to **share** their discoveries **quickly**, **easily** and **effectively**?



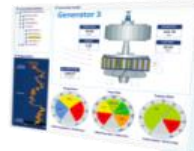


Any Data, Anytime, Anywhere

## PI Visualization Suite

- Gives **every tool** at your fingertips
- To **fit your needs**
- And facilitate **enterprise-wide collaboration**

PI ActiveView



PI BatchView



PI WebParts



PI Coresight



PI ProcessBook



PI Manual Logger



PI DataLink



# The PI System Client Tools

- **PI Coresight** for ad hoc analysis and collaboration with mobility
- **PI ProcessBook** for display building and monitoring
- **PI DataLink** for analysis and reporting
- **PI WebParts** for enterprise-wide collaboration
- **PI Manual Logger** for manual data collection



# PI Manual Logger

Explore

Report

Monitor

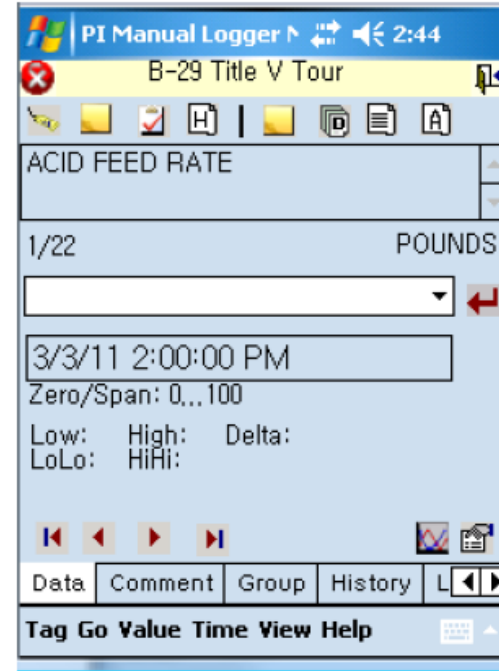
Collaborate

Share

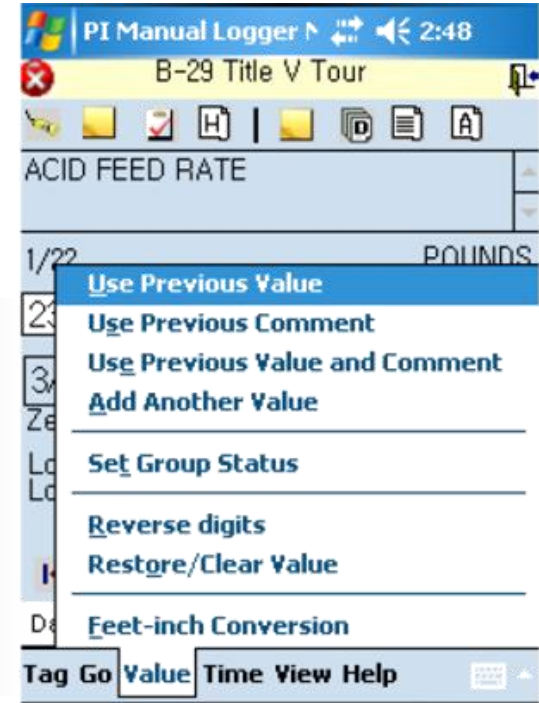
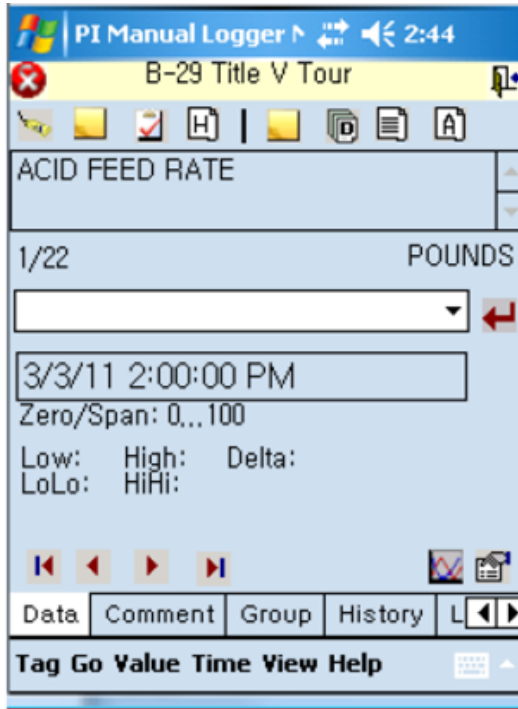
Review

Collect

- **Manual entries** are oftentimes crucial
- **Centralized** configuration based on **tours** and **runs**
- Available on computers and mobile devices (**Windows Mobile**)



# Case Study – Eastman Chemical







# DEMO





# PI Notifications and Visualization Tools



Site\WTG03\Notifications[Low Rotor Speed] generated a new notification event. - Message (HTML)

FILE MESSAGE

Ignore Delete Reply Reply All Forward Meeting IM More Quick Steps Move OneNote Actions Follow Up Mark Unread Categorize Tags Translate Find Related Select Zoom

Tue 8/20/2013 2:01 PM  
PINotAdmin  
Site\WTG03\Notifications[Low Rotor Speed] generated a new notification event.

To: Louis-Philippe Page-Morin

Message Wind Turbines Status.pdi (256 KB)

Low Rotor Speed - WTG03

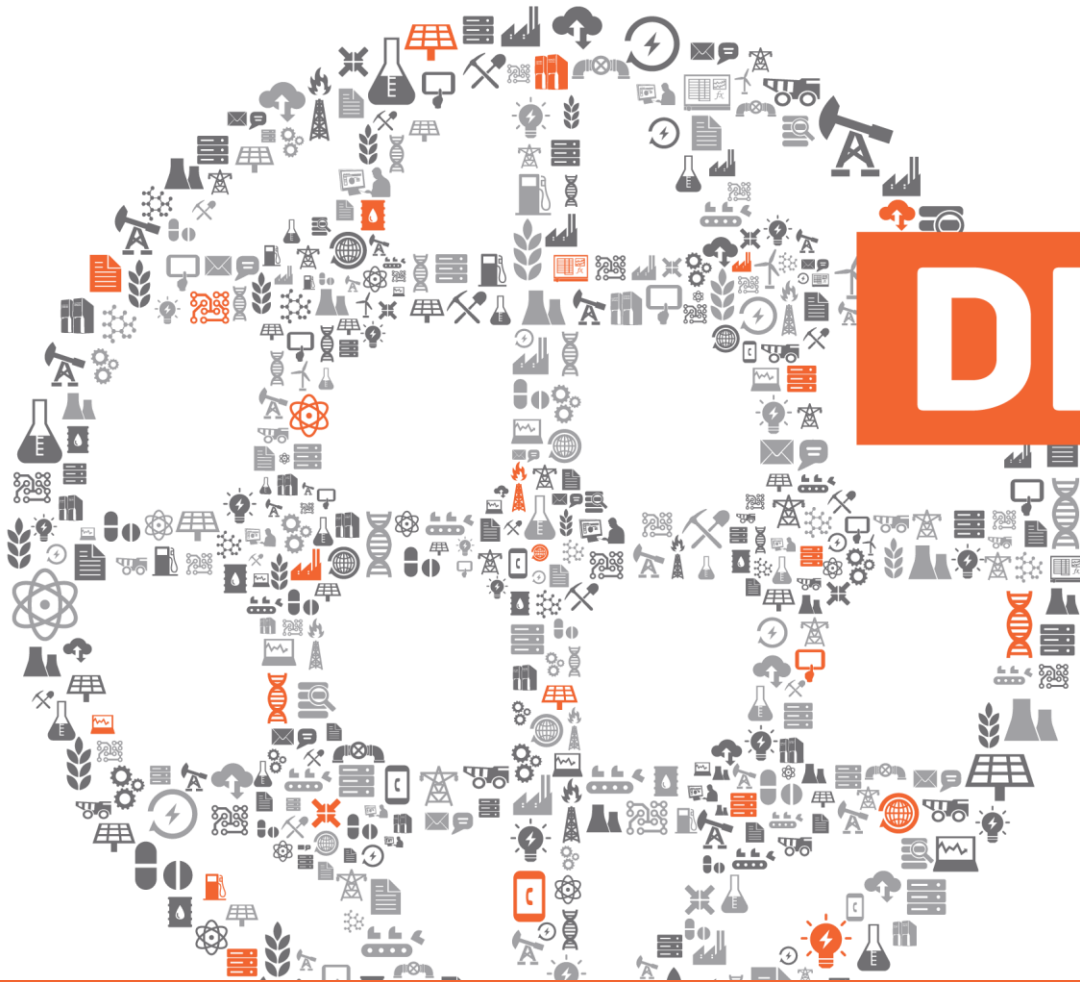
**Trigger Time:** 08/20/2013 14:01:00  
**State:** OutsideControl **Priority:** Normal

Attribute	Value	Timestamp
Rotor Speed	2.356rpm	08/20/2013 14:01:00
Wind Speed	6.997m/s	08/20/2013 14:01:00

[Instant PI WebParts Trend](#)

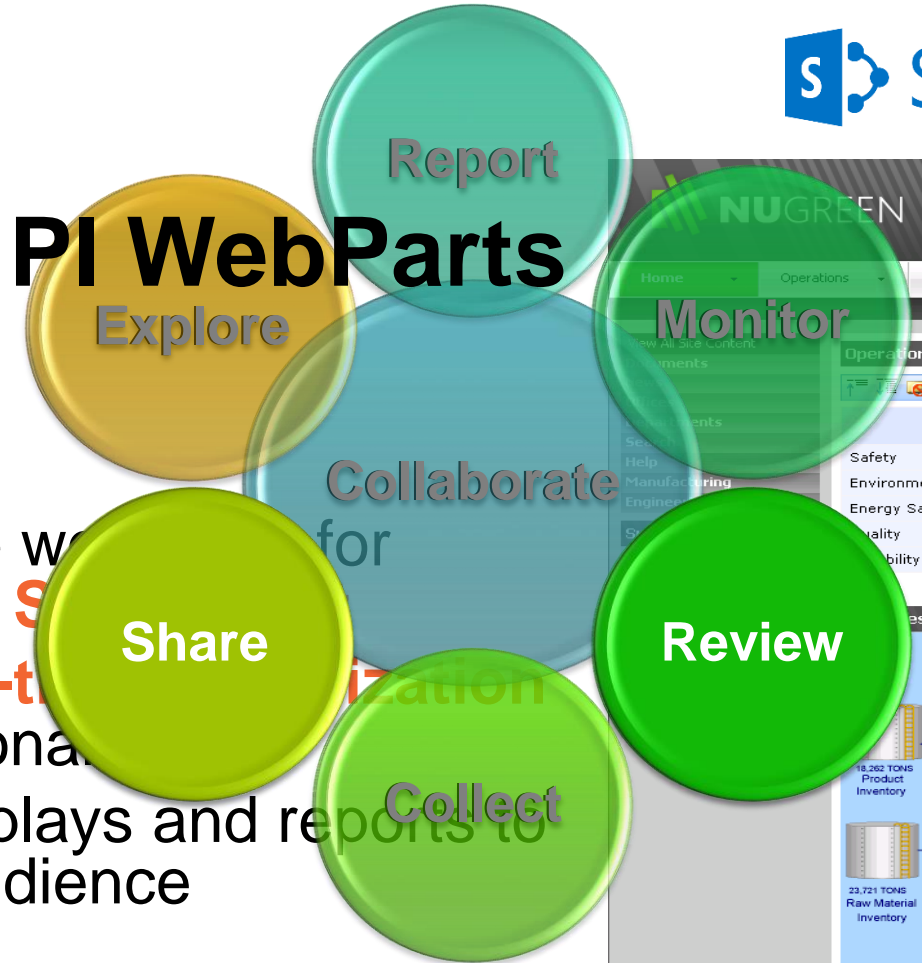
**Actions:**  
[Acknowledge With Comment](#)

Some People Pane features are turned off because Windows Desktop Search isn't available.



**DEMO**

# PI WebParts



**Operations Performance Scorecard**

	Houston				Little Rock			
	To Date	Today	Target	Trend	To Date	Today	Target	Trend
Safety	0	0	●	→	0	0	●	→
Environment	97.1	97.0	●	→	99.0	98.6	●	→
Energy Savings	0.4%	0.4%	▲	→	0.5%	0.7%	▲	→
Quality	97.6	97.9	●	→	97.3	97.6	●	→
Reliability	95.7	96.4	●	→	95.6	96.3	●	→

**Wichita Plant Cracking Process Overview**

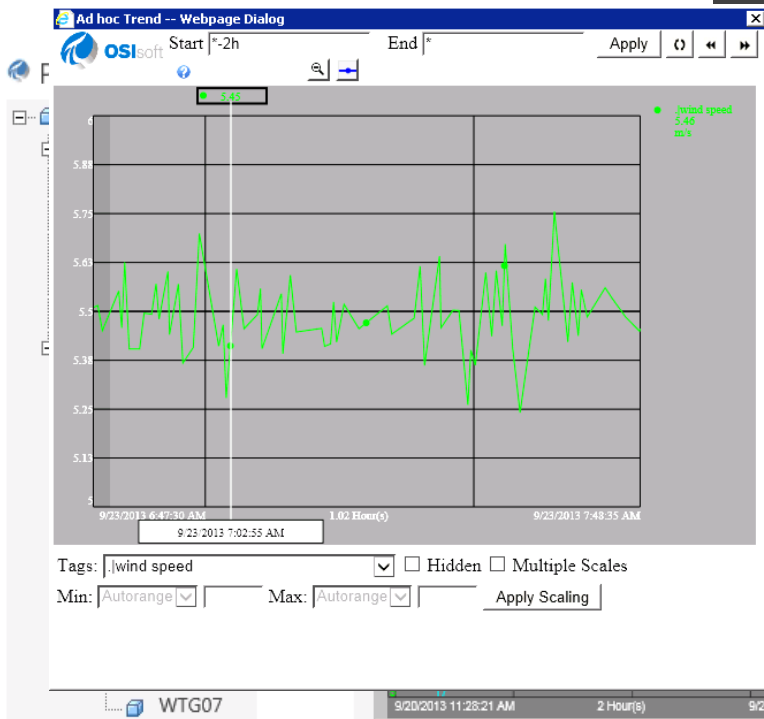
- Interactive web parts for **Microsoft SharePoint**
- Allow **real-time** visualization of operational data
- **Share** displays and reports to a wider audience



Sandbox EDIT LINKS

# NuGreen Energy

- Home
- Documents
- Site Contents
- EDIT LINKS



# PI ProcessBook Displays in Microsoft SharePoint

dy Valley WTG01 PI Coresight Display

Current L1	358.05 kA
Energy	903.44 kWh
Nacelle Position	358.75 °
Power Load	59.62
Wind speed	5.40 m/s
Temperature	14.86 °C

Status ████████

99.97



Sandbox

EDIT LINKS

NuGreen Energy

# PI DataLink Reports in Microsoft SharePoint

Home

Documents

Site Contents

EDIT LINKS

Excel Web Access - Wind Turbines Daily Report\_RS2013\_DLES

	A	B	C	D	E	F	G	H
1		<b>Wind Turbines Daily Report</b>						
2								
3	<b>From</b>	<b>Wind Farm</b>	<b>Windy Valley</b>		<b>Wind Turbine</b>	<b>WTG01</b>		
4	<b>September 22, 2013</b>	Turbine			Environmental Conditions			
5	<b>To</b>	<b>Model</b>	1.5s		<b>Wind Speed</b>	5.53		m/s
6	<b>September 23, 2013</b>	<b>Nominal Power</b>		1.5	MW	<b>Outside Temperature</b>		
8		<i>Energy</i>	<i>Rotor Speed</i>	<i>Nacelle Position</i>	<i>Current L1</i>	<b>Previous Values</b>		
9		<i>kWh</i>	<i>rpm</i>	<i>°</i>	<i>kA</i>	<i>Wind Speed</i>	<i>Outside Temperature</i>	
10								
11	12:00 AM	905.73	17.50	163.34	360.14	5.42	14.98	
12	1:00 AM	905.29	17.50	164.28	360.05	5.50	15.03	
13	2:00 AM	905.70	17.51	144.69	360.13	5.45	15.09	
14	3:00 AM	906.06	17.51	161.13	360.17	5.40	15.14	
15	4:00 AM	907.02	17.52	225.30	360.37	5.56	15.20	
16	5:00 AM	905.36	17.50	158.31	360.07	5.38	15.24	
17	6:00 AM	906.21	17.51	138.86	360.22	5.50	15.23	



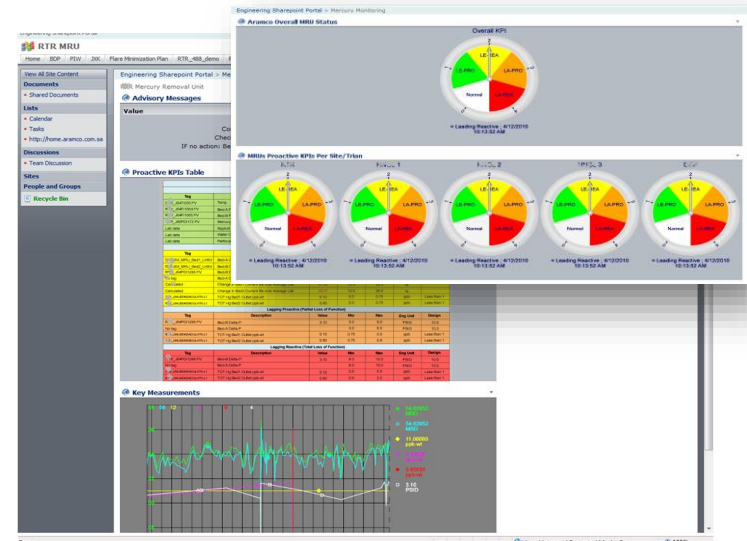


# Proactive Performance Monitoring with Dashboards

Saudi Aramco needed a proactive solution to monitor and improve performance. After implementing **PI WebParts**, the impact on **performance improvement** meant multiple millions of dollars in additional revenue.

Rayan Hafiz  
Saudi Arabian Oil Company  
OSIsoft UC 2010

رامكو السعودية  
Saudi Aramco



## Business Challenge

- The process is **not fully monitored**
- Final products **selling prices are highly sensitive** to mercury levels in the process and need to be **better monitored**

## Solution

- PI WebParts to **see into the process from anywhere**
- **Dashboards and KPI** screens to fully monitor the process
- **Predictive model** to prevent problems in the process

## Results and Benefits

- **Complete monitoring** and management with proactive tools
- **Solutions template** could be used for other applications
- The OSIsoft tools **removed layers of complication**

# PI ProcessBook

Explore

Report

Monitor

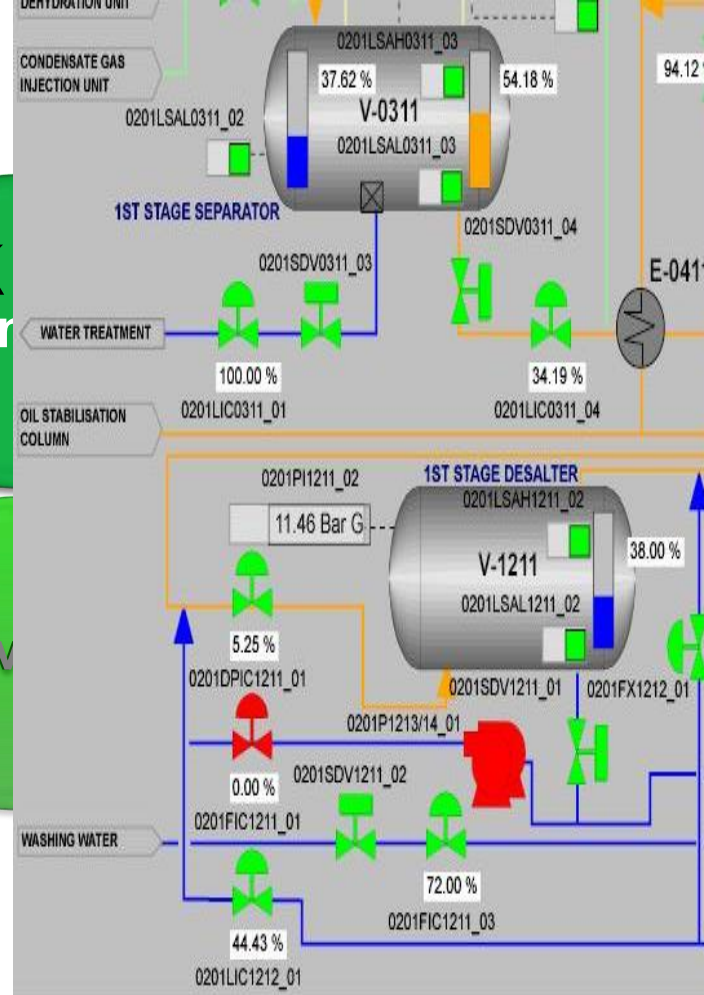
Collaborate

Share

Review

Collect

- Display of **real-time and historical data**
  - Process representation
  - **Trend** with traces
  - Context management with PI AF
- Allow for **process monitoring** and review of problematic events

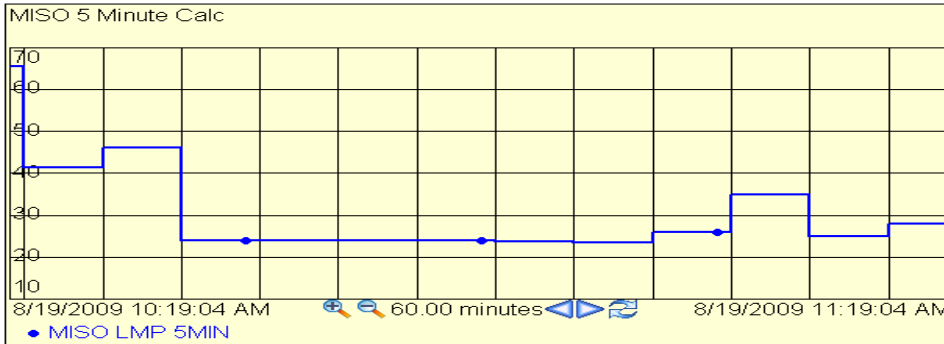




# Demand Response Overview

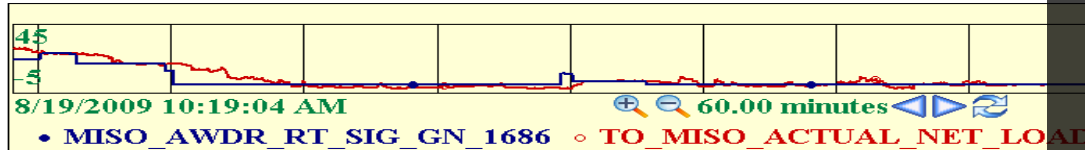
TOTAL POT LINE LOAD: **455.39 MW**

	Real Energy	Regulation	Spin Reserve
Cleared	<b>19</b>	<b>18</b>	<b>00</b>
Deployed	<b>19</b>	<b>00</b>	<b>00</b>



OCB 1500		91.3
OCB 1502		90.8
OCB 1503		92.8
OCB 1504		90.4
GCS 3805		00.0
GCS 3806		90.0
GCS 3800		00.0

Current Average Price **28.50 dollars**  
 5-MIN LMP Price **28.05 dollars**  
 Last Hour LMP Price **31.75 dollars**



## Case Study – Alcoa Demand/Response and Adaptation

Regulation Setpoint

Actual Meter

Homepage

Energy Flow

WPP Switchyard

Generation Trends

Warrick Overview

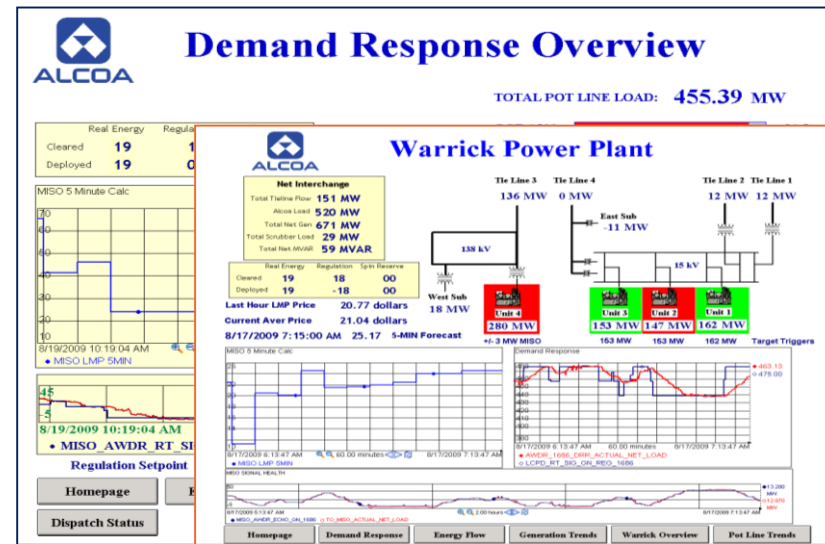
Pot Line Trends

Dispatch Status

# Industrial Scale Demand/Response

- **Warrick** is Alcoa's Largest Operating US Aluminum Smelter
- **330,000 MT** capacity/year
- **Energy is 30-40%** of Aluminum Production Costs
- Generate power for Smelter & Rigid Packaging

Brian Helms  
Power Markets Coordinator  
Alcoa Power Generation



## Business Challenge

- Worldwide commodities **price competition**
- Older (**1960s**) facility
- Business took a major hit due to **economic downturn**
- Needed to find a way to **sustain the business**

## Solution

- **PI System for energy regulation:** sell generated electricity to **Midwest ISO**
- **Monitor Midwest ISO** for energy demand notifications
- Submit **forecasted load data** from the PI System

## Results and Benefits

- Project **payback was in 4 months** (cost \$700,000)
- System **runs efficiently**
- Money help to **sustain the aluminum business**
- Revenues now **above competition**



# PI DataLink

Explore

Report

Collaborate

- Allows **summary calculations** and **filtering** of the data
- Enhances PI System Data with access to **Microsoft Excel reporting** features

	A	B	C	D
1	Début	5/27/2010 13:40		
2	Fin	5/28/2010 13:40		
3				
4	<b>Date</b>	<b>BA:CONC.1</b>	<b>BA:LEVEL.1</b>	<b>BA:TEMP.1</b>
5	27-May-10 13:51:28	43.80355835	0.69	5.41
6	27-May-10 13:51:58	0	0.00	0.00
7	27-May-10 14:07:28	5.801473618	12.40	10.64
8	27-May-10 14:19:58	18.39671898	21.03	20.03
9	27-May-10 14:45:58	25.30208397	39.79	45.05
10	27-May-10 14:55:28	40.00126648	33.46	28.58
11	27-May-10 15:12:28	42.83501053	0.65	0.83
12	27-May-10 15:12:58	0	0.00	0.89
13	27-May-10 15:27:28	5.907530308	10.27	10.69
14	27-May-10 15:42:28	20.59512711	22.60	20.78
15	27-May-10 16:06:58	27.59270096	37.20	42.05
16	27-May-10 16:13:28	39.76164246	35.06	27.03
17	27-May-10 16:33:28	43.08703995	0.53	0.92
18	27-May-10 16:33:58	0	0.60	0.98
19	27-May-10 16:50:58	6.635637283	13.87	13.76
20	27-May-10 17:06:58	19.4419651	24.95	20.57
21	27-May-10 17:26:58	25.2212265	27.14	21.21



J13 : X ✓ f\_x =IF(I13<5,"Normal","Alert")

Simhadri Super Thermal Power Station Unit # 1											
S No.		Parameter	Current Value	Avg Value of Last 02 Hour	Deviation from Average	S No.		Parameter	Current Value	Avg Value of Last 02 Hour	Deviation from Average
<b>BOILER</b>					<b>TURBINE</b>						
1	Load	524.70	525.62	Normal	1	Turbine Speed	2979.97	2978.12	Normal		
2	Total Coal Flow	376.07	377.45	Normal	2	Throttle Press	170.56	171.78	Alert		
3	Total Air Flow	1725.69	1743.93	Normal	3	First Stage Press	166.04	166.04	Normal		
4	Drum Pressure	192.15	192.95	Normal	4	Max Shaft Vibration (SHAFT VIB HPTR X)	155.18	154.26	Normal		
5	MS Temp Left	530.33	530.12	Normal	5	Max Brg Vibration (BRG VIB EXCT-X)	56.02	57.27	Normal		
6	MS Temp Right	530.33	529.47	Normal	6	Max Brg Temp (BRG-3 REAR BOT RGT)	106.66	106.66	Normal		
7	HRH Temp Left	534.85	531.92	Normal	7	Trip Oil Pressure	10.16	10.12	Normal		
8	HRH Temp Right	515.33	521.87	Normal	8	Oil Pressure	10.16	10.12	Normal		
9	Max SH Metal Temp	559.25	560.02	Normal	9	Oil Pressure	10.16	10.12	Normal		
10	Max RH Metal Temp	566.08	566.02	Normal	10	CW Inlet temp	29.65	29.70	Normal		
11	Total SH Spray	55.28	55.68	Normal	11	Condensate DO	6.78	6.63	Normal		
12	Total RH Spray	21.01	20.70	Normal	12	Condensate ACC	0.13	0.13	Normal		
13	APH Exit Gas Temp	139.20	139.75	Normal	13	DM Make-up*(08Hr/01Day)	11.96	10.93	Alert		
15	Hot Sec Air Temp	352.21	352.76	Normal	14	Seal Steam Pressure	358.60	346.94	Normal		
16	Hot Pri Air Temp	306.46	306.41	Normal							
17	Any Fan Not I/S	All In Service									
18	Seal Stm Hdr Temp	287.92	287.19	Normal							
<b>GENERATOR</b>											
1	Primary Water Cond	2.47	2.47	Normal	4	Excitor Hot Air Temp	49.53	49.33	Normal		
2	H2 Pressure	3.52	3.52	Normal	5	Seal Oil DP H2S (TE)	2.30	2.28	Normal		
3	Seal Oil Temp	31.72	31.68	Normal	6	Seal Oil DP H2S (EE)	2.43	2.42	Normal		

Case Study – NTPC  
Critical Parameters Monitoring





Current Value Single Value | Archive Value Multiple Value | Compressed Data | Sampled Data | Timed Data | Calculated Data Calculation | Time Filtered | Search | Properties | Update | Settings | About | Help | Notification Search

D7 : X ✓ fx

**CRITICAL CONTROL POINT PERFORMANCE**

Filter: Month / Year | Date From: 01/07/2010 | Date To: 31/07/2010 | 31 day period | Data Last Updated: 21/09/2010 12:40

District/Locality CCP	% Hours Recorded	Critical Limit - % Good			Target Limit - % Good			# Alarms	Critical Alarms		Target Alarms		Last Refresh
		In Band	Low	High	In Band	Low	High		Low	High	Low	High	

**SWR**

Bunbury																									
Australind																									
Chlorine_Residual_Inlet	R	31.1	G	98.2	G	99.5	G	98.7	G	85.8	G	96.6	G	88.4	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Turbidity	R	31.1	G	100.0	G	100.0	G	100.0	O	93.7			G	98.7	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
UV_Dose	R	31.1	R	88.7	G	88.7			N/A				G	0	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Boyanup																									
Chlorine_Residual_Inlet	R	31.1	O	98.2	O	99.5	O	98.7	R	85.8	O	96.6	R	88.4	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Turbidity	R	31.1	G	100.0	G	100.0	G	100.0	O	93.7			R	98.7	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
UV_Dose	R	31.1	R	88.7	G	88.7			N/A				G	0	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Collie																									
Chlorine_Residual_Inlet	R	31.1	G	98.2	G	99.5	G	98.7	G	85.8	G	96.6	G	88.4	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Turbidity	R	31.1	G	100.0	G	100.0	G	100.0	O	93.7					G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
UV_Dose	R	31.1	R	88.7	O	88.7			N/A						G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Darkan																									
Chlorine_Residual_Inlet	R	31.1	G	98.2	G	99.5	G	98.7	R	85.8	O	96.6	R	88.4	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Turbidity	R	31.1	G	100.0	G	100.0	G	100.0	O	93.7					G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
UV_Dose	R	31.1	R	88.7	G	88.7			N/A						G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Busselton																									
Mandurah																									
Dwellingup																									
Chlorine_Residual_Inlet	R	31.1	G	98.2	G	99.5	G	98.7	R	85.8	O	96.6	R	88.4	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Turbidity	R	31.1	G	100.0	G	100.0	G	100.0	O	93.7					G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
UV_Dose	R	31.1	R	88.7	G	88.7			N/A						G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Mandurah																									
Chlorine_Residual_Inlet	R	31.1	O	98.2	O	99.5	O	98.7	R	85.8	O	96.6	R	88.4	G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40
Turbidity	R	31.1	G	100.0	G	100.0	G	100.0	O	93.7					G	0	G	0	G	0	G	0	G	0	21/09/2010 12:40

**Case Study – Water Corporation of Western Australia Critical Control Point Performance**

# PI DataLink 2013 & Microsoft Excel 2013

- **PI DataLink 2013**
  - **PI AF** support with the new **PI System Search** engine
- **Microsoft Excel 2013**
  - Business Intelligence (BI) tools are integrated
  - Microsoft **PowerPivot**
  - Microsoft **Power View**

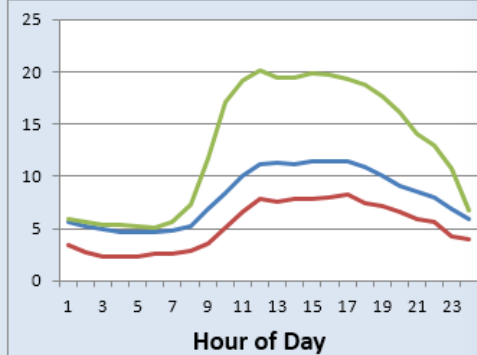


# Demand Profiling and Grid Analysis



Substation

Feeder Distribution, kWh



Distribution Profile Report\_2013 - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW ADD-INS PI DATALINK PI AF Builder POWERPIVOT

X28

## Feeder and Pole Transformer Analysis

**Feeder Circuit**

- FD1209
- FD2349
- FD4602

**Pole Transformer**

- PT0398
- PT1324
- PT2235
- PT4537
- PT7465
- PT7745
- PT8356
- PT8461

**Weekday Profiles, kWh**

**Weekday \ Weekend Profiles, kWh**

**Monthly Profiles, kWh**

**Pole Loads at Peak (9 am - 4 pm), kWh**

	Jan	Feb	Mar	Apr	May	Jun
	KWH	KWH	KWH	KWH	KWH	KWH
PT0398	4.4	4.5	5.0	5.3	5.5	5.5
PT1324	3.5	3.6	3.5	4.0	4.1	4.2
PT2235	3.4	3.9	4.1	4.5	4.7	3.1
PT4537	2.8	3.2	3.3	3.7	3.8	3.7
PT7465	3.1	3.2	3.5	3.8	3.9	4.0
PT7745	3.2	3.2	3.1	3.3	3.6	4.3
PT8356	10.6	11.0	11.0	11.7	12.1	11.7
PT8461	3.3	3.3	3.6	3.8	3.8	3.5

Substation Feeder and Poles Substation Feeder Loading Substation Service Area

READY CALCULATE 100%

OSIsoft. REGIONAL SEMINARS

© Copyright 2013 OSIsoft, LLC.

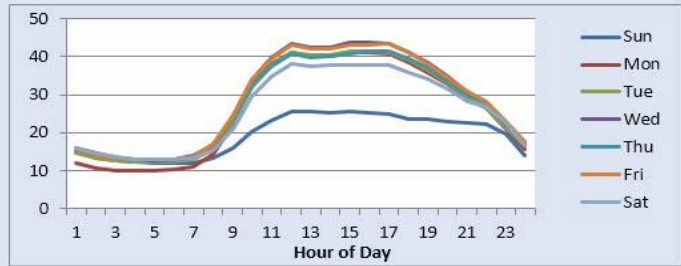
25

# Feeder and Pole Transformer Analysis

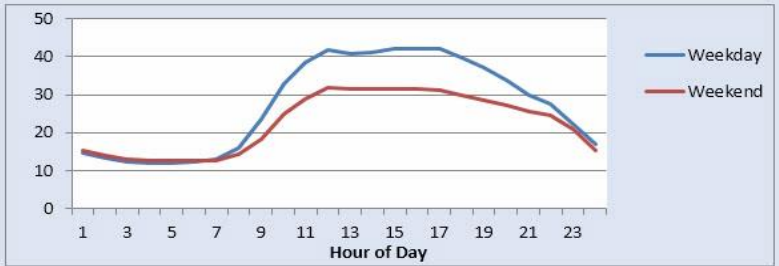
- Feeder Circuit**
- FD1209
  - FD2349
  - FD4602

- Pole Transformer**
- PT0398
  - PT1324
  - PT2235
  - PT4537
  - PT7465
  - PT7745
  - PT8356
  - PT8461

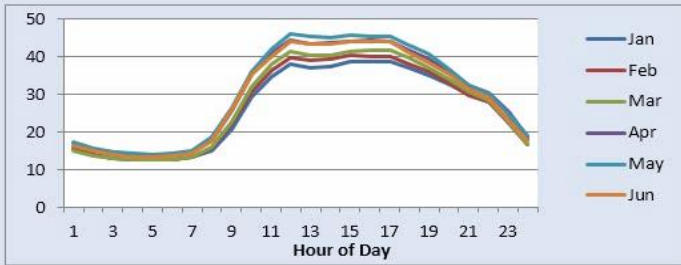
**Weekday Profiles, kWh**



**Weekday \ Weekend Profiles, kWh**



**Monthly Profiles, kWh**



**Pole Loads at Peak (9 am - 4 pm), kWh**

	Jan KWH	Feb KWH	Mar KWH	Apr KWH	May KWH	Jun KWH
PT0398	4.4	4.5	5.0	5.3	5.5	5.5
PT1324	3.5	3.6	3.5	4.0	4.1	4.2
PT2235	3.4	3.9	4.1	4.5	4.7	3.1
PT4537	2.8	3.2	3.3	3.7	3.8	3.7
PT7465	3.1	3.2	3.5	3.8	3.9	4.0
PT7745	3.2	3.2	3.1	3.3	3.6	4.3
PT8356	10.6	11.0	11.0	11.7	12.1	11.7
PT8461	3.3	3.3	3.6	3.8	3.8	3.5

# PI Coresight Explore

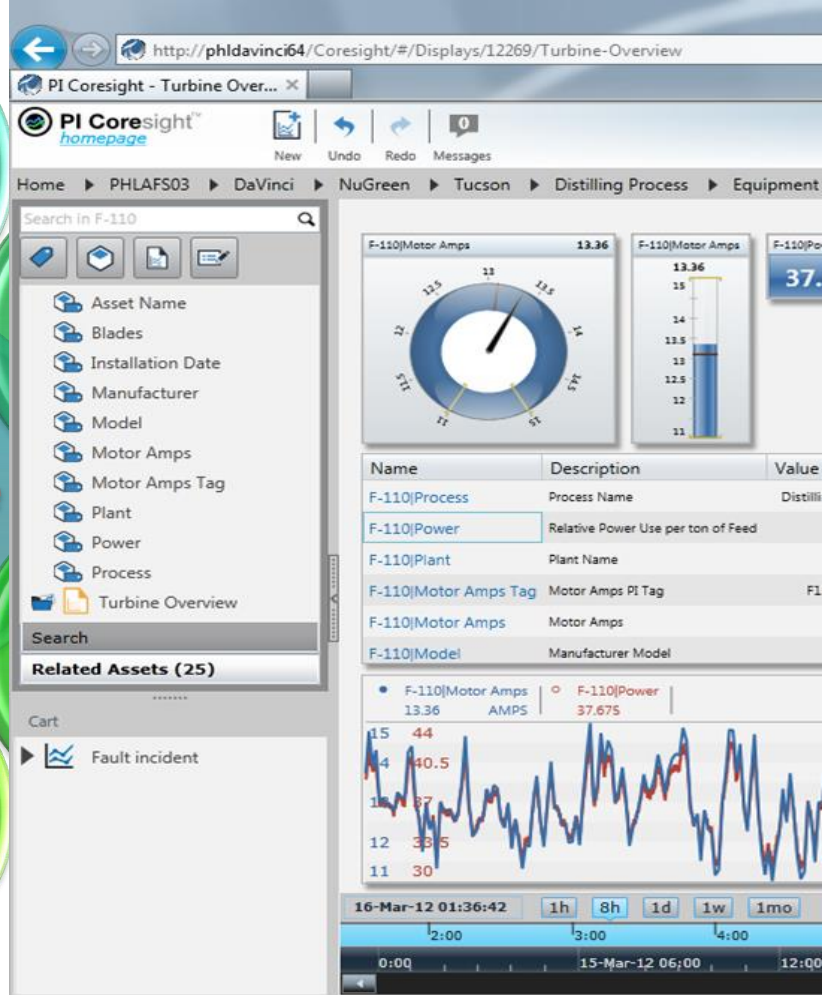
Report

Collaborate

Share

Collect

- **Modern** Web based visualization tool
- Facilitates **ad hoc analysis**
- **Instantaneous learning**
- Software with a **fast release cycle** to fit your needs
- **No client-side installation**

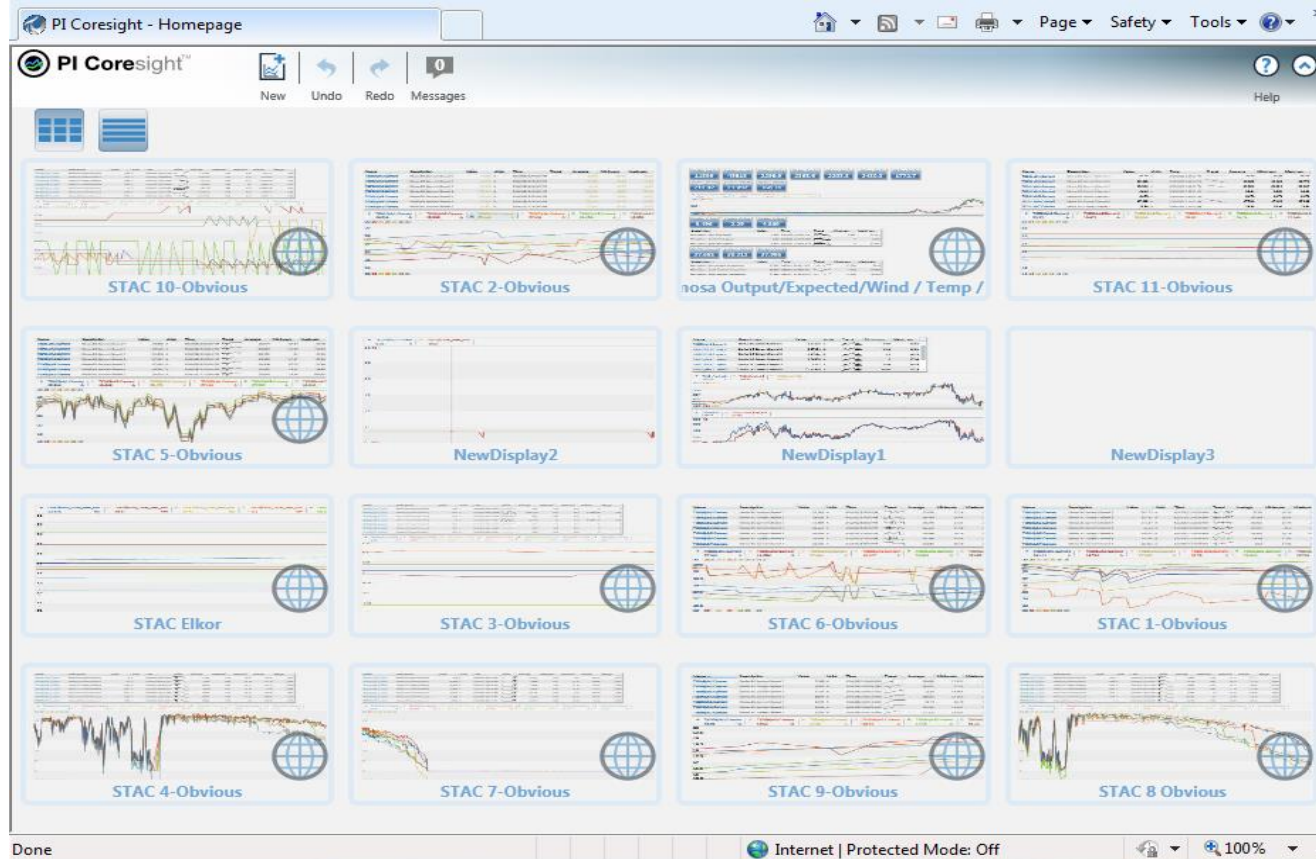




# Benefits of PI Coresight at **AMONIX™**

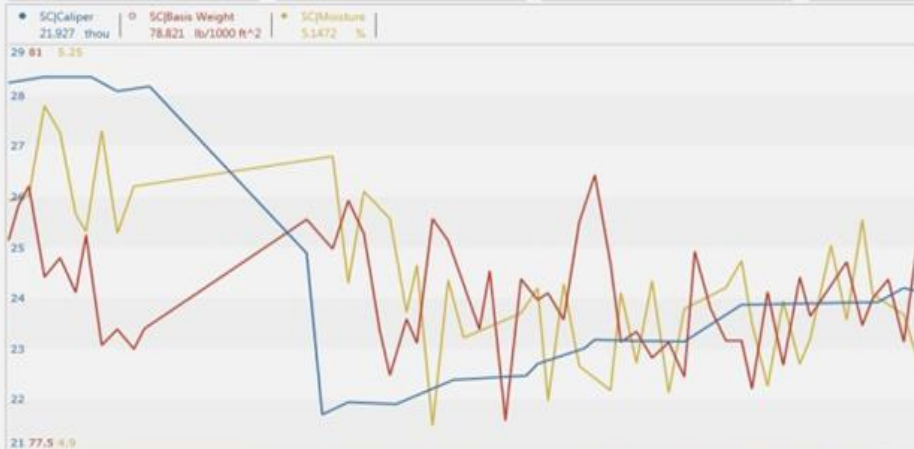


- **Minimal learning curve**
- **Rapid trend analysis**
- **Leveraging PI AF structure and data**





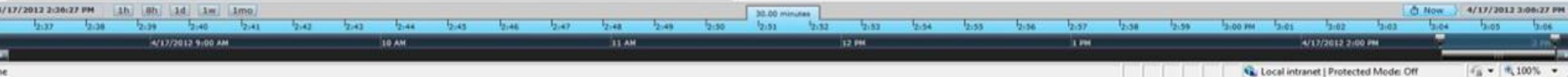
# RockTenn Insight for Operators



Name	Description	Value	Trend	Average	StdDev	Maximum	Minimum
SCJ Caliper 2-sigma	PM#1 Caliper Reel 2 Sig	1.053		0.86739	0.073061	1.053	0.73772
SCJ Basis Weight 2-sigma	PM#1 Basis Weight Reel 2 Sig	4.7333		3.8935	0.45412	4.9964	2.8824
SCJ Moisture 2-sigma	PM#1 Moisture Reel 2 Sig	0.4664		0.43212	0.025518	0.4664	0.408

*“Operators are afraid of full blown PC Applications, PI Coresight will give them easy to use ad hoc capabilities.”*

– Matt Corcoran, RockTenn



# Visualization and Mobility



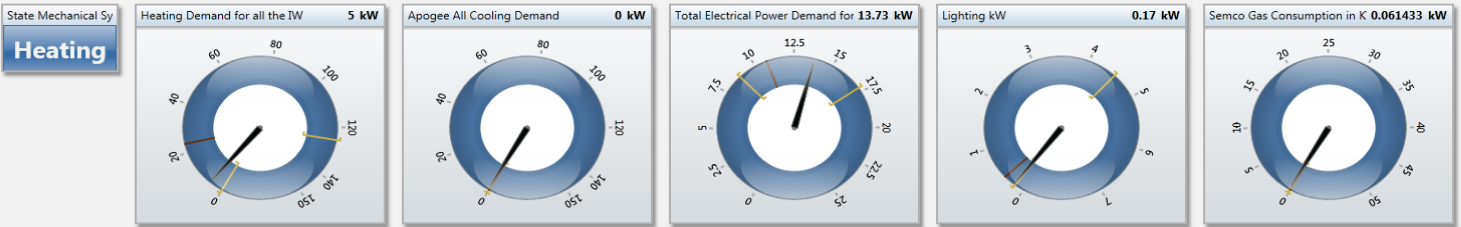
Your needs are evolving:

- **Remote** access
- Access at **any time**
- **Self-service** usage

# Mobility and the PI System

- Mobile **PI Coresight** application for the **iPad** and the **iPhone** now available!
  - Native application
  - Free download on the Apple App Store™
  - Test it now with **sample data**

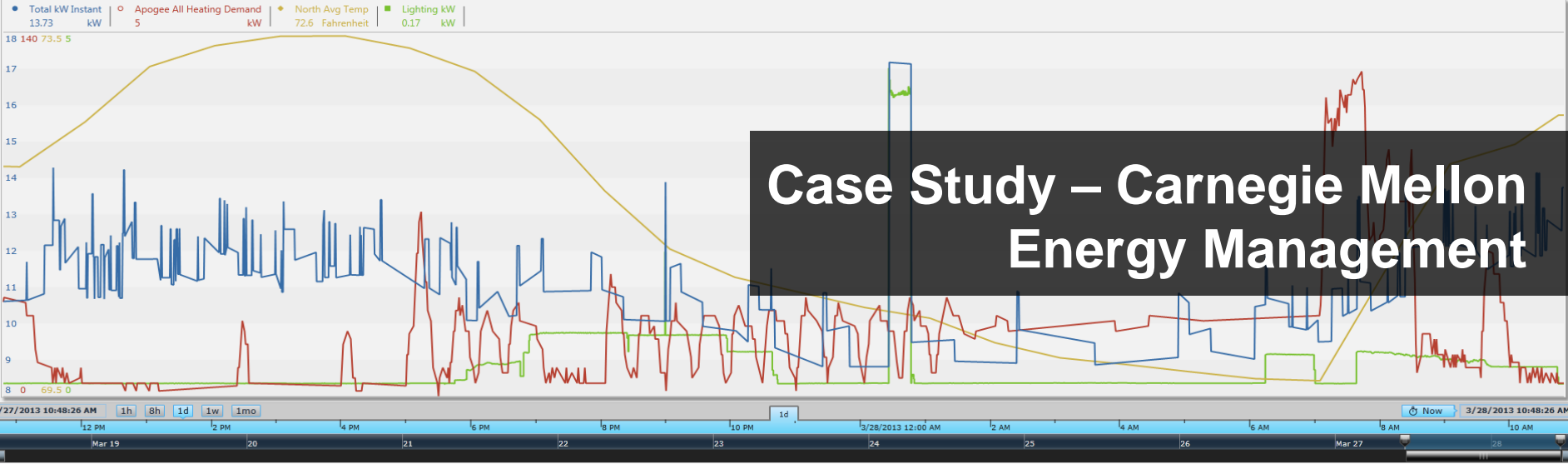




Name	Description	Value	Units	Trend	Average	Minimum	Maximum	StdDev	Range
Apogee All Heating Demand	Heating Demand for all the IW	5	kW		23.64	0	125	21.44	125
Total kW Instant	Total Electrical Power Demand for all IW	13.73	kW		10.77	8.812	17.18	1.402	8.365

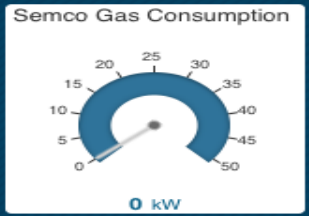
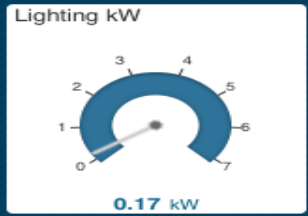
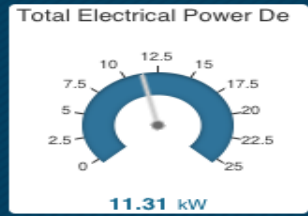
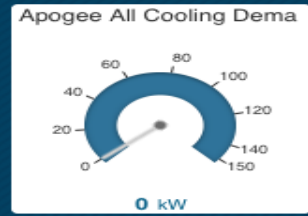
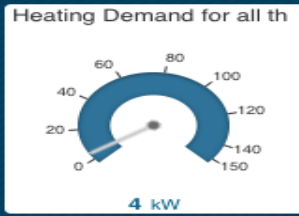
  

Name	Description	Value	Units	Trend	Average	Minimum	Maximum	StdDev	Range
North Avg Temp	North Average Temperature	72.6	Fahrenheit		71.5	69.7	73.5	1.34	3.79
North IWNorth Avg Ill	North Average Illuminance	857.8	Lux		336.3	0	1,469	461.7	1,469



# Case Study – Carnegie Mellon Energy Management

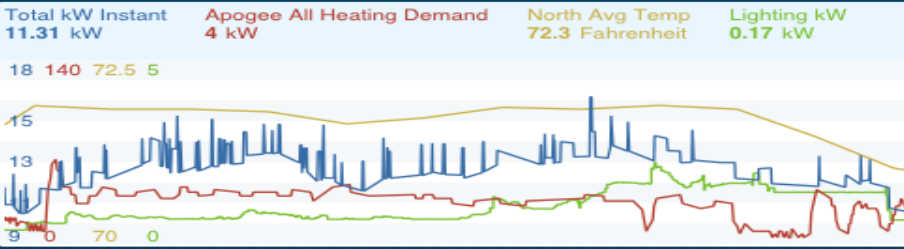
State Mechanical System  
**Heating**



Name ▲	Description	Value	Units	Trend	Average	Minimum	Maximum
<b>Apogee All Heating Demand</b>	Heating Demand for all the IW	4	kW		28.82	2	124
<b>Total kW Instant</b>	Total Electrical Power Demand for all IW	11.31	kW		11.38	9.497	17.95

Description ▼	Value	Units	Trend	Average	Minimum	Maximum	StdDev
North Average Temperature	72.3	Fahrenheit		71.2	70.1	72.3	0.622
Daylight Level Apogee	1,418	Lux		1,236	1,500	226.57	

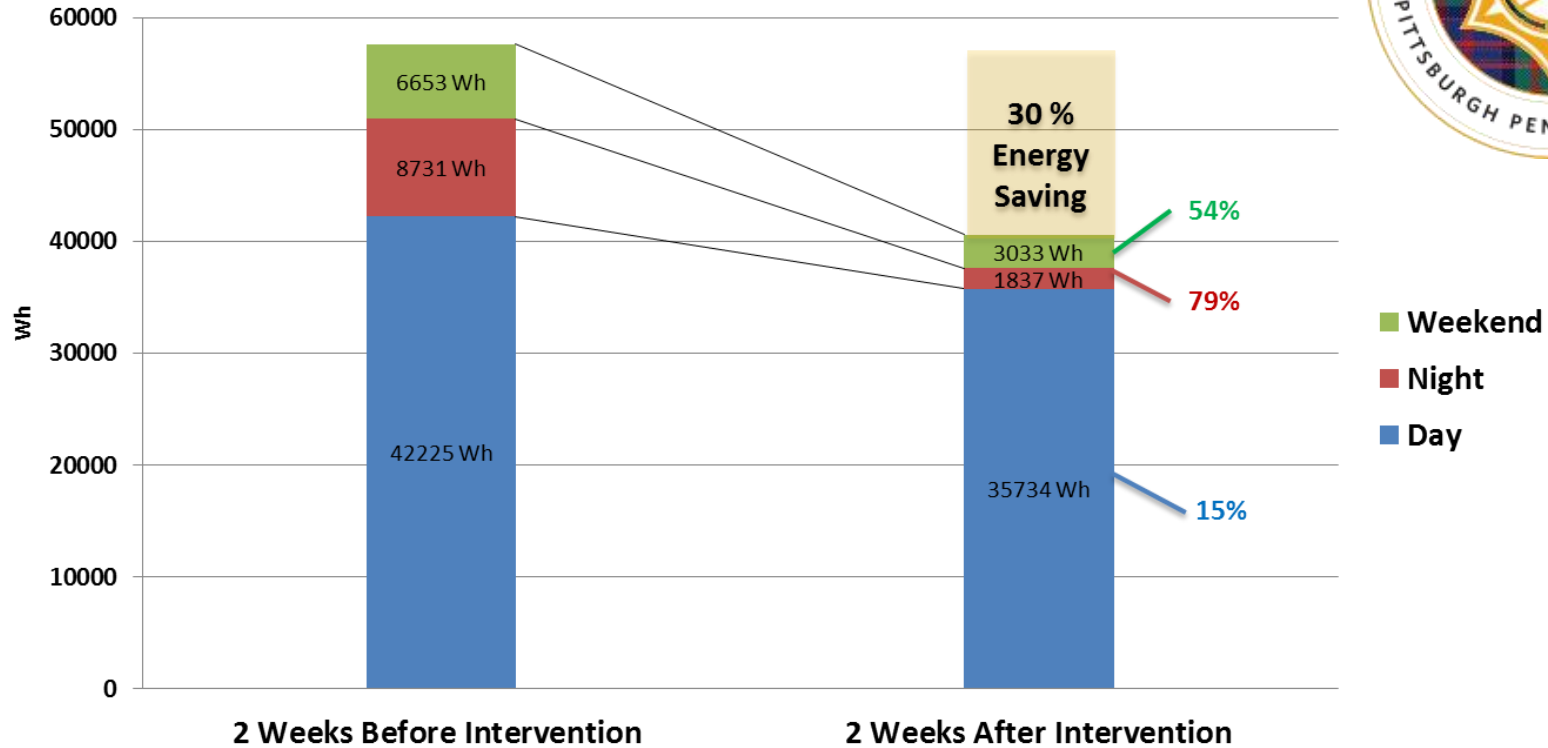
# Case Study – Carnegie Mellon Energy Management





# Case Study – Energy Management

## Energy Savings (CFA n=7)



# Support for iPad and iPhone



# Support the Devices you Use

How can you tell now what every team member will use...

tomorrow...

next week...

**especially** next year!



# Collect Data with Different Devices



The screenshot displays a mobile application interface for data collection. At the top, it shows 'PI Manual Logger' and 'TOURS'. Below this is a 'Back' button and a timestamp 'Apr 09 2013 - 12:34:14 pm' with '1 / 8 tags'. The main section is titled 'Pump P250 Temp' and includes instructions: 'Use the vibration probe to measure the Temperature for Pump P250.' A 'Value' input field contains '190'. Below the input, it shows 'Limits violated: Hi(185)' and 'H:185 L:155'. The 'Previous value' is '184 - Apr 09 2013 - 12:34:14 pm' with a link '> more values'. A 'Timestamp' section shows 'Apr 09 2013 - 12:34:14 pm'. A 'Comment' field is empty. At the bottom, there are navigation buttons for 'Next / Prev' and 'All Missing'.

- Browser interface is device agnostic
- Simplified screen
- Android phone & tablet
- iPhone and iPad
- Any modern browser (**HTML5** support)



# View PI ProcessBook Content on Different Devices

The screenshot shows the PI Coresight web interface. At the top left is the PI Coresight logo. Below it is a search bar labeled "Search All Displays". To the right of the search bar is a "Browse Displays" section with a grid icon selected and a "New Display" button. The main content area is titled "ALL DISPLAYS" and features a "Sort by:" dropdown menu set to "Most Recently Opened". Below the sort menu is a "View:" section with filters for "PI ProcessBook", "PI Coresight", "Public", and "Personal". The main area displays a grid of eight process displays, each with a thumbnail image, a title, and the author's name. The displays are: "Main Sector - Production" by Tomas Hans, "Main Tank" by Apu San, "Vault Simulation" by Apu San, "The Mixer" by Adam Solo, "Process Overview" by Derek Brans, "Tank Production" by Adam Solo, "Plant in Montreal" by Derek Brans, and "Main Pot Lines" by Derek Brans. On the left side of the interface, there is a sidebar with "GROUPS" and "FOLDERS" sections. The "GROUPS" section includes "ALL DISPLAYS" (57), "FAVORITES" (3), "MY DISPLAYS" (3), and "RECENTLY ADDED" (12). The "FOLDERS" section includes "Coresight" (10), "Milling North Sector" (5), "Milling East Sector", "Milling West Sector", and "Milling South Sector". At the bottom left of the interface is the OSISOFT logo.

- **Browse PI ProcessBook displays** the same way as PI Coresight
- Any modern browser (**HTML5** support)



# PI Visualization Suite Benefits

- Access to the data in the format you want **reduces the time to insight**
- Access to the data when and where you want **facilitates collaboration and sharing of insights**
- **All** visualization tools to **any** user gives **the right tool** for the job **at the right time**





# Questions

Please wait for  
the **microphone**  
before asking  
your questions



State your  
**name &  
company**



# Operational Insights Enterprise Wide





**THANK**

**YOU**

Brought to you by



# Rami Antoun

[rantoun@osisoft.com](mailto:rantoun@osisoft.com)

Customer Support Engineer  
OSIsoft, LLC