OSIsoft®

USERS CONFERENCE 2012

The Power of Data

101 Uses for PI ProcessBook 2012

Presented by **Laurie Dieffenbach**, Product Manager

Andre Downey, Development Lead

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USERS CONFERENCE 2012

The Power of Data

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Customer Displays

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Types of Displays

- 18 examples from different industries and countries
- Some represent a process or part of it with images
- Some show mostly values and status
- Some feature a particular kind of symbol

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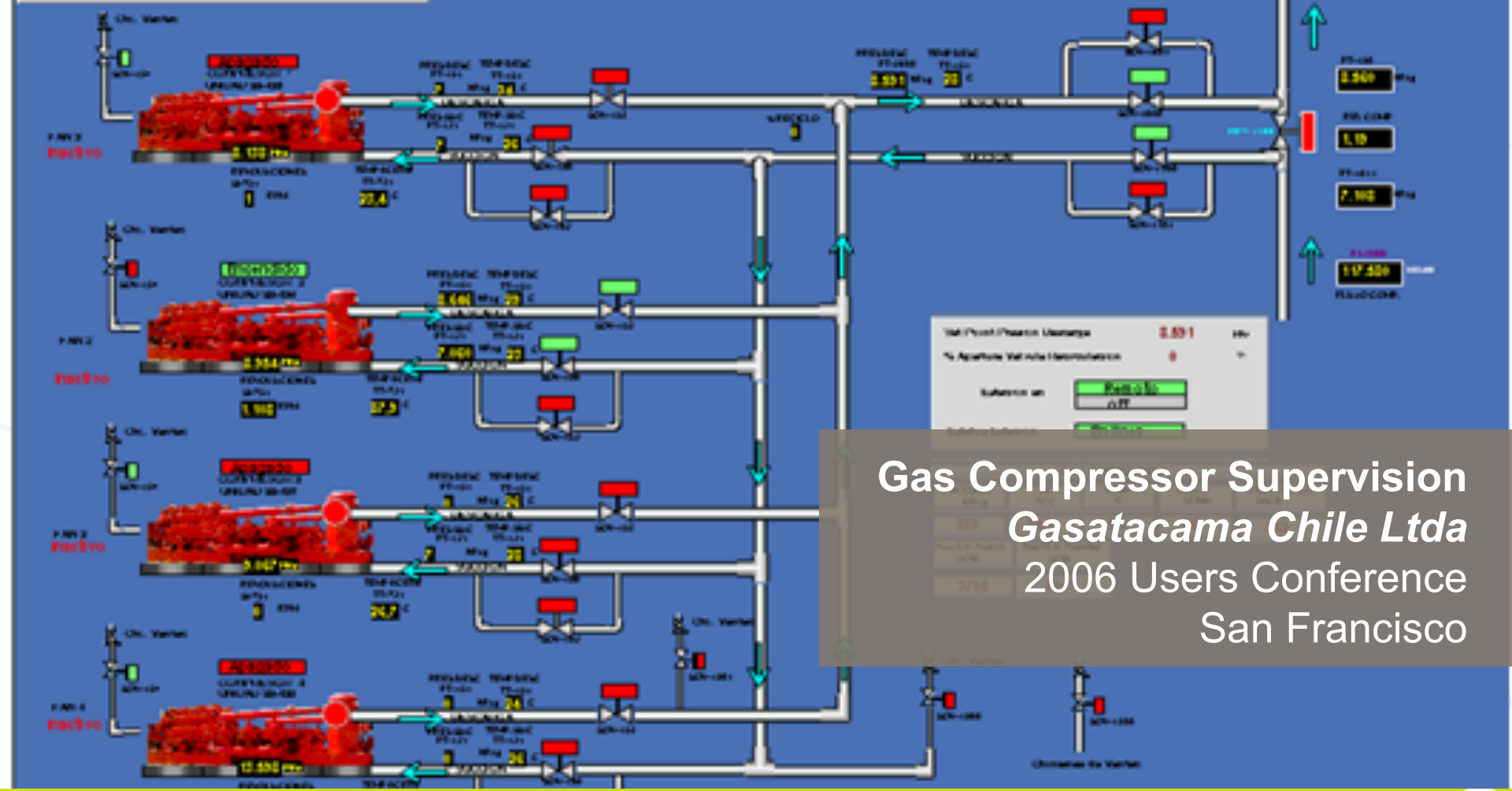

Gas Compressor Supervision

Gasatacama Chile Ltda

2006 Users Conference

San Francisco

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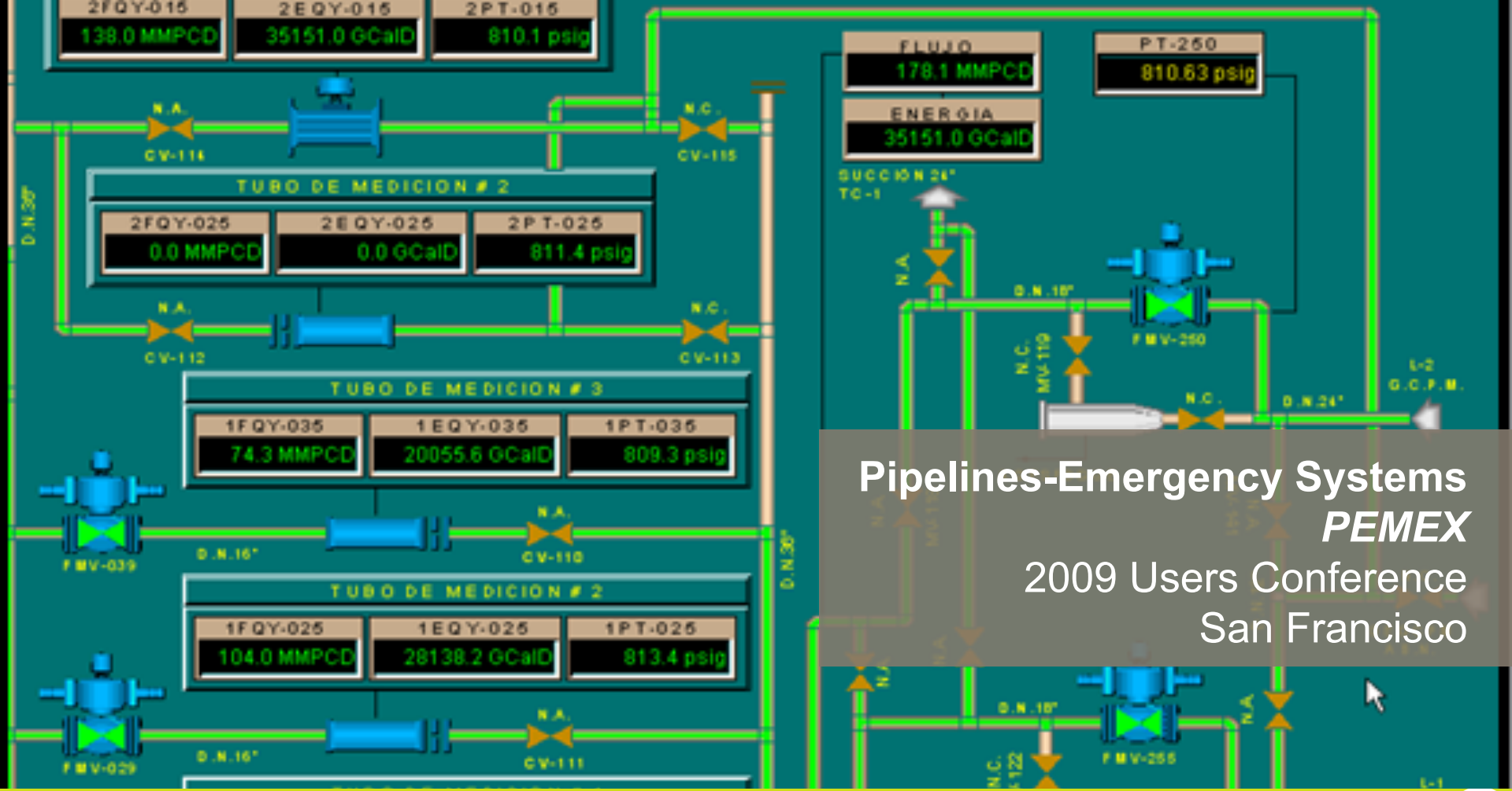

Pipelines-Emergency Systems

PEMEX

2009 Users Conference

San Francisco

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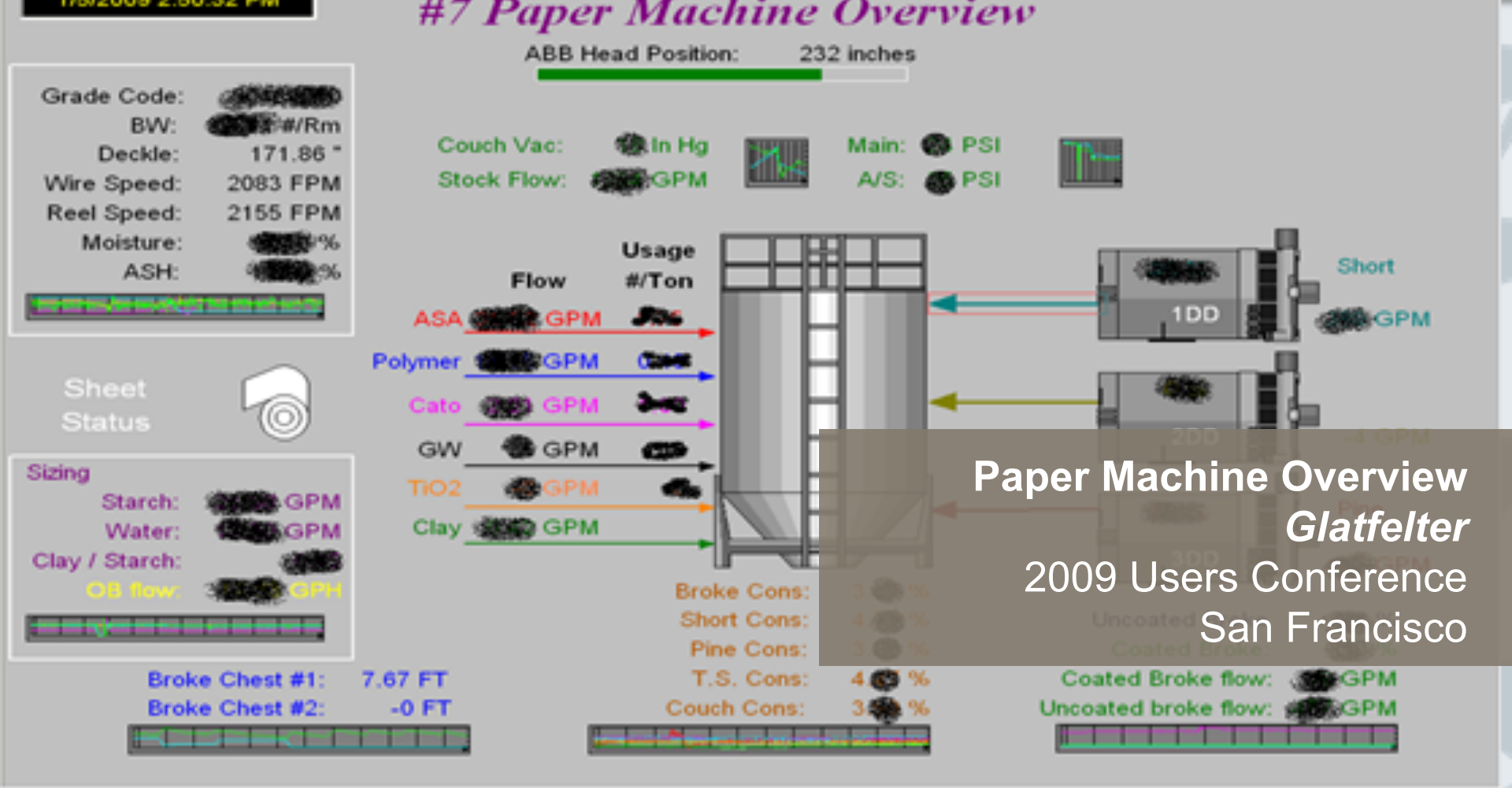

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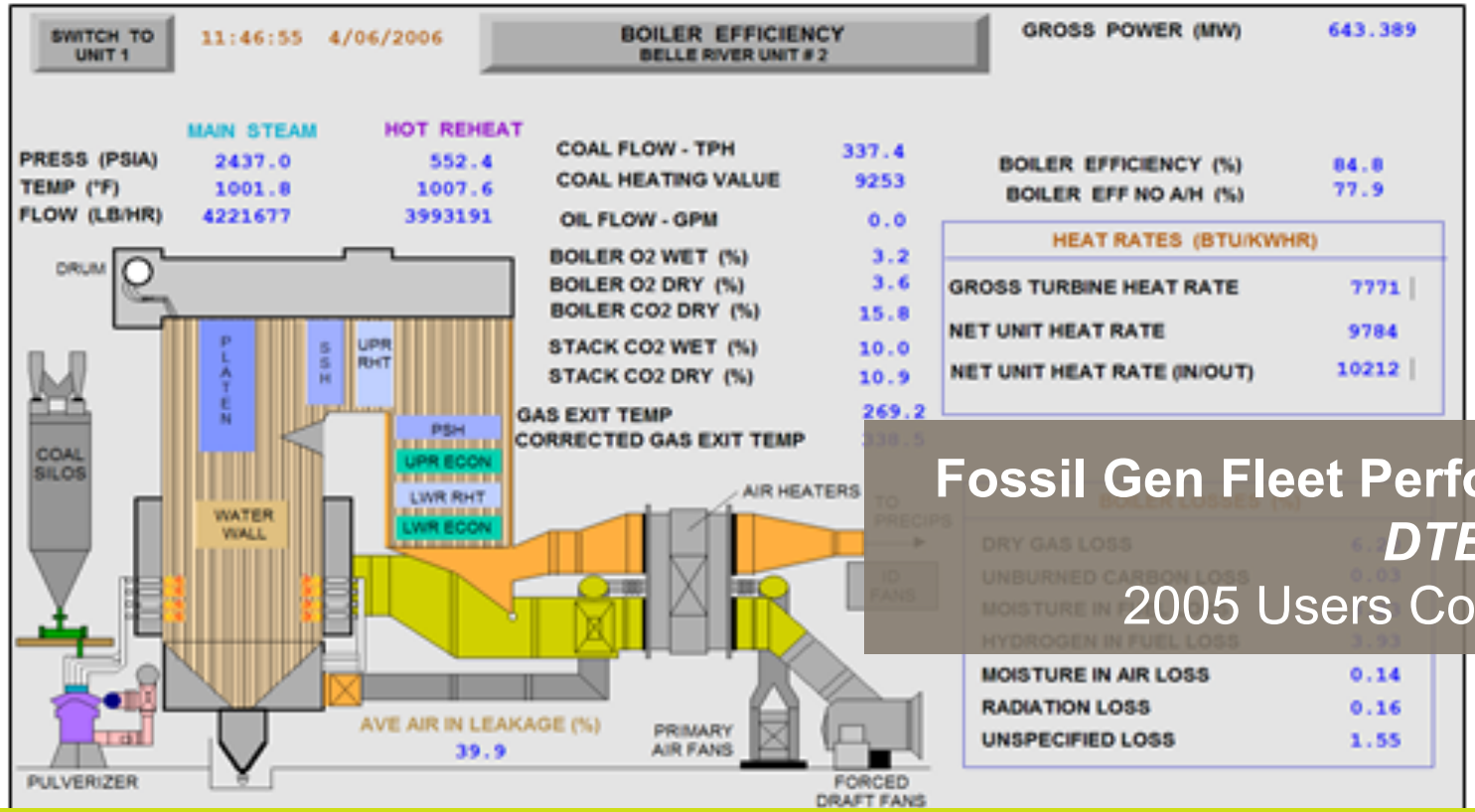
Thermal Performance Calculation Engine



Fossil Gen Fleet Performance

DTE Energy

2005 Users Conference

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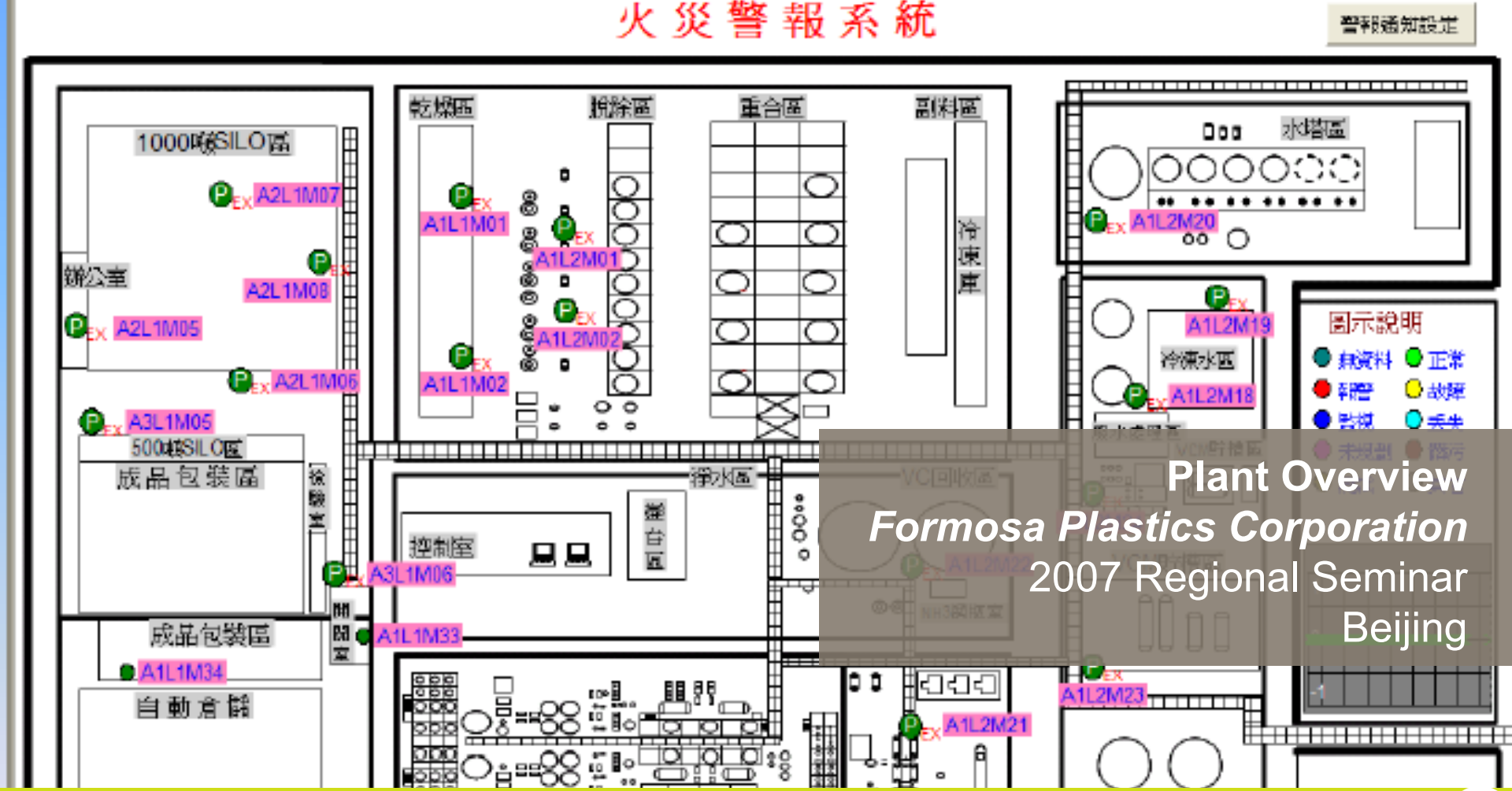

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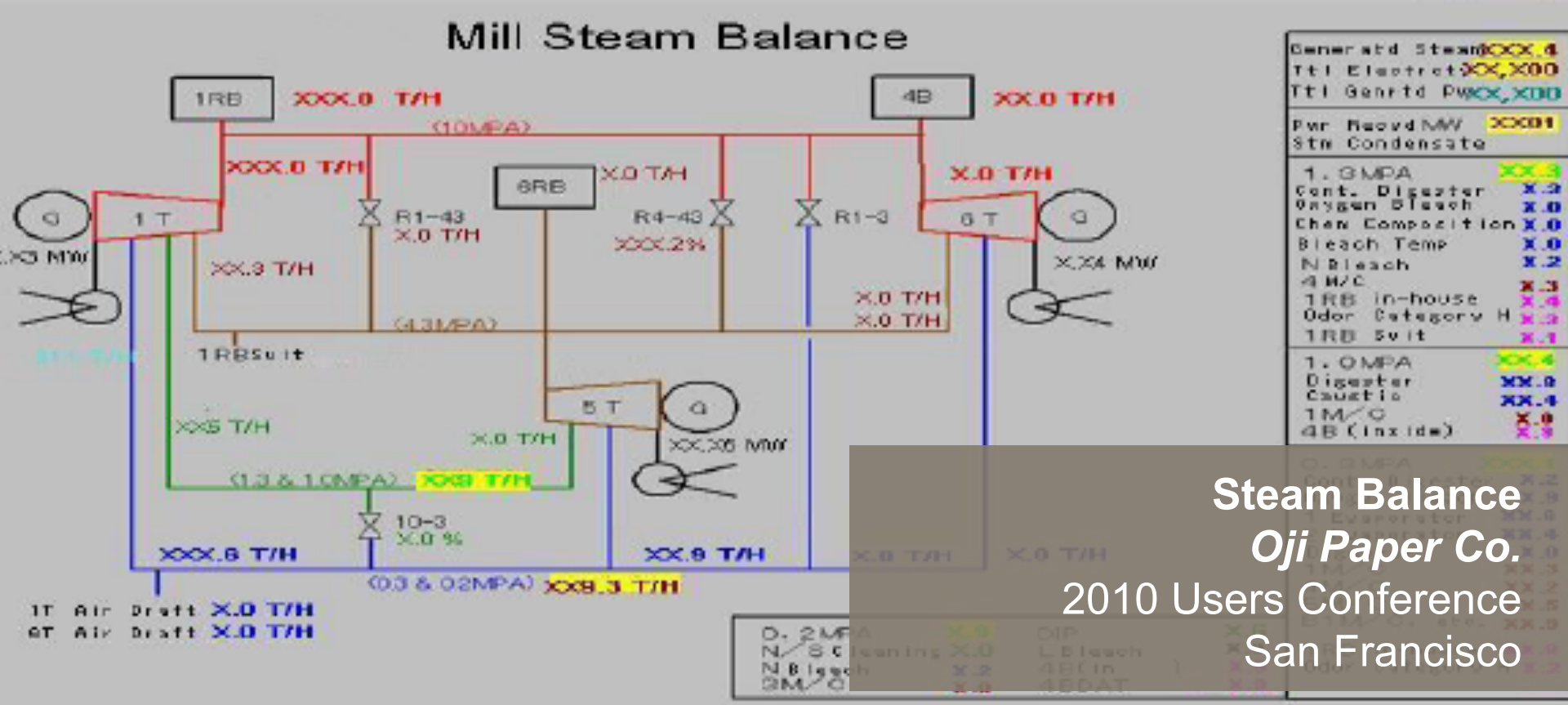

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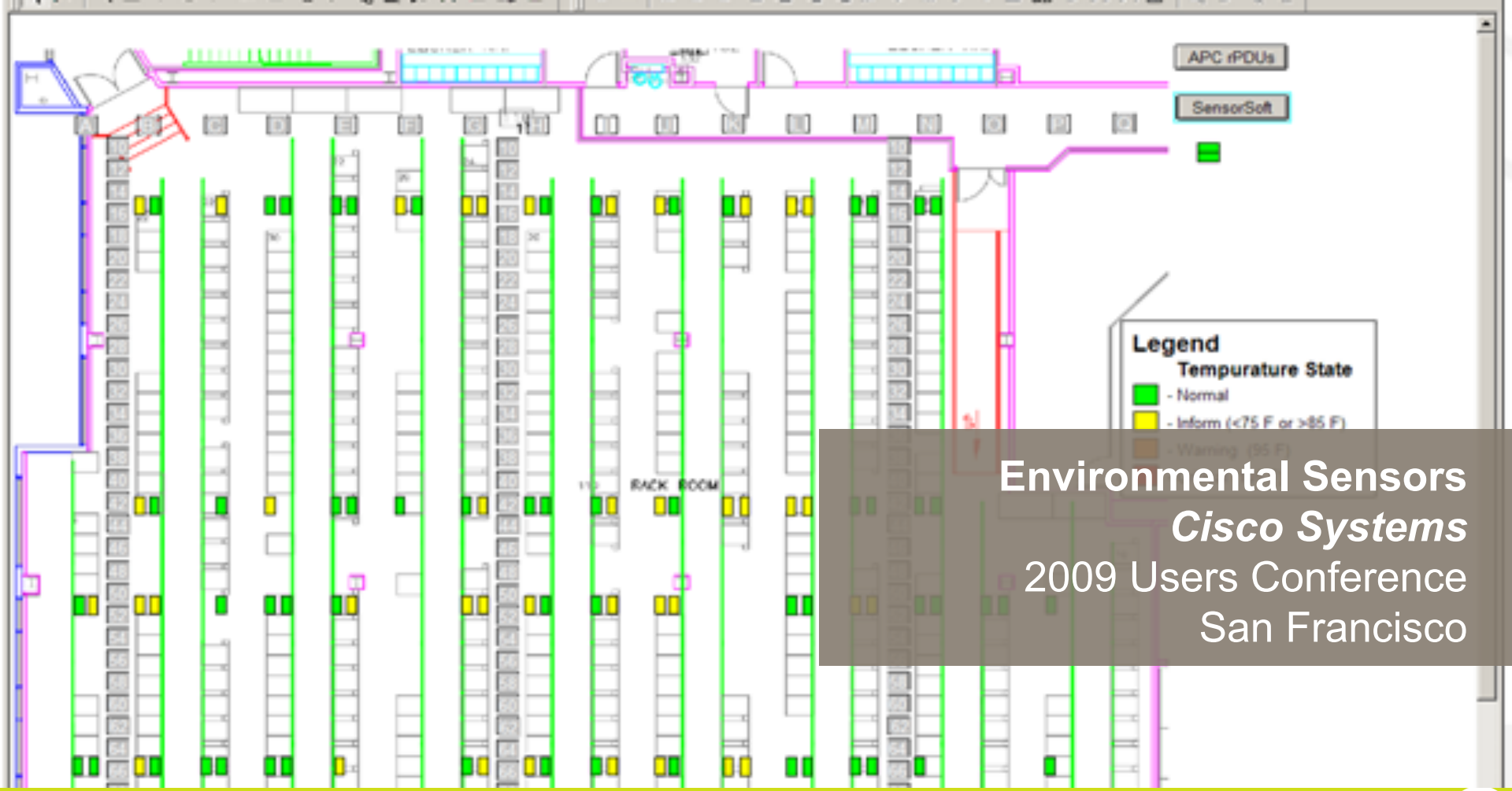

Environmental Sensors
Cisco Systems
2009 Users Conference
San Francisco

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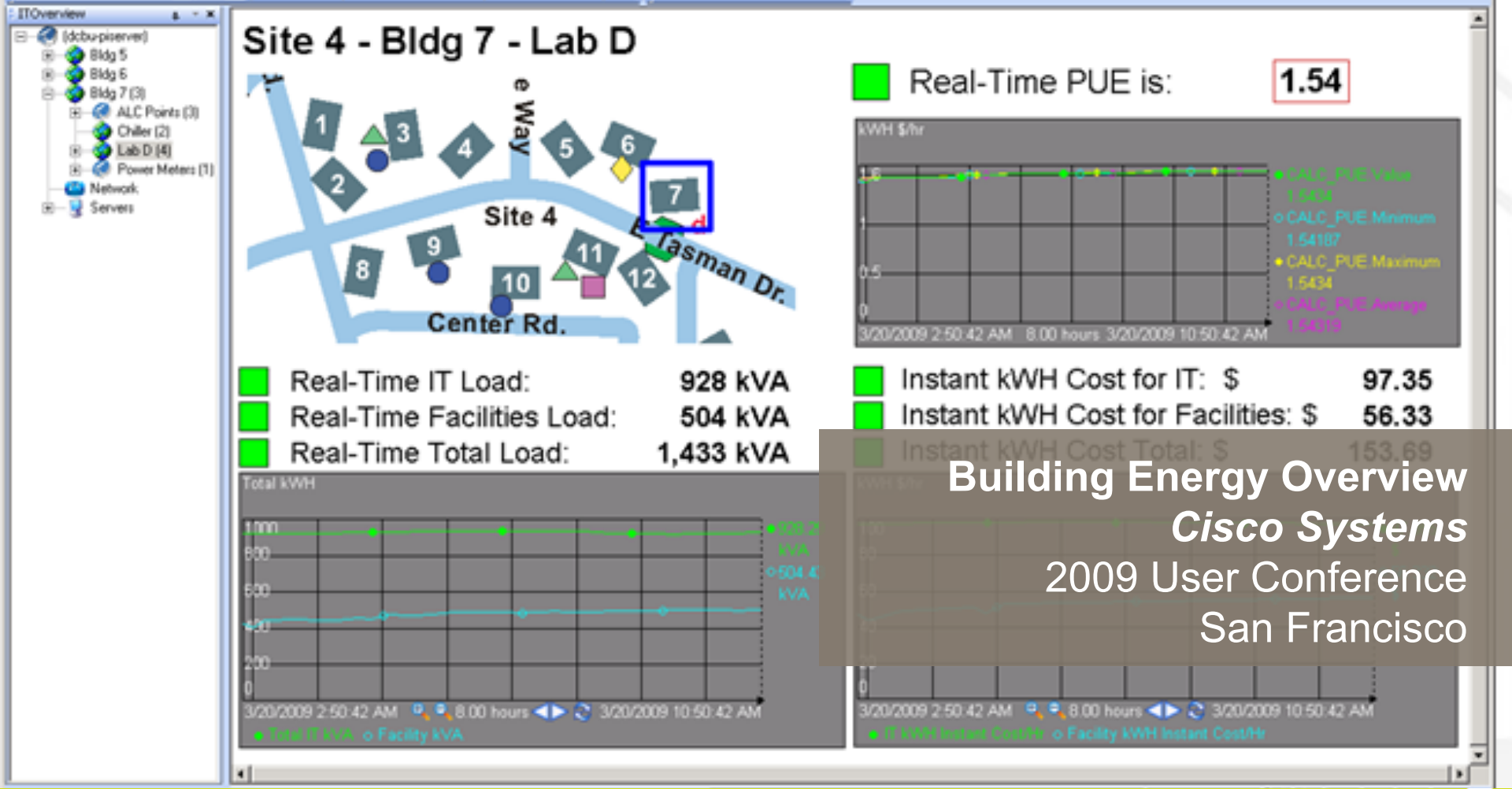

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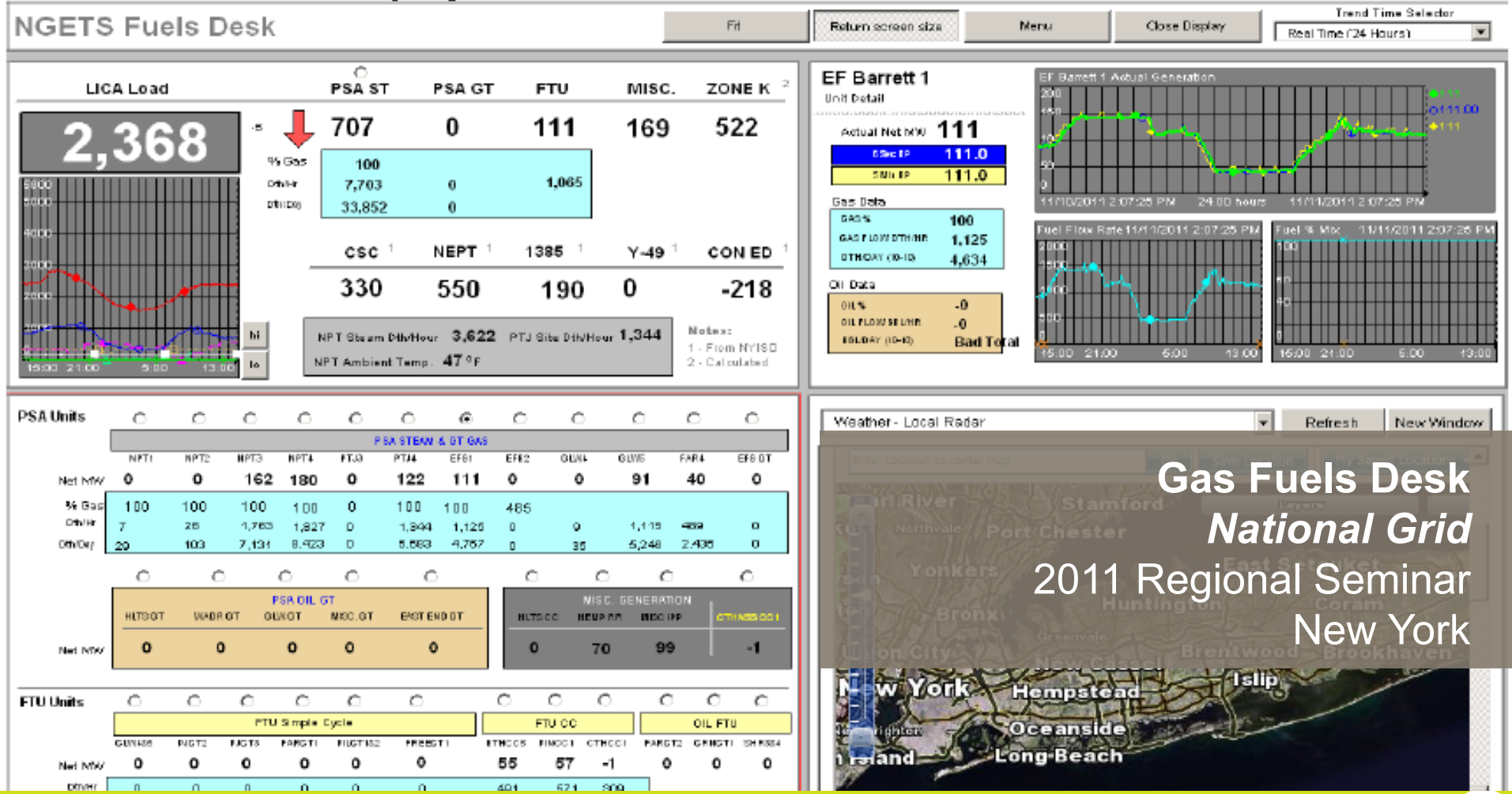

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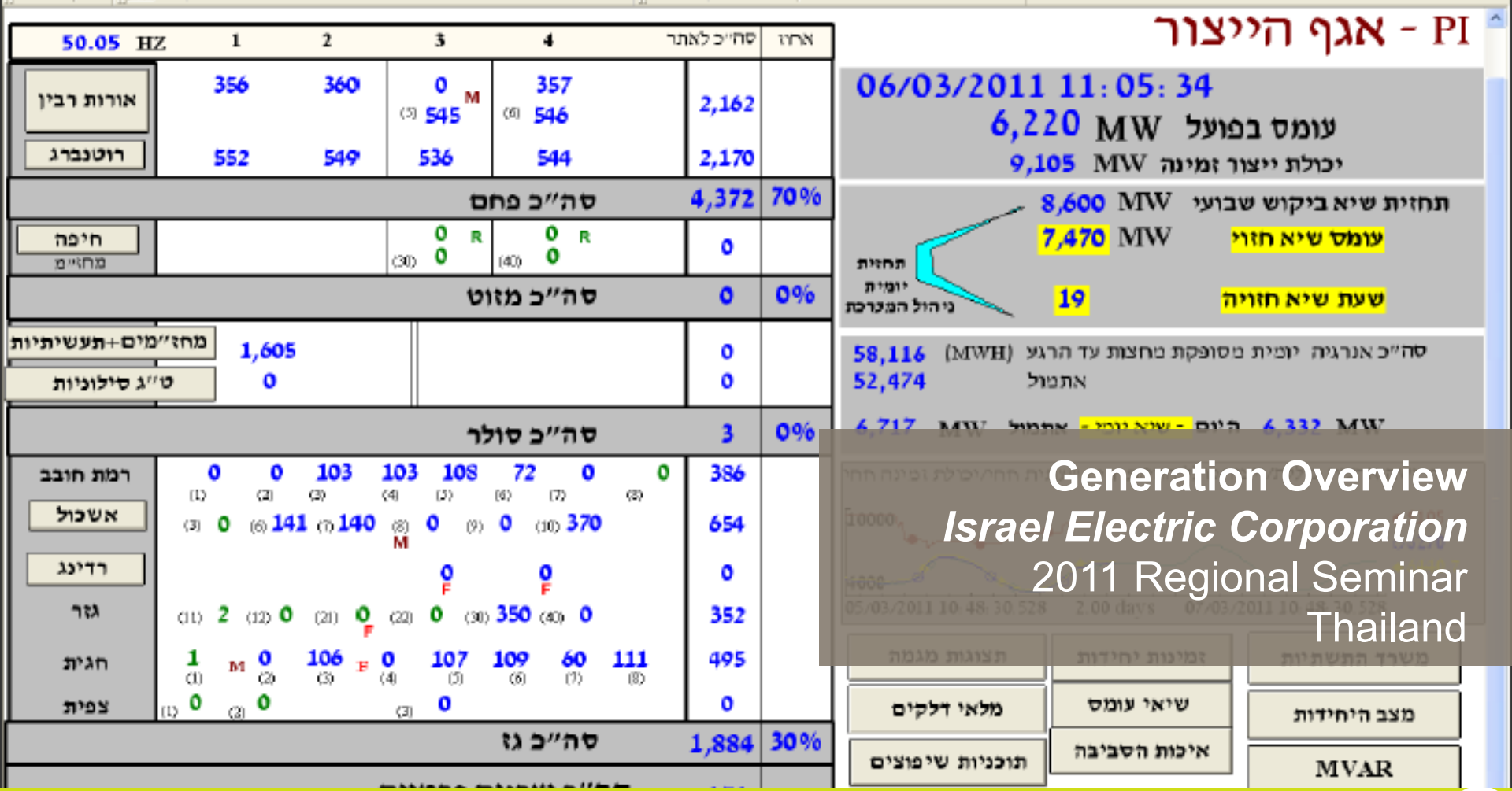

Generation Overview

Israel Electric Corporation

2011 Regional Seminar

Thailand

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Vault Summary KVA, Amps and Status

Newark Airport Vault Summary

Data as of: 9/6/2011 4:20:08 PM

	NMP status					2601 Amps			2602 Amps			2603 Amps			kVA		
	2601	2602	2603	XFMR kVA	I(FL) AMPS	A	B	C	A	B	C	A	B	C	2601	2602	2603
Loc 01 Tower Switch House				1500	1804	60	66	78	0	0	0	54	60	72	57	0	52
Loc 02 Terminal C West				2000	2406	1236	1212	1152	1206	1206	1146	1248	1194	1116	960	948	949
Loc 03 Terminal C Middle				2000	2406	1236	1290	1158	1218	1122	1128	1320	1356	1272	1004	906	1033
Loc 04 Terminal C East				2000	2406	906	930	846	888	882	774	720	822	750	715	679	614
Loc 05 Terminal B North				2500	3007	854	854	805	868	861	805	791	819	763	694	692	653
Loc 06 Terminal B South				2500	3007	588	588	574	539	581	560	539	588	595	470	510	465
Loc 07 CHRP				2000	2406	372	342	330	0	0	0	318	306	312	268	0	262
No location #8																	
Loc 09 Terminal A East				2000	2406	492	516	510	498	510	474	594	570	540	403	400	456
Loc 10 Terminal A West				2000	2406	714	684	642									
Loc 11 Parking Oval				750	902	41	38	38									
Loc 12 Marriott Hotel				1500	1804	465	455	455									
Loc 13 Utility Station 197				750	902	54	54	42									
Loc 14 Air Mail Facility				750	902	0	0	0									
Loc 15 Fuel Farm West 196				750	902	99	96	86									
Loc 16 Fuel Farm East 196				1500	1804	78	66	66									
Loc 17 Terminal B International				2000	2406	816	834	792									
Loc 18 Terminal C-3 Bus Room 2				2000	2406	678	666	690									
Loc 19 Terminal C-3 Bus Room 1				2000	2406	696	606	648									
Loc 20 Parking Garage P-4				750	902	145	155	150	160	150	140	185	175	160	120	129	143
Loc 21 Terminal A-2 Satellite				1000	1203	202	186	205				205	186	198	169		168
Loc 22 FAA Tower				750	902	110	125	115	105	100	95	90	96	90	101	85	79
Loc 23 Parking Garage C				750	902	180	180	140	165	165	145	185	170	135	144	147	139

Condition-Based Maintenance

PSE&G

2011 Regional Seminar

New York

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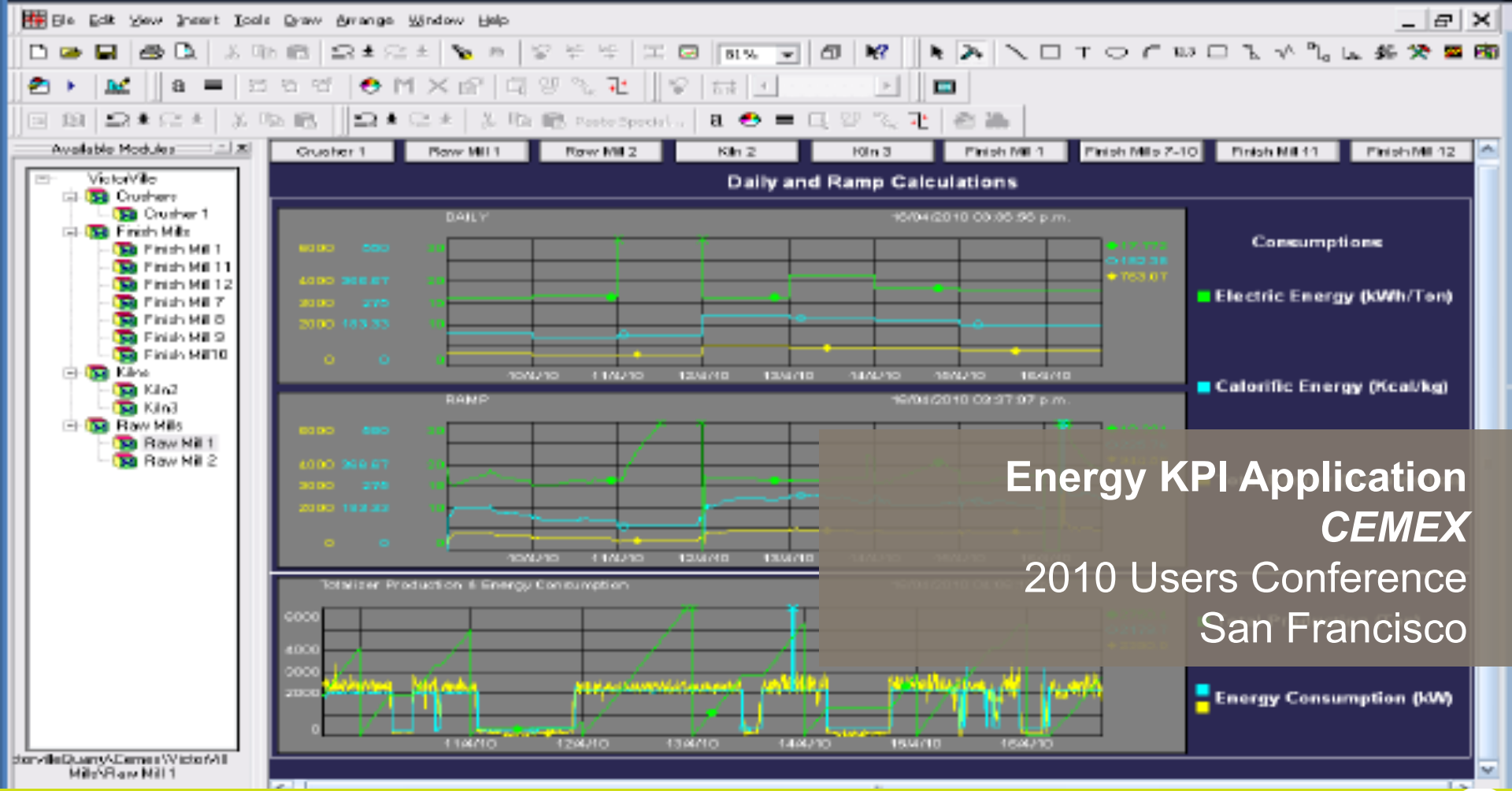

Energy KPI Application

CEMEX

2010 Users Conference

San Francisco

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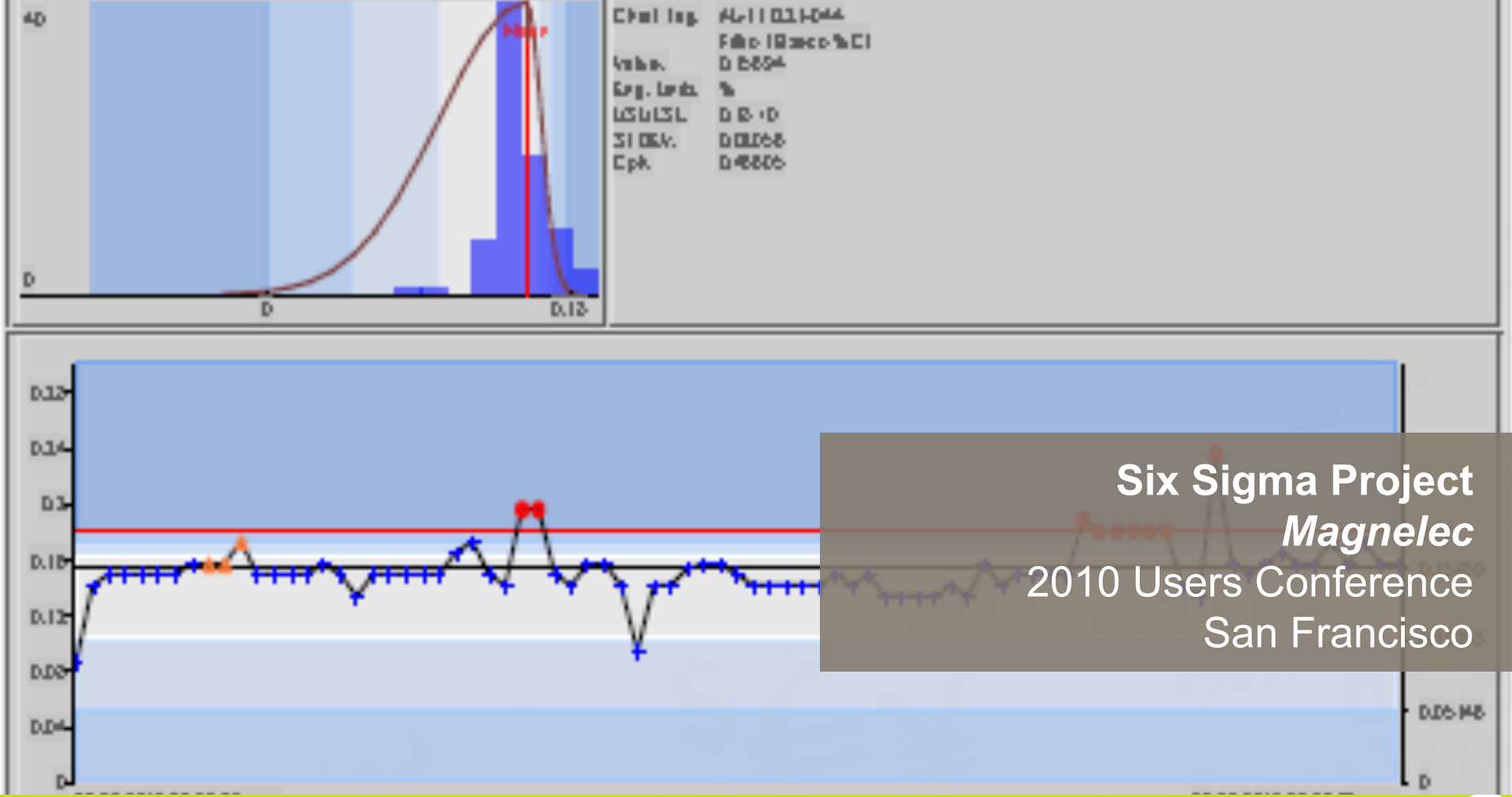

Six Sigma Project
Magnelec
2010 Users Conference
San Francisco

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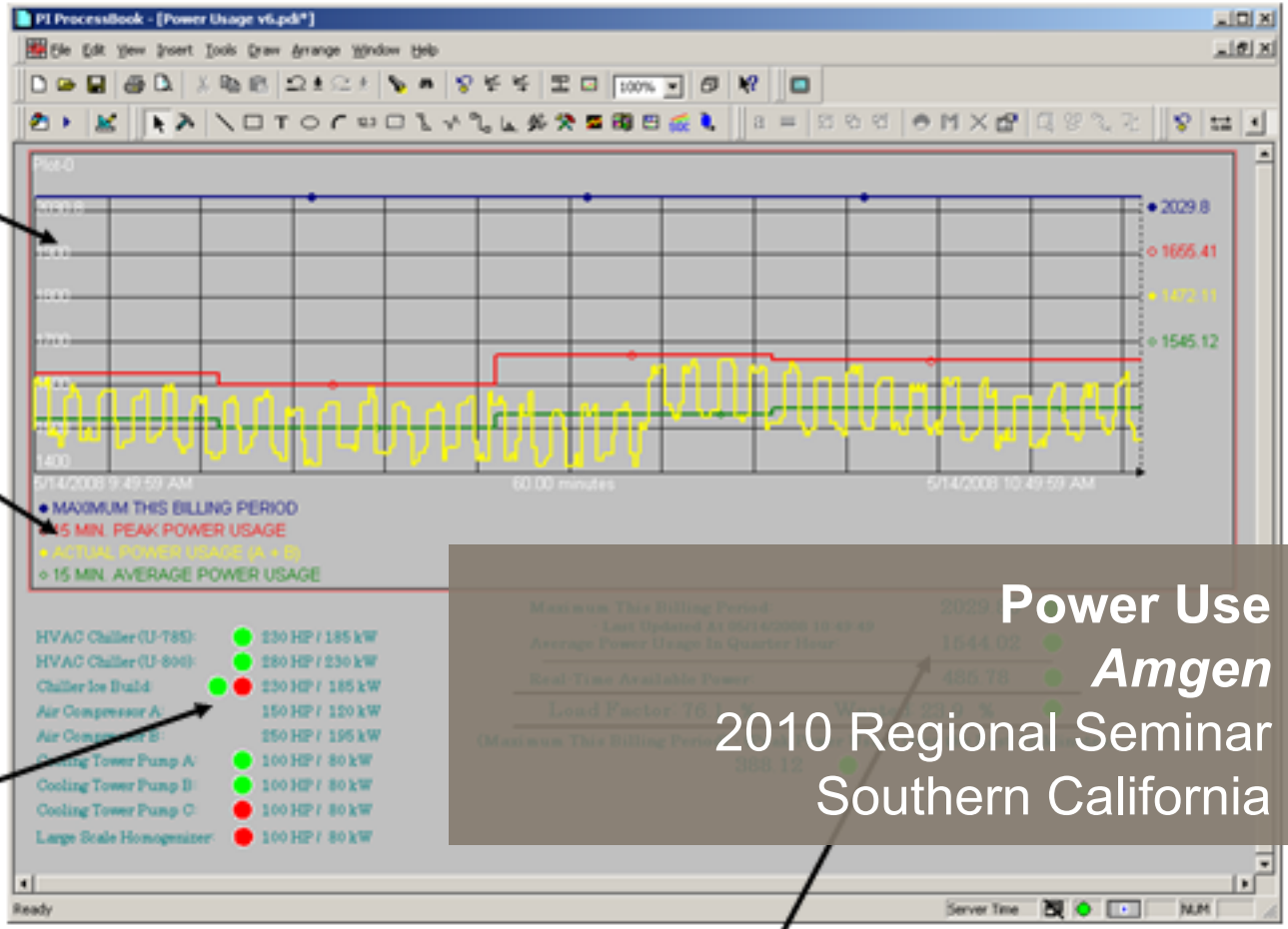
Time Based Trend

Calculated Datasets

Multi-State Symbols



Power Use
Amgen
2010 Regional Seminar
Southern California

VB Variables

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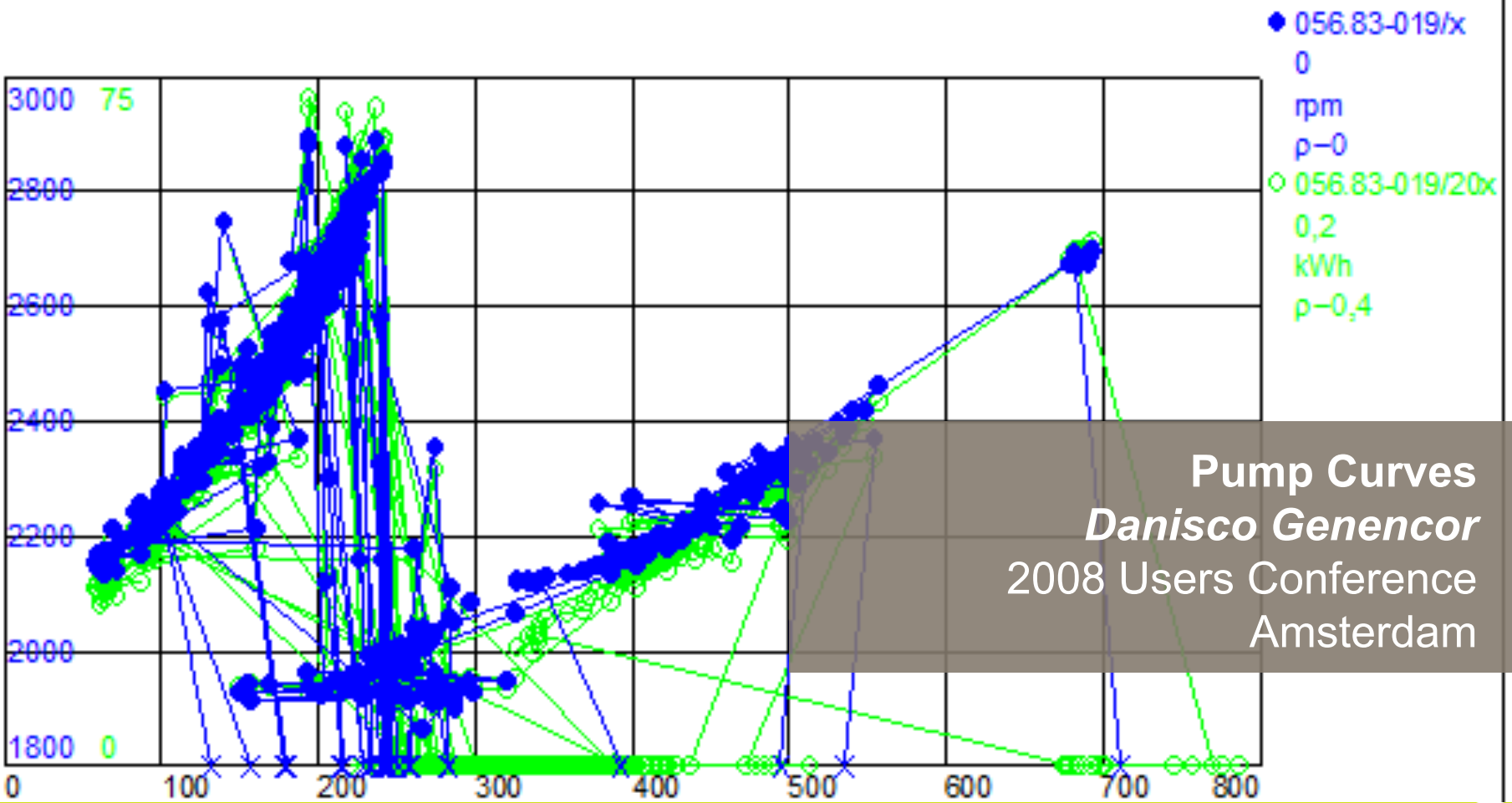

Pump Curves

Danisco Genencor

2008 Users Conference

Amsterdam

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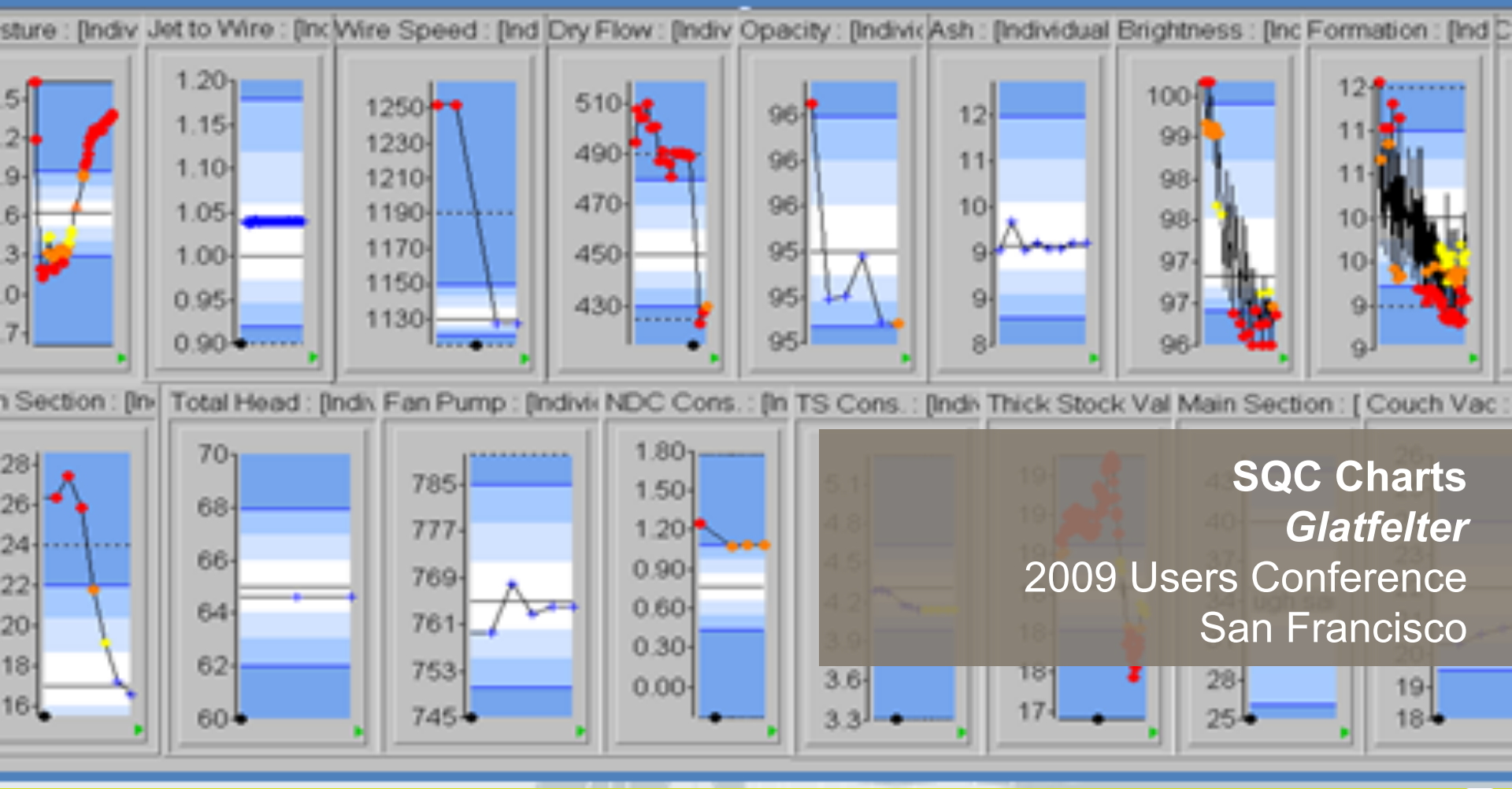

SQC Charts
Glatfelter
2009 Users Conference
San Francisco

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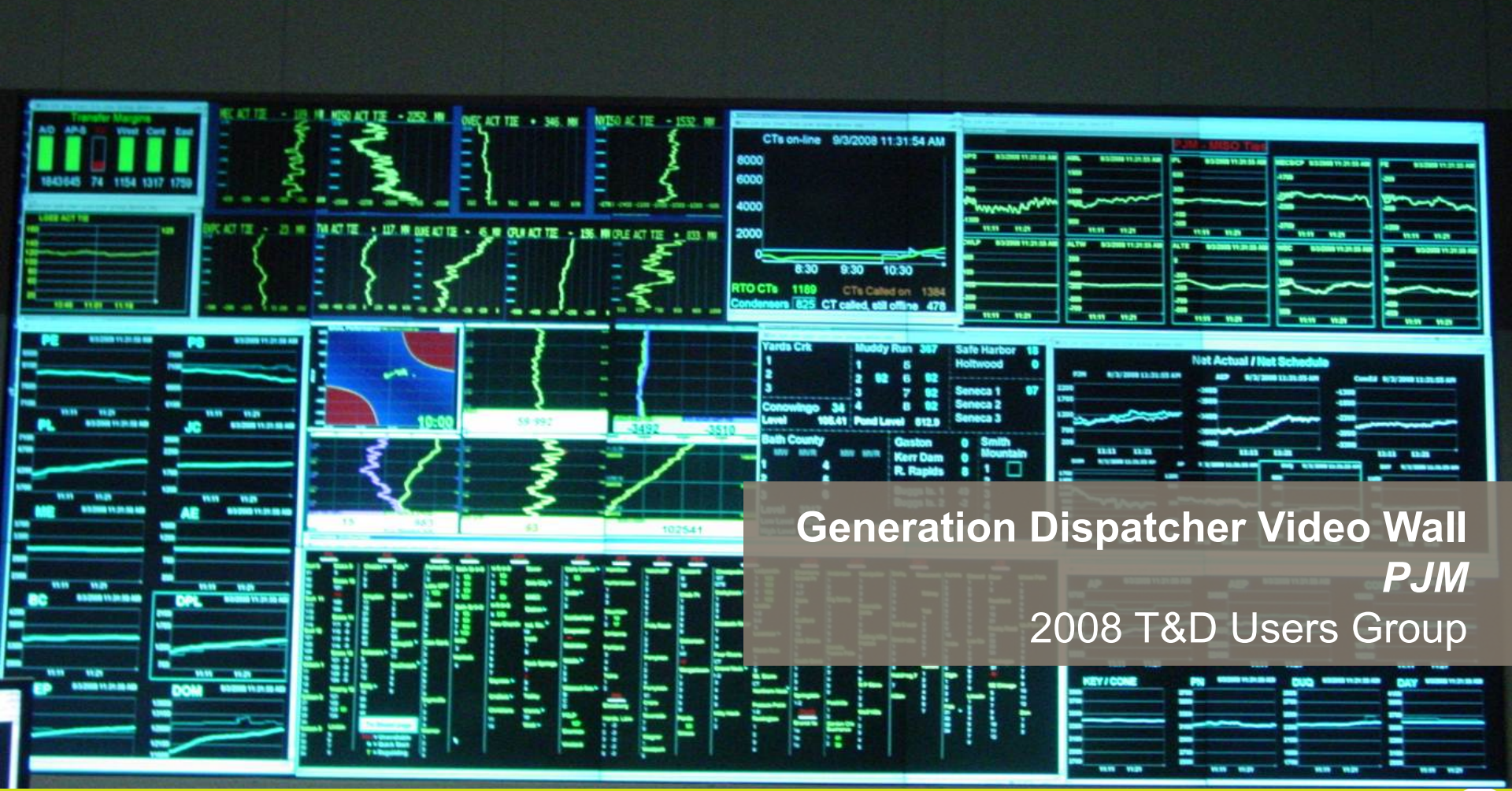

Generation Dispatcher Video Wall

PJM

2008 T&D Users Group

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Transmission Video Wall

PJM

2008 T&D Users Group

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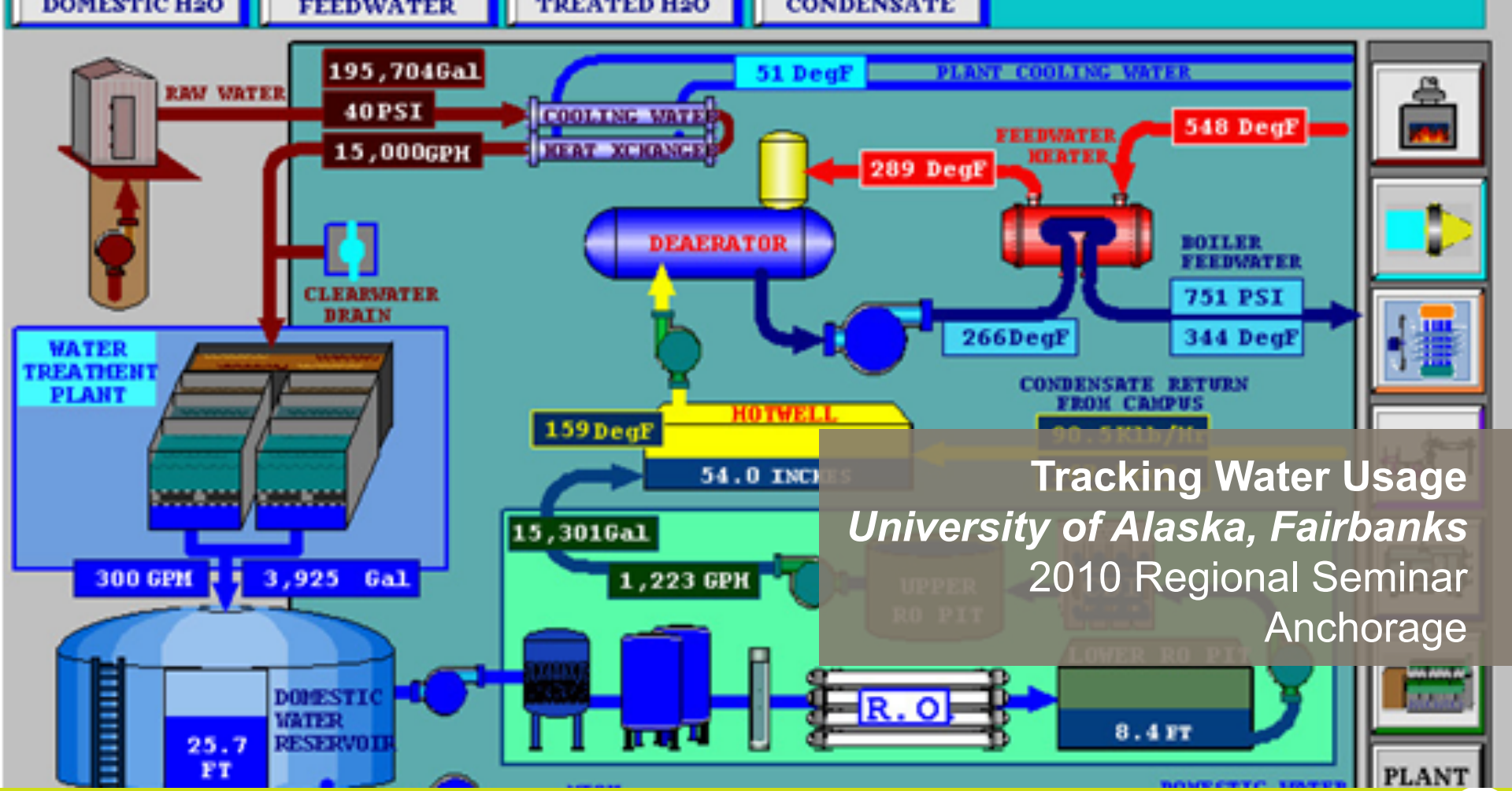

Tracking Water Usage

University of Alaska, Fairbanks

2010 Regional Seminar

Anchorage

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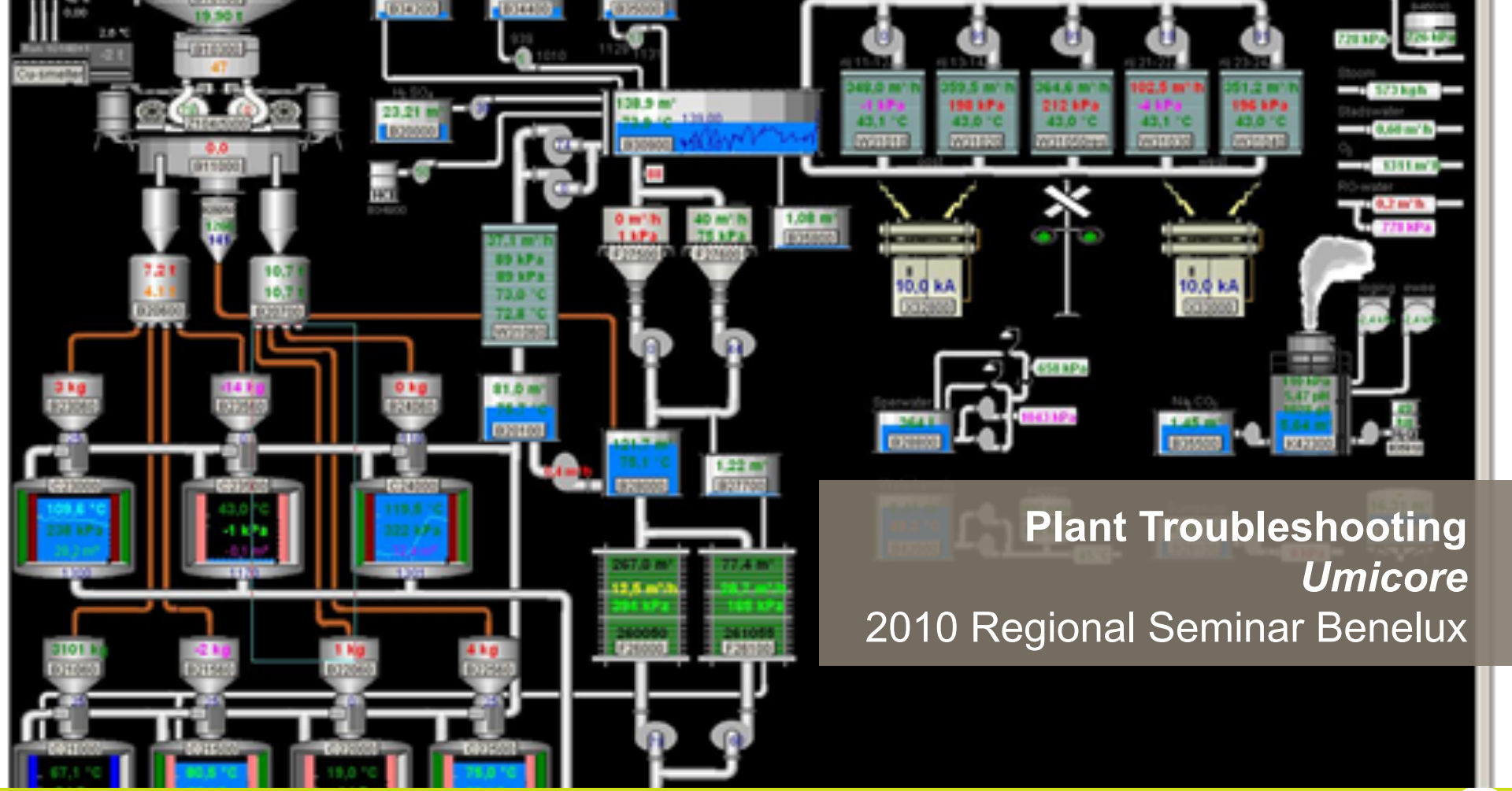

Plant Troubleshooting
Umicore
2010 Regional Seminar Benelux

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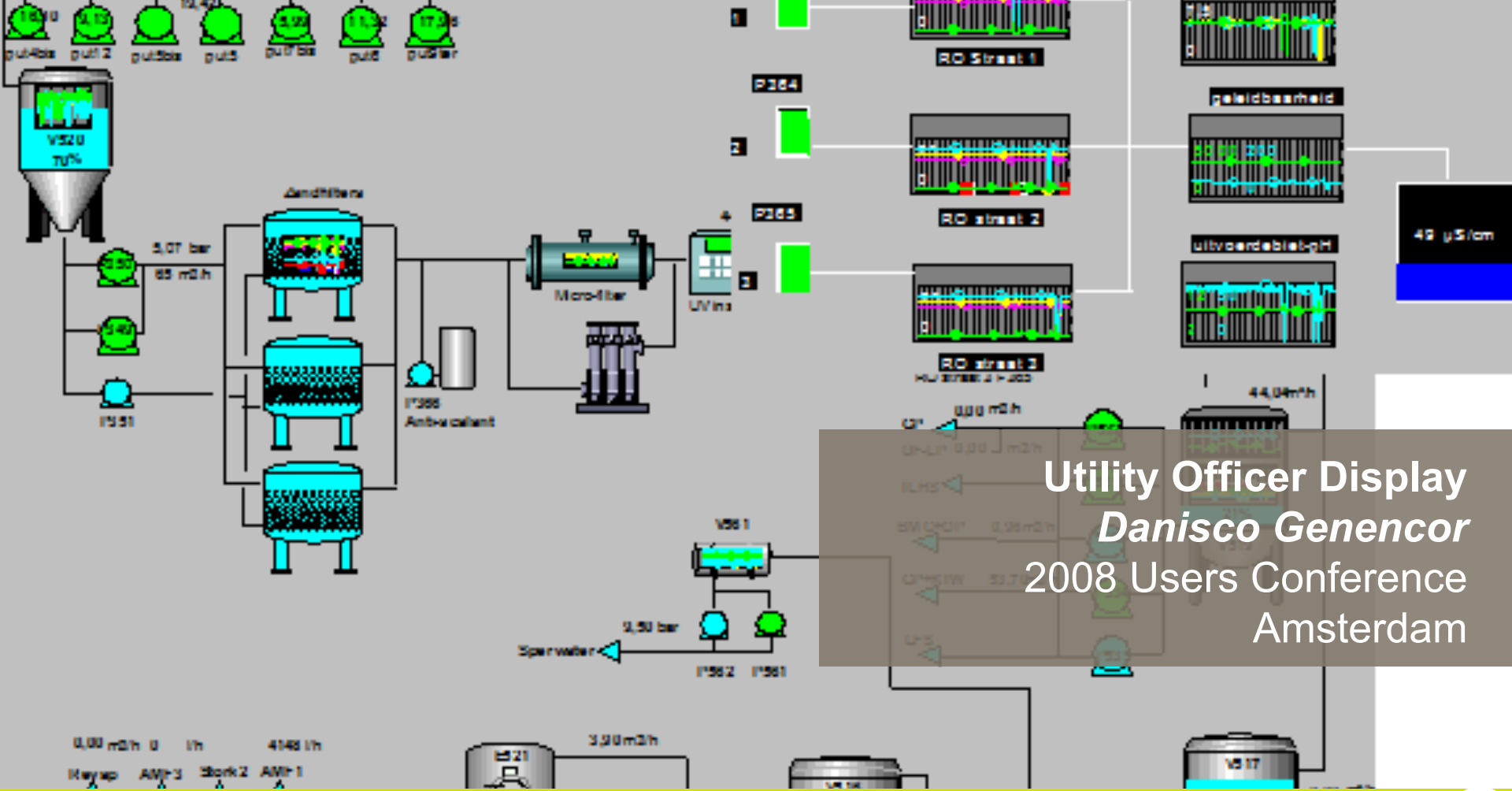

Utility Officer Display

Danisco Genencor

2008 Users Conference

Amsterdam

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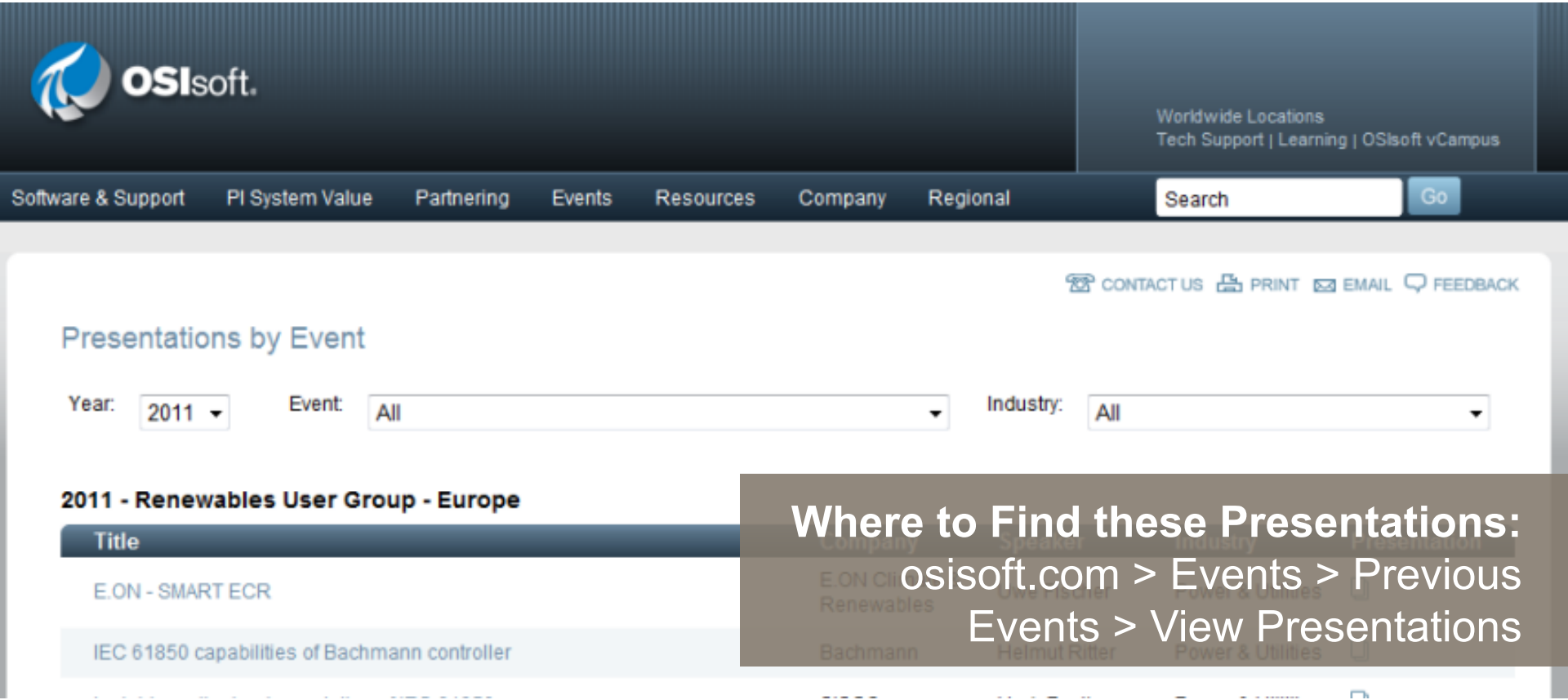

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Summary

- These examples show how customers use PI ProcessBook to monitor operations and improvement projects
- There are many more examples across industries on our website

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Further Ideas

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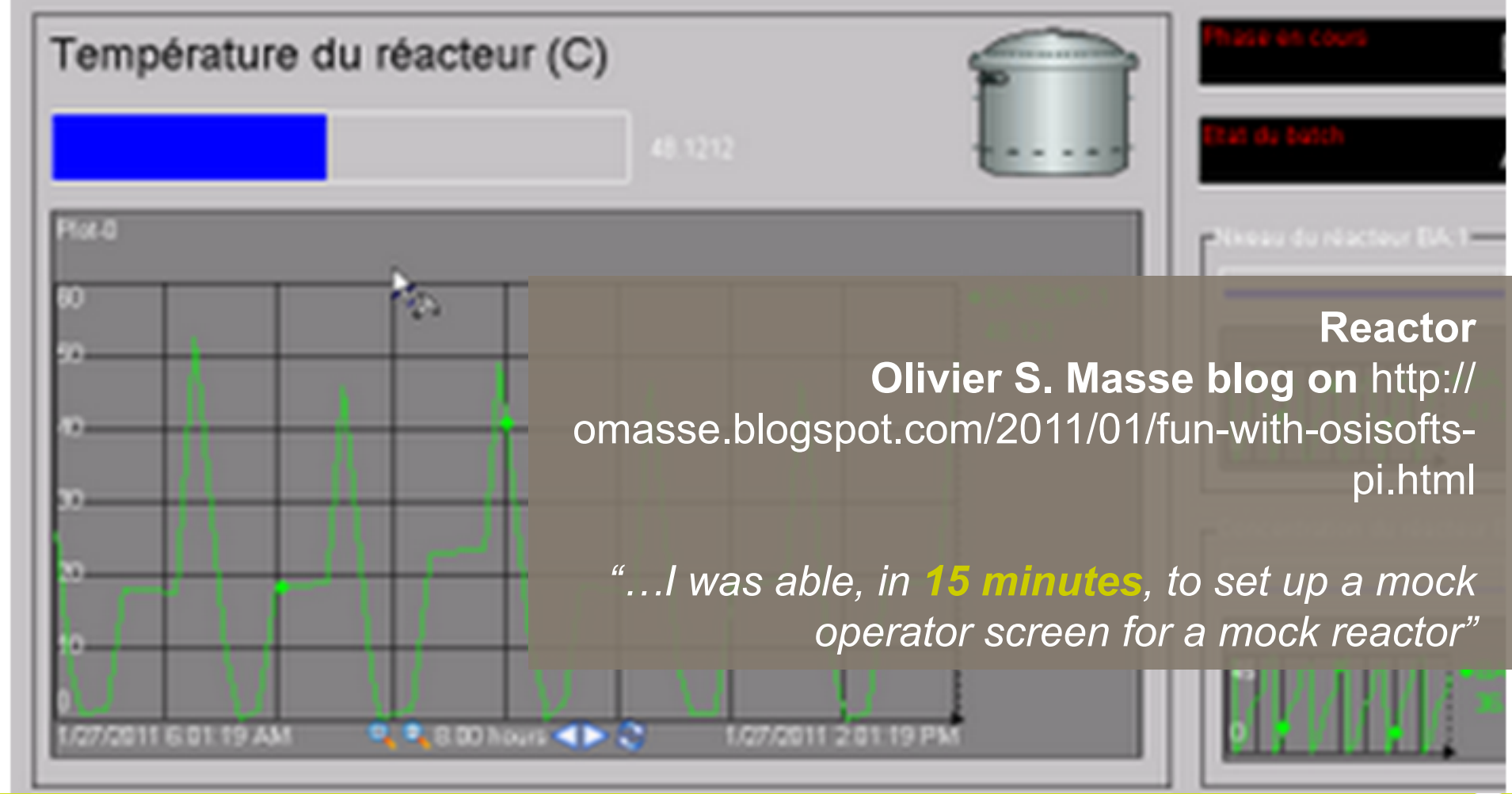

Reactor

Olivier S. Masse blog on http://omasse.blogspot.com/2011/01/fun-with-osisofts-pi.html

*"…I was able, in **15 minutes**, to set up a mock operator screen for a mock reactor"*

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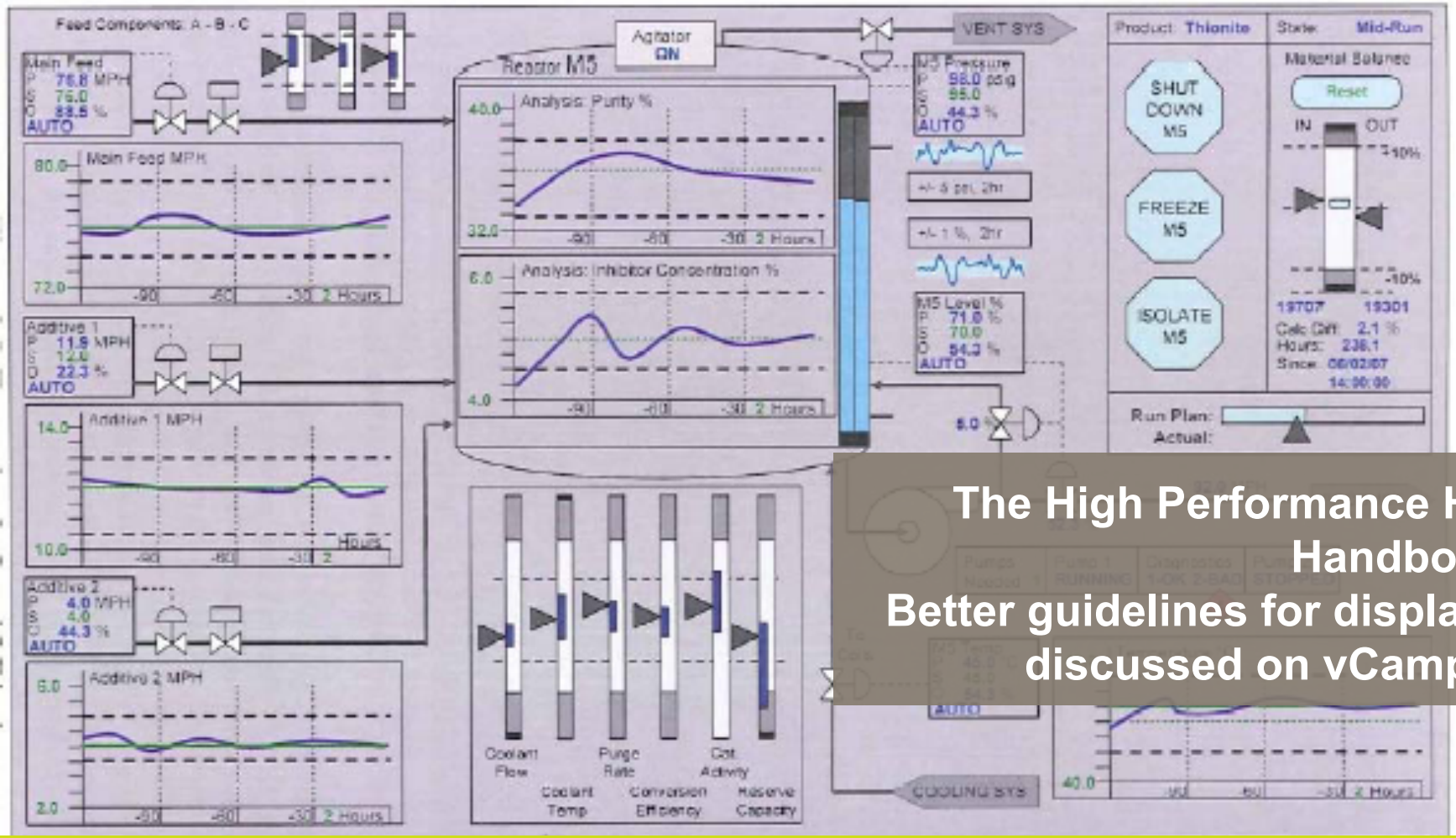

The High Performance HMI Handbook; Better guidelines for displays, discussed on vCampus

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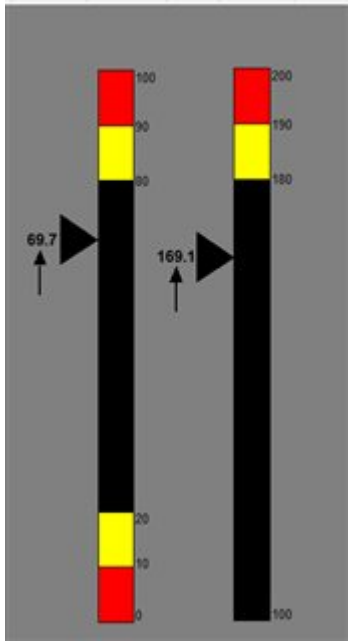

Example from OSIsoft vCampus user Rhys Kirk

*"…in **10 minutes** I had fully updating Star Trek 'sick bay' bar charts that are multi-stated, and powered by VBA by hooking in to the Data Update events"*

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Moral of the Story

- Simple displays of the right data can be very powerful
- Data-packed displays should minimize color and attention-getting behavior
- PI ProcessBook has a lot of power for customers

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What's New?

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PI ProcessBook 2012

- Focus on improving International support
- Better ways to manipulate time while reviewing displays
- Improved support for asset-based data, such as annotating a value referenced by a PI AF attribute

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PLEASE **PAUSE** FOR **DEMO**

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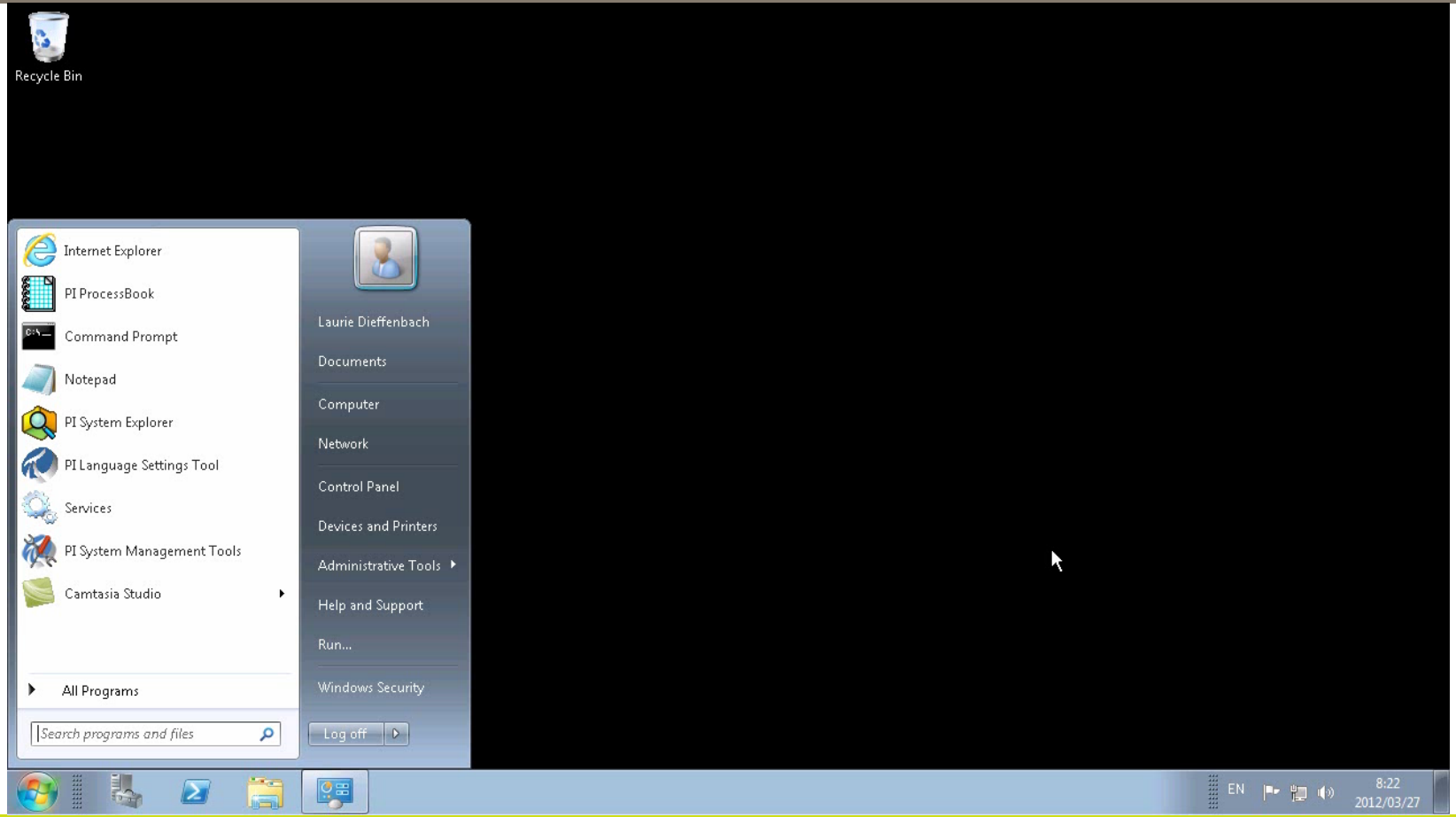
PI ProcessBook Language Support



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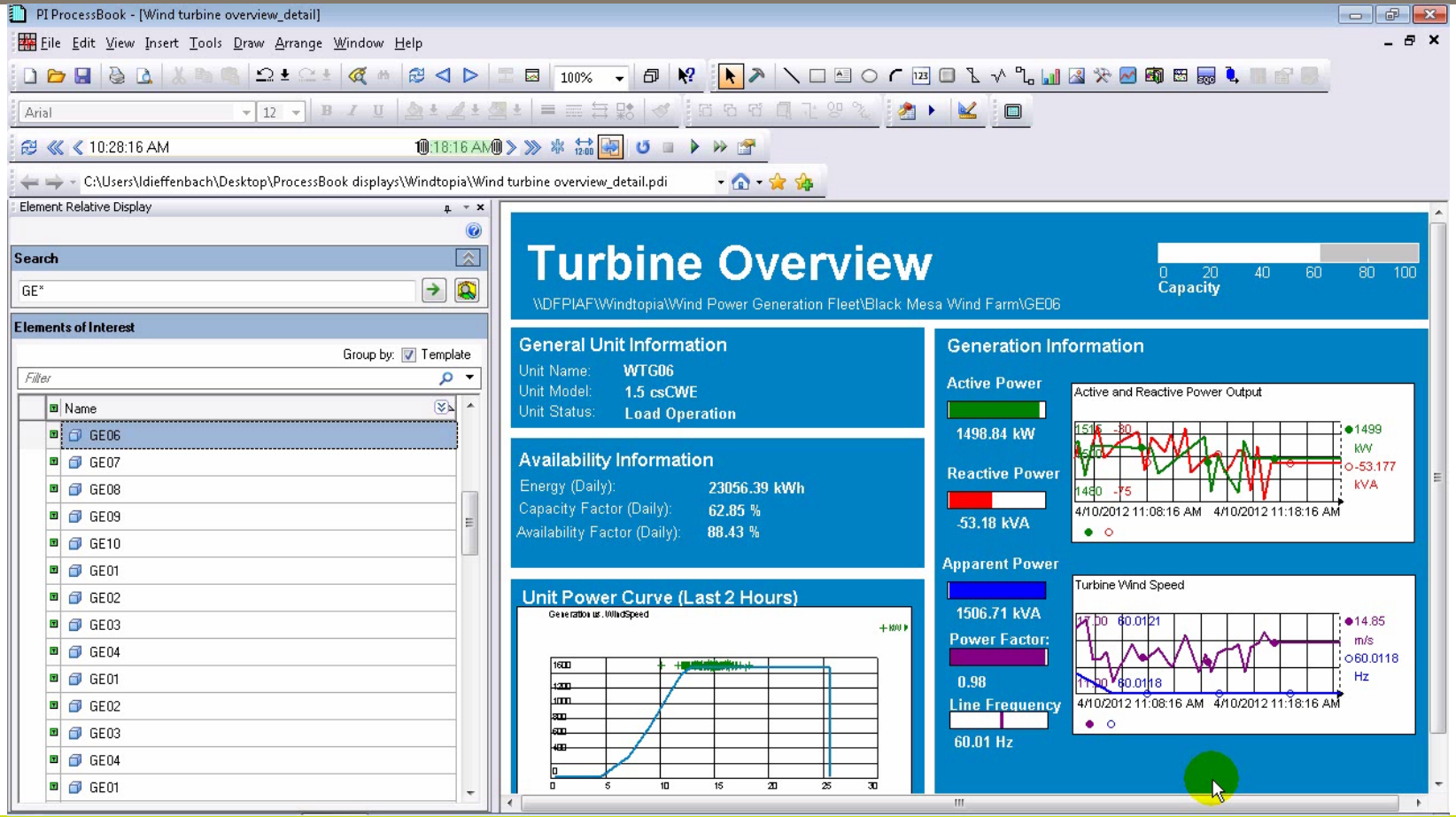
Other New Features



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C:\UC2012\PI ProcessBook Displays\World Wind Fleet View - Ja.pdi

世界風力艦隊

累計産出 6620 MW　毎日の収入 1.54 M$　日の収入となりまし 176 M$

ブラジル

インストール容量: 1092 MW
現在の電源: 1072 MW

予想されるキャパシティファクタ: 47 %
実際のキャパシティファクタ: 49 %

可用: 98 %
実行しているタービン: 712

欧州

インストール容量: 2198 MW
現在の電源: 2170 MW

米国

インストール容量: 1234 MW

中国

インストール容量: 2231 MW

Support for multinational organizations

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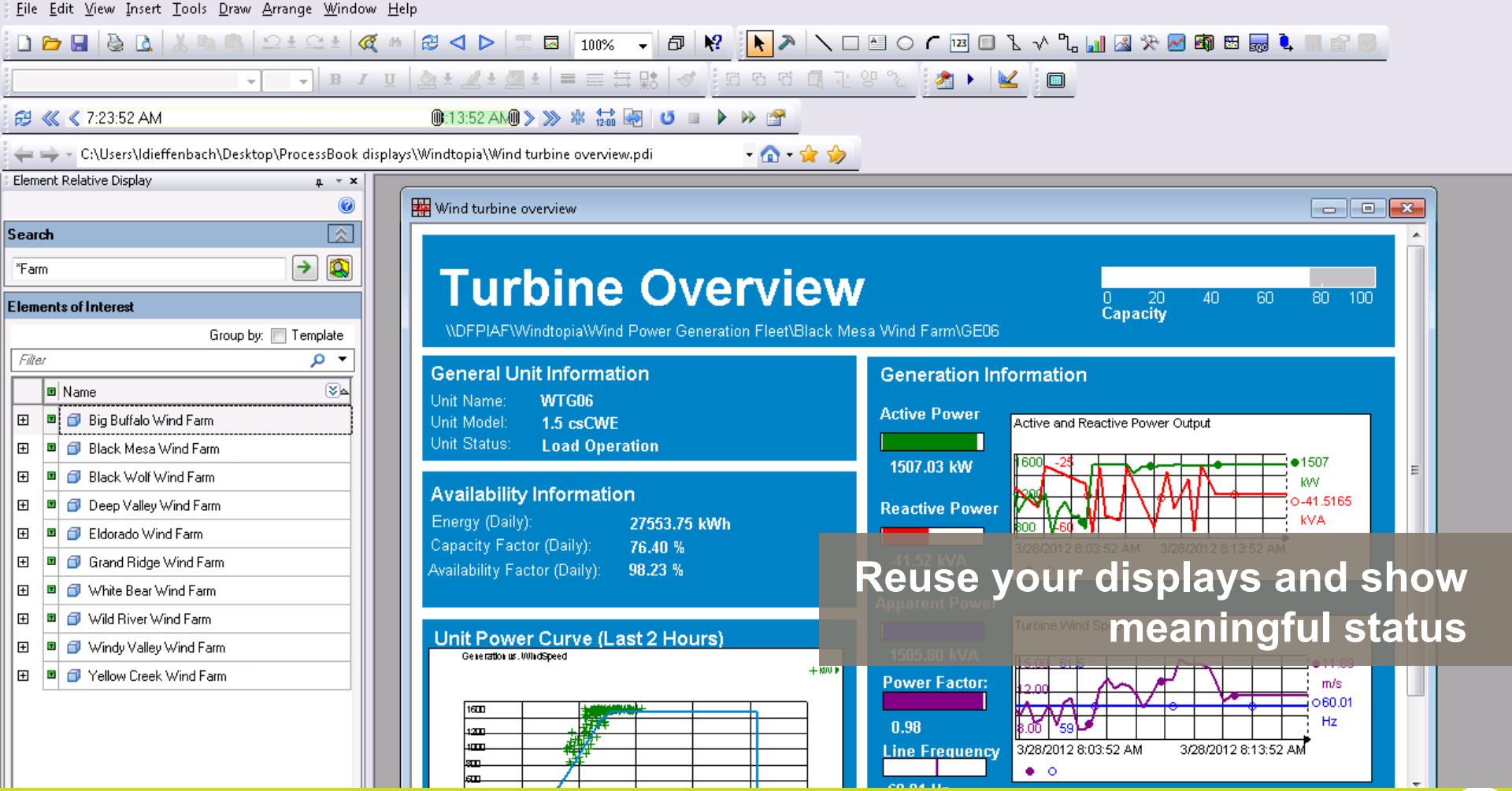

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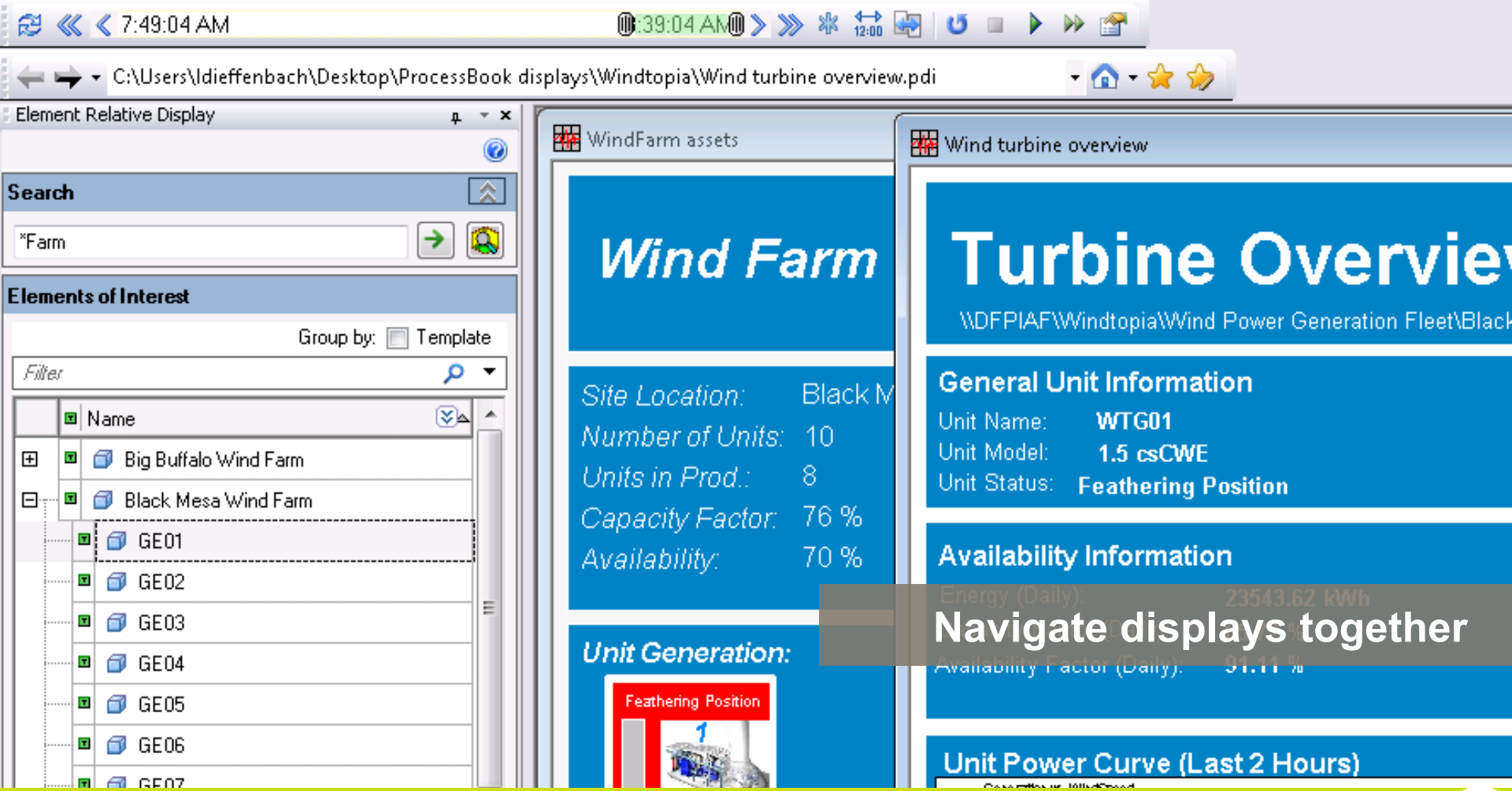

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What's Next?

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Coming Next

- Better ways to build displays from assets
- Better ways to compare assets
- Ways to view and apply significant events with PI Event Frames
- Ways to launch PI Coresight for ad hoc analysis
- Display server to reuse PI ProcessBook content

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