The Visualization Revolution

Presented by **Tom LeBay** and **Eugene Resnick**

Agenda

- What's New- PI Coresight 2015
- Getting Value- San Francisco Public Utilities Commission
- What's Ahead- Visualization for the modern PI System

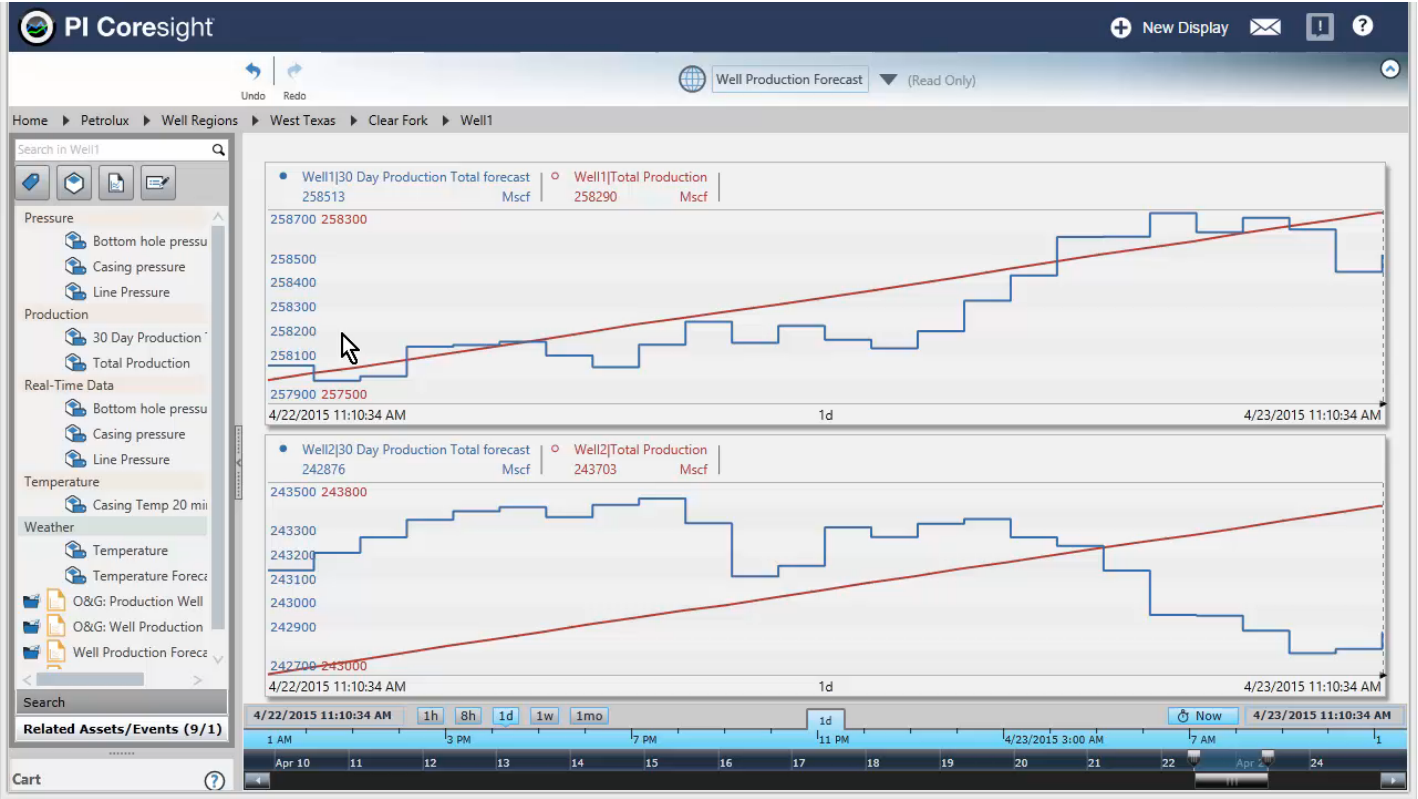
PI Coresight™ The fastest, easiest way to visualize PI System data

- *Web Client for ad hoc analysis*
- *PI System data on any desktop or mobile device*
- *View PI ProcessBook displays*
- *Easily integrated into other web applications*

What's new with PI Coresight 2015

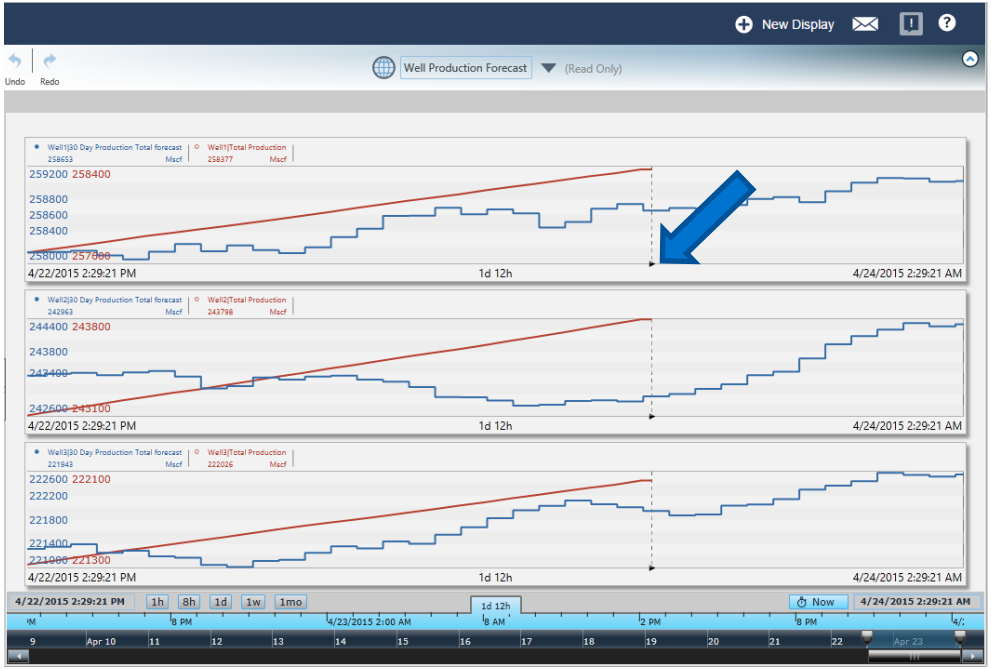
PI Coresight 2015 supports future data

I need to see how production is tracking my forecast



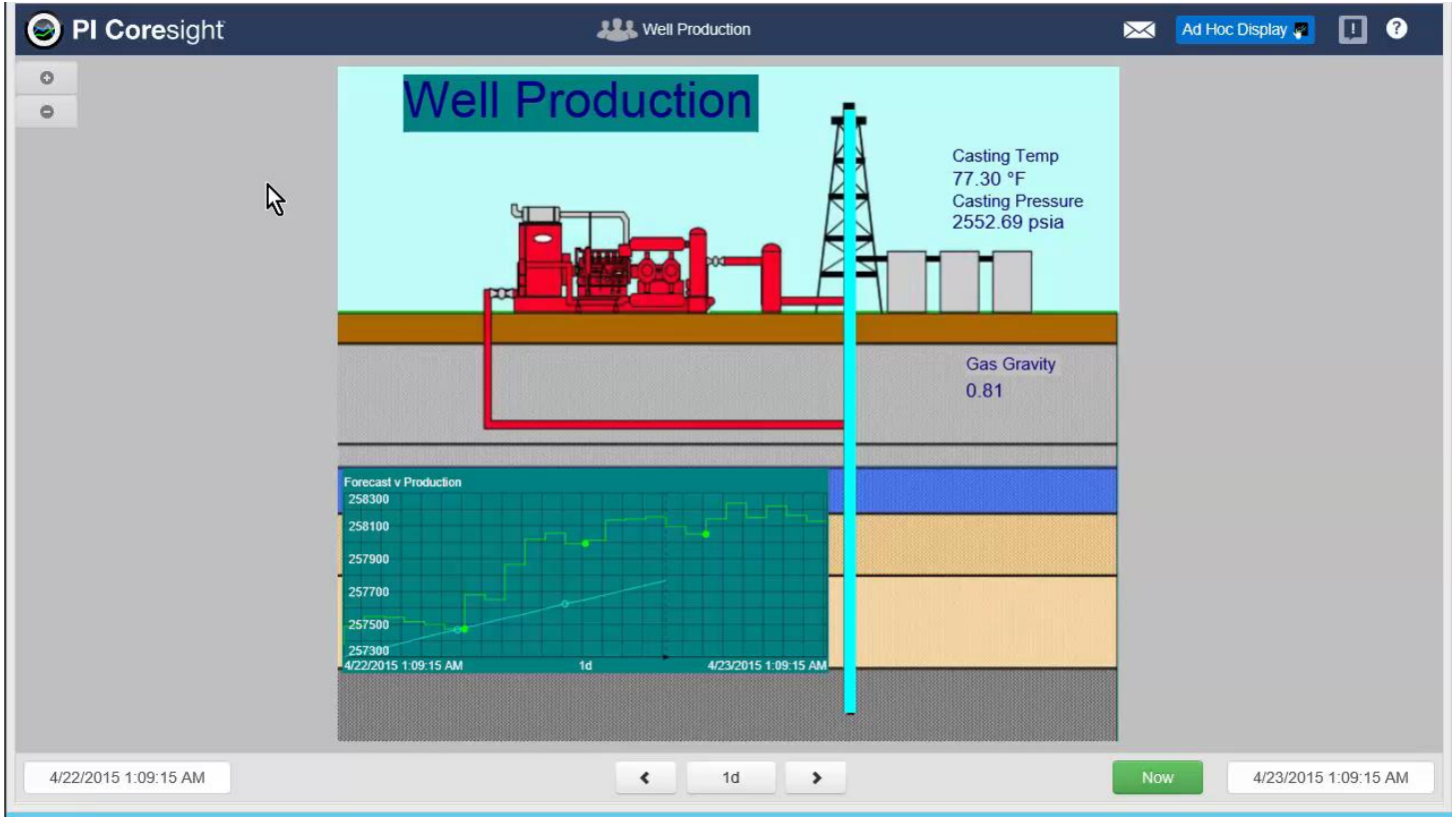
What did we just do?

1. Current Time indicator
2. Actual vs. Forecast- everything updates!



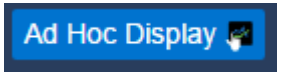
Sharing is important

When I find a problem I need to share it with others

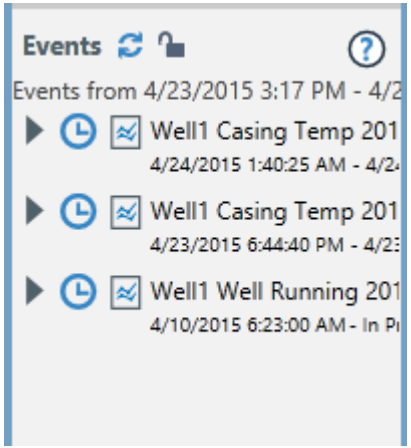


What did we just do?

- Ad hoc display- all visible data items moved to a table



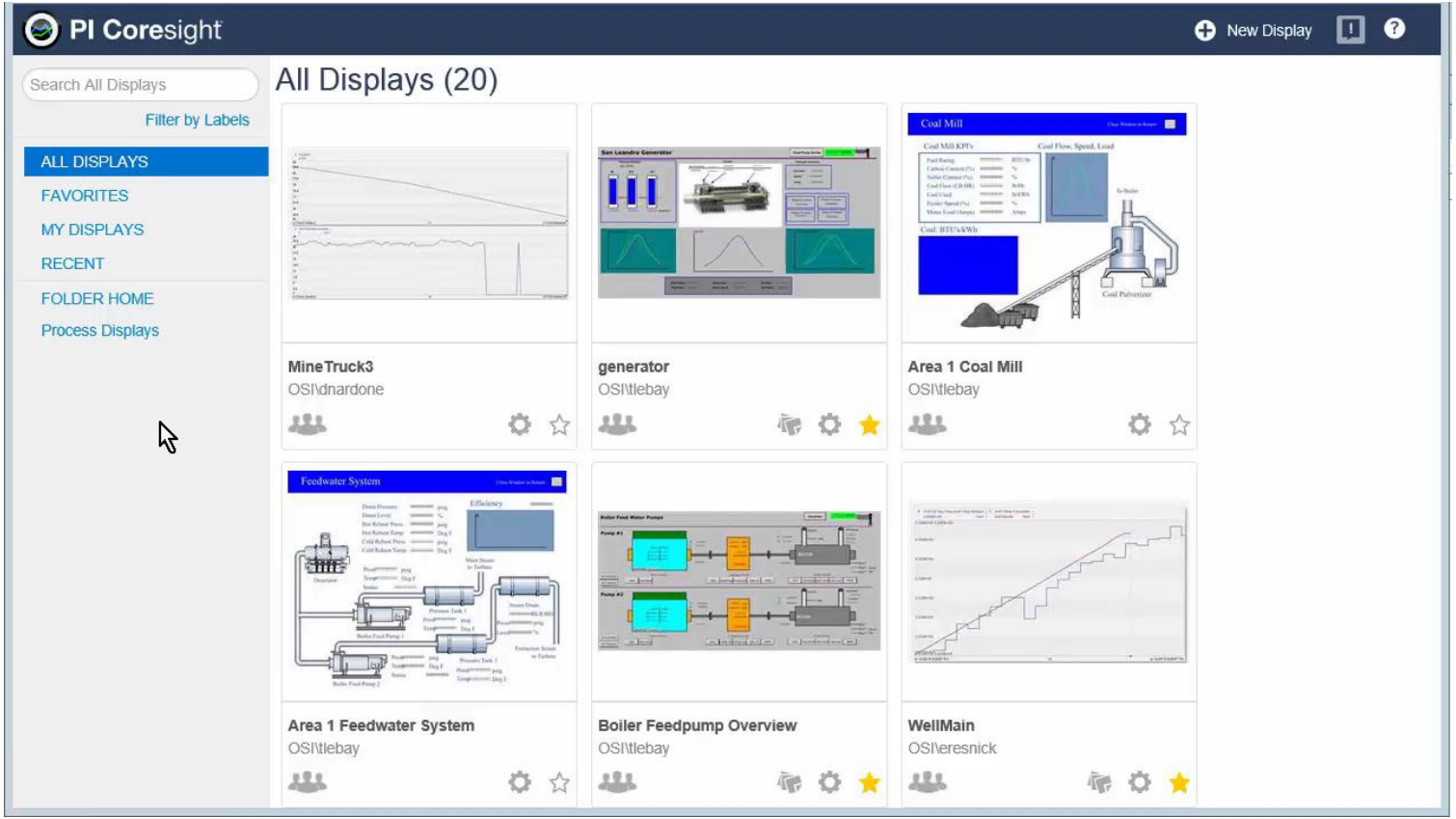
- Related Events- based on data items and time range



- Email link- using local mail client

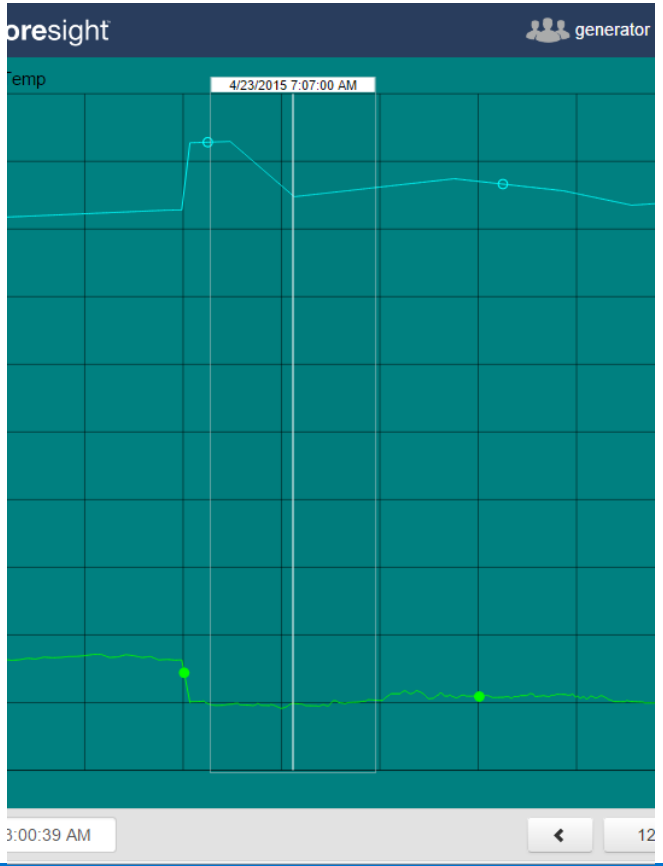
Mining for gold

I want to see specific values on my process displays



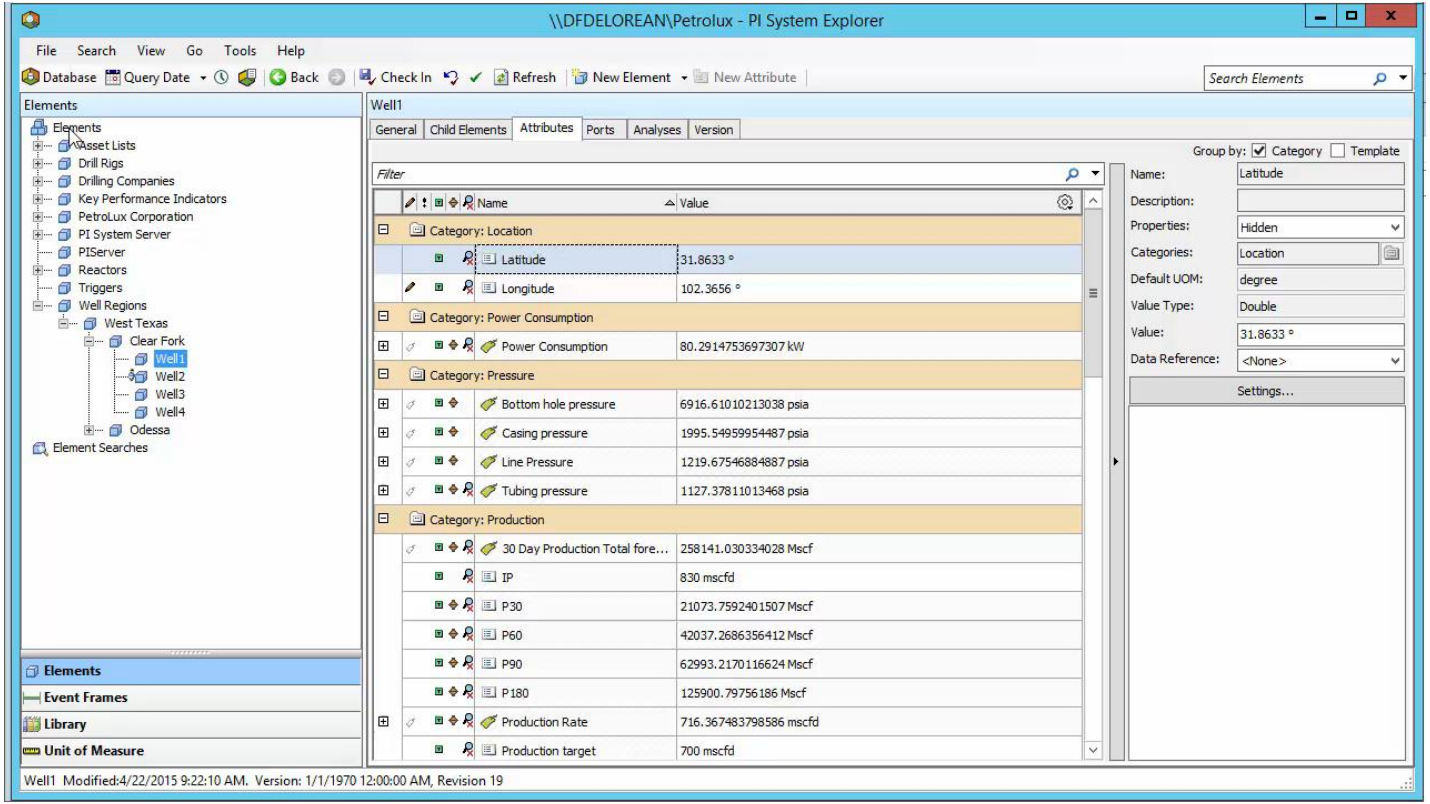
What did we just do?

- PI ProcessBook trend cursor
  - Available on pop-up trend
  - Click/tap to place
  - Drag to move or delete



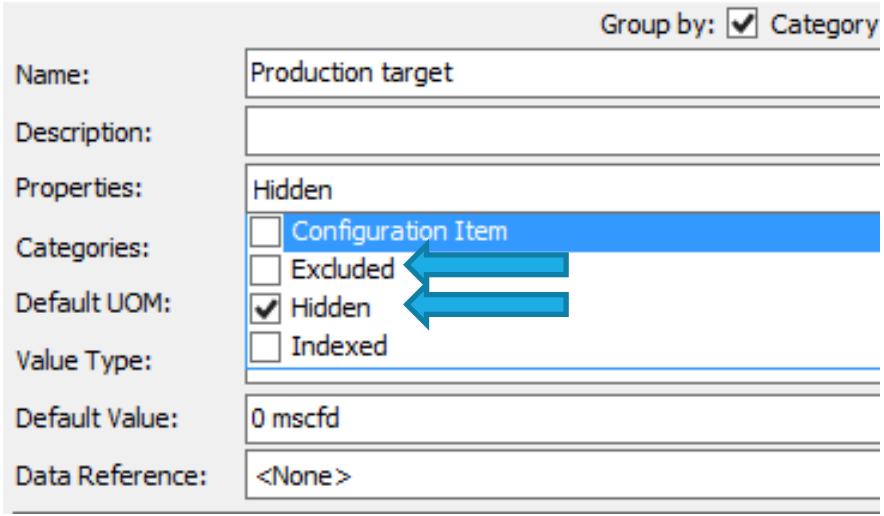
Show only what's important

I only want to see what I'm interested in



What did we just do?

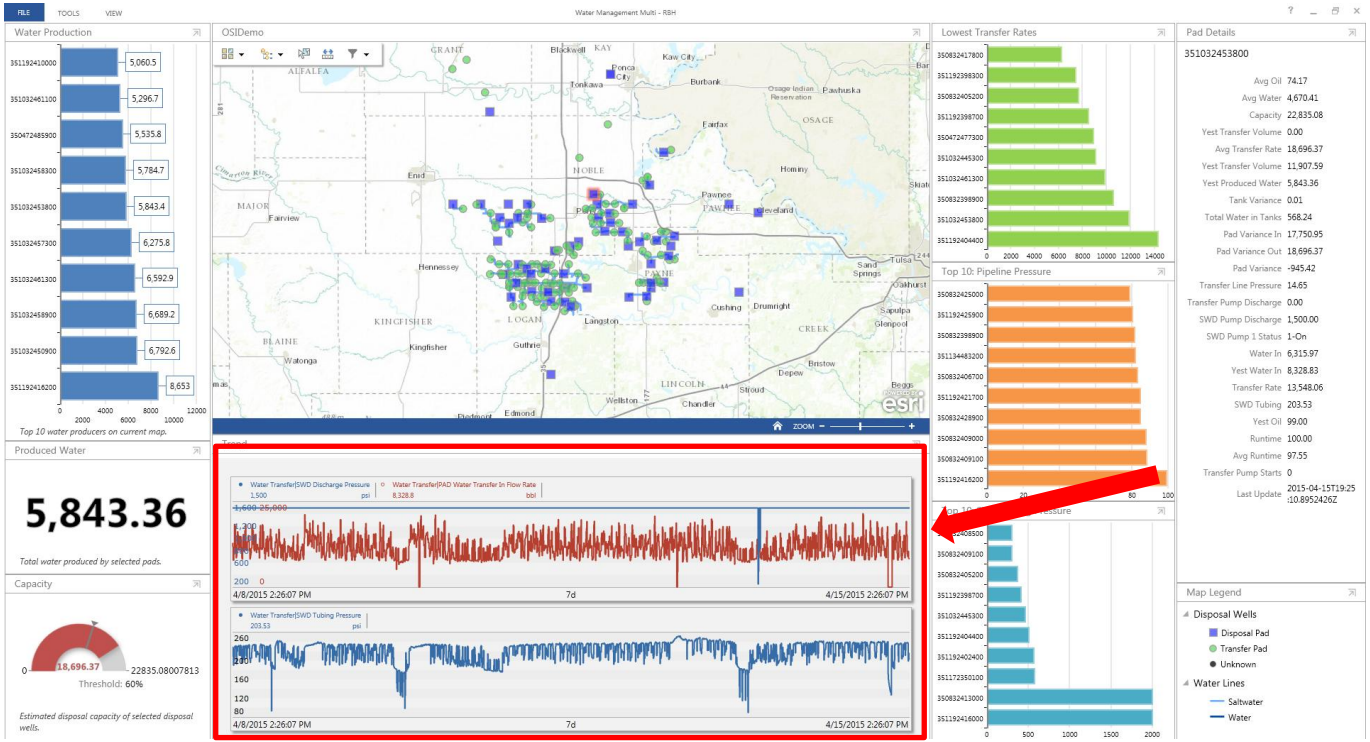
- Hidden property
  - Not returned by PI Coresight search
  - Still returns a value if already on a display
- Excluded property
  - Not returned by PI Coresight search
  - Does not return a value if already on a display



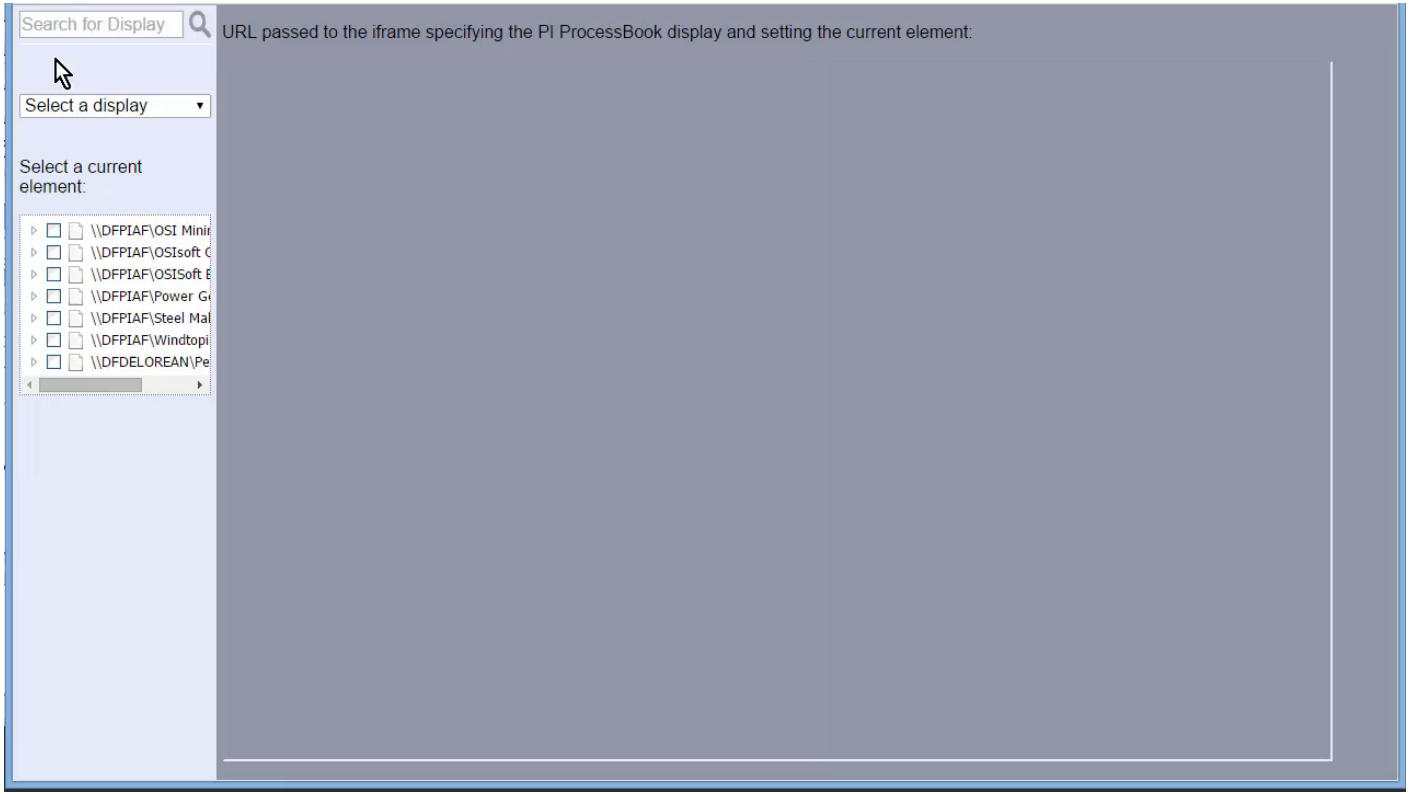
Some things are better together

The power of integration

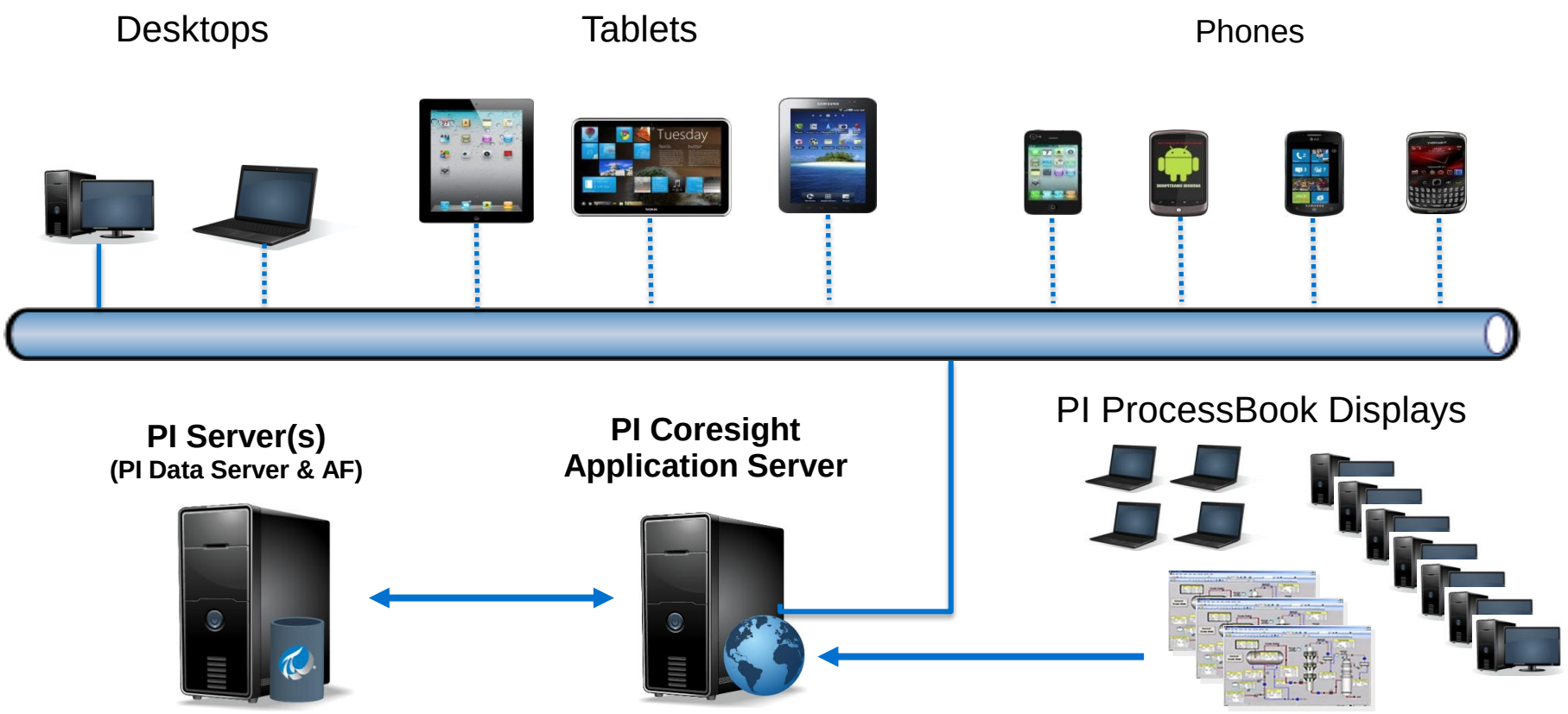
Operations dashboard at Devon Energy



Integrate PI Coresight with other web apps



PI Coresight – Access your data everywhere



Services of the San Francisco
Public Utilities Commission

Implementation of PI Coresight 2014 at the San Francisco Public Utilities Commission (SFPUC)

Max Chung, Electrical Engineering
Wastewater Enterprise (WWE)

Our Background

- The city under The City
  - Wastewater Enterprise (WWE) operates and maintains the City's combined sewer system which collects and cleans both sewage and stormwater.
  - 1,000 miles of pipes
  - 27 pump stations
  - 3 treatment plants
  - 8 deep water outfalls

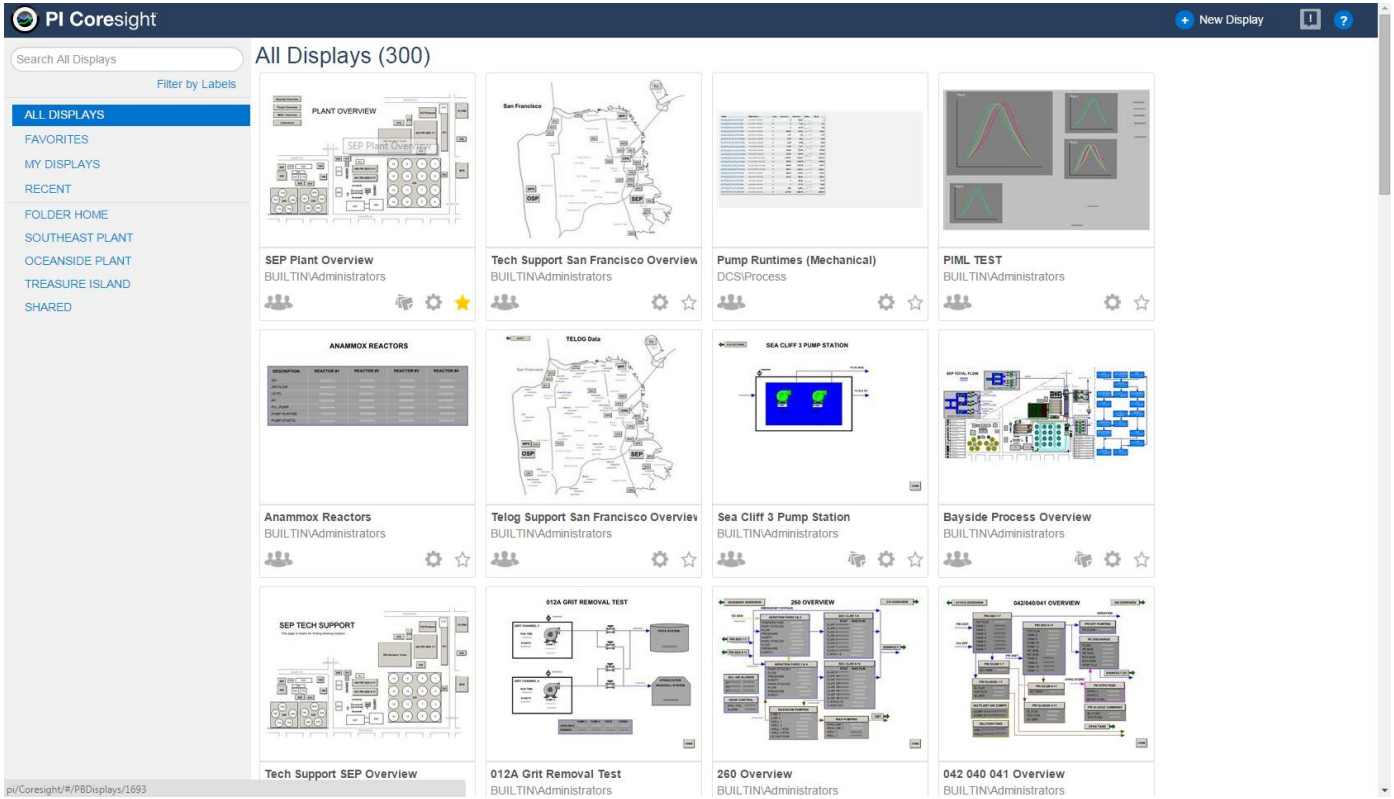
How much can we clean?

- Wastewater Enterprise (WWE) has 2 major and 1 standby sewage treatment plants.
  - Southeast plant (SEP) –cleans up to 250 MGD
  - Oceanside plant (OSP) –cleans up to 65 MGD
  - Northpoint plant (NPP) –activated during major rain events, cleans up to 150 MGD (during major rain events only)
  - There are 27 sewage collection stations scattered throughout SF which pump flows to these treatment plants

Old fashioned

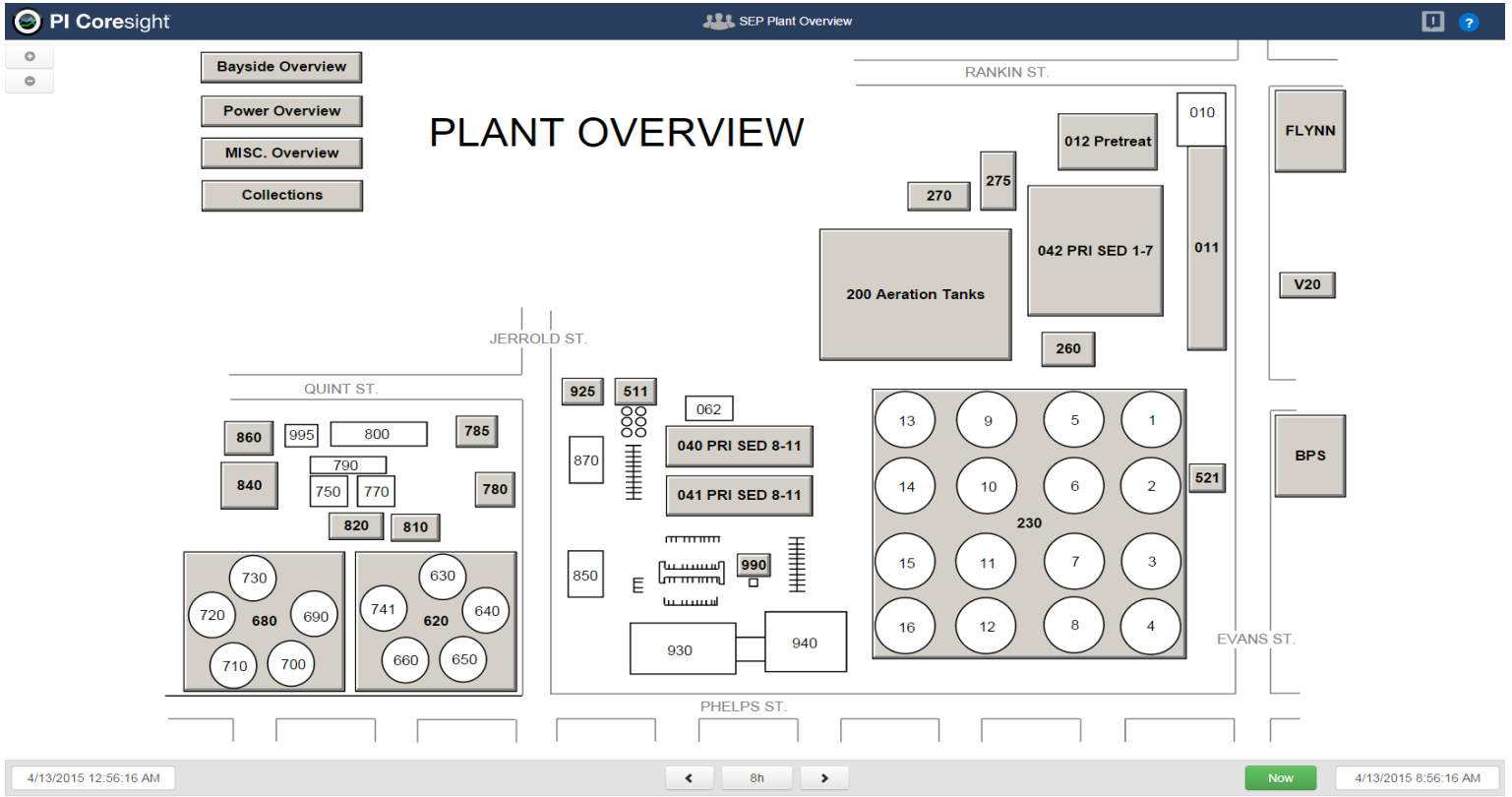
San Francisco Water Power Sewer

How we use PI Coresight 2014

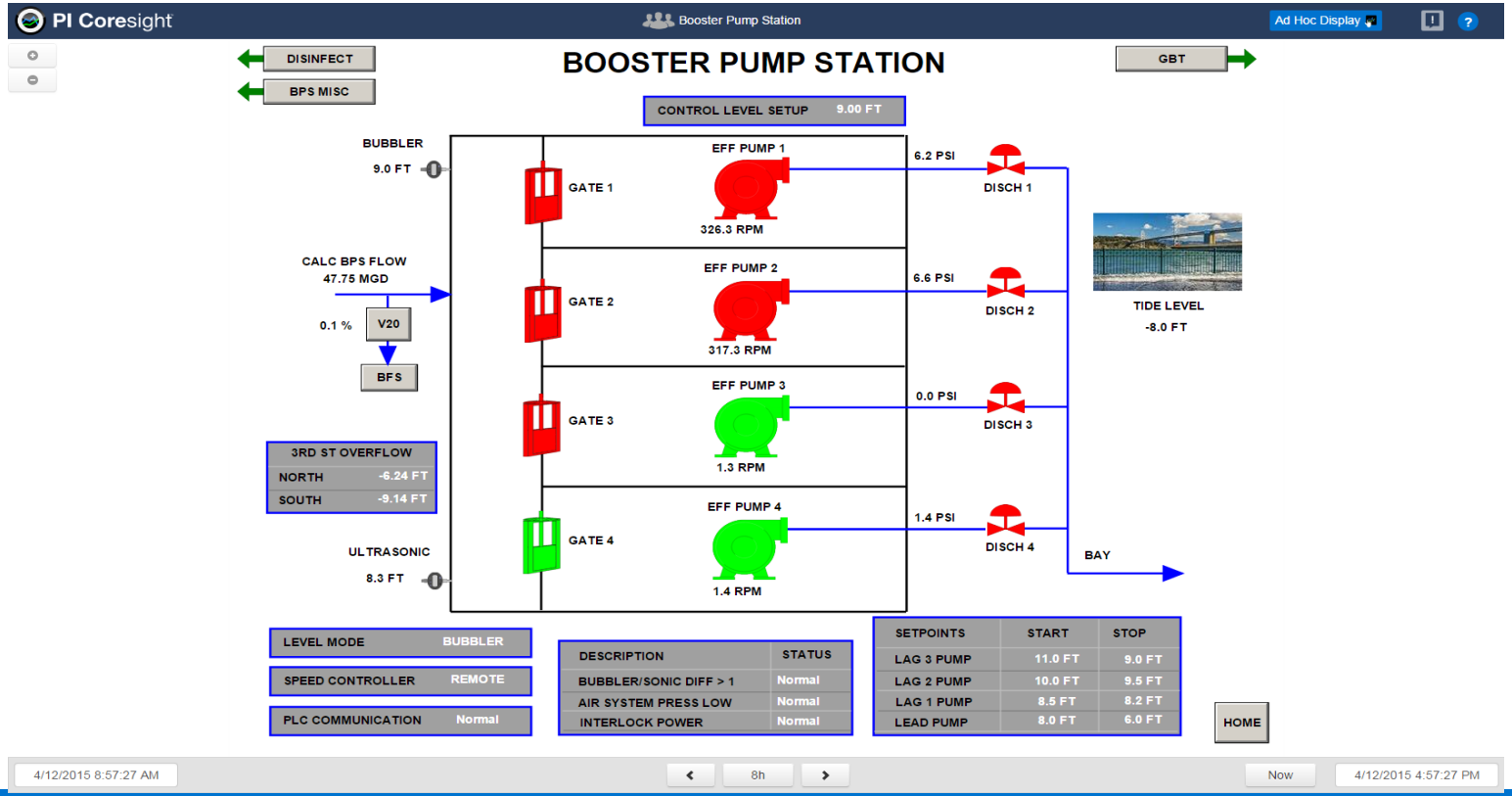


San Francisco Overview

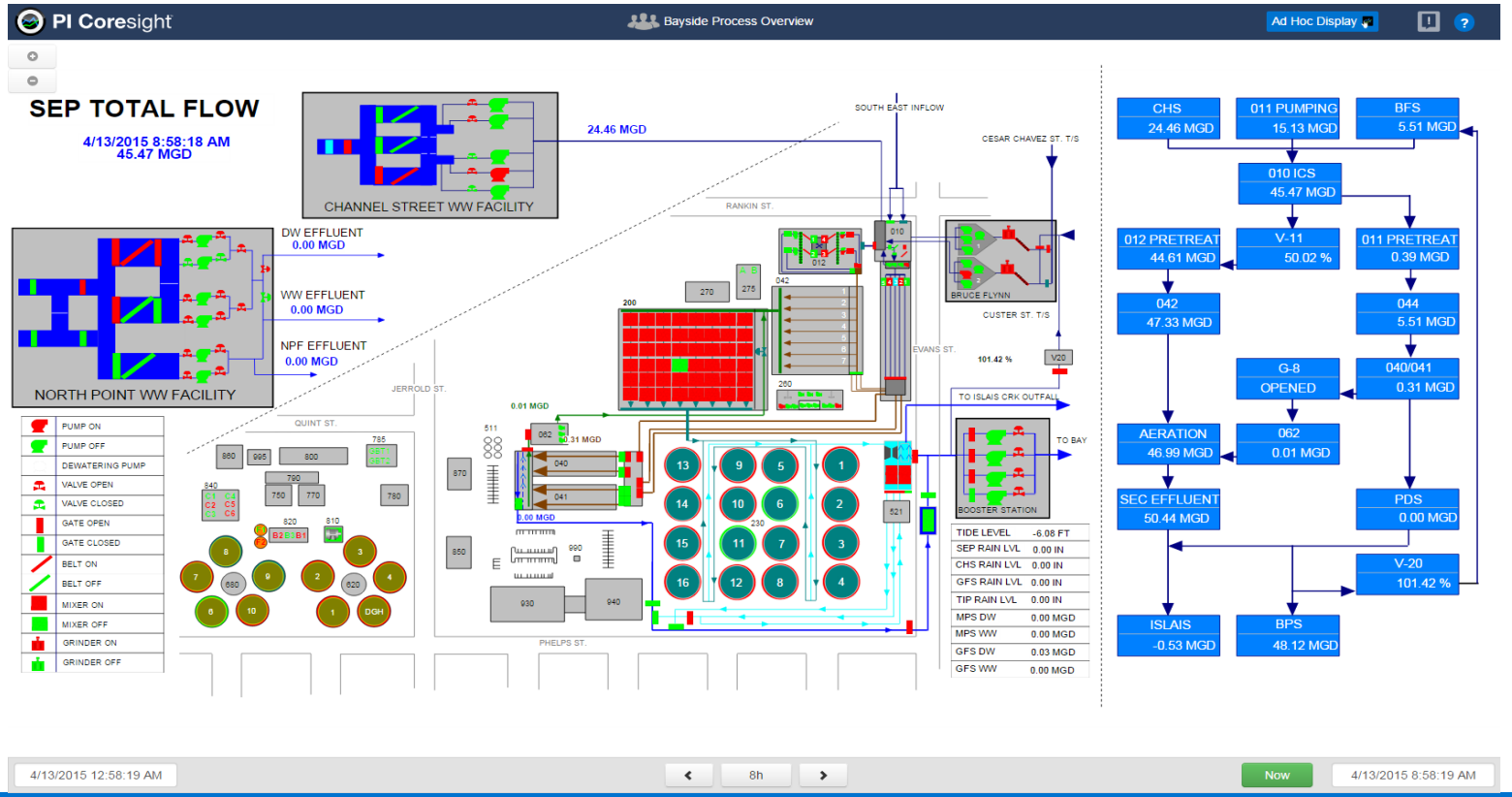
Southeast Plant Overview



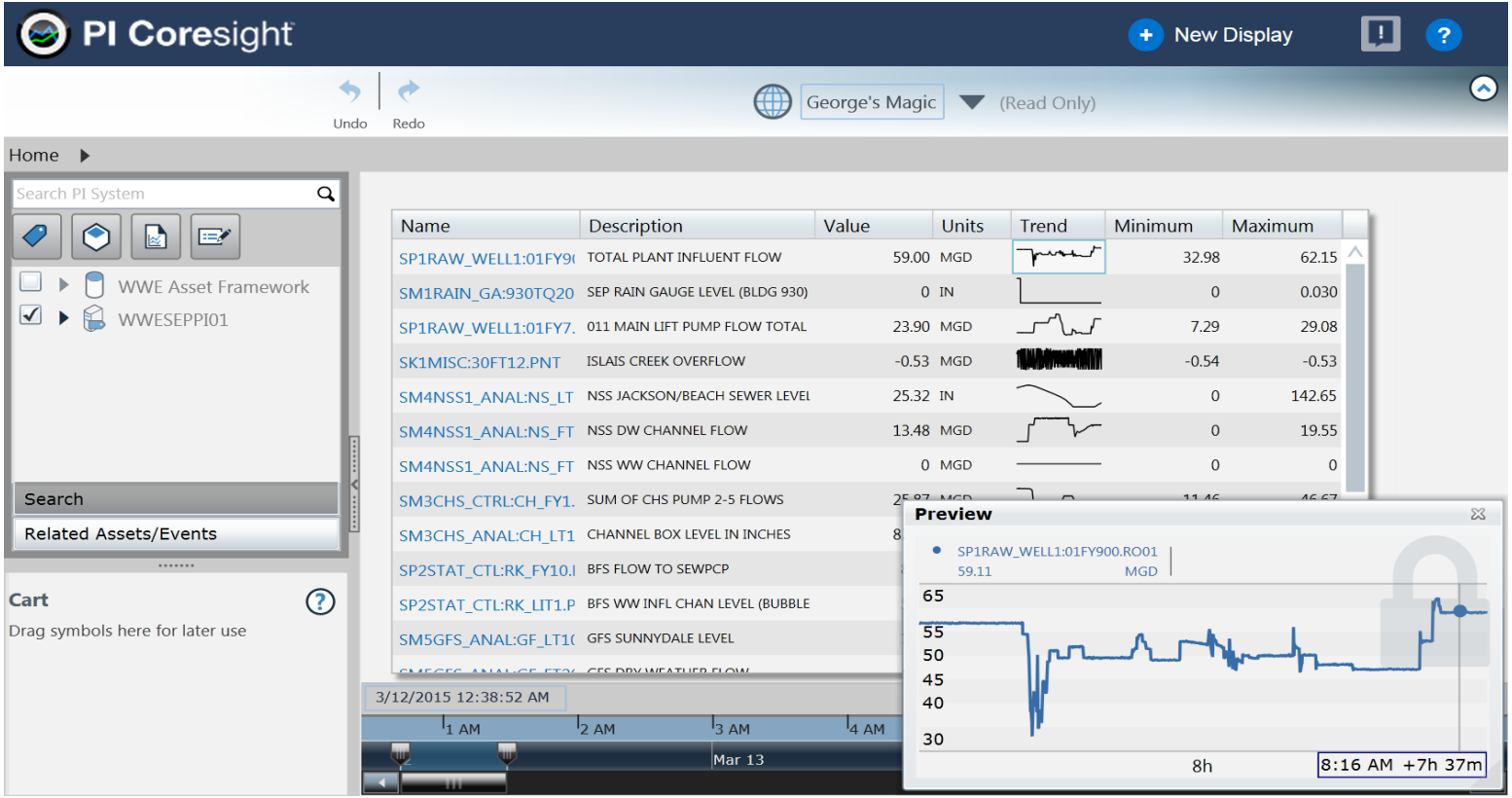
Booster Pump Station Training



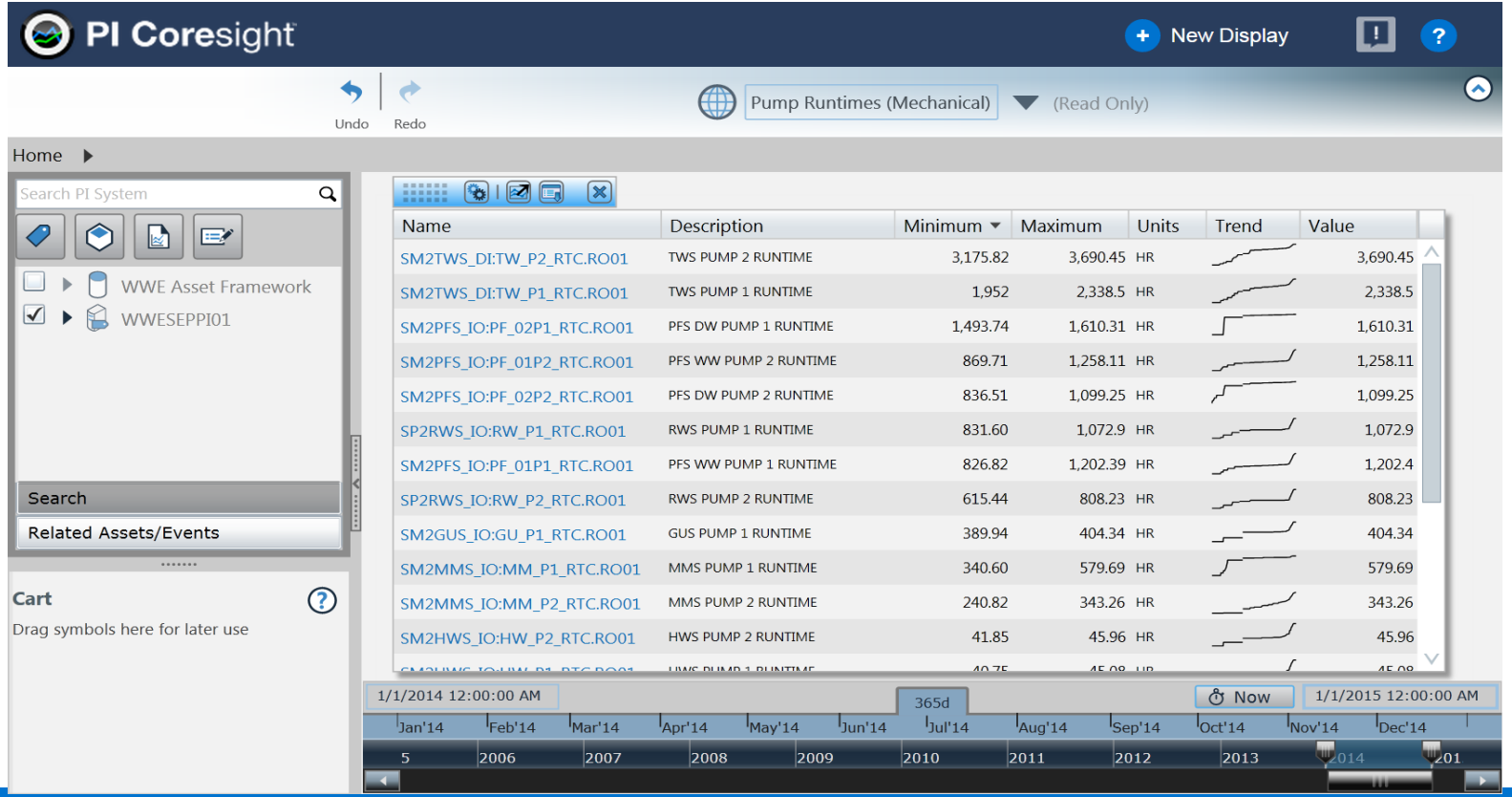
SEP Process Overview



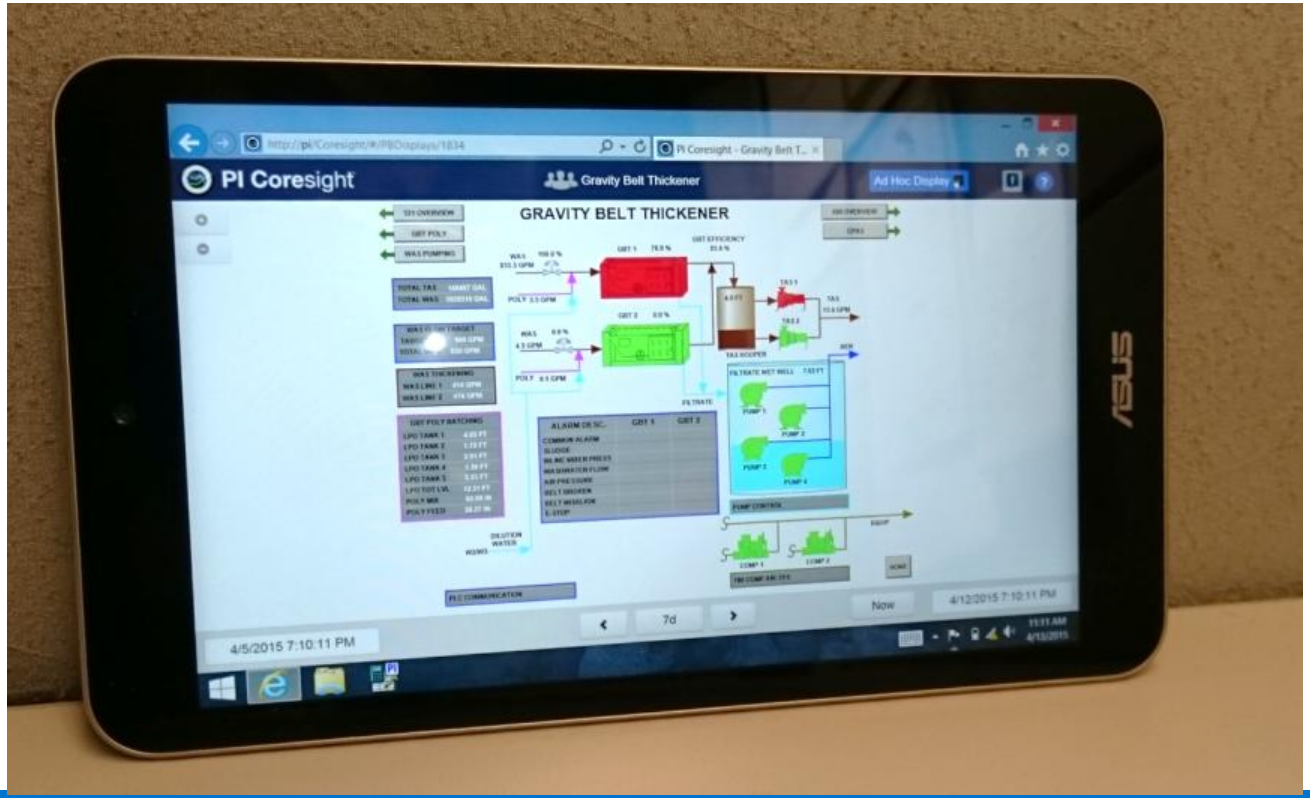
Critical Flows and Levels



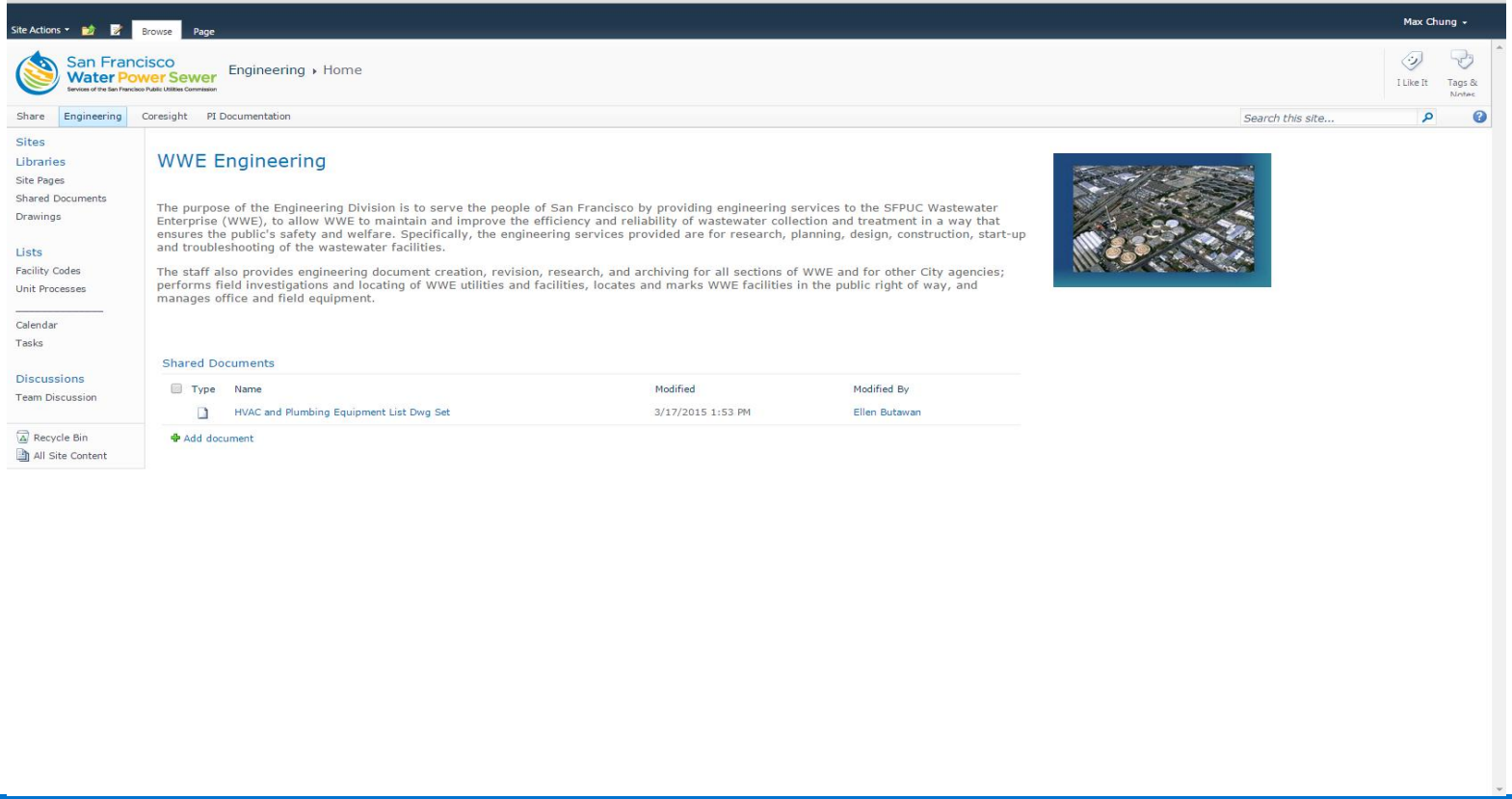
Finding Pump Runtimes



Access PI Coresight w/ Tablet Devices

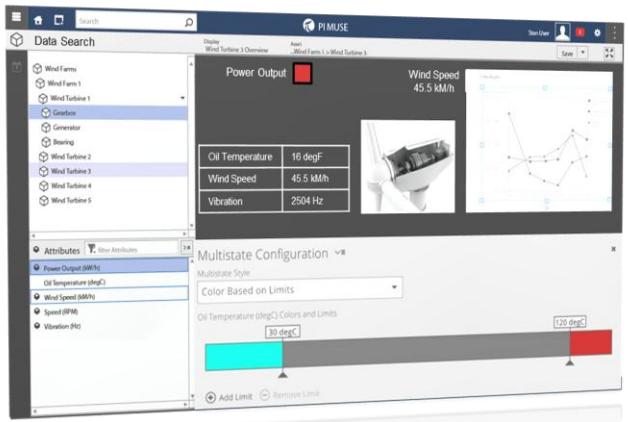


One Other PI Coresight Integration



What's planned for PI Coresight?

Visualization for today's PI System



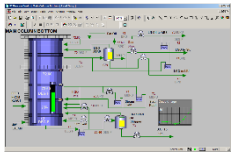
Authoring

Monitoring

Ad Hoc Analysis

Time Series | Assets | Events | Analytics | Notifications

TODAY (2015)

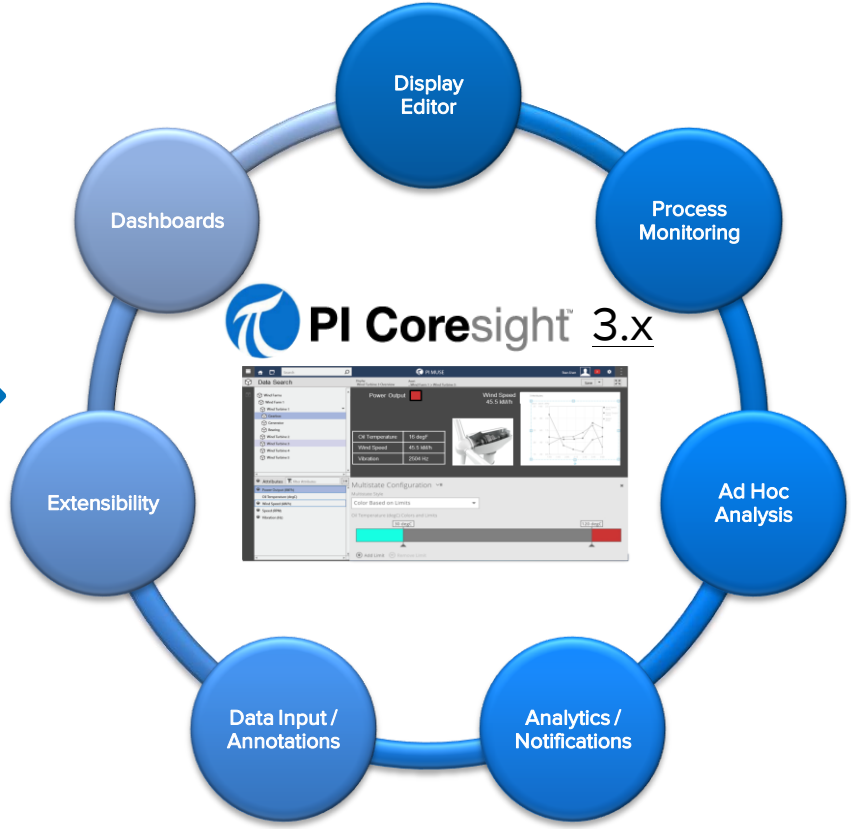


PI ProcessBook
Display Editor
Process Monitoring

PI Coresight 2.x
Ad Hoc Analysis
PB Display Viewer

PI WebParts
Dashboards

FUTURE (2016+)



PI Coresight™ 3.x

The following is a glimpse of what the development team is working on in support of the PI Coresight 3.x vision.

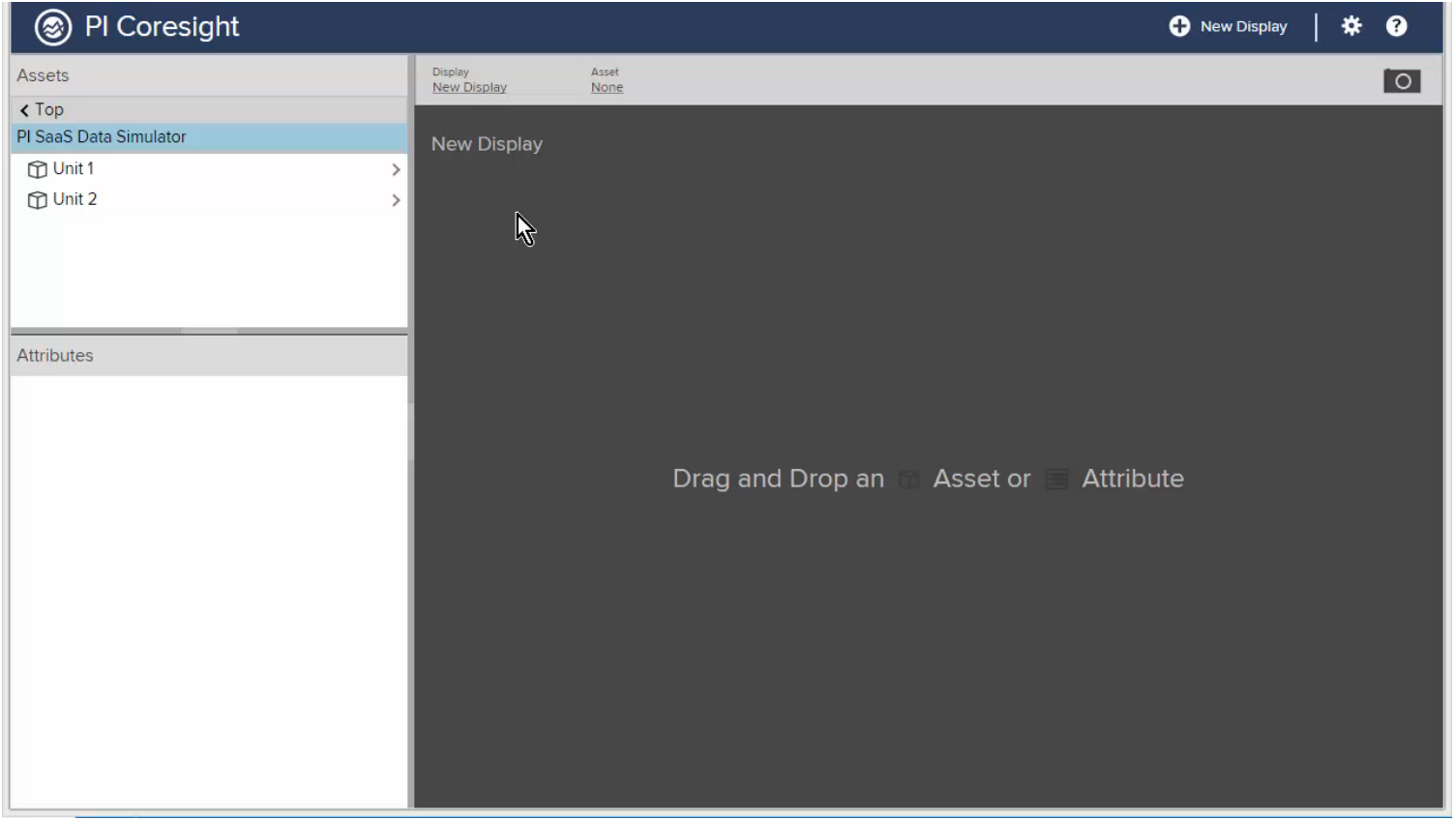
The functionality displayed is subject to change.

In other words… anything you are about to see or hear can't be held against Tom or Eugene in a court of law.

Keep it simple…and make it look good

Draw me a picture

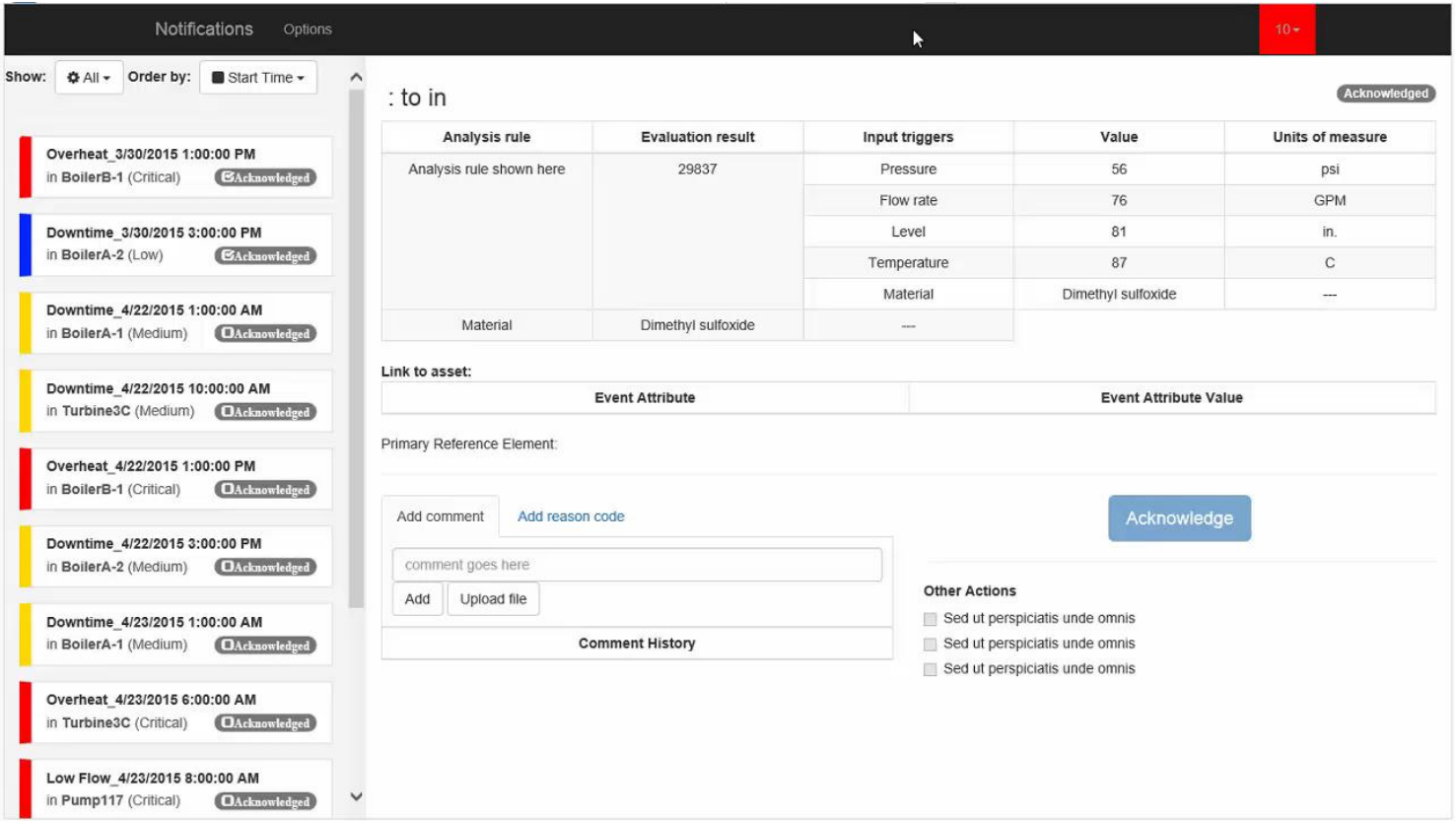
Prototype Development



High priority interrupt

What's important right now?

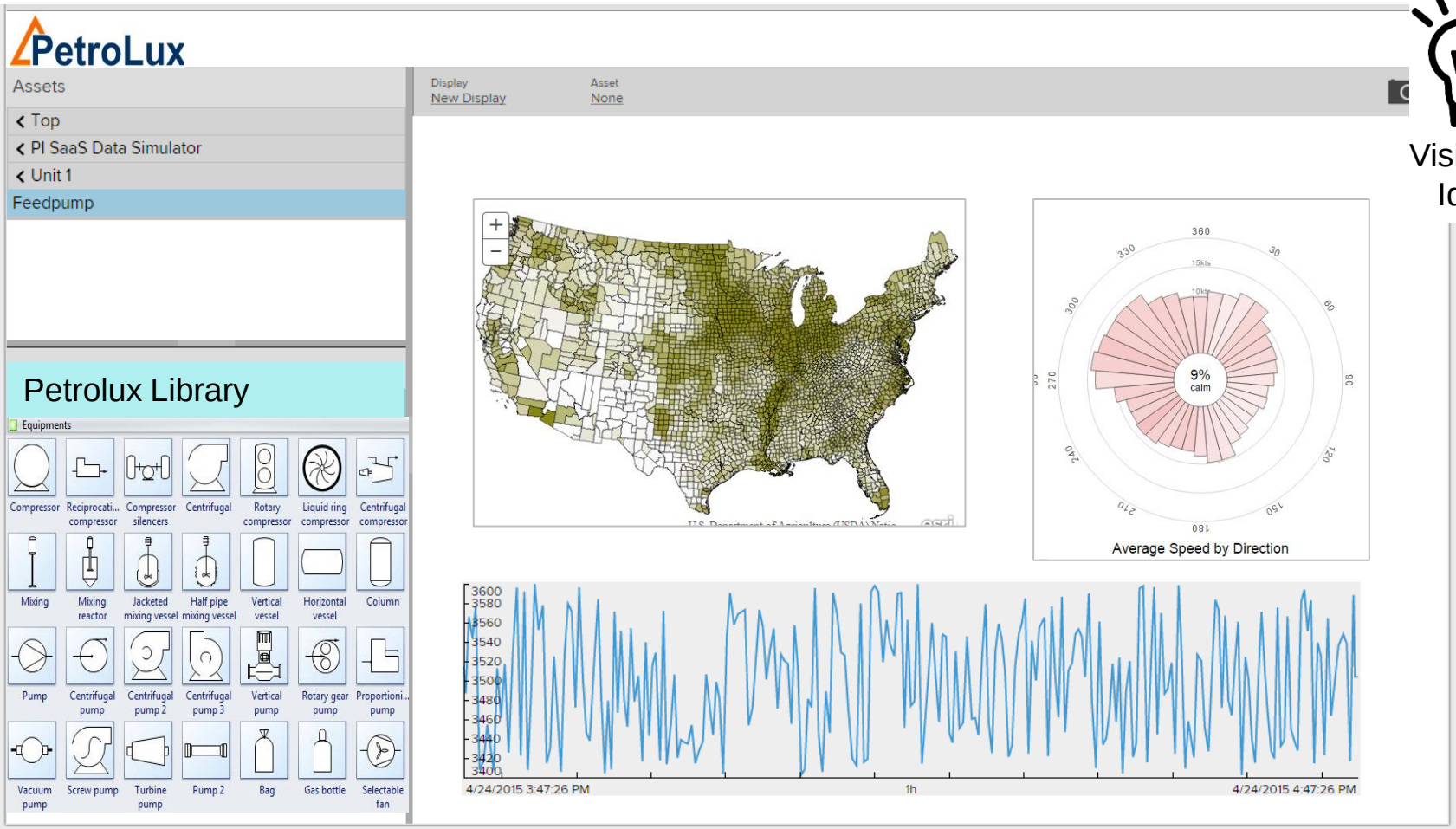
Prototype Development



Time is relative

What's different about what just happened?

More is better



Vision & Idea

The PI System delivers even more value when integrated together

For more information

Today

Batch Migration to Event Frames	2:00 - 2:30
Event Frames - How to Provide Context to Critical Events	2:45 - 3:15
Building Displays with the new PI ProcessBook and PI Coresight	2:00 - 3:15 Lab

Tomorrow

Exploring your Data with PI Coresight	9:15 - 10:30 Lab
Bring element-relative features of your PI ProcessBook displays to PI Coresight	9:15 - 12:00 Lab

Tom LeBay

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OSIsoft, LLC

Eugene Resnick

Engineering Group Lead

OSIsoft, LLC

Max Chung

Electrical Engineer

Wastewater Enterprise (WWE)

Questions

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

State your **name & company**

THANK YOU

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