

# Information is the Key to EMIS

How past performance can influence the future

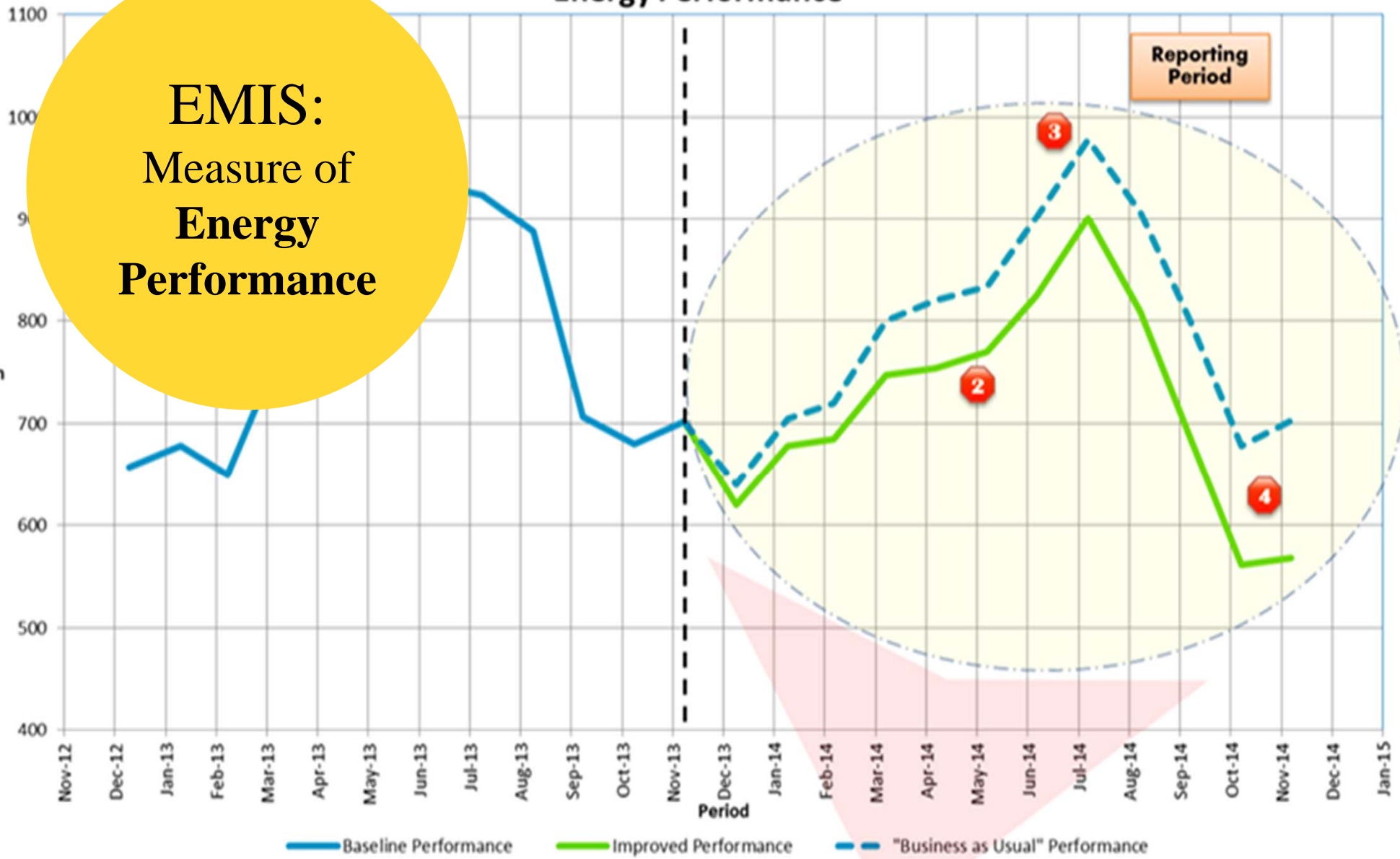
Greg Baker  
Engineering Manger  
VEIC

EMIS:  
Energy  
Management  
*Information*  
Systems



**EMIS:**  
Measure of  
**Energy**  
Performance

### Energy Performance



EMIS serves  
Energy Management Needs  
(SEM/CEI):

A tool that can provide **visibility**

Motivate

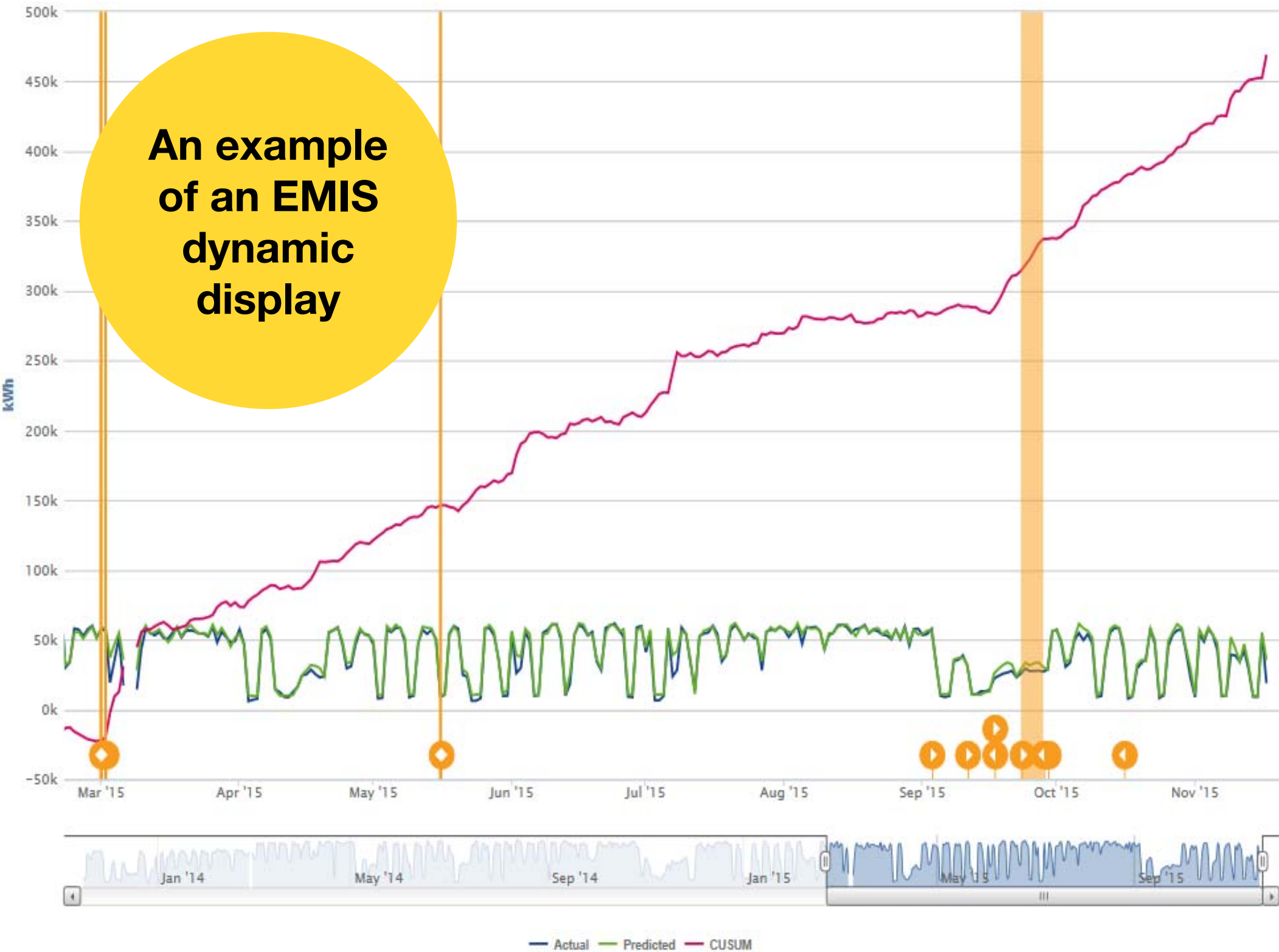
Manage

Attribute

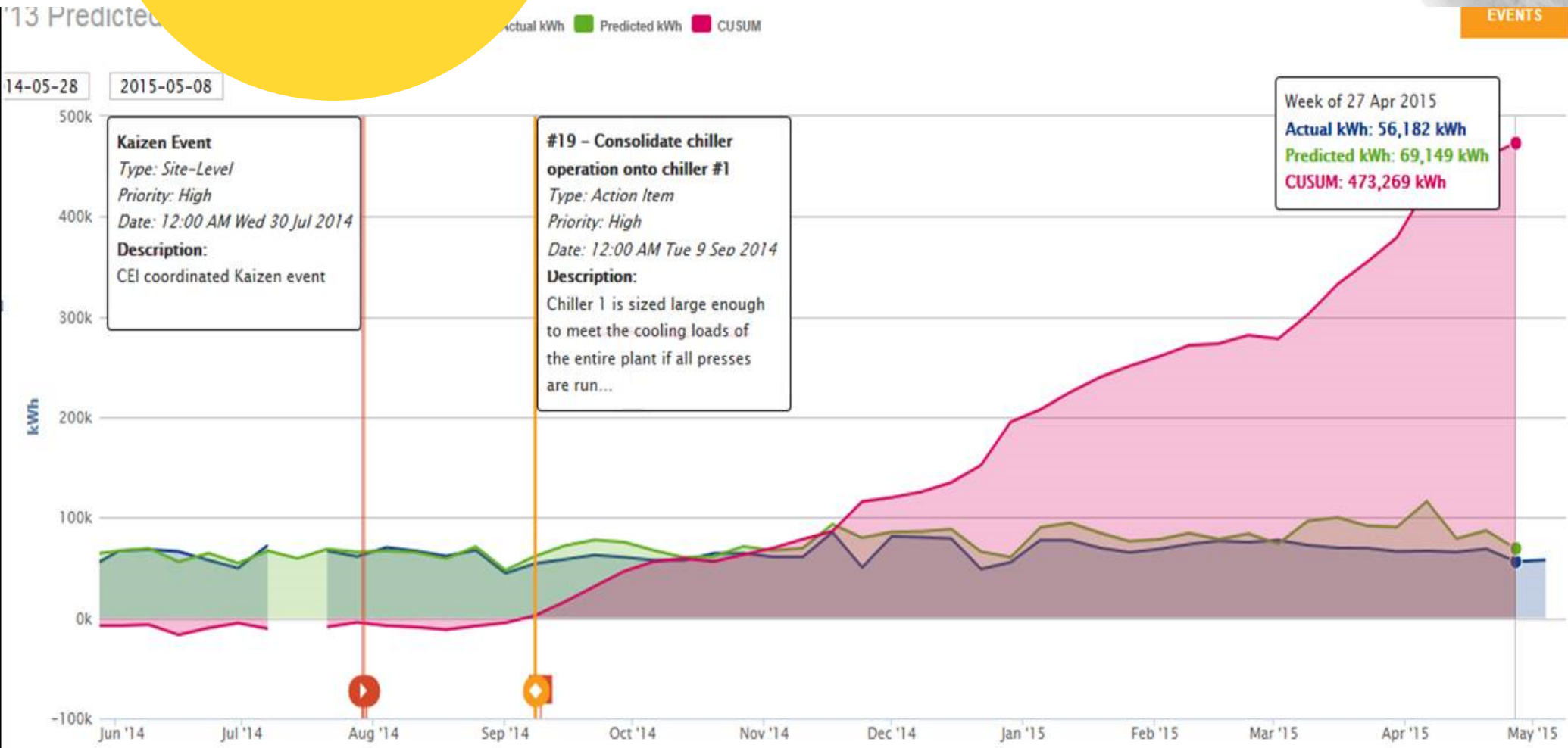
- **Dynamic display**
- **Connects actions to results**
- **Can build stronger relationships with customers**

***EMIS  
BENEFITS***

**An example  
of an EMIS  
dynamic  
display**



# EMIS connects actions to results







# **Customer Engagement**

Offers insight

Allows for deeper  
conversations

Obtaining data is a  
value-add



- **Facility variables identification**
- **System implementation**
  - **Simple versus complex**
- **Secure data management**

***EMIS  
CHALLENGES***

# Production data is critical

Identification

Transmission

Security





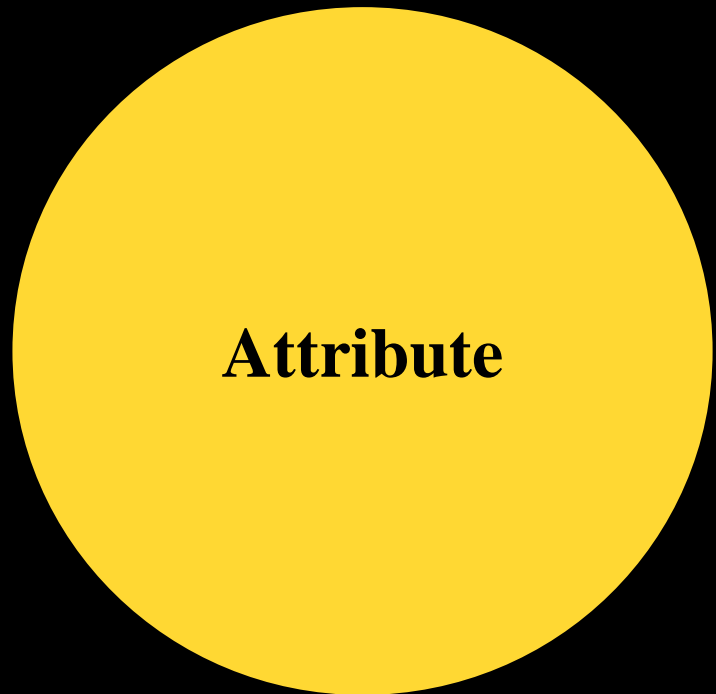
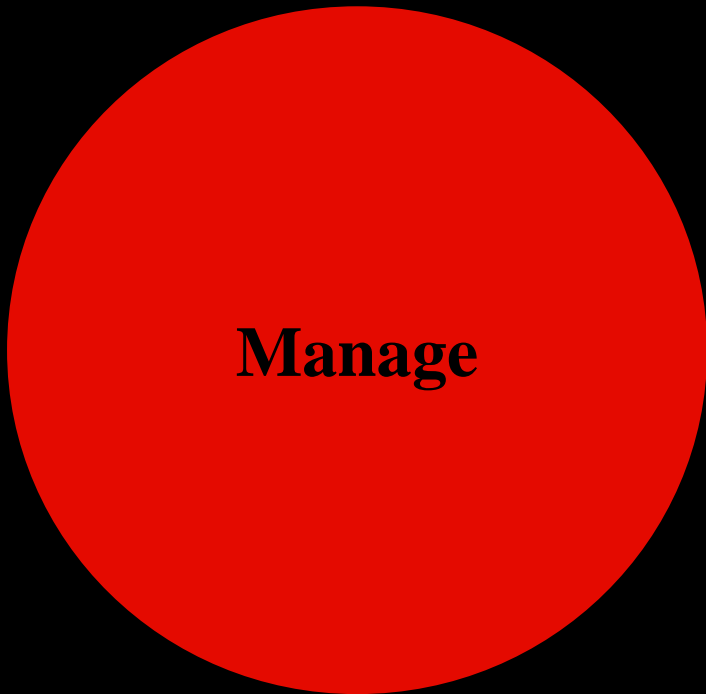
Much depends on your customer's baseline



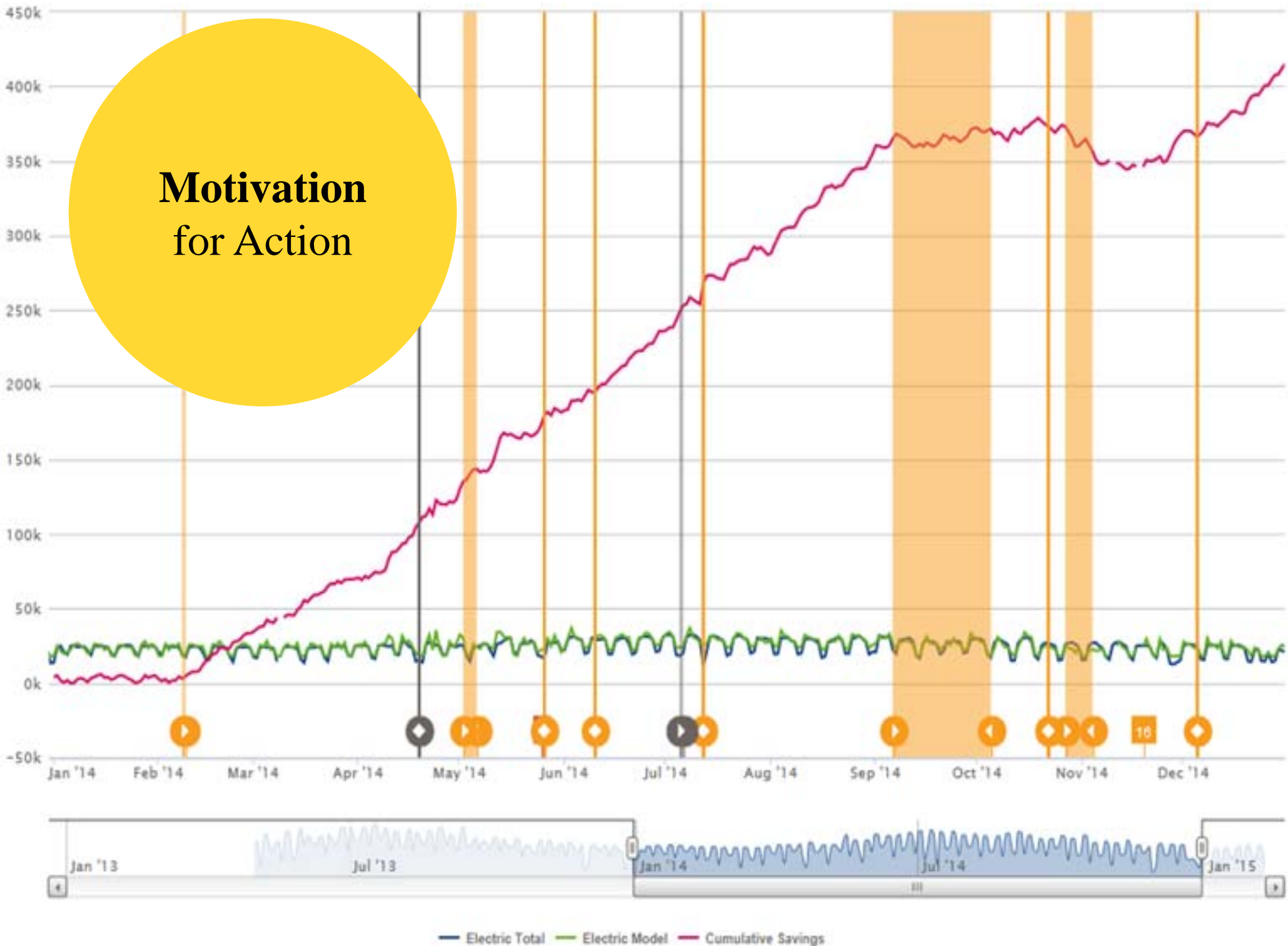
# Protocols are needed

Will my company's data be lost or compromised?

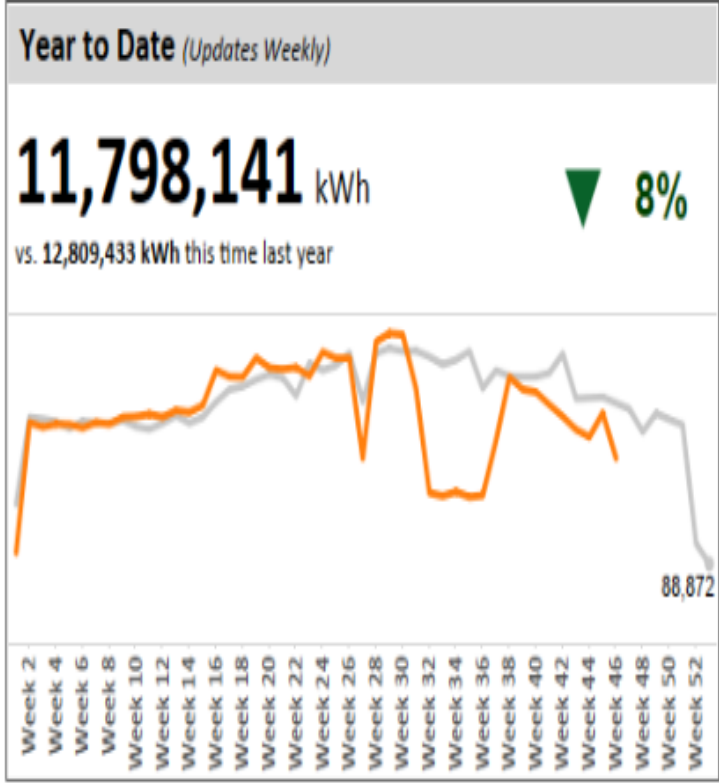
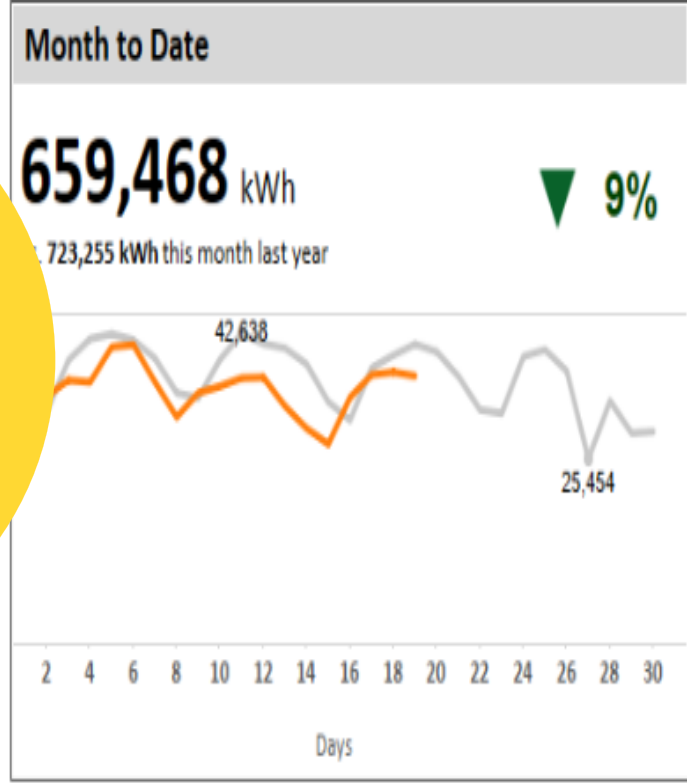
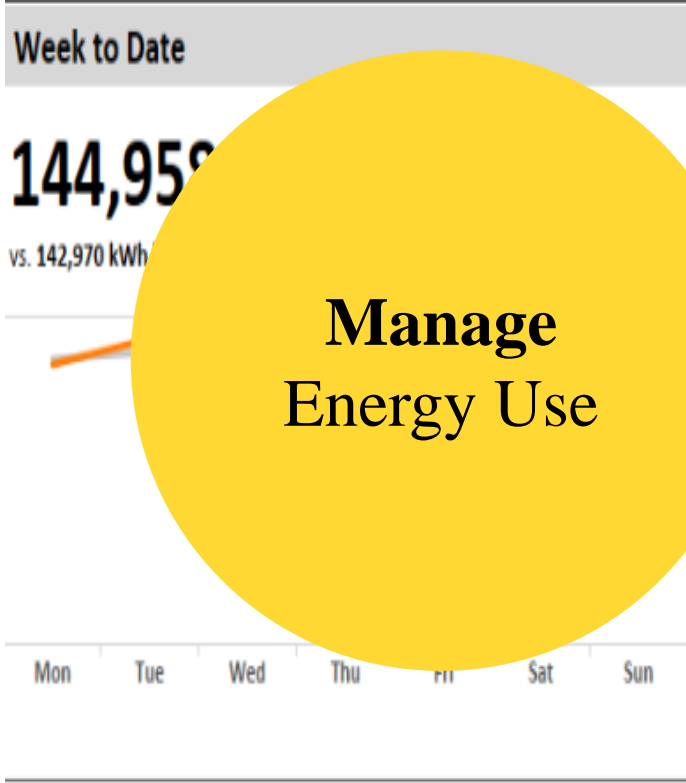




# Motivation for Action

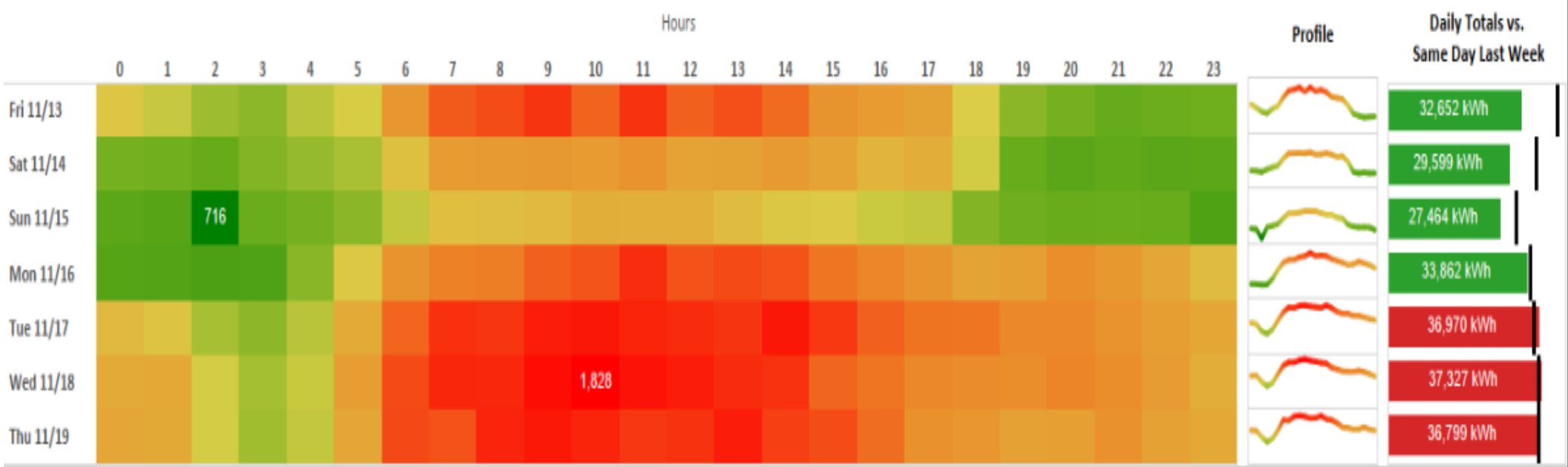






### Rolling 7-Day Heatmap

*Red and green squares represent high and low periods of hourly energy consumption over the last 7 days. Min. and max values are labeled.*



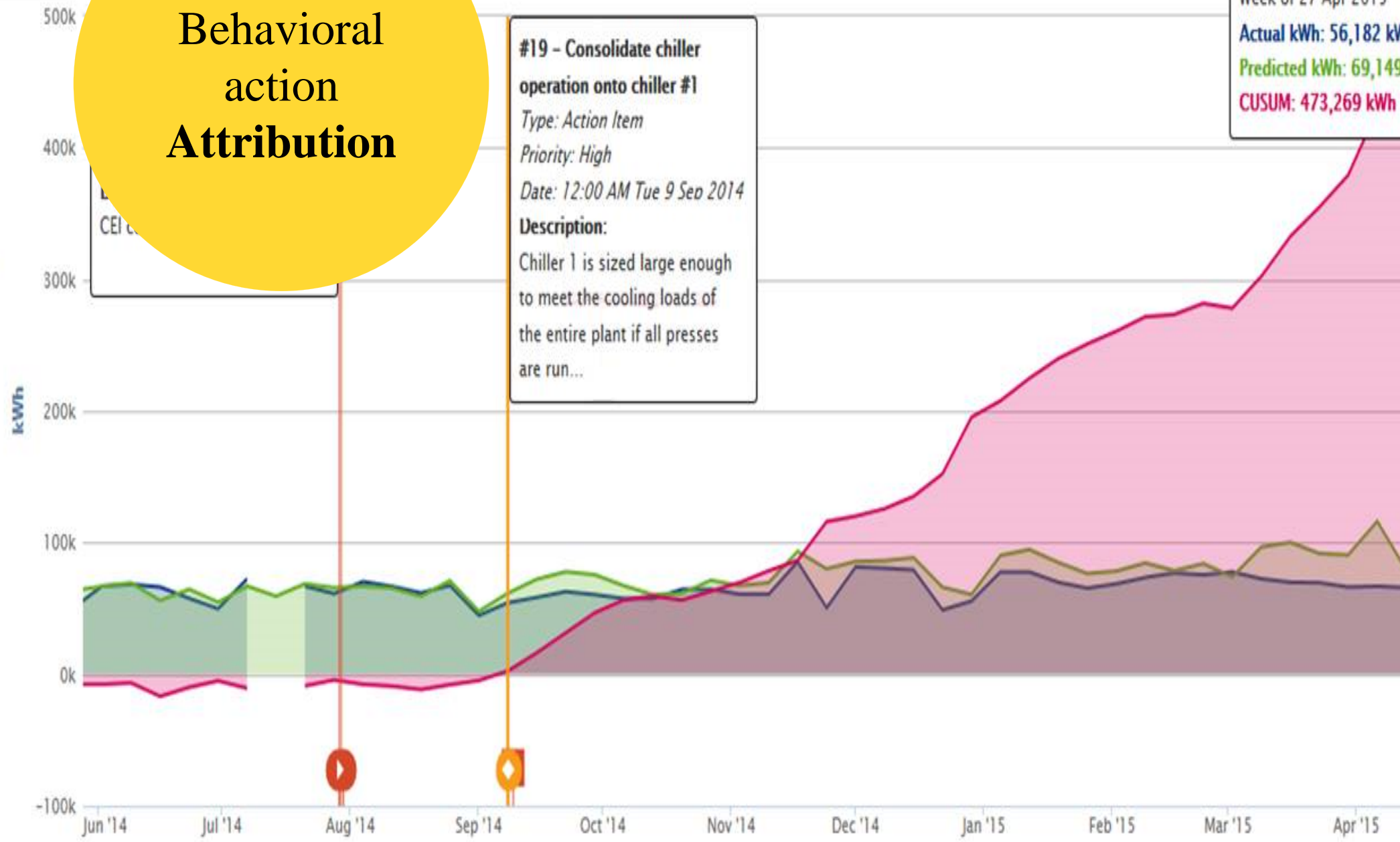
Actual kWh Predicted kWh CUSUM

14-05-28

Behavioral  
action  
Attribution

#19 - Consolidate chiller operation onto chiller #1  
Type: Action Item  
Priority: High  
Date: 12:00 AM Tue 9 Sep 2014  
Description:  
Chiller 1 is sized large enough to meet the cooling loads of the entire plant if all presses are run...

Week of 27 Apr 2015  
Actual kWh: 56,182 kWh  
Predicted kWh: 69,149 kWh  
CUSUM: 473,269 kWh



How do we communicate.....

- the absence of something?
- the right information?
- to the right person?
- at the right time?

EMIS