OSIsoft PI System Visualization / Analytics

Presented by **Archie Gale**

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Industry Success Story

Manila Electric Company (2015)

- CBM implemented by monitoring key gas ratios for the transformers
- US$490,000/year saved
- ROI of 3 years

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Agenda

- Implementing CBM using the PI Analysis Service
- Using PI Clients for CBM
- Next Steps
- Conclusion

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Implementing CBM using PI Analysis Service

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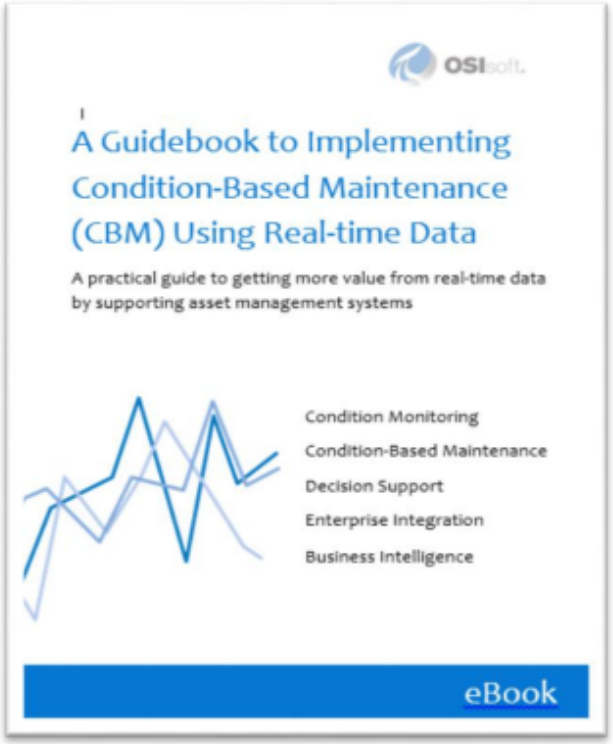
CBM Prescriptive Guidance



Terms & Definitions

Implementation Guidance

PI System Overview for CBM

PI System Integration w/ CMMS

Enabling Opportunities

Solution Examples

Industry References

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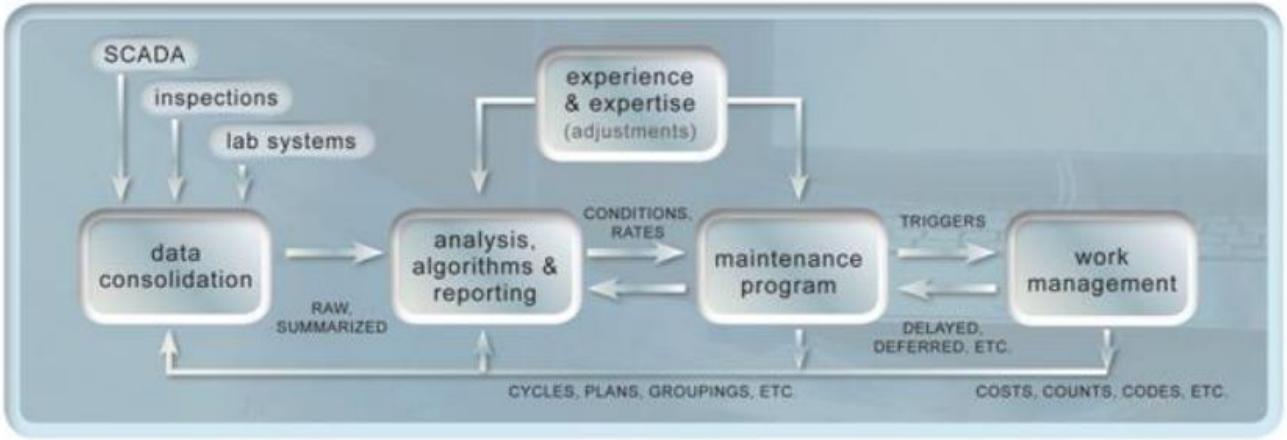
Continual development process

- Continue to improve
- Continue to tie the process together
- Get more from existing data and systems



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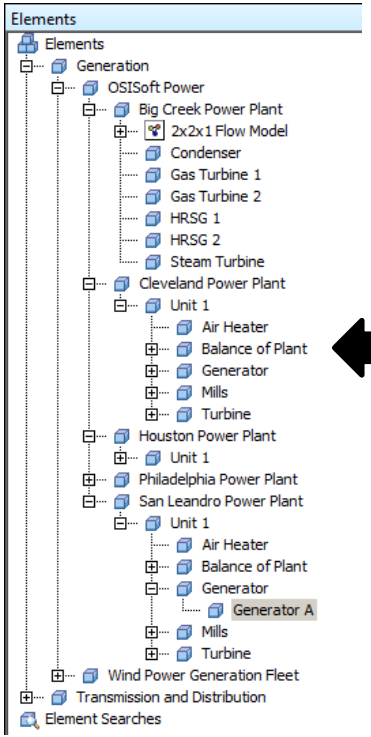
Linking to EAM systems

- Assets synchronised between the EAM system and the AF database
- Utilise both PI and external analysis tools
- Bidirectional data flow
- Utilise PI Integrators



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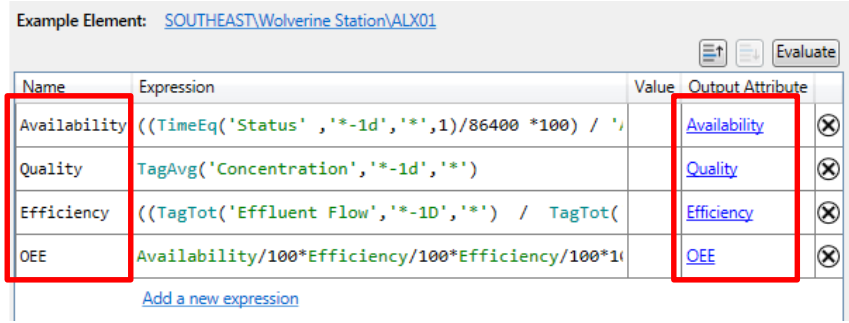
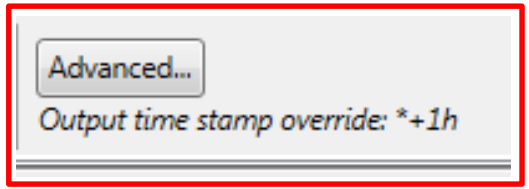
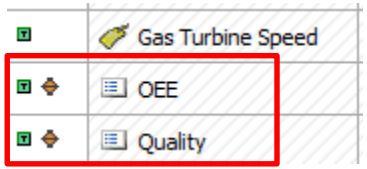
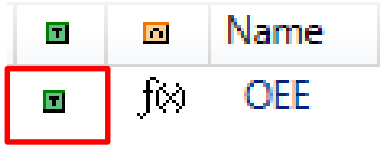
PI Analysis Service features

- Perform useful, continuous analyses
- Multiline expressions
- Custom timestamp on output
- Write analysis outputs to attributes, and PI points for optional historisation
- Templatised









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Using PI Clients for CBM

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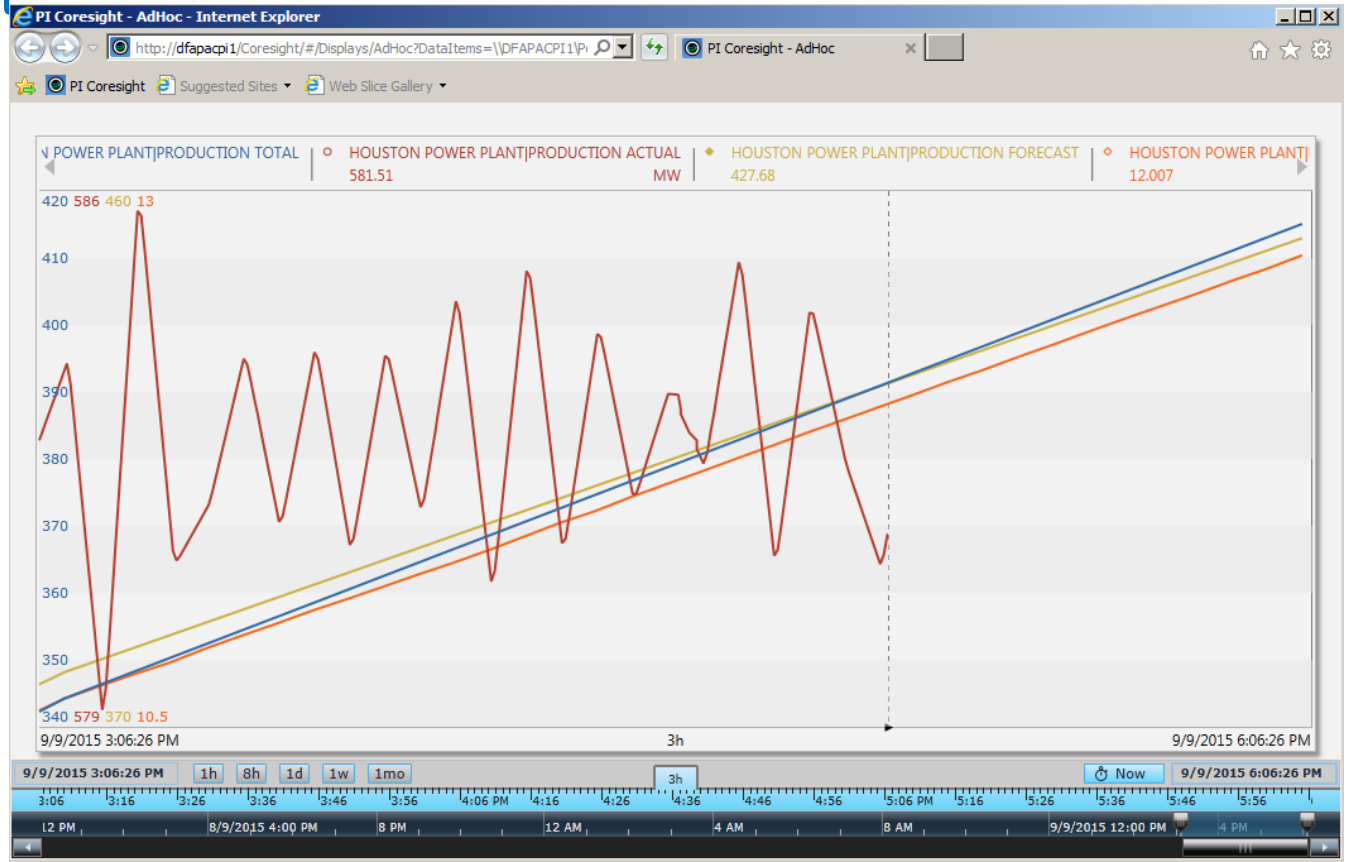
Active monitoring with PI Notifications and External Links to Coresight



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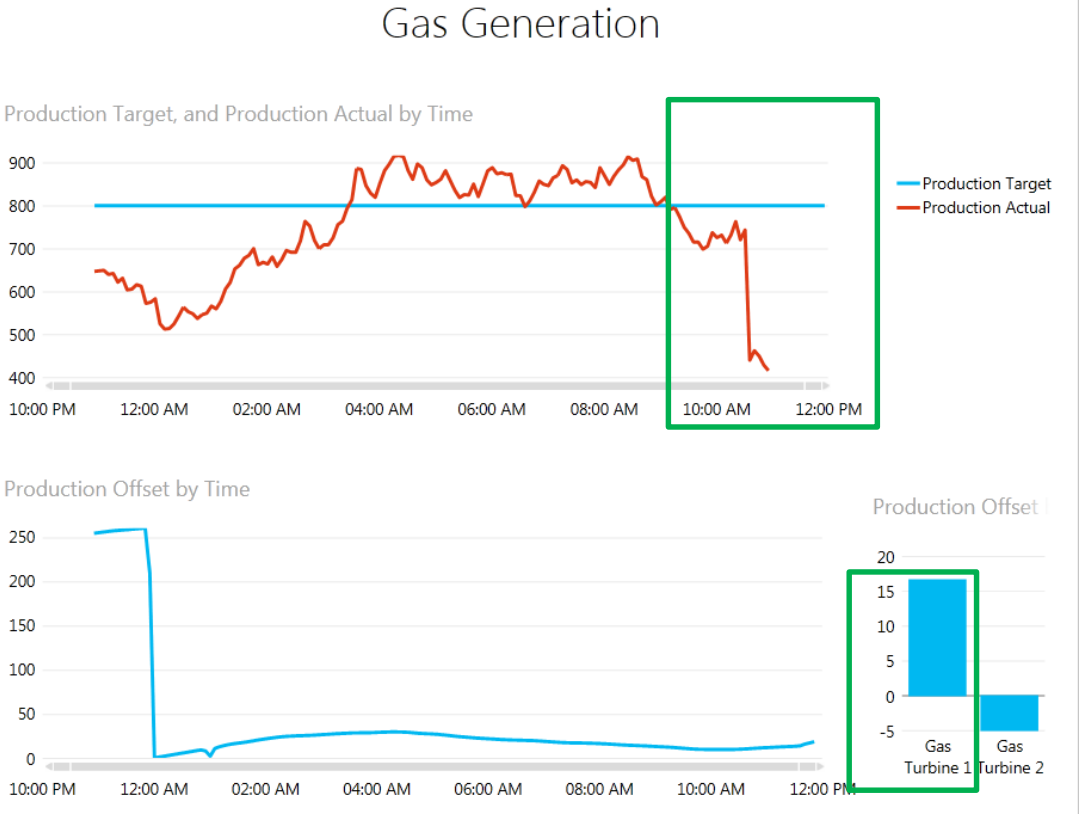
Utilise existing Generator reports for analysis



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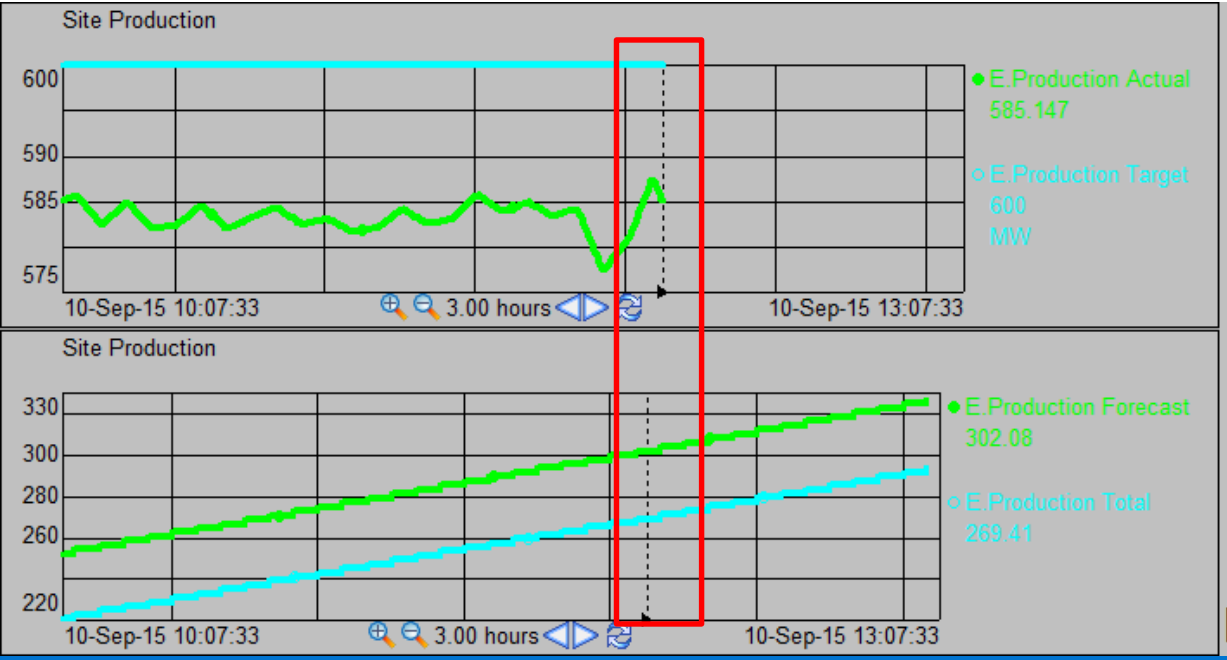
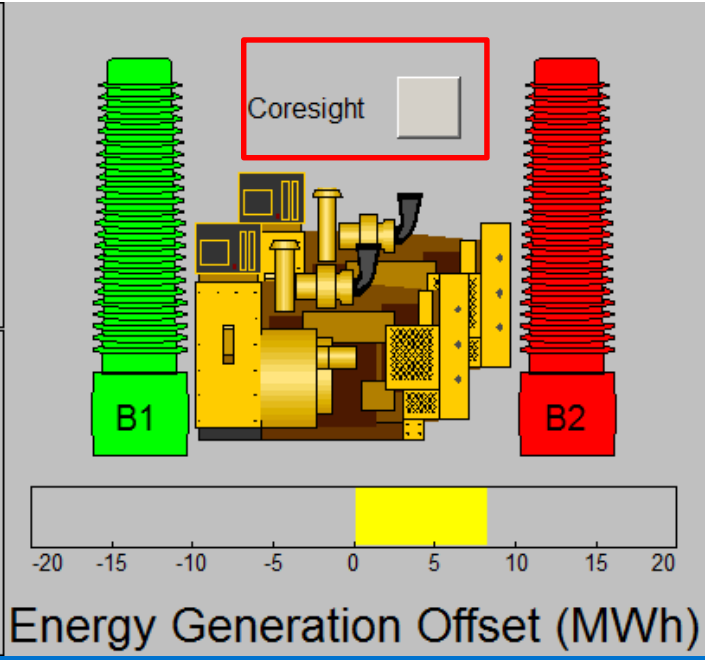
In depth inspection of the turbine using PI ProcessBook





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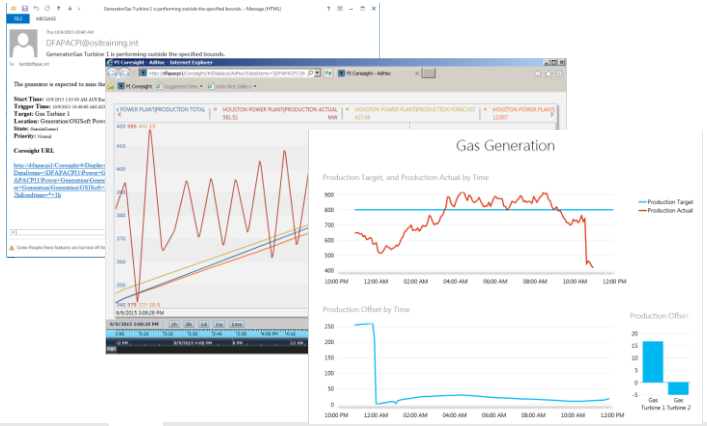
Summary

The active monitoring in conjunction with premade reports increases efficiency twofold. Less time concerned about generators that are in a healthy state and less time spent creating the same reports for each subsequent alert



BUSINESS CHALLENGES

- Utilise an active monitoring method to allow CBM
- Calculate asset health in real time for CBM
- Visualize relevant information faster and easier

SOLUTION

- PI Notifications for active monitoring
- PI Analysis Service for calculating scores used in a templatised CBM model
- Ad-Hoc PI Coresight trends for quick and clear visualization
- Future data capabilities to increase score accuracy

RESULTS AND BENEFITS

- Less resources passively monitoring
- Consistent scoring mechanism between assets
- Faster asset health visualisation
- Real time predictive modelling

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Next Steps

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How OSIsoft can help

- Prescriptive Guidance
- Workshops
- Customer Presentations
- PI Square
- Partners (products, services, partnerships)

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Contact Information

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Questions

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

State your **name & company**

Please don't forget to…

Complete the Survey for this session

The Power of Data
DECISION READY IN REAL-TIME

Evaluation Form (Seminar Location - Date)

Name:_____ Company: _____

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Quality and content of the presentations	Poor	Good	Excellent	N/A
Welcome	○	○	○	○
The Journey To Real-Time Operational Intelligence	○	○	○	○
The Power of Connection	○	○	○	○
Tank Level Management System	○	○	○	○
Using the PI System to Aid in Troubleshooting Operational Aspects of Oil and Gas Well Drilling and Completion	○	○	○	○
Unleash your Infrastructure	○	○	○	○
Information on the Spot	○	○	○	○
Wrap-up/Seminar Conclusion	○	○	○	○

Quality and organization of the seminar				
Choice of date	○	○	○	○
Time allowed for lunch/breaks	○	○	○	○
Choice of presentations	○	○	○	○
Pace and time allowed for the presentations	○	○	○	○

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감사합니다

谢谢

Danke

Gracias

Merci

Thank You

ありがとう

Спасибо

Obrigado

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