A change in how we consider our maintenance strategies

EEA APEX Presentation

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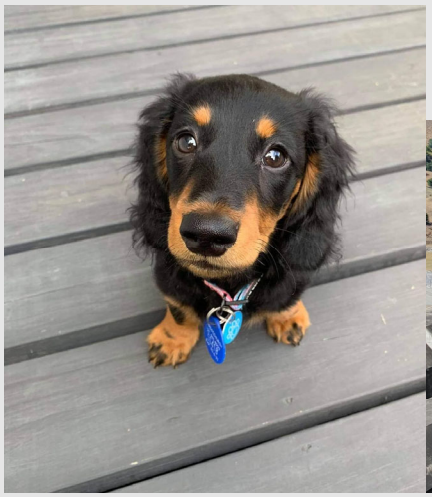

About Me

- Dog mum
- Electrical Engineer
- Twizel

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About Me

- Electric Vehicle charger installs at our Hydro sites and offices

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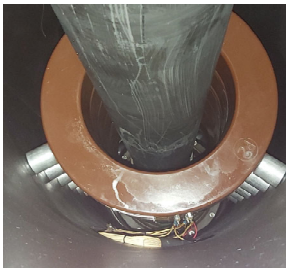
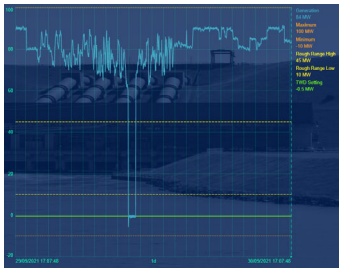
What's this all about?

Site equipment → PLC → PI





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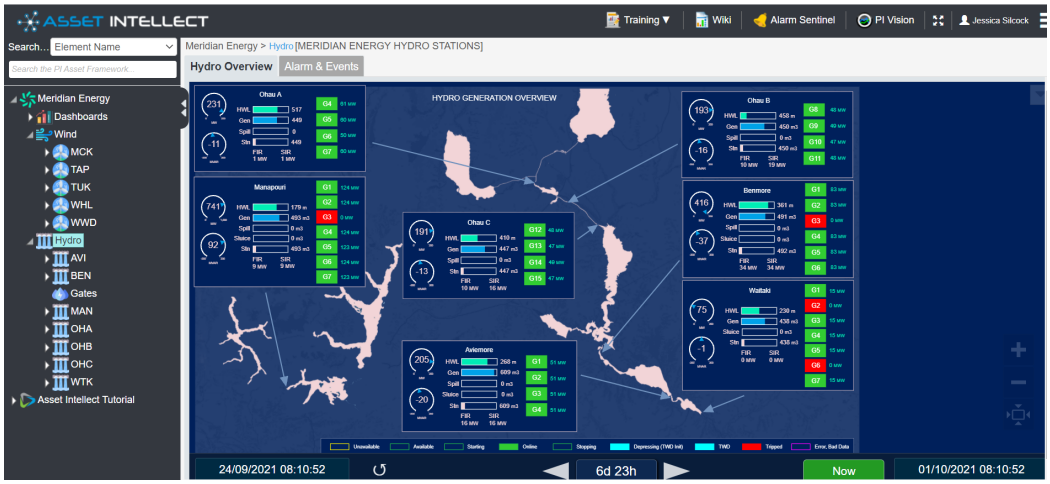
What's this all about?



Preventative Maintenance

Cons:

- Longer outages
- More resources

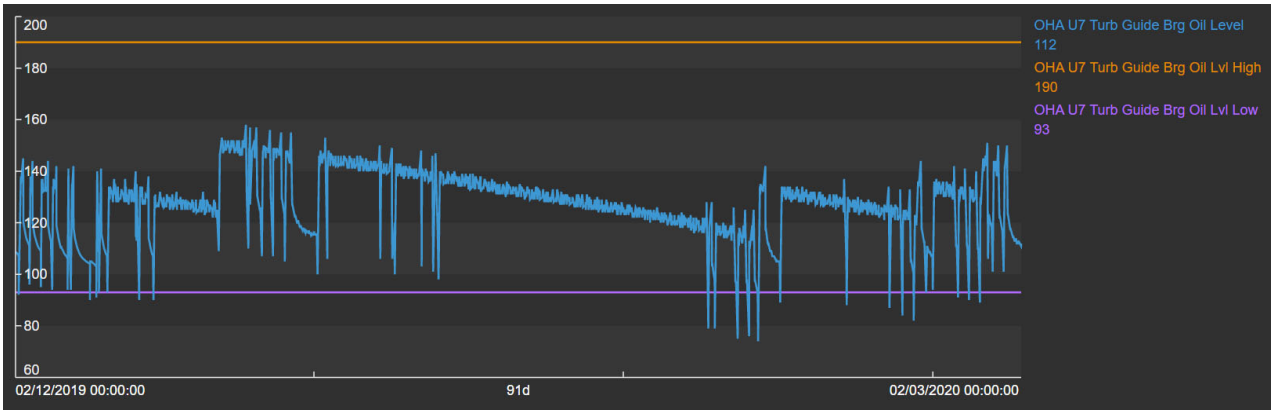
→ Higher carbon emissions

Pros:

- Scheduled
- Spread across sites

→ Control maintenance demand

Predictive Maintenance



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Predictive Maintenance

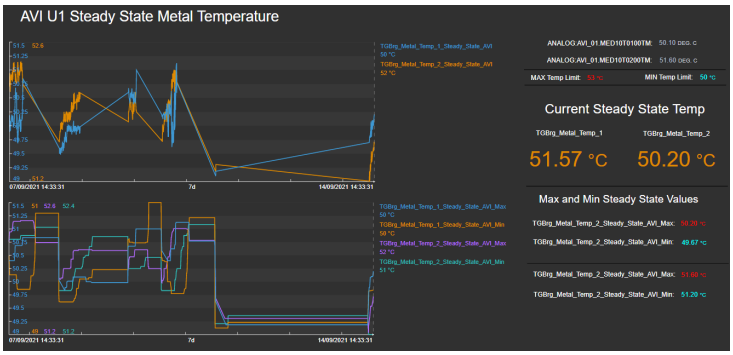
AVI Metal Temp Has generated an Alert for the Steady State Temp is High

Pi_Alert
To Jessica Silcock
2:19 pm

Steady State Test : AVI Metal Temp Steady State
Event Frame Start time: 1/01/1970 12:00:00 a.m. New Zealand Daylight Time (GMT+13:00:00)
SteadyState: 50.10
SteadyState2: 51.52
Min Steady State at Start time: 50.00

This is a POC for the Steady State Temp High test

Path to display: https://piportaltest/PIVision/#/Displays/761/SteadyStateTest



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Predictive Maintenance

Cons:

- Cluster of maintenance → Higher carbon emissions

Pros:

- Reduced outage duration
- Extended life expectancy
- Reduced travel

→ Reduced emissions

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Predictive Maintenance – How far can we go?

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Summary

PI data & new instruments + Condition monitoring & predictive maintenance = **Advanced detailed maintenance diagnostics**