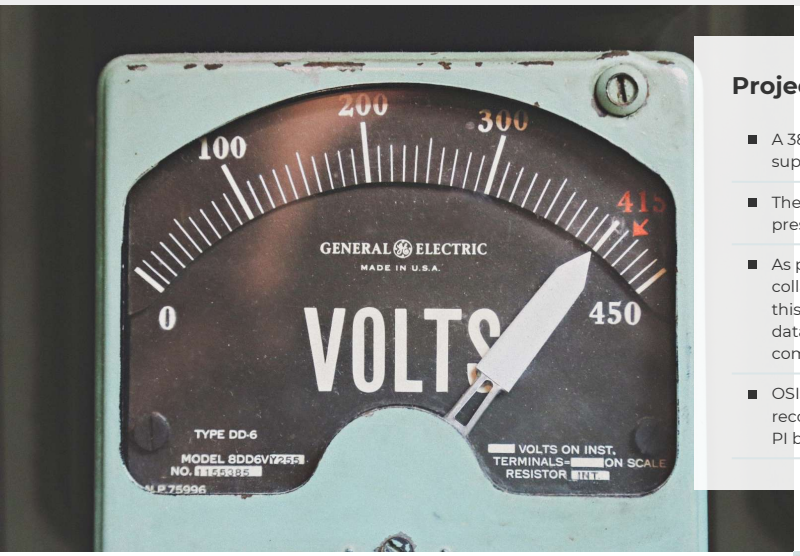
IMPROVING THE EFFICIENCY OF A POWER STATION WITH A OSISOFT PI ENTERPRISE HISTORIAN

"If I had nine hours to chop down a tree, I'd spend the first six sharpening my axe" - *Abraham Lincoln*

Industry	**Sector**	**Segment**
Energy	Gas Power Stations	Business Systems



Project

- A 388MW natural gas fired power station has been constructed in Tasmania to support Tasmania's hydro generation capability.
- The power station was constructed to diversify power generation and to ease the pressure on the state's hydroelectric dams, which are prone to drought conditions.
- As part of ongoing operational improvements, management identified the need to collate and centrally store data from disparate systems into an Enterprise Historian; this way, the data could be evaluated and used for operational intelligence and data-driven decision making. This would support the optimisation of the asset, aid compliance and reporting.
- OSIsoft PI was selected as the Historian platform and the management team recognised they needed a partner who was fluent in the implementation of OSIsoft PI but also possess a wide ranging OT capability.

Solution

Cromarty Automation was engaged to work collaboratively with the client to:

- Develop a scope to identify business requirements for the Historian.
- Specify, install, and configure data collection interfaces to collect data from multiple data sources.
- Implement the OSIsoft PI Enterprise Historian to collect and store data.

Once deployed Cromarty Automation:

- Developed an SQL reporting utility to automatically identify engine run events and calculate engine efficiency based on average exhaust temperatures when compared to a profile.
- Provided run hours and number of operations reports for equipment in the maintenance system.
- Provided ongoing OSIsoft PI upgrades, maintenance, and support of the system.
- Provided monthly system auditing and reporting.

Outcome

Since deployment, the OSIsoft PI Historian has become critical to the efficient operation of the power station. It provides easily accessible, consistent, centralised data for the asset engineers to evaluate allowing data driven business decisions to be made, planning of critical maintenance and optimisation of operations.