Case Study - Automated Data Reporting
Increase Accuracy and Productivity

SPS ®
DATA FIRST

SAVE MONEY, TIME, AND LABOR - GET IT DONE FAST AND RIGHT THE FIRST TIME

Background

A large company in the oil & gas industry operates a cogeneration facility in Southern California that produces process steam, with electricity as a by product. The waste heat from the gas turbine is used to produce steam that is then used in an enhanced oil recovery application. The company collects significant amounts of data from their plants to influence the reliability performance of their assets. They have a strong desire and incentive to optimize the manner in which they capture essential plant

> **"I used to spend a full morning reviewing logs and entering data for all three plants, now it takes at the max one hour, so I am a happy customer!"** - Engineer & Data Specialist

operating data, from start-up to shut-down, through automation with the goal of minimum input from staff being necessary. They have a business culture of using operational information to ensure effective business operations and decision making at the plant and corporate level. They piloted SPS' ORAP® Asset Insight® SaaS to assess the long-term value, and the opportunity to extend the SaaS to the remainder of their installed base of operating assets – their extensive global fleet.
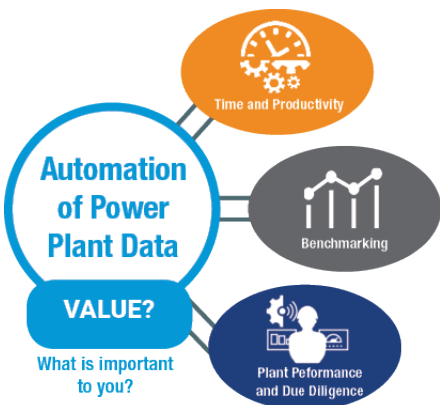
The Situation

The engineer in charge of data reporting for the three (3) cogeneration plants in California, (9 units in total) validated SPS' automated data collection tool, ORAP Asset Insight, to determine the value of applying the SaaS across their portfolio. The plant has multiple reporting requirements; regulatory reporting (including the CAISO and NERC GADS), plant and corporate management, as well as special business requests to address issues and concerns as they arise. In addition, they regularly participate and submit operating data to SPS' ORAP program for their corporate KPI and benchmarking analytics. They estimated that during a heavy peaking month (i.e. when start and stop over 20 times on each unit), the reporting requirements for NERC GADS was a burden. It would take hours to complete the required data reporting using their old manual process – the run cycles and the stand-by cycles had to be validated manually. In addition, there is also a required internal review (a layer of added effort and time) from corporate headquarters to validate and approve the data before it is released. They chose to pilot the Asset Insight SaaS to reduce and replace this time-consuming effort.

Automation of Power Plant Data

VALUE? What is important to you?

Time and Productivity

Benchmarking

Plant Peformance and Due Diligence

The Solution

ORAP Asset Insight captures data from their internal PI System and securely passes it to the ORAP database through PI Cloud Connect (which is NERC CIPS compliant). The data is transformed into time, capacity, age, and events – it reflects the full operating cycle for each and every individual start-up and shut-down (including trips). Once transformed, the data proceeds through an automated validation process, with oversight by SPS engineers. The process automatically develops and validates all operating and age data; Service Hours, Reserve Hours, Outage Hours, Factored or Equivalent Hours & Starts, and more. All of their Reserve Shutdown Events (which are required by NERC GADS) are now developed automatically – a significant time savings.

Business Benefit

They reported that the automated data collection process reduced entry time significantly on these peaking units – their labor time and cost were greatly reduced. What took hours per unit, was now reduced to one (1) hour per plant – savings in time and labor by a factor of 4 or 5. They no longer have to search through log books looking for start-ups and shut-downs, and they no longer have to create reserve shutdown events and downtime – Asset Insight captures the data and performs the work for them. The data burden is gone, equating to time savings and increased data accuracy. Even in a month without much operation, they are still seeing a real benefit in reduced effort (1 to 2 hours). The added value comes later when data requests and reporting requirements can be fulfilled without significant effort or lost time – The ORAP Analytics Portal provides the data at the level of detail required to support business objectives. And they have access to SPS engineers when needed – and at no cost!

Saving $25K per plant each year!

Contact Lynne Bellizzi (bellizzi@spsinc.com) for more information!

ORAP® **ASSET INSIGHT**®

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