

Client Reference

From manual hassles to seamless power management: A generator success story

In the face of economic challenges and ongoing load shedding in South Africa, robust generator monitoring is essential to sustain assets, cut costs and ensure uninterrupted business operations.

Rhynard Prins, Business Development Manager

30% ↓
monthly diesel expenses

24/7
Online, generator performance monitoring

Key challenges

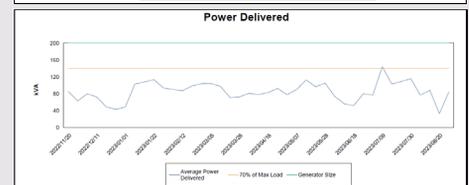
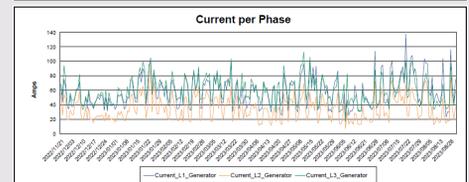
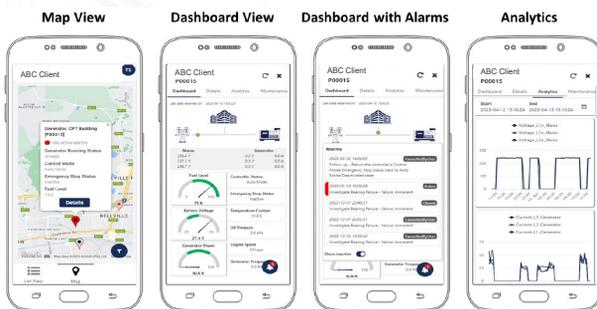
- ▶ Manual scheduling of services and re-fuelling events.
- ▶ Data accessibility.
- ▶ Equipment compatibility.
- ▶ Lack of benchmarking and trending.
- ▶ No early warning system before a power outage occurs.
- ▶ No historical data for governance and invoice verification.
- ▶ Additional manpower is required to check generator performance daily.
- ▶ A delay between a generator alarm being raised and action taken.

Our intervention

- ▶ Data is continuously collected from generator controllers and stored centrally on an integrated enterprise asset management system.
- ▶ Alarms are centrally triggered and prioritised.
- ▶ Access to data leading up to alarms being triggered.
- ▶ Centralised ability to add, remove or adjust alarm triggers without the need to visit each generator to apply changes.
- ▶ The On Key Asset Pulse app enables seamless realtime monitoring, analytics and reporting. It gives the facilities manager the perfect tool to manage their generator fleet.

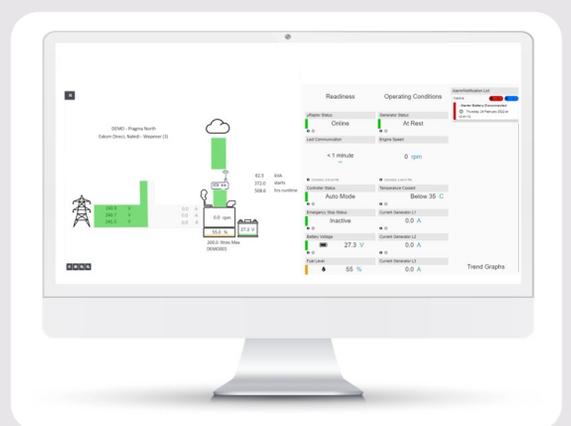
Value add

- ▶ The generator is monitored in realtime and all historical data is recorded for analysis purposes.
- ▶ A new level of governance is in place where actual generator monitoring data can be compared to invoices for fuel and services.
- ▶ Proactive triggers are in place to manage services and re-fuelling.
- ▶ Maintenance strategies can be applied to asset type level.



Client background

- ▶ Pragma is an engineering company that delivers enterprise asset management solutions to asset-intensive industries. Pragma takes pride in the software tools and management practices they have developed to help companies in the mining, manufacturing, local government, distributed facilities and original equipment manufacturing sectors perform at their peak while balancing asset performance, cost and risk.
- ▶ Our client's head office has a 200kVA backup generator to ensure no loss of power in the event of a power failure. The facilities manager on site had the task of manually keeping track of generator running hours to schedule services and fuel levels to plan re-fuelling and visually check the generator's performance frequently.



Six reasons why organisations need our Generator Asset Performance Management service

Our Generator Health Management service is a digitised solution that simplifies the management of these critical assets, helping you save on operating and fuel expenses, minimising downtime and effortlessly handling increased workloads.

Need more convincing?

Scan the QR code to calculate how much we can save you.



1 Equipment compatibility

Our gateway device is compatible with various generator controller brands and models, enabling data collection from an entire fleet of generators. This allows for a comprehensive performance overview, making identifying and addressing potential issues easier before they become major problems.

Data from different types of generator controllers can be processed and stored uniformly, facilitating easy analysis and comparison across the fleet.

2 Optimal generator utilisation

Recorded generator load can aid decision-making around generator utilisation. This includes determining if:

- ▶ the generator size is appropriate for the installation environment
- ▶ additional load can be added, and
- ▶ the load is balanced between the generator's phases.

3 Flexible operational and maintenance strategies

Reports are sent to site managers, providing vital information and prompting them to take corrective action if necessary.

Alarm limits can also be adjusted centrally to accommodate operational or generator-specific requirements. For example, a critical site with a longer lead time for fuel can be triggered for refuelling earlier than other sites.

4 Data accessibility

Data is continuously collected from generator controllers and stored centrally on an integrated enterprise asset management system. This design allows for the following benefits:

- ▶ Alarms are centrally triggered and channelled through the EAMS instead of at a generator level.
- ▶ Access to data leading up to alarms.
- ▶ Centralised ability to add, remove or adjust alarm triggers without the need to visit each generator to apply changes.
- ▶ Uniform data processing and storage gathered from various generator controller brands and models.
- ▶ The ability to trend and compare data across generators to identify anomalies.

5 Benchmarking and trending

Our engineers can access a big data pool across different generator brands and sizes. By comparing data from different generators, we can help identify inefficiencies in refuelling practices at specific sites, while trending monitoring points can reveal "hidden" failures, such as a malfunctioning charger.

6 Governance

Detailed data collected during generator operation enables accurate calculation of fuel consumption. This data allows for more precise forecasting of refuelling needs and reconciliation of fuel bills against fuel usage. In addition, we also oversee contractor management, perform cost benchmarking and manage contractor service level agreements.