

Infotechnics Case Study: PowerCo

**The following case study information is based upon a project undertaken by Infotechnics.
For reasons of client confidentiality all identifying references have been changed.**

The Requirement

“PowerCo” is a large power Generation and Distribution company. They operate many power stations ranging in size from large coal fired stations to CHP and renewable. In addition to this they have transmission and distributions services.

The Power industry has become increasingly dynamic in recent times and as a result PowerCo, like all other large power companies, has a diverse range of assets, in terms of age, size and technologies.

Their power stations tended to have their own operational logging systems in place and these ranged from bespoke computerised systems to paper logs. As a result there were a range of requirements that were not being fully met, both at the station level and at a corporate level also.

Station Level

The individual stations interest was in ensuring the operations teams operated efficiently and that there were good lines of communication between disciplines and shifts. These requirements differed based on the type of station.

Coal Stations: The large coal stations have multiple operational teams responsible for each unit. These teams are required to share information within the team and route information to central control.

CHP Stations: The CHP stations are smaller in size and have less operations personnel on shift. The biggest requirement here is to understand the current and planned status of the plant in order to ensure it can meet changes and continue to meet market conditions.

Renewables: The renewable assets comprise of many small generating locations, mainly hydro and wind farms. These are controlled from a central control room and many of the locations are unmanned. The main requirement here is to be able to manage the information centrally and to have visibility on the operational status of multiple locations simultaneously.

Corporate Level

At the corporate level, the requirement is one of *Station Reporting*; having a centralised view on the complete fleet and using this valuable information be able to improve operational efficiencies and ensure a high level of safety across the board.

Management were looking for a way of better understanding their diverse range of assets and to put in place better controls that allow them to drive the business forward.

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These requirements included:

- Clear reporting on the operational activities of the multiple teams within the large coal stations. These stations provide the bulk of the generating capacity and must be robust and reliable.
- High visibility of the current and planned availability status of the CHP stations. These assets can be brought on/off line very rapidly and can be very valuable in providing the ability to meet changing load requirements.
- Visibility of all safety and environmental issues across the whole fleet.

The Solution

The solution implemented needs to address the requirements at both the station level and the corporate level – a challenging set of requirements. The solution would need to be extremely flexible to address all the issues.

PowerCo put together a project team to look at the market for potential solutions. At the outset, there was much scepticism about the chance of finding an existing solution that could meet their needs and some were resigned to the long, high cost, high risk road that was developing their own bespoke system.

The **Infotechnics Opralog** product is widely used in the UK Power industry and it did not take long for the PowerCo project team to become aware of it.

The team had detailed presentations on the solution and visited existing users where they discovered that Opralog provided all the features they required and additional enhancements they could make use of.

The team commissioned a pilot project to thoroughly understand the product's capabilities and how it would work within the diverse cultures of the power stations. The pilot was a resounding success.

Opralog was implemented without incident or delay to all assets and head office locations over a four month period.

The end result was an enterprise-wide stations reporting management tool that provided real benefits to the stations and the management team.

The Benefits

PowerCo found the benefits of using Opralog to be wide ranging.

From a cultural perspective:

- Information is shared more easily. The culture of *asking* for information has been replaced by an environment where information is highly visible and available to people.
- Operators understand the value of high quality logs. They can benefit from fast analysis of current and historic logs. Opralog facilitates the whole logging process, guiding operators through logging of events, making the logging of activities a seamless occurrence rather than a chore.

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- Shift handovers are more efficient. The high visibility of information enables the oncoming team to get “up to speed” quickly and allows them to ask insightful questions to ensure they fully understand all the issues.

From a practical perspective:

- Logs are extremely consistent both in terms of quality and the way similar events are logged.
- Logs are instantly available across the organisation to the appropriate people.
- Specialist functions such as availability, health & safety and environmental teams now have instant access to the information they require across the board.
- Issues can be quickly escalated through the management chain.
- Management have a clearer understanding of how the business is performing and can resolve operations status with market conditions more easily.
- The whole organisation has a “learning tool” that captures the valuable operational knowledge and turns it into a valuable asset of the business.