The Shores of Isle of Man, United Kingdom

Customer Success Story

Manx Electricity Authority
Isle of Man, United Kingdom

Pulrose Power Station

> *"After interviewing a number of independent systems integrators, we decided to utilize ICONICS as the solution provider. We determined that, although not necessarily cheaper, the services that ICONICS could provide would be more consistent and would best use the features available in the GENESIS32 product."*
>
> **Mike Newby**
> Plant Engineering Manager
> Manx Electricity Authority

About Manx Electricity Authority

The Manx Electricity Authority (MEA), in the United Kingdom, is responsible for the generation of electricity, controlled from multi-plant facilities, across the Isle of Man. The MEA is also responsible for ensuring full commercial potential of the UK-IOM (Isle of Man) subsea power cable. One of the difficulties faced by the MEA was they found themselves with a proliferation of different SCADA systems. Each operated uniquely; which made it very time constraining and costly to train operators and keep them updated on system changes. Wanting to streamline their efforts, the MEA decided it was time to look for an integrated enterprise-level SCADA solution.

The Manx Electricity Authority decided to turn to ICONICS for a solution after careful evaluation.

ICONICS Software Deployed

Manx Electricity implemented GENESIS32™, GenBroker™, DataWorX™32, GraphWorX™32 and MobileHMI™ to work towards a solution.

Project Summary

As part of this integration, a design project was kicked off as a pre-requisite to the implementation which aimed to define a set of display templates and common symbols. This requirement meant that the integration team would have to gain a deep understanding of the operations of all the underlying SCADA applications and create a unified set of symbols that would allow the operators to understand and control all of the plant through a single and consistent user interface.

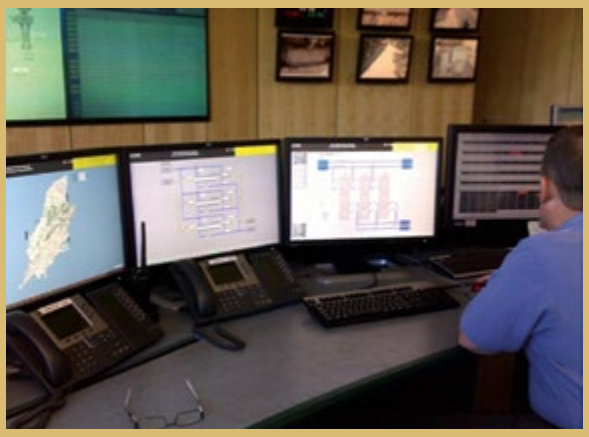
The implementation began by using ICONICS GENESIS32 software to host a pair of redundant servers at each of the key sites. ICONICS software provided a consistent and uniform interface that could be spread across three monitors allowing a single operator, in one control work-

station, to manage and control the entire island's generating capacity. ICONICS GenBroker-technology allowed the MEA to set up a remote connection to the Isle of Man from ICONICS' offices in Dudley to test the installation, ensuring zero lag time in program commencement. This allowed the project team to test the symbols and displays in real time without having to make many costly trips to the MEA. This strategy meant that the on-site commissioning and testing time of the project was greatly reduced since the majority of the data was pre-tested. ICONICS DataWorX was used as an intermediate layer for the SCADA and provided the translation logic between the various underlying control systems and visualization. In all, the solution currently contains 75,000 data points across the island and is capable of scaling way beyond this in the future.

Benefits of the System

With power stations located at Peel, Pulrose, and Ramsey, and with critical gas infrastructures located at Glen Mooar with a variety of DCS and PLC-based control systems, the MEA decided to look for an integrated enterprise level SCADA solution with the following requirements:

- Integration of MEA's entire key infrastructure across multiple sites
- Easy expansion for future capacity
- A seamless switchover with parallel running capability of the old SCADA applications as a backup
- Commissioning and testing completed during the annual plant shutdown week before the Manx TT road races



An Operator at the Multi-monitor Control Station

Glen Mooar

A new addition to the Manx Electricity Authority story is how the implementation of ICONICS MobileHMI drastically enhanced their plant manageability. MobileHMI is a Windows Phone application that pairs with ICONICS GraphWorX32 to monitor plant outputs and alarms. Once alarms are set based on selected data points, MobileHMI can send push notifications to the operator's Windows Phone in the form of an SMS or text message with details on particular asset levels, alarm severity, and other vital information. This new technology allows operators to monitor plants remotely while still receiving vital operational details.

Conclusion

Using ICONICS software, the MEA was able to sync their SCADA applications in such a way that they were able to function under one system and remotely monitor facilities while still being in touch with real-time data and alarms. The success of this project is highlighted by Mike Newby, who said "We have no hesitation at all in recommending ICONICS to anyone looking for a well-designed SCADA package built upon a world-class software platform and delivered by competent and friendly engineers."

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