

## POWER STATION DOCUMENTATION CASE STUDY



### ABOUT MARCHWOOD POWER LTD

Marchwood Power is a modern natural gas fired CCGT (combined cycle gas turbine) power station located outside Southampton, England. Costing \$600 million, it came on line in 2010 and delivers 842MW.

### BUSINESS CHALLENGE

Marchwood Power is one of the most efficient power stations in the UK, combining very high thermal efficiency with advanced operating procedures to produce electricity economically and with minimum environmental impact. Ready access to correct drawings and documentation for maintenance purposes are a key to maintaining this efficiency. There are about 30,000 manuals and drawings, including about 500 P&ID drawings and 500 Task Risk Assessments. The plant was handed over with a mix of hard copy manuals, drawings on DVDs and a supplier-provided document database of limited functionality. Finding documents in it was taking up as much as 3 hours. The database did not provide for revision control or mark up (redline).

Consequently, not long after the plant came on line, management realized that a proper engineering document management system (EDMS) would be required.

### SOLUTION

Marchwood Power evaluated three EDMS systems and chose Trix Organizer because they evaluated it as easy to use, it worked best and it was up-to-date. Additional factors in the decision were: the modular structure of Trix Organizer so additional functionality could be purchased when required; the API (Application Programming Interface) to enable the system to be integrated with existing maintenance software so documents could be called directly from work orders; the offer of a pilot installation so the EDMS could be tested in advance of purchase of the full system.

### IMPLEMENTATION

During the Requirement Study a team from the Provanum Group interviewed users about their needs and the business processes that the system would be supporting. They then installed the pilot installation on a standalone computer. This gave Marchwood Power users the opportunity to test the proposed configuration and to experience how documents could be checked in and out of the system for editing. After only a few days of testing, it was clear to Marchwood Power that the system would meet their requirements.

For the full implementation Marchwood Power chose to use Trix Organizer Web clients so the user experience paralleled the existing Browser based maintenance software. Marchwood Power also contracted the Provanum Group to migrate the existing 40,000 data and file records into the system in a single consistent format with links to equipment identification numbers. In addition to searching on known metadata the system is set up with a Graphical Search function. Users click on hot spots in photos of equipment to locate the documents they need.

## BENEFITS RESULTING FROM INSTALLING TRIX ORGANIZER

### Reducing costs, increasing revenues and improving efficiency in daily operations

#### Everything now is immediately and easily found

Users drill down logical trees or click on photos and click on pre-stored filters to find just what they need.

#### Faster, more comprehensive collaboration

The system's redlining tools enable users to contribute to and learn from markups made in drawings and documents.

#### No need for external viewers

The system's built-in viewer means that users do not have to open additional applications in order to view their drawings and documents.

#### Improved Safety

Having the correct documents in a timely manner improves safety. Users have the correct information and more time to spend on the job.

#### No duplications

Only authorized users can make changes to files and only one person can edit at a time, preventing duplicate edits.

#### History of changes is there for all who need to see

All changes must be recorded and attributed so users have a reliable and complete history of changes made.

#### Only approved documents are visible

The system requires managers to approve drawings and documents before they can be seen by operators.

#### User groups

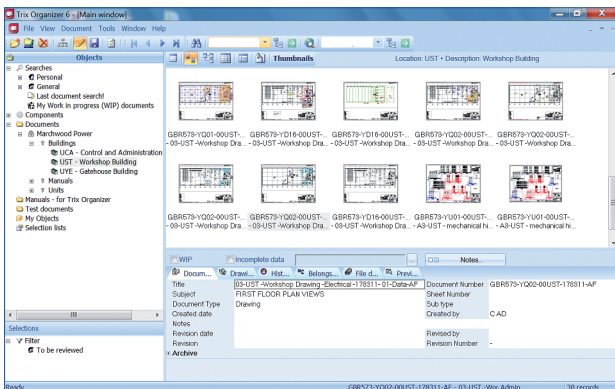
Rights are assigned to groups, not individuals, simplifying personnel changes.

#### Going directly from Equipment to Drawings

Users can find all the drawings and documents associated with a specific piece of equipment or KKS\* ID process number. These Reference Designations are set up to comply fully with engineering standards.

*\*KKS is a power plant specific identification system used by Siemens, Alstom and others.*

For more information contact 020 7193 7445 or [sales@provanum.co.uk](mailto:sales@provanum.co.uk)



"We selected Trix Organizer EDMS because of its modern and user friendly interface. It is saving us valuable time and money and made us more efficient in daily operations."

Nick Vigors, Production Manager,  
Marchwood Power Ltd



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Provanum delivers turnkey document systems with unique functionality for the engineer's needs. Thanks to our own product development we can create optimal products and make adjustments for a customer at a reasonable price and thus provide more effective system solutions. Trix Systems is our software development company.