

REDACTOR

ORIGIN ENERGY CSG



REDACTOR



Issue #1 2008



• ORIGIN ENERGY
CSG

• EAST GIPPSLAND
WATER

• LOY YANG POWER

• TECHNOLOGY
SPOTLIGHT

• NEW AT PARASYN

• AWARDS &
CONFERENCES

Completed Stage in CSG Project

PARASYN have completed a stage in the delivery of the Spring Gully SCADA upgrade.

Origin Energy CSG has been working in Coal Seam Gas for several years. Spring Gully is a major Coal Seam Gas (CSG) field they manage located 80km North East of Roma, Central Queensland Australia. Spring Gully required their SCADA system to improve productivity and diminish unnecessary manual tasks.

The Spring Gully Well Production SCADA and Information System was developed with large scale and system sustainability in mind. Specific areas of engineering focus include the reliable and systematic monitoring of Well Head controls and configuration parameters.

Very early in the design stage Origin Energy determined that Well Head site configuration may change as the performance and characteristics of the well changes. As such the instrumentation, electrical interface, control devices, communications, SCADA and Information Systems were tightly integrated resulting in a site configuration change by the "click of a button".

Origin wanted to develop a SCADA and telemetry

monitoring system capable of supporting a large number of production wells distributed over an area of 500 – 700 square kilometers. They also wanted to be able to allow for full automated control of well heads remotely, monitor accurately the wells operations and analyze system performance for operational and remote asset managers. This also gave offsite production engineers access to process data for data modeling and engineering analysis.

Origin reduced the need for operations staff to frequently visit the site. This reduced the environmental impact on the site and the use of roads. It also increased safety with decreased requirement from staff driving to site. For Origin Energy perhaps the single most important benefit is the access to the tools and information allowing them to continue to improve the production performance.

Origin Energy CSG Head Office now have access to data not previously available. This can be used for reporting, analysis and data mining. Another way PARASYN are helping business run more effectively.—



www.parasyn.com.au

PO Box 400

Cannon Hill Qld 4170

AUSTRALIA

sales@parasyn.com.au

T: +61 7 3396 6388

T: +61 3 9574 9599

PARASYN





East Gippsland Water Flowing Forward

PARASYN has been assisting to implement a new SCADA system throughout East Gippsland Water's region.

The East Gippsland region encompasses 10% of Victoria from Bairnsdale to Dinner Plain in the north and Mallacoota in the eastern tip of Victoria.

This major investment by East Gippsland Water included work to upgrade switchboards and the SCADA system under two different major contracts. The initial stages of the project are planned to be completed with their final commissioning and handover training scheduled for mid-May 2008 and subsequent additions to the system have been commissioned. The field testing and handover training are currently nearing completion.

The initial focus for East Gippsland Water and PARASYN was water quality and the extensive real-time monitoring of water treatment facilities. Work concentrated on the design of field monitoring equipment, computer hardware and software. PARASYN's role as a turnkey project delivery group included the design and supply of telemetry panels, all software systems and to ensure all sites were

commissioned and operational within the desired timeline. This was delayed during East Gippsland's widespread bush fires, and flooding and the subsequent need for East Gippsland Water's resources to be deployed to ensure continuity of services to their customers.

The EGW SCADA & Information System is an initiative encompassing remote monitoring to provide early warning of faults or performance issues at key facilities.

The overall objectives for the new EGW SCADA were:

- Decrease Risk
- Increase Operational Efficiency
- Increase System Usability

Today PARASYN is working closely with the key stakeholders within East Gippsland Water to ensure that the system is sustainable and easily manageable for years to come. Over the next few years the use of the new SCADA system will be expanded to cover other key facilities and assets.—



Loy Yang HMI Powering On

Late last year PARASYN assisted Loy Yang Power with various upgrades to their existing SCADA Monitoring System.

Located within the heart of the Latrobe Valley, 165 kilometers east of Melbourne, Loy Yang Power is Victoria's single largest energy producer. PARASYN have been working closely with Loy Yang Power for the last few years providing system upgrades and support for the Plant Services and Environmental SCADA Monitoring System.

The most recent system upgrade involved the expansion of the system to include 2 new Water Quality testing sites. With the commissioning of these additional monitoring points to the SCADA system, Loy Yang Power are able to closely monitor the quality of treated water that may enter the ecosystem from around the power station on a 24/7 basis. This forms a vital part of their environmental responsibility that they strive to maintain to meet EPA guidelines.

Part of the physical components supplied include two enclosures using Kingfisher RTU's (KFRTU), field instrumentation with local display panels and solar power supply systems. Onsite communication is via

KFRTU spread spectrum (SS) radios to an existing site that will be enhanced with SS radio for communications. Enhancements to the HMI where also required to allow for the remote monitoring of the new sites.

Loy Yang Power and PARASYN share a close ongoing working partnership with this latest system expansion following on from previous projects including:

- Field RTU Hardware upgrade Project
- SCADA HMI Software upgrades and re-configuration

PARASYN are also providing technical support to Loy Yang Power and recently provided assistance to resolve a system malfunction due to the failure of an obsolete communications module which we were able to source a replacement for and assist with the re-commissioning of the system.

The Loy Yang Power/PARASYN partnership is one of mutual respect and value with both organisations benefiting from partnering.—



PARASYN's DNP3 a Driving Force

The DNP3 protocol is an open standard which encourages interoperability between devices including outstations, RTUs (Remote Telemetry Units) and IEDs (Intelligent Electronic Devices) and SCADA Masters. A DNP3 network typically consists of a single master and multiple outstations. The master is usually a SCADA server and the outstations are the RTUs and IEDs. The protocol is used to logically and systematically transfer data to and from these devices. DNP3 is a time series protocol and supports real-time and time stamped data.

Features include:

- Supports TCP/IP communication.
- Supports DDE, SuiteLink, and OPC connectivity.
- CSV export of time stamped data for manual import into two separate InSQL servers.
- Support export of time stamped data to Citect through a CTAPI interface.
- Runs as a service.
- Supports hot configuration.
- Supports remote configuration.
- Configurable message timeouts at both the Data Link and Application layers.
- Flexible polling scheme, allowing either poll by class, or poll for specific objects.
- When performing a class poll, each class can be enabled and disabled.
- When performing a class poll, each class can be polled at a different rate.
- Supports polling of multiple outstation devices.
- Supports networks with or without a data concentrator (master RTU).
- Ports can be individually disabled via system tags to support redundancy.
- Performs self diagnostics.

NEW Melbourne Office

With our constant growth over the last 8 years we have again expanded our operations. PARASYN's Brisbane office has been expanded to accommodate our growing needs in Queensland.

In Melbourne we have also moved to a larger facility. The new office is located at:

**Unit 1, Level 2
202 Jells Road
Wheelers Hill
Victoria 3150**

If you would like to visit our Melbourne office please feel welcome. Office number: **03 9574 9599**.

New Melbourne Office



Upcoming Events

Zenith Awards

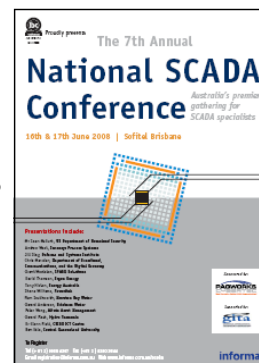
Look out for PARASYN in **May's PACE magazine** as we enter this years Zenith Awards in the Water & Waste Water, Oil & Gas, and for the first time Automation & Manufacturing categories.

Thanks to our customers; Origin Energy CSG, East Gippsland Water and the APA Group whose projects have been selected for the awards.



7th Annual National SCADA Conference

For the first time PARASYN will be attending the National SCADA Conference. We are looking forward to rubbing shoulders with industry leaders of SCADA. We will be introducing an exciting new product so please come and see what it's all about. Follow the link on our website or click the image to see the [brochure](#).



NEW Staff Victor Vo Systems Engineer

We are excited to welcome Victor to the team and look forward to introducing him to you.