



Power Systems
Consultants

PSC NEWS

NEWS AND VIEWS FROM THE TEAM AT POWER SYSTEMS CONSULTANTS SEPTEMBER 2008

CONTENTS

Page 1

PSC awarded Support and Development Contract

Page 2

Northpower SCADA goes "live"

Page 2

Power Systems Consultants maintains a Quality Management System certified to ISO 9001:2000

Page 3

PSC assists ElectraNet in South Australia with Remote Support and their EMS Upgrade Project

Page 3

Transpower Islington Substation HMI Project

Page 4

PSC welcomes new staff

Page 4

Simon Lister celebrates 10 years of excellent service with PSC

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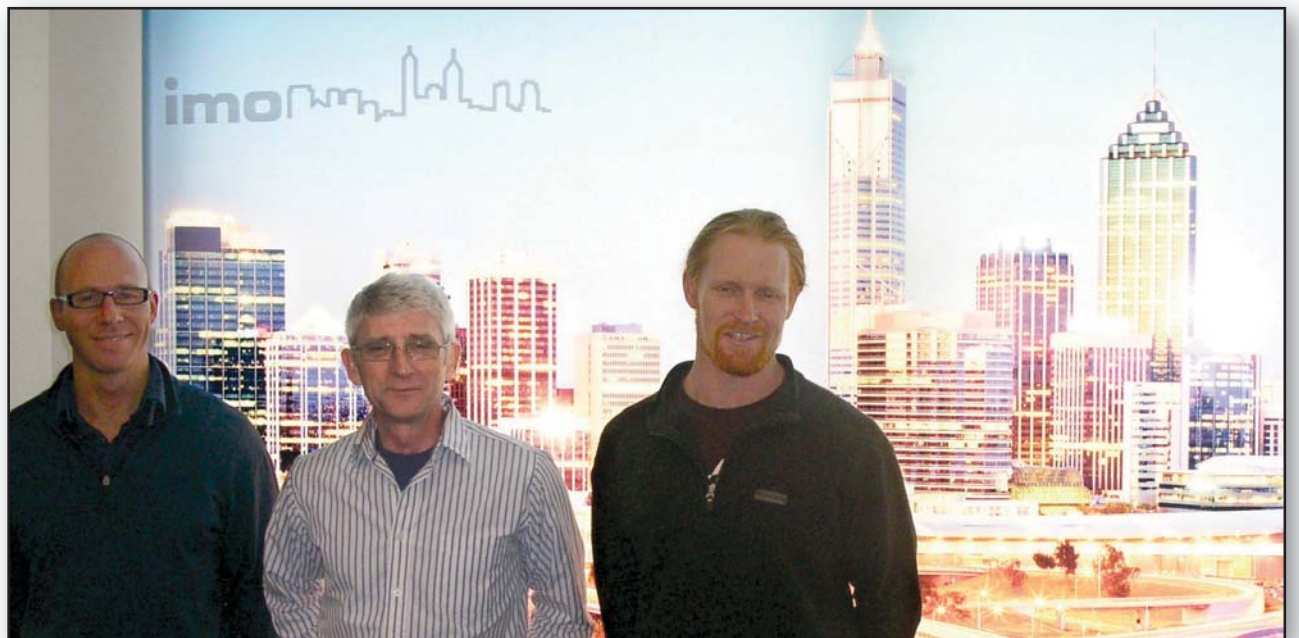
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PSC awarded Support and Development Contract by the Independent Market Operator of Western Australia

In June 2008, Power Systems Consultants (PSC) was awarded a multi-year contract to provide on-going Support and Development of the Wholesale Electricity Market Systems used by the Independent Market Operator of Western Australia (IMO). This award by the IMO resulted from a competitive procurement process that commenced in February 2008.

Under this contract, PSC will be supplying both on-site personnel to be based at the IMO offices in Perth and remote software development and/or support services.



Andrew Watson (PSC), Arthur Pettigrew (Manager IT, IMOWA) and Steve Hunt (PSC) at the IMO offices in Perth, Western Australia

Now based in Perth, PSC welcomes the return of Steve Hunt from extended leave to fill the role of PSC's on-site team leader at the IMO. In the few weeks since the start of work on site in Perth; Steve Hunt has been joined for various work periods by Andrew North (PSC Australia), Jonathan Zukerman (from PSC USA), Arthur Panggabean (from PSC New Zealand), Graeme Dickason (PSC Australia) and a PSC contractor from New Zealand – Andrew Watson. This core PSC team are now accepted as "trained personnel" under the contract and are available to undertake both on-site and remote work for the IMO.

In a recent management meeting, the CEO of the IMO, Allan Dawson congratulated PSC on being awarded the Contract and stated his "appreciation for the speed at which the on-site and Transition In team was mobilised and commenced work in Perth" and that "the IMO is already seeing tangible benefits from the service provided by the PSC on-site support team".

In the coming weeks, additional PSC resources will spend time at the IMO to gain first hand experience with the IMO's market systems which were supplied by ABB. All the PSC trained resources will then be well placed to provide the required support and development services going forward.

PSC is pleased to welcome the IMO as a client and looks forward to a mutually rewarding and successful business relationship extending many years into the future.

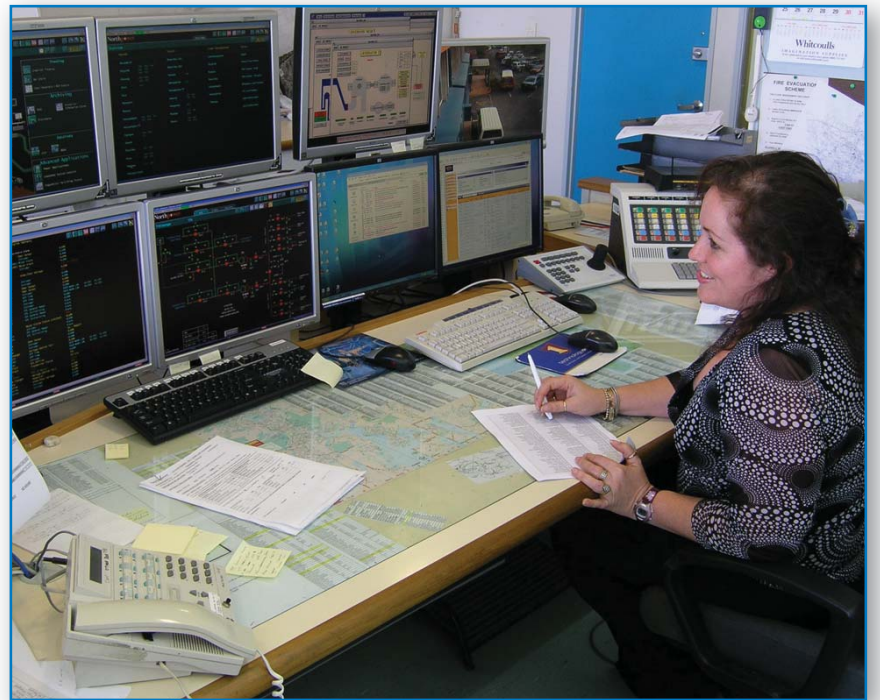
Northpower SCADA goes "live"

Northpower Limited recently went "live" with their new Siemens Spectrum Power™ TG SCADA (Supervisory Control and Data Acquisition) system.

The cut-over to the new system went very smoothly which speaks highly of the technical preparations by the Northpower and PSC project teams. Improved security and reliability together with enhanced functionality, particularly related to alarm management, were major goals of Northpower's SCADA replacement project.

Within hours of the new system going "live", a spectacular electrical storm hit Northland. This turned out to be the first of four back to back storms, including the deepest low pressure weather system in over a decade with winds gusting to 170 km/h and torrential rain causing widespread flooding and cutting power to many households. "The system performed well during the storms and the operators coped well with the new system. Few problems were experienced due to the extensive commissioning program", confirmed Steve Lowe, Northpower's Network Development Engineer.

Northpower purchased the SCADA software licenses from Siemens and the server and workstation hardware from Gen-i. PSC was engaged to integrate the software and hardware and to engineer the migration from Northpower's existing SCADA to the new system. PSC's responsibilities included project management, assistance with the development of standards, implementation of the SCADA database and displays, programming of automatic routines,



Northpower's Marise Martin at the main control desk

configuration of a Data Warehouse including the loading of 9 years of historical data, factory acceptance testing, training, installation and assistance with commissioning.

Ross Gaspard and Sriram Rangunathan of PSC worked on the project and were on-site for the cut-over and through the night of the first storm. PSC congratulates Northpower on the completion of their SCADA replacement project and thanks their project team for all their assistance - Steve Lowe, David Abernethy, Vince de Roo, Doug Flamank, Gary Ihaka, Marise Martin, Bruce Smith and Ian Reed. Thanks also go to the Siemens USA team led by Harald Ilg.

Quality Management System

Power Systems Consultants maintains a Quality Management System certified to ISO 9001:2000

Power Systems Consultants quality management system is certified to the world's most widely recognised quality management system standard, ISO 9001:2000.

PSC's Scope of Services covers design, project management, commissioning, investigations, system studies, and SCADA, EMS and market services.

While ISO9001 certification was obtained back in September 2002, ongoing regular audits are required to maintain this certification.

Telarc SAI recently completed the revalidation audit to renew PSC's certification in New Zealand, and this audit resulted in zero conditions – indicating PSC's quality management system compares well to recognised world best practice standards.



ISO 9001



PSC assists ElectraNet in South Australia with Remote Support and their EMS Upgrade Project

July 2008 saw the start of planning for an EMS (Energy Management System) Upgrade Project at ElectraNet in South Australia.

At ElectraNet's request, PSC hosted a System Assessment Workshop in Adelaide in July to review the existing on-site and remote software support arrangements and identify business requirements to be included in the EMS Upgrade Project scope.

Joining with the ElectraNet EMS IT team (Frank Maio, Sharon Willis and Raji Hamed) and the PSC on-site support team (Phil Watson and Kevin Hart); PSC arranged for our senior systems engineers Graeme Dickason (currently based in Brisbane), Patrick Carroll (from PSC USA but currently based in Melbourne) and Adam Marshall (based in Adelaide) to participate in this workshop. Wolfgang Thaler (based in Melbourne) also attended providing valuable input from an on-going AREVA support and development perspective having recently returned from the North American AREVA Users Group conference.

The workshop program enabled the sharing of recent support experiences and included detailed analysis of previous outages.



ElectraNet and PSC staff at the System Assessment Workshop

Discussions identified the system architecture proposed to be delivered as a priority change under the EMS Upgrade Project which will better protect a key ElectraNet business performance measure.

All the participants benefited from the workshop and the key decisions and outcomes were presented to Mike Walters, ICT Manager ElectraNet.

Transpower Islington Substation HMI Project

Stewart Drake and Simon Lister of PSC have recently assisted Transpower New Zealand Limited with the installation of a new HMI (Human Machine Interface) system at the Islington substation in the South Island of New Zealand. The new HMI system is used for the substation control and indication functions as well as reactive power control and was supplied by Survalent Technology based in Ontario Canada and represented in New Zealand by Quasar Systems.

Stewart Drake acted as the Engineer to Contract and worked with the supplier, designer and installation contractor to complete factory acceptance testing, operator, maintenance and configuration training, design and installation of the new HMI equipment, fibre optic cabling associated with the Ethernet LAN, DNP3 configuration changes, power supply connections, site acceptance testing and decommissioning of the existing HMI.

Simon Lister provided technical expertise for this project which included the technical specification and detailed design for the installation of the new HMI, preparation of the DNP3



Islington Substation control desk and HMI equipment cabinet

protocol map changes, testing documentation and specialist knowledge of the Islington C50 RTUs.

PSC worked with Transpower, Survalent Technology, Quasar Systems and the stations maintenance contractor Transfield Services to ensure that the new HMI system at Islington substation was successfully installed and commissioned during the required timetable and outages.



PSC Welcomes New staff

Roger Ward

Roger Ward has joined PSC as a SCADA and Control Systems Engineer. Roger has extensive experience in the electrical power industry in the commissioning and maintenance of substation control and protection equipment including SCADA commissioning and RTU configuration. Roger will be working in the Controls and Market Systems Group supporting our clients in New Zealand.



Feiyu Lu

Feiyu Lu has joined PSC USA as a Market Systems Engineer. He comes to PSC from the Energy Market Company in Singapore where he was a Senior Market Analyst and he is now based in the San Francisco Bay Area. Feiyu holds a Bachelors and Masters degree in electrical engineering and has significant experience in energy markets and market efficiency.

Peter Fong

Peter Fong has joined PSC Australia as a SCADA Engineer. Peter has experience in system operations and market systems. He has also been involved in the support and development of real-time systems for the energy industry. Peter will be working in the Australian SCADA/EMS group initially supporting our clients in South Australia.



Simon Lister celebrates 10 years of excellent service with PSC

Simon Lister is an Electrical Engineer with Power Systems Consultants and recently completed 10 years of excellent service with the company. Since joining PSC, Simon has been involved in a large number of projects in Australia and New Zealand. He has extensive experience in the detailed design and technical specifications for power station and substation automation and control systems. This work has also included the specialist areas of RTU and PLC programming and HMI configuration.

Simon's projects have included detailed design and technical specifications for Transpower substation control, RTU and IED projects, metering design for Meridian Energy and detailed design, programming and commissioning of the New South Wales runback scheme for the Murraylink HVDC Link installed between Victoria and South Australia. The PSC Management team congratulates Simon on his excellent service with PSC and his dedication and commitment over the past 10 years.



PSC's Control and Market Systems Manager Graham Long presents 10 year certificate to Simon Lister with his daughter Rachel

