



Specialist Consultants  
to the Electricity Industry

# PSC NEWS

News and Views from the team at PSC

Issue 37 | March 2014

## PSC - Focusing for the Future

PSC has built a trusted reputation for excellence across the world. As one of the leading specialist consultants to the electricity industry, we have continuously evolved throughout our successful history to meet the wider needs of the industry.

In today's environment, many new challenges are emerging. Clients face rapidly changing patterns of generation and demand through to increased regulatory and financial pressure.

In response to this environment, clients are increasingly seeking out providers with in depth specialist skills and a successful track record of project delivery. In response to these challenges, PSC has brought clarity to its vision and mission.

### A clear vision and mission

At PSC our vision is to be one of the world's leading power systems consultancies. Our mission is a simple one. We want to 'help our clients power the world'. We plan to deliver on this vision and mission through a new operational structure that will

offer enhanced end-to-end solutions, relevance and value for our clients.

Further to this, we will continue to build on the success of our world-leading international groups. These specialist groups, such as HVDC, integrate the wide-ranging technical and operational skills of our global team. This allows PSC to deploy highly professional and cohesive teams for projects anywhere in the world.

PSC is focusing for the future and we are committed to helping our clients power the world. Watch this space for more on these initiatives in future issues of PSC News.

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### VISION

To be one of the world's  
leading power systems consultancies

### MISSION

Helping our clients power the world

### HOW

Through our portfolio of capabilities and experts that provide end-to-end solutions to the power industry

[www.pscconsulting.com](http://www.pscconsulting.com)

# Updated PSC Website with New Features

PSC has recently updated our website to expand and add more information to the different areas of our business. This includes a new section "Team PSC@work" where you can view profiles on selected PSC team members.

As part of the focus on evolving PSC's online presence, you will also find links on the website to an emerging social media suite including an enhanced LinkedIn company page and a Facebook presence which is the 'human face' of PSC.

For more information, please visit our website – [www.pscconsulting.com](http://www.pscconsulting.com)



*The new Team PSC@work section on our website*

## PSC Making Modelling Better

Over the last year PSC has supported a number of customers to make EMS and DMS modelling improvements. It takes more than product knowledge to effectively develop and maintain models.

Modelling requires knowledge of the power system, data communications, controls, operating procedures, security and other disciplines that are inherent to operating a power grid. PSC has both the technical knowledge and utility domain knowledge required for Operations Technology modelling. PSC has successfully worked with many customers to tackle a range of modelling challenges. Recent PSC modelling services include:

- Develop and implement an integrated multi-site model management and deployment solution. For customers with multiple sites operating distribution SCADA products, PSC has assisted in consolidating the modelling process to improve consistency, lower support costs, and reduce the time it takes to put a model on line.
- Unified modelling for utilities operating both an EMS and DMS. PSC has assisted clients in modelling the EMS and DMS data models, including the overlap between the models with a single unified modelling process. The resulting benefits include elimination of redundant modelling, reduced costs, faster validation, and increased data accuracy.
- Heterogeneous modelling solutions for clients operating more than one vendor product. Many of PSC's clients operate multiple vendor solutions and PSC provides support, connectivity, and integration across the platforms to automate data modelling, testing, and integration.

- Model migration for EMS and DMS upgrade and replacement projects.

PSC's open support approach prevents vendor lock-in, providing our customers with a range of support solutions from multiple sources. PSC works collaboratively with the leading vendors and other service providers to provide the best possible open support solutions. The customer comments and feedback that our consultants hear speaks for itself:

**"With the PSC team, we were able to make major breakthroughs in modelling, far exceeding our expectations."**

**"PSC's practical advice and expert knowledge allowed us to make great strides in just one week."**

**"Prior to working with PSC, we were considering alternatives to our vendor modelling solution. PSC showed us how to effectively utilize the vendor's modelling tools."**

**"We engaged PSC to improve our modelling process because of their proven reliability, commitment, and consistently high levels of service on our most critical projects."**

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# SP AusNet Modelling Application Project

PSC Australia was recently engaged by SP AusNet to assist them with the implementation of Alstom's e-terrasource modelling application. The contract was awarded to PSC based on the use of a specialist resource, namely Mark Prentice from Seattle (PSC USA). Mark started working on the SP AusNet system remotely from Seattle and recently spent the first of 2 x 2 week long periods on site in Melbourne, Australia progressing the configuration and set up of e-terrasource.

The SP AusNet implementation of e-terrasource is quite unique as we believe it is the first anywhere in the world that will use the "segregation" capability of e-terrasource - whereby the output of e-terrasource can be readily applied to the two (2) different Alstom systems in operational service with SP AusNet ((1) electricity transmission, and (2) electricity distribution and gas distribution).

The SP AusNet's database modelling team work on both Distribution and



Transmission power systems. SP AusNet wants to create both a Transmission database and a Distribution database from the same e-terrasource instance so that the modelling effort is only done once on the shared asset data.

Towards the end of his first trip to Melbourne, Mark provided some hands-on training to the whole PSC Melbourne based Controls team and selected SP AusNet resources.

The photo records an enjoyable short lunch for Mark (third from the right) to thank him for his time with us so far and his excellent work for SP AusNet. Mark has told us he has thoroughly enjoyed working along-side the highly skilled resources working at SP AusNet and looks forward to his next visit.

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## Power and Water Corporation EMS Upgrade work 2013/14

Power and Water Corporation provides electricity, water supply and sewerage services across the Northern Territory in Australia. In a joint effort with Power and Water Corporation, PSC Australia has assisted in an Energy Management System (EMS) upgrade to a later version of an Alstom Grid EMS e-terraplatform.

The upgrade consisted of replacing the EMS & FEP servers at the main and backup sites, Data Historian, Dispatch Training Simulator (DTS), Corporate Data Servers, new operator consoles, network infrastructure, virtualised server platform

hardware and providing a more robust storage and backup solution.

Power and Water Corporation drew upon the expertise and experience of PSC onsite and offsite staff and subcontractors to complete the various modules of the EMS upgrade. The collective current knowledge of PSC project staff from Australia and the United States all assisted to provide information and configuration on the virtual and physical server platforms.

The commissioning team consisted of Power and Water Corporation and PSC

staff, and various subcontractors working predominately onsite in Darwin at the Hudson Creek Control Centre. The Front End components were commissioned to production in February 2014 and the backend system is due to go into production in June 2014.

PSC would like to thank and congratulate all Power and Water Corporation and PSC staff who worked on this successful project and looks forward to providing further technical support to Power and Water Corporation in 2014.



# PSC Welcomes New Staff

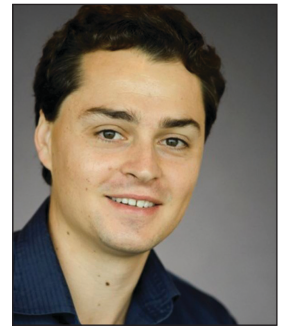
## Alasdair Turner

Alasdair Turner has joined PSC New Zealand as a Principal Engineer in Energy Markets, having retired from PA Consulting, and has extensive experience in the generation, transmission and system operations sectors of the electric power industry. Alasdair has designed and delivered energy policy at the highest levels, most recently in Malaysia. He is a trusted advisor to a number of energy market operators, where he has supported the delivery of innovative options for the operation of electricity power systems within energy markets, covering New Zealand, Australia, South Africa, Singapore, Malaysia, the Philippines and Ontario (Canada). Alasdair is also internationally regarded as an expert in the testing and certification of market clearing software.



## Mark Parker

Mark Parker has joined PSC Australia as a Principal Electrical Engineer and has experience in power generation, transmission, distribution and project management. His qualifications include a Bachelor of Engineering degree and a Master of Engineering in power generation. Mark's recent experience has included project manager for the detailed design of a 110kV/11kV inner urban substation for Energex, traction power lead for the tender design for Adelaide to Gawler railway electrification, development of the tender specification for the first Static Frequency Converter for traction power supply for railway electrification in Australia and secondment to two clients, SP AusNet and Ergon to manage the delivery of concept and detailed designs for multiple transmission and distribution substation projects.



## Stuart Ramsdale

Stuart Ramsdale has joined PSC New Zealand as a Telecommunications Consultant and has over 25 years' experience in the IT and electricity industries, having commenced as a cadet in the NZED. He has spent the last six years working in Transpower's Network Operations centre, supporting both the transport and IP networking platforms. Stuart also has 12 years' experience as a contract manager and technician completing telecommunications projects and the maintenance of communication equipment for the high voltage electricity industry throughout the Waikato area. Stuart will be based in our IT & Telecommunications group in New Zealand.



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## Andrew Robbie celebrates 10 years of excellent service with PSC

Andrew Robbie is a Principal Electrical Engineer and has recently completed 10 years of excellent service with PSC Australia. Since joining PSC, Andrew has been involved in a large number of projects in Australia and New Zealand. He has extensive experience with power system studies including load flow, short circuit, stability and harmonic studies. This has included model writing and development for dynamic simulation.

Andrew's projects have included system studies for Tasmania with the introduction of the Basslink HVDC link, planning considerations and technical options for long distance transmission line extensions and most recently development of a new power system dynamics simulation model for a client in Australia and generator modelling and testing. The PSC Management team congratulates Andrew on his excellent service with PSC and his technical leadership and commitment over the past 10 years.



*Andrew Robbie is congratulated by PSC Electrical Engineering Manager Les Brand*