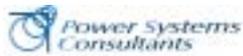


## SCADA/EMS/MARKET SUPPORT SERVICES



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## On-Site Support Contract for the Energy Market Company in Singapore

The Singapore New Wholesale Electricity Market (NEM) went live at midnight on January 1, 2003. The NEM is operated by the Energy Market Company (EMC) which provides the IT systems, the trading environment, and the governance for the market in a transparent, professional and cost-effective manner.

The NEM is an ex-ante market based on a variant of Locational Marginal Pricing, with half-hour trading periods. The Pricing and Dispatch functions for the NEM are carried out by the Market Clearing Engine (MCE).

A consortium of ALSTOM EAI and PSC won the competitive tender to provide support and enhancements for the Market Clearing Engine from January 1, 2003. ALSTOM EAI is contracted to provide enhancements to the MCE and PSC is contracted to

provide on-site support for 2 years with an option for a further 2 years.

The on-site support team was set up by Ranil de Silva, PSC's Director of Engineering, and Tri Huu Le who was previously engaged with work on the electricity market in Australia. Ranil is scheduled to be replaced by Simon Oliver who will be returning to PSC from Ofgem, the Electricity Market Regulator in the United Kingdom.

PSC anticipates that the support contract with EMC will be a stepping stone toward the provision of more services in the electrical power industry in Singapore and the region.

The PSC support team is shown here together with EMC staff at EMC's office in Republic Plaza in Singapore.



Back row: *Ranil de Silva, Lu Fei Yu, David Bullen, Tri Huu Le, Luke Peacocke, Shashank Swan*  
Front row: *Eunice Koh, Asad Syed, Martin Carroll*

# RTD Backup Project

**P**SC has successfully completed a project to improve the availability of Transpower's electricity market real-time dispatch systems.

Transpower is responsible for optimally dispatching generation to meet the demands of the New Zealand electricity market and to meet their obligations for power system security as per Market Rules and security policies. This is done using a system known as Real Time Dispatch (RTD) where a market dispatch solution is solved every 5 minutes, and the generation is dispatched using the resulting solutions. If this system is unavailable, for whatever reason, an independent stand-alone dispatch system is used. This is a requirement under the Market Rules.

As one of a number of dispatch improvement initiatives instigated by Ajay Maharaj, Transpower's Projects Manager for Grid Operating Services, PSC was engaged to carry out a detailed investigation of all known issues



*Robert Scott congratulates the team on successful commissioning of FreqKemy SAD. L-R: G. Long, D. Monk, D. Schwartzfeger, J. Cowley Ajay Maharaj, Robert Scott.*

and business requirements in this area. PSC's detailed report recommended a new dispatch solution buffering system between RTD and the database servers, so that RTD operation could continue seamlessly despite server downtime or database changeover to standby. This approach would allow RTD to continue to dispatch generation to market requirements as per normal for an extended period despite the market database server being unavailable. It was also recommended that the existing secondary stand-alone dispatch system be replaced by an improved system designed as an enhancement to an existing market tool.

The recommendations of the report were accepted, and PSC was engaged to manage a project reporting to Robert Scott, Transpower's IT&T Programme manager, to carry out the custom software work, testing and implementation. PSC staff working on the project were Graham Long (project manager and technical investigation), David Schwartzfeger (custom software), David Monk (installation and commissioning) and Jeff Cowley (technical advice and testing).

The system was commissioned to service in April/May 2003. The project development was completed well within budget and the result was highly successful in meeting its objectives and obtaining user satisfaction.



# PSC assists ALSTOM EAI with EMP2.2 Testing

In February 2003 PSC received a request from ALSTOM EAI in Seattle to provide immediate assistance with the final testing of the Energy Management Platform EMP2.2 and HABITAT 5.4 software products prior to their release. Flights were confirmed and within 5 days Kent Horan, a PSC SCADA Engineer normally based in Hamilton, NZ was in Seattle helping out!

ALSTOM is in the process of completing testing of their latest releases of EMP2.2 and HABITAT 5.4, which will be available in late April. PSC were required to work with the developers and do functional testing of this software.

The tests were performed on three operating system platforms, Windows, Unix and VMS. EMP2.2 makes use of WebFG, which makes displays accessible via a Web Browser or a WebFG Viewer which is loaded on the operators PC.

Kent found the trip to Seattle was good for skills development and helped strengthen PSC's relationship with Seattle based development and customer support engineers with ALSTOM EAI.



*On his one day off Kent went skiing at Crystal Mountain which had just received a 30cm of fresh snow, which is a great place to ski with spectacular views.*

## PSC Australia joining the ISO 9001 club

PSC Australia recently underwent an audit in support of obtaining ISO9001 certification. PSC in New Zealand already has its management system certified to ISO9001 and it was appropriate for PSC in Australia to have its own certification.

The certification audit was held on the 14th March 2003 with an Auditor from Telarc visiting the PSC office in Melbourne, along with PSC's Quality Manager Edward Hall. The audit was a great success. In supplying his report, Telarc's Murray Woodfield commented on 'A very well run Company'.

Congratulations to PSC's Australian Manager, Dave Denny, and the PSC Australia staff in continuing PSC's strong commitment to Quality.



# PSC Celebrates 5 Year Staff Anniversaries

During recent months PSC has celebrated three employee's five year anniversary. Congratulations go to Edward Hall (PSC Projects Manager), Mark Gilchrist (Project Engineer) and Keith Fisk (Project Engineer) on becoming five year employees of PSC. PSC is very proud of its record of long term staff employment. It is quite common for people in our industry to change jobs on a rather frequent basis even more so when their company restructures itself. PSC is proud to have maintained a steady employment base and be an employer of choice for many of its employees. Later this year 2 more staff members will cross the 5 year barrier. This will mean that PSC will have 14 of 41 staff (34%) who have been with the company for 5 years or more. This is a very high percentage considering the company turns 8 years old in May.

Once again I congratulate the birthday boys and commit myself to maintaining PSC as the preferred location for employment.

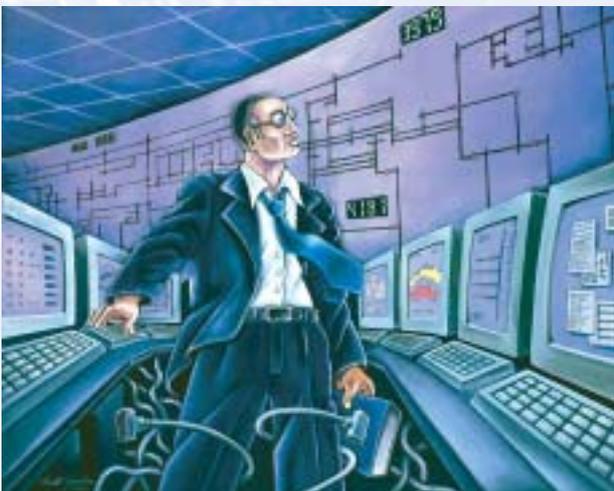
Regards

Tony Armstrong  
Managing Director



*Tony Armstrong M.D., Keith Fisk, Mark Gilchrist and Ed Hall*

## SCADA/EMS, Market Systems, RTU/IED Support Services



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