



SCADA/EMS/MARKET SUPPORT SERVICES



SPI PowerNet EMP Upgrade

SPI PowerNet, the Transmission Network Provider for the state of Victoria in Australia, are currently in the process of upgrading their ALSTOM Energy Management System. The system is expected to be put into service in March this year. PSC have been involved since the project start supplying project resources and assisting with the maintenance of the current system effectively providing backfilling for the SPI PowerNet staff.

The SPI PowerNet system comprises dual redundant EMS servers at a main and backup control centre. The system also scans RTUs for a local distribution network provider. There has also been an operating system change with the new EMS servers running Unix, a change from VMS on the current system.

In line with current thinking on system installations and upgrades, SPI PowerNet are keeping very close to the core product and customising delivered code only after very careful consideration. This approach should allow easier migration to future versions.

PSC provided the resources of Dave Denny, Graeme Dickason and Wolfgang Thaler working with Kevin Whelan, Manager Control Centre Systems, and the SPI PowerNet team. The diversity of the PSC staff involved has allowed SPI PowerNet to easily get the assistance they required, particularly in the areas of database and display conversion, application integration and system configuration. PSC are pleased to have been part of a successful migration project and look forward to continuing their relationship with SPI PowerNet.



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Dave Denny (PSC), Doug Pedler (SPI P), Wolfgang Thaler (PSC), Lui Biancucci (SPI P), and Glenn Hoggan (SPI P)

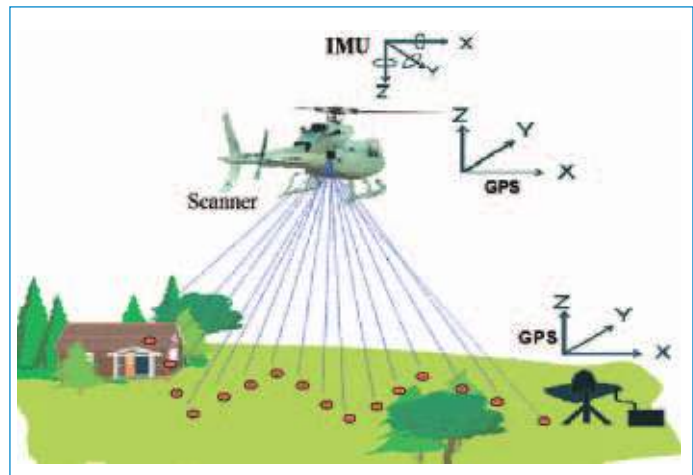
Aerial Laser Surveying Project for Transpower

Aerial Laser Surveying (ALS) is the application of the remote sensing technology of a laser scanning system combined with accurate geodetic equipment. When applied to transmission lines this provides accurate information as to the transmission line construction and clearances to the ground and nearby obstacles.

PSC undertook in conjunction with Transpower the initial investigation into Aerial Laser Surveying (ALS) technology and headed the specification development process. This has led to the Aerial Laser Surveying being completed by Transpower of much of its transmission lines using a specialist contractor Opten Limited.

PSC were again engaged to assist by providing project management of the surveying and data analysis projects. PSC's Ross Crust is the project manager for the

completion of the Aerial Laser Surveying work involving the data collection and data processing. PSC's Edward Hall is the project manager for the ALS analysis project that takes the processed data and undertakes technical analysis and modelling to develop line rating reviews for the surveyed transmission lines.



PSC Sponsors Mana Coastguard

Power Systems Consultants is pleased to be the primary sponsor of the Mana Volunteer Coastguard's rescue jetboat named 'PSC Rescue'.

PSC Directors Tony Armstrong and Ranil de Silva are shown with Coastguard crew around the Silverline jetboat at the launching on 1 December 2002.

The sponsorship duration is for 5 years. The jetboat is intended to provide a fast response rescue capability along the Mana coastline near Wellington, New Zealand. The jetboat's speed and ability to maneuver in very shallow water will greatly enhance the Coastguard's capability in the Mana area. The jetboat will supplement the Coastguard's existing Waveney class vessel which is used for offshore rescue.

It is anticipated that the rescue jetboat will be a common sight at aquatic events around Wellington, providing safety and security services.



Tony Armstrong and Ranil de Silva of PSC handing over the boat to Mana Coastguard.

PSC and the Transpower Real Time Pricing Project

PSC has recently been involved in designing and implementing a software solution for Transpower to facilitate the calculation of real time indicative prices at nodes for the New Zealand Electricity Market.

The project covered Design, Project Management, Software Development, and Testing of Systems. The software has allowed Transpower to use existing analog SCADA MW data that it collects from substations and use these for the calculation of indicative ex post 5 minute electricity price at each of the 220 nodes throughout New Zealand. Software checks SCADA data quality and estimates values where required; this is to ensure that the best available data is used for calculation of the prices, as inaccurate information can affect the calculated prices and send wrong signals to market participants.

The price is calculated every five minutes within 2 minutes of the 5 minute period ending. These prices are published on the New Zealand Electricity Market's web site.

PSC was able to deliver the required result to Transpower within the allocated budget and time frame. Overall the project has been deemed a great success.



Job 1000

On 10 April 1997 PSC marked a milestone in that it had opened 100 job numbers, this took nearly 2 years from the company's inception. On Friday 20th September 2002 we entered the thousand series of job numbers for the first time. Congratulations to Keith Fisk for being the recipient of Job 1000. This is a milestone for PSC which has been reached through all our efforts.



Keith Fisk handing Alice Faleafaga Job 1000 application

PSC Tees off in Melbourne

Melbourne turned on its finest weather for the PSC Australasian Invitational Golf Tournament in mid December. PSC Melbourne staff and clients enjoyed the light breeze off the lake as they made their way around 9 holes of the Albert Park course, set against the backdrop of an impressive city skyline.

Though the field was a mix of able golfers and those with talents more inclined to the social side of the game, PSC ensured that golfing prowess was certainly not a prerequisite to receiving recognition.

One of a number of novelty prizes awarded by PSC Managing Director, Tony Armstrong went to Alstom's Dave Metcalfe for his spectacular water shot, which bounced twice on a busy road before disappearing into the lake. SPI's Doug Pedler took out the major prize with a consistently skillful round.

The alfresco 19th hole proved popular well into the evening, with good food and plenty of liquid refreshment to inspire the burglar's tales of awesome shots played against impossible odds.



Dave Metcalf Alstom ESCA, Doug Pedler SPI Powernet & Tony Armstrong PSC.



Marj Bourbon NEMMCO, Dave Denny PSC, Martin Strong NEMMCO & Lui Biancucci SPI Powernet.

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



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