

Power Systems
Consultants

PSC NEWS

NEWS AND VIEWS FROM THE TEAM AT POWER SYSTEMS CONSULTANTS

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PSC welcomes new staff

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10 Year Anniversary Issue



PSC would like to thank all of its clients over the past 10 years including



The PSC Scholarship

In November 2004 PSC established the "PSC Scholarship" at the University of Canterbury, School of Engineering.



PSC Scholarship recipient Lance Frater, being congratulated by PSC Managing Director Tony Armstrong and Engineering and Lines Manager David Monk.

The scholarship is provided in association with the Electric Power Engineering Centre (EPECentre), further enhancing the co-operation between academia and industry. The PSC Scholarship is open to students in their 3rd professional year, who are focusing on power engineering subjects and have demonstrated excellence in their studies to date.

2005 is the first year that the scholarship has been awarded. PSC were very pleased to be able to award the PSC Scholarship to its inaugural recipient - Lance Frater. The scholarship was awarded at a spit roast provided by PSC to the power engineering students and staff at Canterbury.

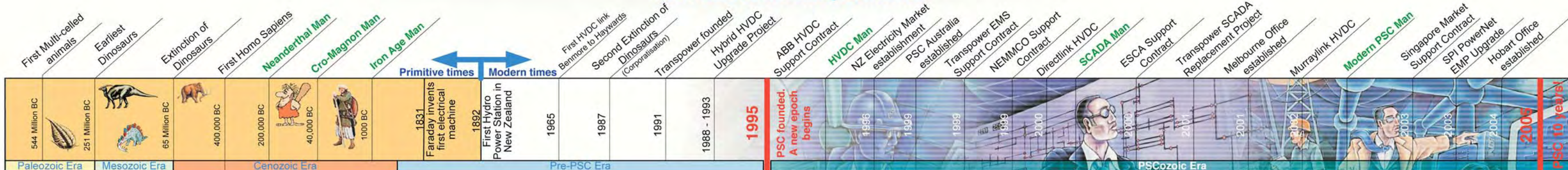


In addition to the PSC Scholarship, PSC is committed to the training and development of Engineers in the Australian and New Zealand power industry. PSC have recently employed two graduate engineers, Paul Cannin and Peter Neophytou. Paul is working in the PSC New Zealand Engineering group, while Peter is working in the PSC Australia SCADA / EMS group. With the wide range of clients and work disciplines that PSC supports, Paul and Peter will gain a broad range of knowledge and experience that will benefit their careers within the power industry.

PSC Celebrates 10 Years



The PSC Evolutionary Timeline



Vector SCADA/DMS Support Contract

Building on its strong history of providing SCADA/EMS (Energy Management System) support to clients in the electricity transmission and market sectors, PSC recently started providing support to Vector Limited for their new SCADA/DMS (Distribution Management System).

In addition to being New Zealand's largest electricity distribution company, Vector's portfolio of businesses and services includes delivering gas and high-speed broadband voice and data communications in the Auckland and Wellington regions.

Vector recently signed a three year Gold Service Agreement with Siemens PT&D Inc. (USA) for the support of their Telegyr TG8000 SCADA/EMS. This agreement sees PSC subcontracting to Siemens to provide local support services to Vector. PSC will also have a major role in the planned upgrade of the system to the latest version of the Telegyr SCADA/EMS, re-branded to be called Spectrum PowerTG.

Prior to joining PSC, Ross Gaspard led the New Zealand based technical team that staged, factory tested and delivered the SCADA/DMS to Vector. During this time, Ross received comprehensive training on the Telegyr system at Siemens offices in San Jose. In preparation for the support agreement, Tim Hood and Tony Weller of PSC joined Vector staff for System Management Training in Auckland.

Other companies in the region operating Telegyr TG8000 SCADA/EMS systems include Meridian Energy, Alinta (Melbourne) and Hydro Tasmania.



Andries van der Westhuizen, Vector Business Systems Manager, Ross Gaspard, PSC's Auckland based Senior EMS Consultant and Warwick Glendenning, PSC's Operations Manager meet during a recent visit to Vector's Auckland Control Room to discuss the Gold Support Contract.

PSC Designs Upgrade of Telecommunications Services for Transpower's Wellsford Substation

PSC telecommunications design staff recently assisted Transpower to upgrade the telecommunications services into Wellsford Substation just north of Auckland.

Telecommunications services into Wellsford had previously been provided by limited capacity power line carrier technology which was end of life for support. This upgrade provided a new high capacity fibre optic transmission system from the local telecommunications carrier Telecom. This will enable Transpower to add IP networking services to the station in the future if required for substation automation.

PSC's scope of work was to provide an installation and decommissioning specification which included the Telecom fibre entry into the substation, transfer of voice and SCADA

RTU data to the new link and installation of digital protection signalling equipment. It also included the removal of line traps and coupling capacitors in the 110kV switchyards at Wellsford, Henderson, Maungaturoto and Maungatapere Substations where the power line carrier had been terminated.

The new fibre optic link was successfully commissioned by installation contractor Electrix in February 2005.

ElectraNet SA Communications Work

PSC is pleased to announce that it has been engaged by ElectraNet, South Australia's electricity transmission network service provider, to provide communications consultancy for a microwave radio investigation and a high voltage powerline carrier (PLC) system review.

The radio investigation involves investigating options and proposing a radio design solution for a PDH 34Mb/s microwave radio system from ElectraNet's Canowie substation in the State's mid-north, to the Davenport area. The PLC study will examine ElectraNet's existing State-wide PLC

system and recommend areas for improvement based on the current condition of infrastructure, identify the impact of new requirements, and discuss the future role of PLC's in ElectraNet's extensive communications network. PSC will also provide training for ElectraNet's communications engineers to manage the new PLC system specification and design.

PSC looks forward to working with David Schutz, Senior Telecommunications Engineer, and his staff, on this ElectraNet project.

Genesis Tongariro Links

PSC Telecommunications Engineer John Grace has recently provided assistance to Genesis Energy with radio engineering of four radio links that will be installed in the Tongariro region.

The links provide communications for control of the power stations and structures in the region. The new 13 GHz links will replace the aging M Band radios installed in the late 1980's. Kevin Box of Genesis Energy is the client project manager for this upgrade.

PSC's input has been provision of:

- Detailed radio path checks for the links to Tokaanu, Rangipo, Wairehu and Tukino;
- Licensing applications for the new links;
- Installation specifications for the new links.

Preparation for the installation specifications included visiting the sites. The picture shows the twin masts at the Tukino Radio Repeater site.



PSC welcomes new staff

Peter Neophytou

Peter Neophytou has joined PSC Australia as a Junior Engineer. Peter has a Bachelor of Engineering from RMIT University in Melbourne and until recently was working as an Application Engineer for an industrial automation company. Peter has an interest in HMI development and SCADA system support and is keen to pursue this interest within the electricity industry. Peter is currently working at NEMMCO supporting their EMS display development.



Paul Cannin

Paul Cannin has joined PSC as a graduate engineer, having completed a Bachelor of Electrical Engineering degree with honours at the University of Canterbury. Paul's main areas of interest are power electronics, HVDC and power system operation. Paul is fluent in Spanish, having spent one year in Argentina on the student exchange programme, and he is keen to work abroad and travel. He is currently assisting the Market Services team of the Transpower System Operations Division.



Trevor Hosking

Trevor Hosking joined PSC in May as a Senior Consultant with specific responsibility for telecommunications project management. Trevor has previously worked for Alcatel New Zealand Limited and the Department of Civil Aviation and has extensive experience in telecommunications engineering and manufacturing including senior management roles. Trevor is currently assisting Transpower with Portfolio Management in their Information Technology group.



PSC celebrates 5 Year staff anniversaries

In recent months PSC has celebrated the five year anniversary for three staff members. Congratulations go to Alice Faleafaga, William Malcolm and Wolfgang Thaler on five years service with PSC. PSC is very proud of its long term staff employment record and is committed to maintaining PSC as a preferred employer.

