



PSC NEW

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

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Congratulations to the PSC **Indoor Cricket Team**

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Transpower PSC Alliance

The signing of an Alliance agreement between Power Systems Consultants and Transpower New Zealand, the owner and operator of New Zealand's high voltage transmission grid signifies a major milestone between the two companies.

This agreement formalises PSC's position with Transpower for the last 13 years and recognises PSC's excellent relationship with one of our major clients.

Each company plays an important role in the achievement of the other's objectives and in supporting the other's programme of works. PSC will provide Transpower with access to our key resources to support their upcoming build and maintenance programme.



PSC CEO Warwick Glendenning and Transpower CEO Dr Patrick Strange sign the Alliance Agreement

One major project PSC will support is the proposed replacement of the HVDC Pole 1 equipment. PSC's Electrical Engineering group have extensive knowledge and experience in the design, project management, commissioning, operation and maintenance of HVDC transmission systems.

This Alliance agreement covers all of Transpower's business units i.e. Information Services and Technology, Grid Development, Grid Projects, Grid Performance and System Operator. This means PSC will continue to provide support to existing business units and be able to provide services to Transpower in new areas not previously supported by PSC.

A set of alliance principles have been agreed to, and these will be used to govern the future relationship between the two companies. With the introduction of this Alliance agreement, PSC looks forward to strengthening our close relationship with Transpower.



PSC Group of Companies

Power Systems Consultants (PSC) was established in 1995 to provide independent engineering and consultancy services to transmission, distribution and generation companies throughout the world.

The PSC Group of companies currently comprises Power Systems Consultants New Zealand Ltd, Power Systems Consultants Australia

Pty Ltd, Power Systems Consultants Asia Pte Ltd and Power Systems Consultants Inc. in the United States. The head office of the PSC Group is located in Wellington New Zealand, with offices in Auckland, Nelson, Melbourne, Adelaide, Hobart and Seattle. PSC has the expertise and knowledge to offer the following services:



Control & Market Systems

- Development, factory acceptance testing, on-site commissioning and on-going support for Energy Management, SCADA and Sub-Station Control Systems
- Applications support including display and database management
- Historian PI integration services Qualified OSIsoft PI System™ integrator
- Wholesale Electricity Market Systems support of applications, databases and solver engines
- Electricity Market Systems software development and enhancement
- Training in Electricity Market Systems concepts, practices and operation



Electrical Engineering

- System studies including load flow, short circuit, dynamic stability and harmonics
- Market constraint equations, grid code compliance investigations and generator connection studies
- Grid outage planning and operations studies
- Strategic planning and technical investigations
- Project management and engineer to contract services
- Engineering support for grid equipment maintenance and upgrade projects
- Development of equipment specifications, design and maintenance standards



HVDC

- Specification and design of HVDC transmission systems including system studies and reliability studies
- Controls development and testing, including factory system testing
- Specification, factory testing and commissioning of associated SCADA systems
- Preparation of test and commissioning plans, co-ordination of system tests
- Project management, operations and maintenance support including training
- Development of operator training simulators
- Development of performance reporting packages



Transmission Lines

- Aerial Laser Survey, data processing and management
- Project management and engineer to contract services
- Project, operations and maintenance support services
- Asset information and data services
- Quality Assurance reviews
- Technical investigations
- Design reviews (constructability)
- New technology investigations



Telecommunications and IT Networks

- Strategic Planning
 - Business Case Preparation and Contract Negotiation
- Design, specification preparation and commissioning
- Extensive expertise in fibre optics including OPGW
- Network planning and technical investigations
- Project Management and Contract Management services
- Information Security
- Operations and maintenance support
- Audits and network reviews

PSC Australia Control & Market Systems Business Unit

PSC is pleased to announce the appointment of Warren Young as the Manager for the Control and Market Systems business unit in Australia. Warren started his career as a power systems technician with the Electricity Corporation of New Zealand and he has also worked as a commercial pilot for six years. Warren joined PSC in 2000 as a SCADA support engineer at Transpower's control centre in Hamilton New Zealand. He then moved to Sydney to provide SCADA support services to NEMMCO who are the wholesale electricity market operator for Queensland, New South Wales, Victoria, Tasmania and South Australia. Warren has extensive experience in the support of AREVA SCADA/ EMS systems, control & data centre infrastructure and ICCP connections.



PSC's Australian Managers John Tink and Warren Young

For the past 18 months John Tink has been doing an excellent job as the acting Control and Market Systems Manager and will now take up his "official" role as the PSC Australian Business Manager based in PSC's Melbourne office with oversight for business logistics, consulting and business development across all PSC's core businesses. John is an experienced senior project manager for EMS/SCADA and market systems projects. His recent experience includes working as the program director for the market systems project for Transpower New Zealand Limited during the detailed design phase and the national

program manager for the retail electricity market settlement and transfer solution project (MSATS) for NEMMCO in Australia.

Warren and John will work closely with our staff and clients to ensure that PSC continues to build on its record of SCADA/ EMS and Electricity Market Systems support services and project implementation throughout Australia.

Warren can be contacted at warren.young@pscau.com John can be contacted at john.tink@pscau.com

Kent Horan celebrates 10 years of Excellent Service

Kent Horan is a Controls & SCADA Engineer for PSC and he celebrated 10 years of excellent service with the company in November 2008. Since joining PSC, Kent has been involved in a large number of projects and technical support roles including National SCADA modelling and commissioning, Wholesale Electricity Market support and HVDC control systems.

Kent is currently supporting ABB Power Systems in Sweden with development, testing, installation and commissioning of control equipment for a number of international HVDC projects. His most recent project has seen him working on the new control system for a major upgrade to the Apollo end of the Cahora Bassa HVDC link in South Africa. Kent has extensive knowledge and experience of the MACH 2 control system which is the world's most widely implemented control system for HVDC. The PSC Management team congratulates Kent for the excellent effort and results he has achieved over the past 10 years.



Kent Horan carries out testing on a control cubicle for the Apollo HVDC project



PSC welcomes new staff

Naresh Kumar

Naresh Kumar has joined PSC New Zealand as a SCADA Engineer. Naresh has a Bachelor of Engineering Degree in Electrical Engineering and has extensive experience in SCADA and IT applications support, analysis, software development, integration testing and implementation. Naresh will be working at PSC's office in Auckland supporting our distribution clients.



Timothy Browne

Timothy Browne has joined PSC USA as a Power Systems Engineer. Tim has completed a Bachelor of Engineering degree in Electrical Engineering from the University of New South Wales and a Doctor of Philosophy from the University of Wollongong in Australia. He has previously worked as a Transmission and Field Services Engineer for EnergyAustralia in Sydney and his most recent work assignment has been at the Arizona State University as a Postdoctoral Researcher studying power system dynamics and power system sensor applications. Tim is based in Seattle, Washington.



Jack Homeyer

Jack Homeyer has joined PSC USA as a SCADA/ EMS Engineer. He has over 24 years experience in the utilities industry with over 10 years working with SCADA/EMS systems. This includes AREVA T&D technology, ICCP applications and the development and management of data analysis tools such as OSISoft PI. Jack has a Bachelors degree in mathematics, a Masters degree in applied statistics and has completed post graduate studies in electrical engineering. Jack is based in Reno, Nevada and will be working with PSC clients in the US and internationally.

2008 Nelson Bays Under 16 Rugby

The Nelson Bays Under 16 Rugby Team competes in the Annual South Island Round Robin Tournament held between 12 Teams from throughout the South Island of New Zealand. The teams first compete in their respective zones and at the conclusion of pool play it was Nelson Bays that came out as top qualifiers.

All teams then travelled to the Timaru tournament where we saw some wonderful talent on display. Nelson Bays qualified first in their pool and then had a comfortable win over North Otago in their quarter final. A very tough semi final saw Nelson Bays come out on top over South Canterbury 14 to 10 with the home side putting up a real fight in front of a very parochial crowd. The final was against the previously unbeaten Southland team and proved to be a real cliff hanger which eventually saw the Southlanders winning the final 13 to 11.

The Nelson Bays team can take some comfort in knowing they



played with real determination and skill throughout the tournament. Eight of its players named in the starting lineup for the tournament team was testament to the high level of rugby they produced.

The team would like to thank Power Systems Consultants for the marvelous support shown to them through their sponsorship efforts and really appreciate the contribution companies like PSC make in support of these community activities.

Congratulations to the PSC Indoor Cricket Team

Indoor Cricket has continued to be very popular and PSC has a team playing every Thursday evening at the Action Indoor Sports Centre in Petone during the competition season. The team made the final for their league this year and completed a great victory in a very close game with Matt Cross being named player of the match. Thank you to all the enthusiastic supporters who came along each week and cheered the team on.



