



PSC OPERATIONAL TECHNOLOGIES

Whether it is SCADA/EMS/DMS, substation or generation automation, telecommunications or IT and security issues, increasingly utilities and other major organizations across the globe are turning to the market leader PSC for independent advice and support.

PSC Operational Technologies services

- ▶ Vendor neutral objective advice
- ▶ Project Management
- ▶ Integration
- ▶ Project delivery
- ▶ Requirements analysis
- ▶ Independent advice (Owners Engineer)
- ▶ Operations technology support
- ▶ Testing
- ▶ Documentation
- ▶ Training
- ▶ A world class team of pragmatic professionals
- ▶ Cost effective, onsite and backup support
- ▶ Long term commitment

(Our capabilities are listed in more detail overleaf)

Our team of experts provide the operational technologies, systems, processes and people that will help you seamlessly run your power systems and assets.

We apply independent knowledge of the electricity marketplace and other utility sectors to meet your operating needs.

THE POWER KNOWLEDGE NETWORK

PSC has a global network of locally-based, yet highly mobile specialist consultants. Our people are globally connected and work seamlessly with our clients in a collaborative, accessible and professional manner.

We also bring powerful knowledge transference through our expertise in key operational technology related fields, including control and market systems.

VENDOR NEUTRALITY AND EXPERTISE

PSC is vendor neutral. This independence enables us to objectively work with all the world's leading SCADA/EMS/DMS, IT and telecommunications vendors to best fit solutions to your needs.

Our in depth working knowledge of the world's leading operational technologies vendors; and our associated understanding of their

processes and different product offerings also ensures client compatibility and successful service delivery.

EXPERIENCE THAT COUNTS

PSC offers broad, practical, hands on operational technology experience, spanning control systems, IT, telecommunications and automation systems for electricity and other utilities.

We also bring proven understanding of the critical telecommunications and networking requirements for energy delivery and reliability.

THE VALUE EQUATION

The sum of what PSC offers is greater than its parts – enduring client partnerships based on mutual trust and respect; and built on expert, objective advice and services that deliver measurable value, aligned to client objectives.



Specialist Consultants
to the Electricity Industry

HELPING OUR CLIENTS
POWER THE WORLD



OUR CAPABILITIES

PSC Operational technologies service offers clients the following capabilities:

SCADA/EMS/DMS

- ▶ Strategic Planning and technical investigations
- ▶ Detailed design and specification development
- ▶ Systems administration, operational on-site support, database development and support, display and point commissioning
- ▶ Custom applications and product interface modifications
- ▶ Data Historian system design, implementation, administration and support
- ▶ Integration
- ▶ Project management
- ▶ Training
- ▶ Documentation
- ▶ Vendor Management
- ▶ Network modelling
- ▶ Simulation
- ▶ Testing
- ▶ Operational support
- ▶ PMUs
- ▶ MDM
- ▶ CVR
- ▶ FISR
- ▶ Battery storage integration

- ▶ PV integration
- ▶ Distribution Network Analysis

Substation Automation

- ▶ Substation HMI, RTU and substation management systems
- ▶ Detailed design, configuration and implementation
- ▶ Demand Side Management Systems
- ▶ SmartGrid
- ▶ Substation server design

Generation Automation

- ▶ Generation automation and Governor control
- ▶ PLC programming and integration
- ▶ Generator Management Systems (GMS)
- ▶ AGC tuning
- ▶ Economic Dispatch
- ▶ Unit Commitment

Telecommunications

- ▶ Strategic planning and technology investigations
- ▶ Concept and detailed design
- ▶ Construction, installation and commissioning
- ▶ Network planning

- ▶ Audits and network reviews
- ▶ Radio link path planning
- ▶ Fiber optic technologies
- ▶ Operations and maintenance support
- ▶ Security
- ▶ Cellular networks – LTE
- ▶ MPLS
- ▶ DMZ

IT Networking and Security

- ▶ Data network strategy and asset management
- ▶ Strategic planning and technical reviews
- ▶ Infrastructure architecture and design
- ▶ Secure network and server design
- ▶ Virtualization and storage design
- ▶ Security reviews and network audits
- ▶ Incident forensic analysis
- ▶ IP data network, telephony and VoIP support
- ▶ Cyber Security
- ▶ Operations network to Corporate network secure design and implementation
- ▶ NERC CIP
- ▶ Data center design and implementation
- ▶ Backup control center design and implementation

PROVEN REPUTATION

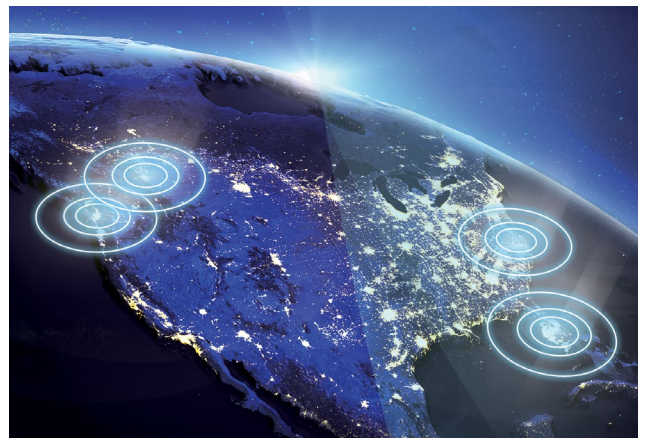
PSC has a global reputation for excellence. A cornerstone of this reputation is an unshakable commitment to excellent client outcomes and value driven client relationships.

The breadth and caliber of our people, coupled with the longevity of our relationships with many of our clients, has led to a portfolio of successful projects around the world.

PSC has delivered Operational Technologies solutions in a range of markets and situations including:

- ▶ North America – SCADA, EMS, DMS, Telecommunications, network support, Smart grid and projects
- ▶ Australia – SCADA, telecommunications and network projects
- ▶ New Zealand – SCADA, telecommunications projects and support

(Ask us for information about these and other solutions, or visit our website)



OUTSTANDING PEOPLE

The PSC team is based in Asia Pacific, Europe and North America, or wherever our client's needs take them. They are on the ground specialists with a shared passion and commitment to helping PSC clients to power the world.



PSC NEW ZEALAND
PO Box 57095, Mana
Wellington
New Zealand
Phone: +64 4 232 7680
Fax: +64 4 232 7682

PSC AUSTRALIA
PO Box 2102,
Fortitude Valley BC, QLD 4006
Australia
Phone: +61 1300 933 632
Fax: +61 7 3252 8640

PSC NORTH AMERICA
PO Box 878,
Kirkland, WA 98083
United States of America
Phone: +1 425 822 8489
Fax: +1 425 822 3520

PSC ASIA
#16-01 The Amara
Corporate Tower
100 Tras Street
Singapore 079027
Phone: +65 9128 1830

PSC EUROPE
SoanePoint
6-8 Market Place
Reading RG1 2EG
United Kingdom
Phone: +44 7827 924 825



**Specialist Consultants
to the Electricity Industry**

pscconsulting.com