



PSC POWER NETWORKS

PSC is a leading thinker in power network design and management. We bring renowned system study expertise and combine it with proven HV substation, asset management and transmission line experience.

PSC Power Networks services

- ▶ Unique system study expertise
- ▶ A combination of leading thinkers with practical hands on experts
- ▶ A reputation for delivering excellence on challenging 'beyond the norm' projects
- ▶ A breadth of know-how in core and parallel fields
- ▶ A global, rapidly deployable team
- ▶ A commitment to enduring client partnerships based on expert, objective advice

(Our capabilities are listed in more detail overleaf)

Blending our leading engineering thinking with practical hands on experience is a powerful combination, making PSC the partner of choice for many utility companies across the globe.

We have developed a reputation as trusted advisors, meeting and surpassing the challenges presented by a wide variety of assignments.

FULL SERVICE PROVIDER

Our people offer an intimate understanding of network studies tools, the latest software and transmission line planning. We match this with pragmatic, hands-on implementation of the full range of network services.

Our 'theory to application' approach makes PSC a truly end-to-end provider of power network services. It also means that tackling the really challenging power network projects is something PSC has become known for.

BEYOND THE NORM

Clients often turn to PSC when they have a uniquely complex 'beyond the norm' challenge.

We apply specialist system studies capabilities that are ideally suited to these complex assignments. These include transmission planning assignments, network studies Outage Management schemes, Impact Studies on Networks for Renewable energy and new technologies.

A REPUTATION FOR EXCELLENCE

PSC consistently delivers excellence in design and analysis of transmission line networks, primary and secondary HV substation and transmission line design capability and LiDar capability.

We also bring crucial expertise in key power network related fields, including control systems, telecommunications, IT networks, market systems, civil and structural fields and HVDC.

RAPID DEPLOYMENT

On any power network assignment, anywhere in the world, PSC teams collaborate as centres of excellence for systems studies and transmission lines.

We offer an extensive global network of locally-based, yet highly mobile PSC consultants, who bring an in depth, independent understanding of a wide variety of processes and product offerings.



Specialist Consultants
to the Electricity Industry

HELPING OUR CLIENTS
POWER THE WORLD



OUR CAPABILITIES

PSC's Power Network service offers clients the following capabilities:

Power System Studies

- ▶ Utilizing PSS/E, DigSILENT and PSCAD
- ▶ Dynamic and transient studies
- ▶ Network planning studies
- ▶ Generator connection studies
- ▶ Studies to support outage management and market operations
- ▶ Insulation coordination studies
- ▶ Arc flash studies
- ▶ Earthing and lightning protection
- ▶ Distribution Network Analysis
- ▶ Renewable integration studies
- ▶ Conservation Voltage Reduction studies

HV Substations

- ▶ Feasibility studies and technical investigations
- ▶ Concept design

- ▶ Primary systems design
- ▶ Secondary systems design
- ▶ Design management

Transmission Lines

- ▶ Transmission line modeling, engineering analysis and design
- ▶ Foundation design and assessment
- ▶ Transmission tower condition assessment
- ▶ Transmission line design tools (PLS-CADD and TOWER)
- ▶ Aerial laser surveys (LiDAR)
- ▶ Project management

Asset Management

- ▶ Independent Engineer roles
- ▶ Regulatory support
- ▶ O&M Advice
- ▶ Generator testing and modeling

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 Power Network solutions in a range of markets and situations including:

- ▶ North America – power systems studies and engineering support
- ▶ Australia – systems studies, transmission line projects
- ▶ New Zealand – systems studies and engineering 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.



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