



Distributed Energy Resources (DER) is about the aggregation and control of distributed energy generation, demand and storage. This includes:

- ▶ Generation: solar (PV), wind, fuel cell, co-gen, diesel
- ▶ Energy storage and efficiency
- ▶ Electric vehicles
- ▶ Demand response
- ▶ Load management
- ▶ Micro grids

NEW CHALLENGES

Across the world Distributed Energy Resources (DER) are presenting new challenges to a wide range of industries. From property developers and large industrials to distribution network operators, organisations need to plan and operate these new technologies in a way that creates the best value for their project, business or network.

SPECIALIST EXPERTISE AND FULL-SPECTRUM SOLUTIONS

Introducing PSC DER, a service from the global power system consulting firm PSC.

PSC will help you to design, operate, and optimise the effectiveness and efficiency of your DER. We offer clients access to the full spectrum of specialist skills needed to meet and surpass the challenges that DER poses and deliver the benefits these new assets promise.

GLOBAL KNOW-HOW AND BREADTH OF CAPABILITY

PSC's breadth of capability and experience is based on DER projects delivered in Australia, New Zealand, North America and Europe. PSC also offers a track record of performance in the electricity industry that spans decades, countries, and specialist services.

From power networks, operational technologies and complete grid consulting solutions to generation source, load, control systems and system security, we work across and beyond the entire DER value chain. This means we underpin our DER capabilities with the diversity of engineering expertise you need.

PSC clients facing a DER challenge enjoy the confidence of having the full range of expertise on the job. PSC DER, global knowledge, experience and full spectrum capabilities.

OUR CAPABILITIES

PSC DER capabilities include:

- ▶ Telecommunications, IT, networking and cyber security
- ▶ SCADA/DMS/EMS
- ▶ Network planning at distribution, sub-transmission and transmission levels
- ▶ Vendor management
- ▶ Distribution market systems
- ▶ DER control space
- ▶ DER system studies
- ▶ PV connections
- ▶ Metering
- ▶ Energy storage
- ▶ Distribution network analysis
- ▶ Active distribution network management
- ▶ Demand response
- ▶ Standards
- ▶ Micro grids
- ▶ Regulatory processes
- ▶ Research



Specialist Consultants
to the Electricity Industry

HELPING OUR CLIENTS
POWER THE WORLD



PROVEN REPUTATION

PSC has delivered a variety of DER projects around the world:

- ▶ Extensive DMS/EMS/SCADA projects in North America, Australia and New Zealand
- ▶ Extensive DER related telecommunications and networking projects in Australia, North America and New Zealand
- ▶ Solar PV connections and DER system studies and controls in Australia and North America
- ▶ PV/Storage integration in North America
- ▶ CVR and PV penetration studies in North America
- ▶ Review of DER efforts in California, a world leader in the DER space
- ▶ Distribution network analysis in North America and New Zealand

For a full summary of our experience, please request a capability statement from PSC.



PSC DER ALSO OFFERS CLIENTS:

- ▶ Strategic guidance on solution architecture, road maps and planning
- ▶ A robust understanding of system operation and how this can be applied to DER
- ▶ Vendor management capabilities
- ▶ Broad product know-how
- ▶ Extensive power industry connections through standards and industry bodies such as MESA and CIGRE

HANDS-ON SKILL DEVELOPMENT

As part of our mission to help our clients power the world we recognise that investing in know-how and skills is crucial. We have taken a hands-on approach to DER to reflect that.

PSC is active in the area of DER R&D, including the installation and operation of our own solar arrays and electric vehicles in New Zealand. The PSC Audi e-tron project has given us practical experience without the usual project constraints.



The PSC Solar array and PSC Audi e-tron



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