



Diversified Electrical Equipment Specialists

CAPABILITY STATEMENT

Company Overview

Insulect is a diversified electrical equipment manufacturer and engineering services provider.

Across the energy network – from power generation, transmission and distribution, through to major energy users – we work collaboratively with electrical asset owners to solve complex network challenges, equipping them with right-fit technical solutions from the world's best brands, including our own.



A Trusted Engineering Partner

Network Solutions

We engineer, build, monitor and maintain electrical network equipment and infrastructure: transformers, switchgear and associated assets and monitoring systems.

Locally Invested

Australian for over 30 years and well connected with the local energy sector, we maintain a strong in-house expertise in HV / MV electrical equipment and associated monitoring systems.

In-house Expertise

Our local engineering services team works across the lifecycle of assets: equipment specification, custom design solutions, commissioning, refurbishment and upgrade projects, as well as asset monitoring solutions and support.

Manufacturing Footprint

Insulect has three manufacturing facilities across Australia where we design and build reliable electrical equipment to meet local network requirements.

Proven Reputation

Our experience extends from solar farms in the outback, to underground substations in the CBD; from a power-hungry aluminium smelter to the switchgear on the pole outside your home.



Our 4 Core Capabilities

We have expertise across high voltage electrical equipment, the monitoring systems that safeguard these assets, as well as the engineering expertise and services needed to get them operational in the network – and continue performing reliably throughout the asset lifecycle.



Switchgear

High voltage electrical equipment for generation, transmission and distribution; substation, overhead, underground



Transformer

Critical components for power and distribution transformers: monitoring, measurement, control, fluids, insulation



Networks

Integrated hardware and software for network asset monitoring: systems development services



Industrial

Composite materials and custom component manufacturing services for demanding technical applications.

Product Portfolio

In addition to our three manufacturing facilities where we design and build our own range of electrical equipment, we are also aligned with a select group of technology partners to extend our diversified product portfolio. Each of these companies are well-known global leaders in their fields of expertise:



Electrical insulation materials and laminate



Monitoring & protection devices for electrical assets



Electrical Equipment



Ester Transformer Fluids



Composite materials for technical applications



Transformer components and bushings

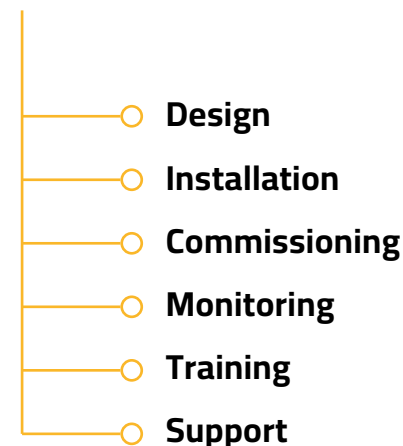


Electrical Equipment

Engineering Services

Our engineering services team works across the lifecycle of electrical assets: equipment specification and custom design solutions, commissioning services, refurbishment and upgrade projects.

They similarly provide custom monitoring solutions for critical equipment, supporting them in system design and installation, through to monitoring services, system optimisation and support.



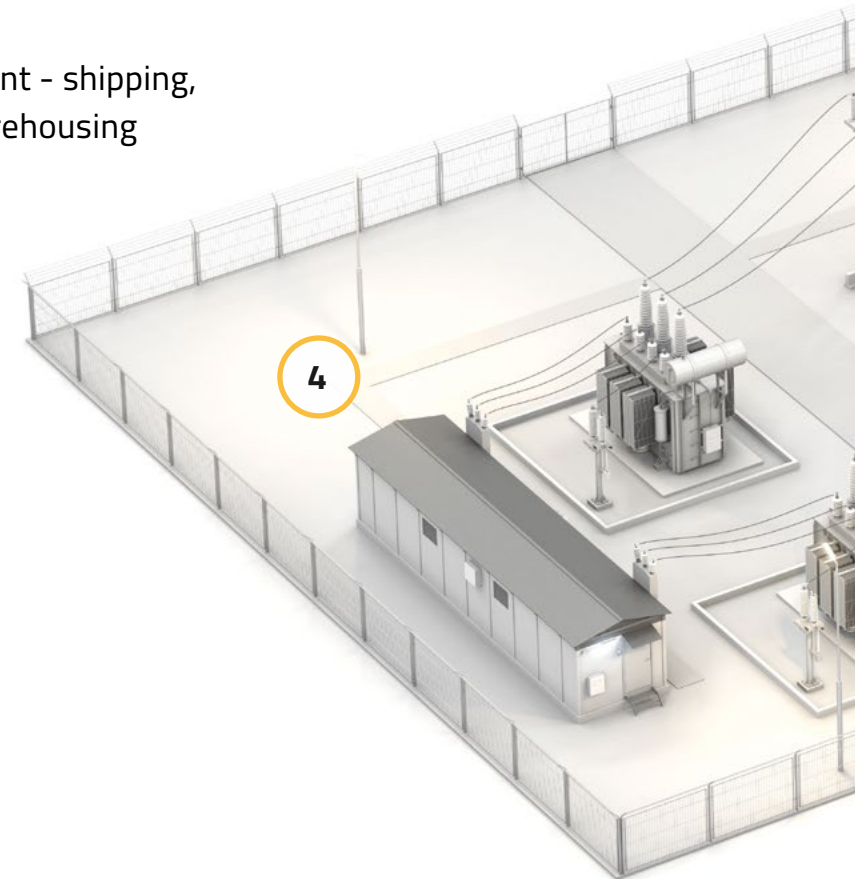
Switchgear

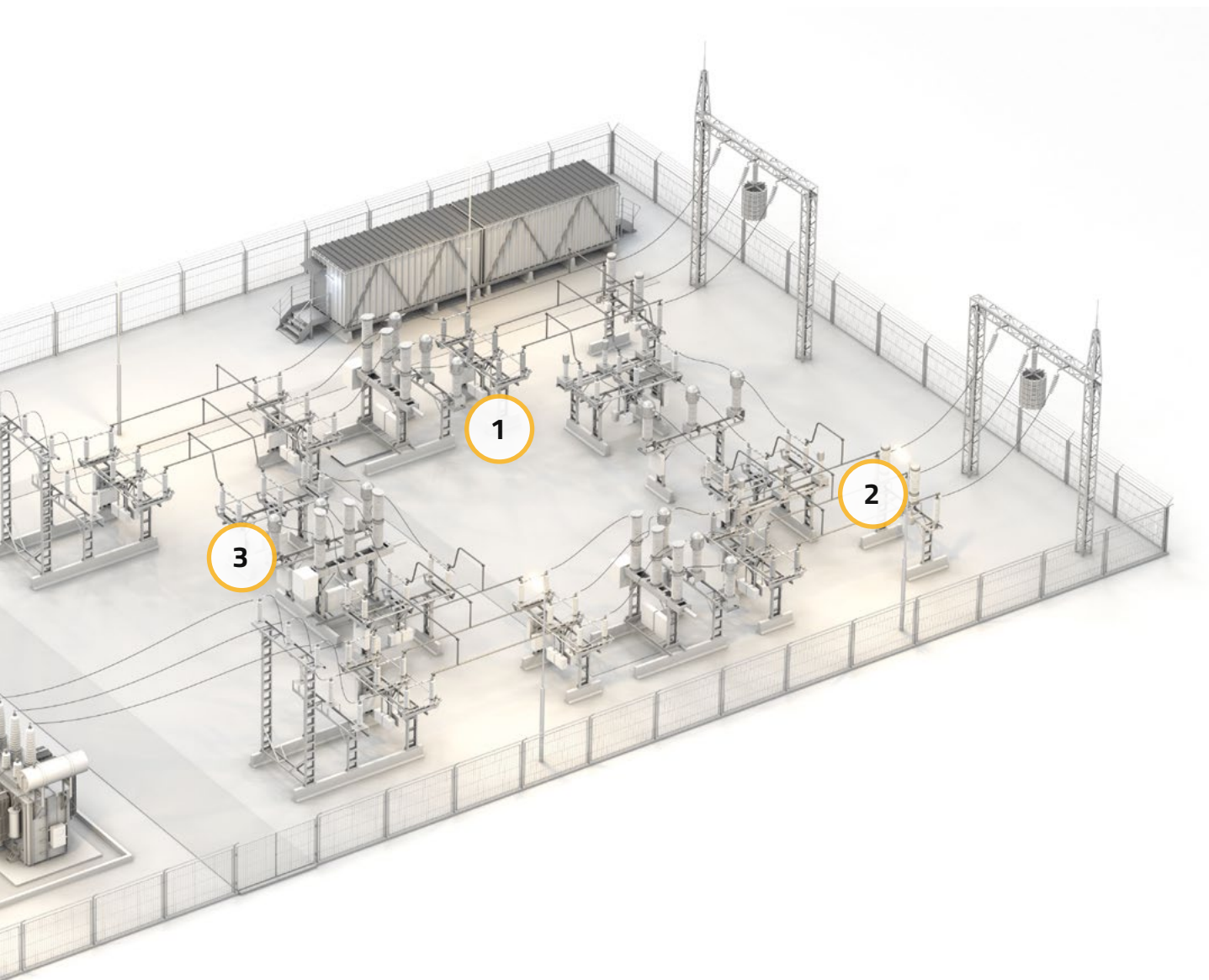
Insulect has a legacy as a trusted switchgear supplier that extends over 30 years and a reputation for providing tough, reliable network hardware requiring minimal maintenance for long-lasting performance.

Extending our Capability

Our growing capability encompasses an extensive range of switchgear for substations, overhead distribution and underground cables. Our core range is locally manufactured at one of our three Australian facilities. This range is augmented by our single-source partner Sieyuan Electric in China to provide additional voltages and technical solutions.

- Experienced local engineering team and market expertise
- Product specialist - site assessment, technical specification development
- Procurement management - shipping, clearance, transport, warehousing
- FAT testing, install and commissioning support
- Turnkey switchgear project delivery





- 1. Disconnectors**
- 2. Circuit Breakers (Dead Tank, Live Tank)**
- 3. Instrument Transformers (Current, Voltage)**
- 4. Cable Link Boxes**
- 5. Load Break Switches (Air & Gas Insulated)**
- 6. Isolating Links**
- 7. Electronics Sectionalisers**
- 8. Surge Arresters (Class A, C)**

Transformer

Insulect is a leading Australian specialist in transformer equipment for asset owners, manufacturers and service providers.

Our capability encompasses everything needed for transformer repairs, maintenance, refurbish and retrofilling, as well as a wide range of componentry and equipment used in the manufacture of new transformers locally.

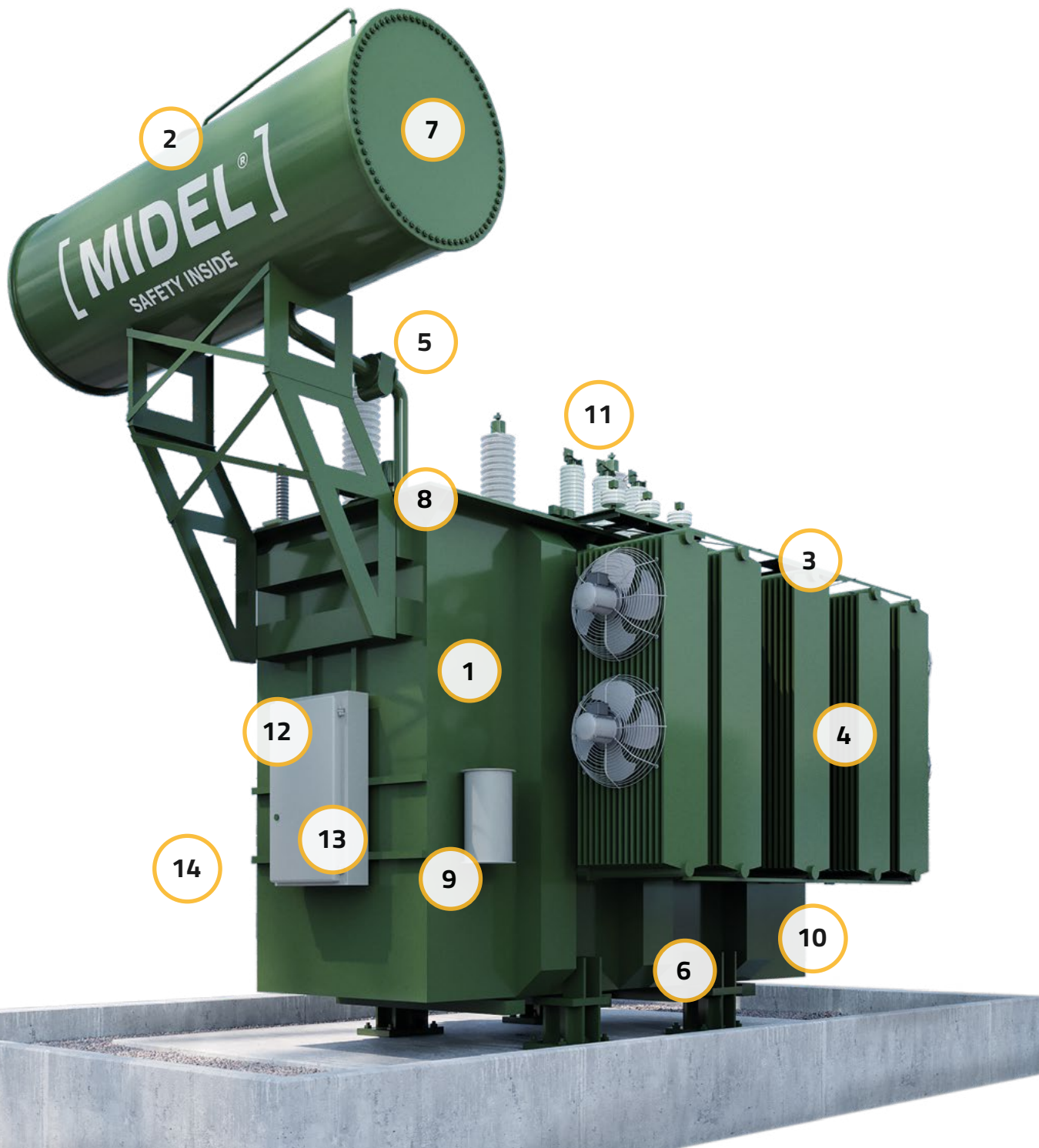
Extensive Product Expertise

We have the most comprehensive product range available. Our local team provides the much-needed support in identifying the right product for your

application, working alongside customers from specification and commissioning support, through to maintenance and upgrades.

- solid insulation materials and components
- ester transformer fluids
- measurement and control devices for almost any application
- complete transformer monitoring systems.

1. **Electrical Insulation**
2. **Ester Fluids**
3. **Temperature - Indicators**
4. **Temperature - Fibre Optics**
5. **Pressure Detection**
6. **Pressure Relief**
7. **Liquid Level**



8. Liquid Flow

9. Smart Breathers

10. Partial Discharge

11. Bushing Monitors

12. DGA Monitors

13. Transformer Monitoring

14. SmartSub Software

Networks

Insulect provides comprehensive power system performance monitoring for the entire energy value chain. From baseload and renewable generation, to transmission, large energy users and distribution connection points, we deliver the capability to rapidly diagnose and action network problems early.

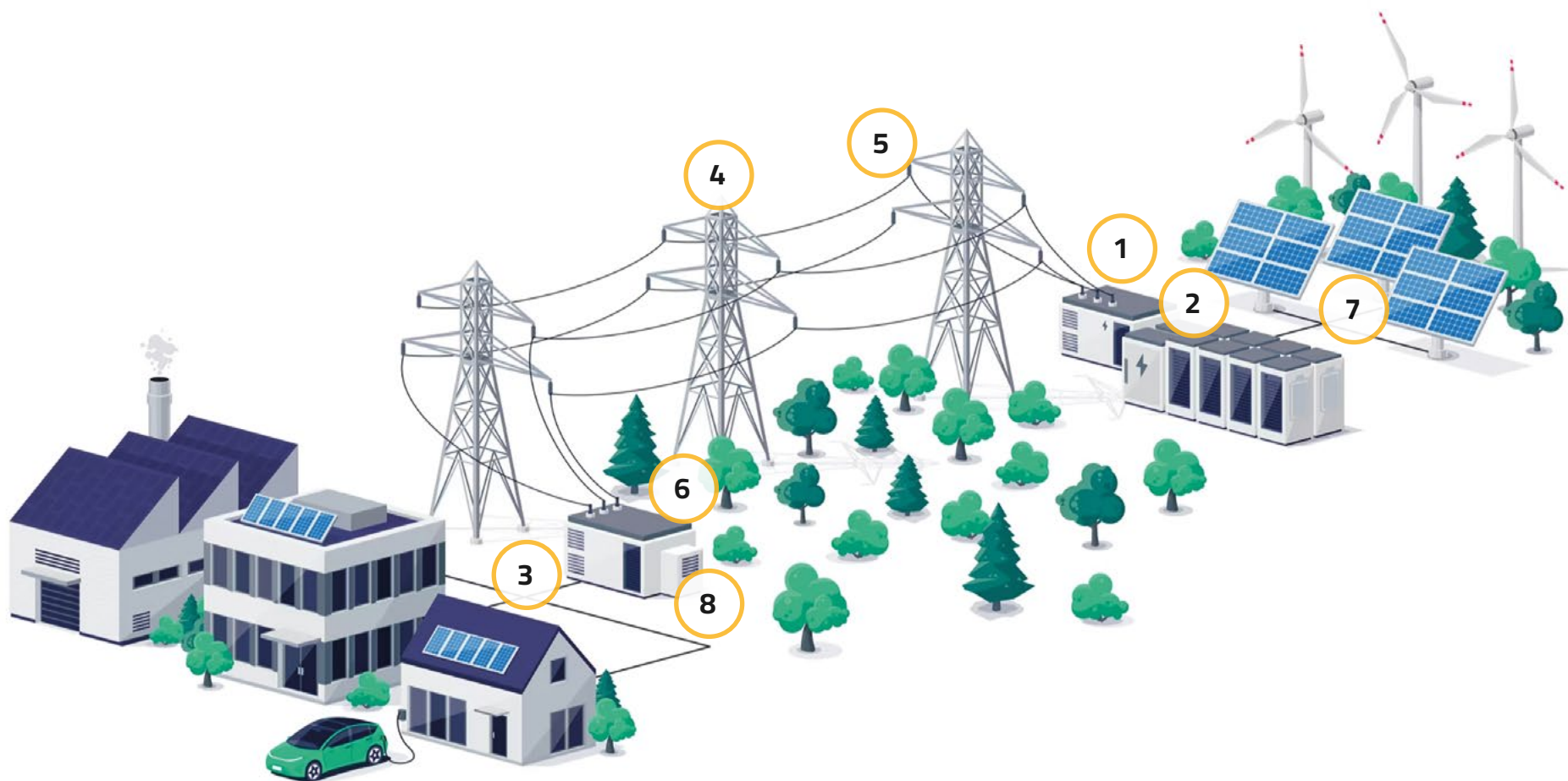
Industry-leading monitoring systems

We partner with Qualitrol to develop and deliver their globally proven network monitoring hardware platform and associated iQ+ software.

Our local engineering team provides the requisite monitoring system expertise

and end-to-end customer support. They actively support companies in the optimisation of their monitoring capability.

- system design and specification
- install and commissioning
- system monitoring and reporting services
- training and support.



1. Digital Fault Recording (DFR)

2. Dynamic Disturbance Recording (DDR)

3. Power Quality (PQ Class A)

4. Fault Location (TWS FL)

5. Phasor Measurement (PM)

6. High Speed Monitoring (HSM)

7. FCAS Monitoring

8. Master Station Software (Multifunction)



Industrial Composites

We provide a range of advanced composite materials and precision machining capability for a wide variety of industrial applications. We help solve challenging problems relating to material performance in machinery and equipment

Composites for demanding applications

Our material partners Rochling and Pucaro produce proven composite products for the toughest of applications.

We support the material selection process, to ensure achieve a match between product and application. We have two local manufacturing facilities

for composite materials, allowing us to deliver custom component orders and just-in-time delivery as standard.

- electrical and thermal insulation
- chemical and corrosive environments
- mechanical wear and tear, strength, durability and more.

Composite Applications

Kitting and sub-assembly

To facilitate customer productivity in warehousing, production and assembly.



Material selection

We partner with a number of premium composite materials companies to ensure we can source the best fit solution.



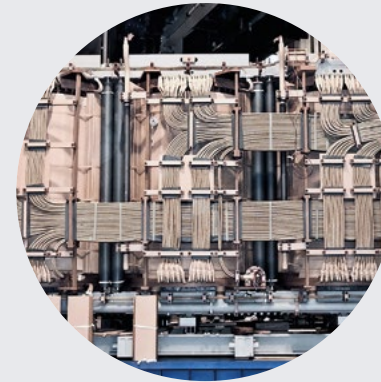
Precision machining

Short run, specialty or volume based non-metallic machining and fabrication at two Australian manufacturing facilities.



Demanding applications

where excellent electrical, thermal, chemical and/or mechanical performance is critical.



Product innovation, prototyping

Our highly-trained and experienced team are able to help solve challenging customer requirements.



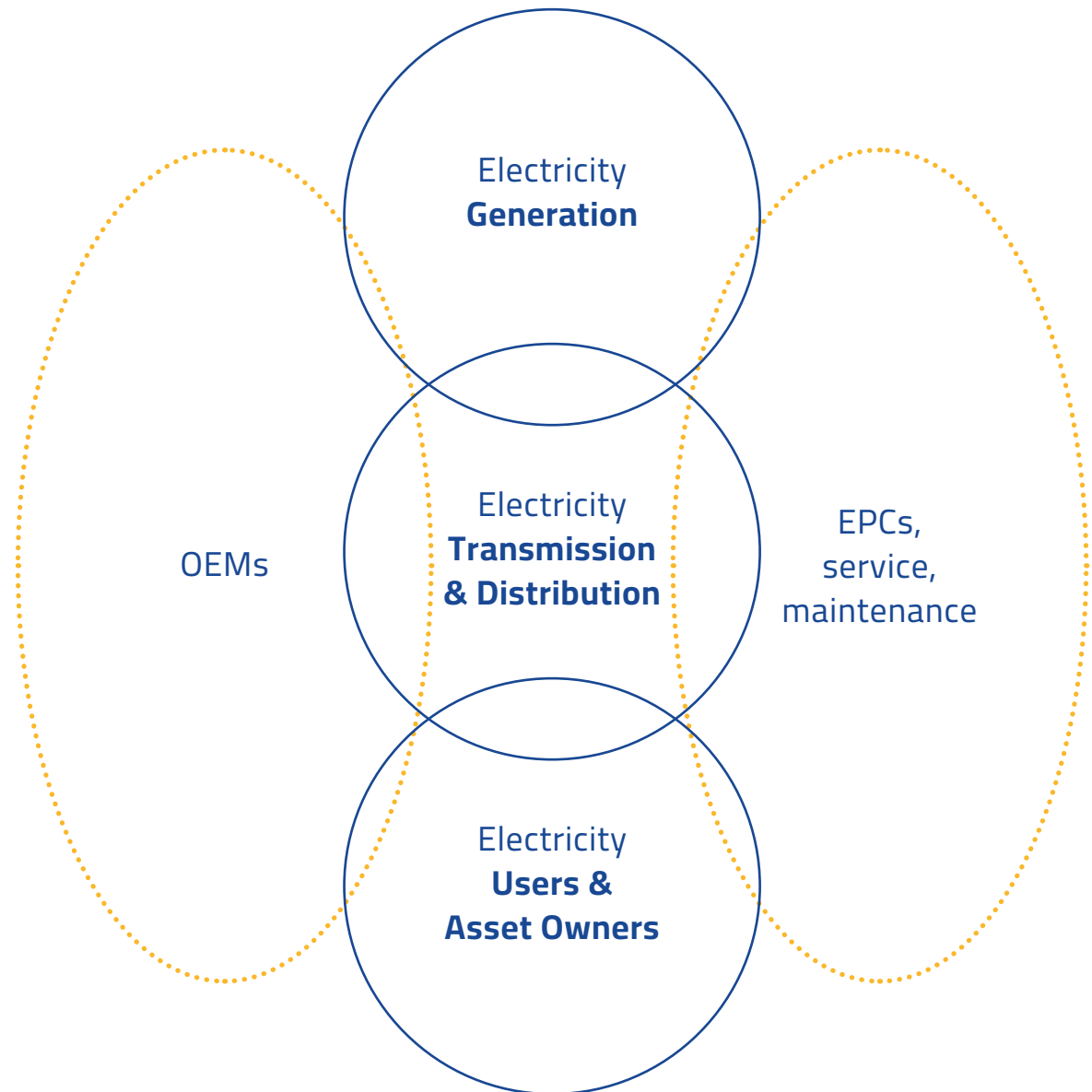
Industry Experience

Insulect is actively making a difference in projects across the Australian electricity network including:

- power generation, base load and renewables
- transmission and distribution utilities
- major energy users (and asset owners), such as mining and smelting, agriculture, other utilities (water, gas, rail).

We also collaboratively partner with other service providers on tender and project delivery:

- engineering, procurement and construction companies (EPCMs), including service and maintenance providers
- equipment manufacturers (OEMs) and related industrial businesses.



Feature Project: management & delivery

Customer: AusGrid

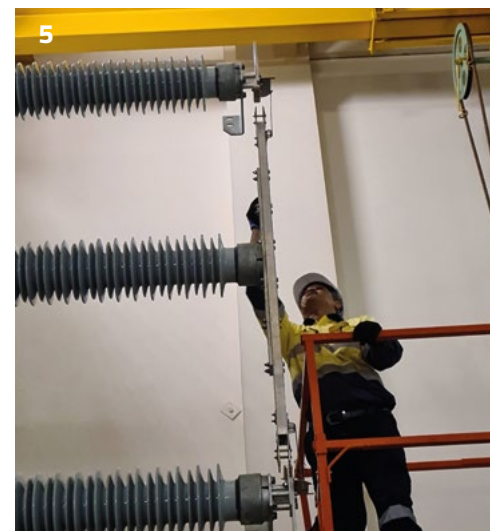
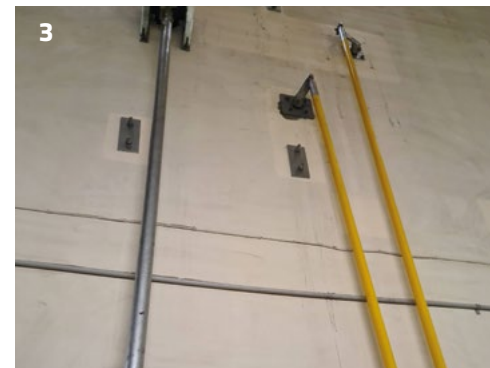
Project: City South 132kV Indoor Substation

Scope: Replace indoor wall mounted 132kV Disconnectors and Earth Switches located in four different transformer bays. This required four different engineered solutions from Insulect to cater for variations between the bays.

Equipment Supplied: Wall Mounted 132kV Disconnectors and Earth Switches

Process:

- Site inspection and assessment
- Equipment specification and design
- Technical drawings developed
- Equipment manufacture
- Factory Acceptance (FAT) and Routine Tests
- Logistics and transportation to site.
- Installation supervision
- Direct on-call support



1. Completed Installation
2. New Operating Mechanism
3. New Operating Rods
4. Installation
5. Adjustment

Featured Customer Projects



Aldoga 275kV Substation

End User - Fortescue Future Industries (FFI GEM)
Equipment/Services

- 275kV Disconnectors, CBs, CVTs, Surge Arrestors, Station Post Insulators



Nevetire Solar Farm, 132kV Substation

End User - Essential Energy
Equipment/Services

- 132kV Disconnectors and Station Post Insulators



Columboola Solar Farm, Substation

End User - Luminous Energy
Equipment/Services

- Serveron TM8 Multi-gas DGA Monitor
- TM8 Commissioning



AEMO FCAS and GPS reporting system

Customers: Origin Energy, Energy Australia, Delta Electricity, Engie, Taillem Bend Solar Farm
Equipment/Services

- Qualitrol IDM+ Multi-function monitor
- A single system to streamline FCAS and GPS compliance reporting and enhanced operational analysis for power stations.



High-res disturbance & fault recording & location

End Users: ElectraNet, TransGrid, Powerlink, AusNet, TasNetworks
Equipment & Services

- Qualitrol IDM+ with FL capabilities, TWS FL8, PMD-A
- An all-in-one system for simplified fault identification, enhanced reliability and performance of transmission networks.



Victorian Big Battery (Tesla)

End User - Neoen
Equipment/Services

- Transformer insulation kits, custom manufactured
- Transformer measurement and protection devices, various

Our Management Team



John Healey
Managing Director



Eric Koutoulas
Business Development



Andres Rambal
Elec Engineering



Rahul Bhandari
Mech Engineering



Simon Prakash
Operations Manager



Kelly Wilding
WHS & QA Compliance



Dena Healey
Finance & Procurement

Qualifications



Values

Responsibility. Taking ownership of our actions, decisions, and their outcomes.

Honesty. Transparency, integrity, and trustworthiness in all aspects of our work.

Respect. Demonstrated through our actions, words, and attitudes towards colleagues, customers, and stakeholders.

Performance. A culture that values excellence, accountability, and continuous improvement.

Continuous Learning. Agility through learning and adapting to new technologies, processes, and market trends.

Communication. Fostering collaboration, driving alignment, and achieving our goals.

Teamwork. A collaborative spirit where team members work together towards shared objectives.



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insulect.com

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