



# Megavar Capabilities

## Our Services

Megavar specialises in high voltage design, construction, testing, commissioning, monitoring, maintenance and test equipment rentals.

Megavar offers a unique combination of engineering expertise, industry application knowledge, and implementation capabilities. One of our great advantages is our comprehensive offering of unbiased electrical testing, maintenance and engineering services.

## Sectors

We deliver specialist high voltage reliability solutions and project services to asset owners in a range of market sectors, for example:

- Power and Utilities
- Healthcare, Education and Commercial
- Mining and Heavy Industry
- Transport Infrastructure

- Oil and Gas
- Data Centres.

Whatever your industry, if you have high voltage infrastructure on site we are able to help.

## Regions

From our five branches located across Australia, we offer 24/7 service coverage for our clients nationwide.

## Our People

Our engineers are qualified industry professionals with experience in power generation, transmission and distribution across a wide range of industry sectors and all regions of Australia.

Many of our staff are accredited members of professional organisations including Engineers Australia, the Australian Institute of Project Management, and the Institute of Electrical and Electronic Engineers.

We are an accredited Employer of Choice and provide a good range of benefits and generous packages to our employees, including in-house training and progressive development of specialist testing skills, study support, and career pathways.

## Our Test Equipment

As Australia's pre-eminent high voltage specialist firm, testing and commissioning HV equipment is our core business and we have an extensive inventory of equipment. Our equipment inventory is displayed on the Megavar website, and we have a growing rentals division offering a complete hire service for all your electrical test equipment requirements. Our range is growing by the month, so if there is something you require that is not listed, please contact us to discuss your needs.





## Reliability Solutions

Clients across Australia choose us for our strength and diversity in HV asset maintenance services. We offer programmed routine inspections, testing, condition monitoring and maintenance services for all asset classes. This supports effective risk management, mitigates against plant outages and ensures a reliable return on the asset investment.

## HV Compliance

Meet your responsibilities to ensure your HV equipment is compliant with Australian Standards with good documentation and systems. Megavar can provide compliance audits and testing, operations and maintenance manuals. Our qualified and experienced HV Operators are able to develop and execute switching procedures for our clients.

## Optimisation Assessment

Uncover profit by finding the root cause of lost performance and points of failure. Megavar can verify protection and fault ratings, and help clients analyse risk and reliability and make informed decisions on capital investments. Services include Short Circuit Coordination Studies; Reliability, Protection Setting and Grounding Studies; Power Tariff and Quality Assessments; Harmonic, Load Flow and Power Factor Analysis.

## Emergency HV Response

Unexpected outages pose serious financial and safety risks and production losses. Get up and running quickly with trouble shooting, damage assessment and repairs, 24/7.

## Condition Monitoring

Predict and avoid failure, plan outages, repairs and replacements. Extend equipment performance, reliability and life expectancy. We provide Thermography; Oil Analysis; Online/Offline Partial Discharge Detection; Tan Delta; SF6 Leak Detection; SFRA/Dirana Transformer tests and ELCID/RSO generator tests.

## Preventative Maintenance

Reduce maintenance costs and improve serviceability with scheduled inspections and testing, prompt repairs, and quick access to spares. We look after Protection Relays, Circuit Breakers and Switchgear; Battery Systems and more.

## Project Solutions

### HV System Design

Our clients rely on us for high value design solutions including: EHV primary layout, HV distribution substations, HV/ LV overhead power lines, underground power systems and cabling, EHV/ HV/ LV earthing systems, insulation coordination, arc flash assessments, lightning protection, electric and magnetic fields, short circuit forces, fibre optic systems, street lighting, SCADA, power system modelling, protection studies and settings.

### Project Delivery and Construction

We deliver full turnkey solutions for our clients, from design, construction and testing through to commissioning. Our qualified and accredited project managers and site supervisors are experienced in managing scope, project scheduling, cost estimating,

quality, resource planning, risk, procurement and stakeholder communications, for both greenfield and brownfield sites.

## Testing and Commissioning

We provide our clients with the widest range of HV power system asset testing and commissioning services to ensure proper installation and trouble free energisation. We can help you avoid costly errors, delays, outages, damage, re-work and excessive operating costs. Our services include motors and generators, current transformers, voltage transformers, power transformers, transmission lines, switchgear, earthing systems, protection and control relays, SCADA, as well as client's engineer, partial discharge testing and more.

## Automation and Control

Our engineers possess unique expertise and understanding of utility and heavy-industry. We have extensive capability in automation and control systems, and the supporting communications and security infrastructure. We offer services to design, integrate, implement, test and commission systems to meet your requirements. Whether you need to interface a new sensor or a completely new control system, Megavar can deliver a solution for you.

