passionate engineers
making a difference

> Power and Energy Capability

FortEng | ***Fortis Engineering - Strength in Engineering.***
FortEng's engineers are passionate about designing, testing and modelling electrical machines and their controllers, renewable and hybrid energy systems, and traditional and complex power systems and elements, for power system analysis and design.

Our forte is working with you to ensure your power and energy equipment and systems are giving maximum return on investment. FortEng specialises in technical and operational investigations, compliance testing and monitoring, model development, simulations and model validation. FortEng develops test methods that are sympathetic to operational constraints and the safety of your equipment and personnel.

FortEng believes in providing real and practical engineering support to our clients.

Generator and power system modelling and testing

- Model development and coding (including releasable user guide (RUG) development)
- Generator model validation testing and and analysis (generators, energy sources, supplies and controllers, AVR/excitation, limiters, PSS and governor systems)
- R1 and R2 models (solar, thermal, hydro, wind, wave, hybrid)
- Power system simulations – dynamic, transient, load flow, fault level

Compliance assessments (program development, testing and analysis)

- Generators
- Network Service Providers
- Network Customers
- Regulatory Authorities

Power quality monitoring, analysis and applications

- Causal analysis and investigations
- Technical standard compliance
- Motor starting and operating investigations
- Harmonics
- Warranty issues and insurance claims
- Statutory obligations
- Variable speed drives operation

Commissioning support

- Hold point assistance for generator grid connections
- Technical advice, measurement services, and performance tests and checks

Compliance Standards

FortEng is able to test and model for compliance with the following standards:

- National Electrical Rules
- Western Australia Electricity Industry Code
- Applicable Australian Standards
- Northern Territory Power & Water (Network Connection Technical Code)
- Horizon Power Technical Rules
- Western Power Technical Rules
- Client specific or developed standards

Equipment and Software

FortEng owns and uses equipment and software synonymous with accuracy, high speed data capture and processing power, including:

- Yokogawa DL850 high speed Scopecorder
- Matlab/Simulink, PSS®E, DIgSILENT, EMTP, CDEGS
- ELSPEC G4500 portable power quality analyser
- Agilent 33522B dual channel signal generator

FortEng's methodologies, personnel and equipment produce high quality test data to enable fast and accurate evaluation of machine and controller performance, conduct model validation work and to identify and help solve machine starting and running issues.

FortEng enjoys delivering high quality engineering.
We are passionate engineers making a difference.

www.forteng.com.au

FortEng
CONSULTING ENGINEERS