Grid Connection Studies for Conventional and Renewable Generators

Extensive expertise in both conventional and non-conventional power generation and provider of a wide range of power system engineering consultancy services to clients in generation, energy storage, transmission and distribution. These services include commercial and technical advice, assistance and strategic guidance for grid connection.

More Information

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Competitive advantage

- Model structure review, generator performance standard study, dynamic model acceptance testing, and benchmark studies
- Synchronous generator modelling, parameter identification and control system design
- Automatic voltage regulator, speed governor and power system stabiliser tuning
- Power system simulation studies (RTDS, PSS/E, PowerFactory,PSCAD, Python)

Impact

- Better grid integration of conventional and renewable generators

Successful applications

- Strategies for grid connection and risk assessment on conventional generator connections and renewable farm grid connection studies
- Guidance on regulatory issues and system modelling with a number of wind farms

Capabilities and facilities

- Real-Time Digital Simulators (RTDS)
- Power System Simulator for Engineering (PSS/E)
- DIgSILENT Powerfactory
- PSCAD/EMTDC
- Matlab, Python, AMPL

Our partners

- GoldWind Wind Farm
- CSIRO
- Ausgrid

- Aurecon