

# **HVDC Transmission and Multiterminal DC Systems**

Real-time simulation and hardware-in-the-loop testing expedites innovative solutions for interconnecting electricity grids over long distances, the integration of large-scale remote renewables, addressing intermittency and the formation of super grids.

## Competitive advantage

- Expertise in:
  - Offline and real-time Phasor and EMT simulations
  - Power and control hardware-in-the-loop testing
- Wide range of experience in advanced HVDC converter models in multiple computational domains, ranging from fully average to component average, to detailed switching models
- · State-of-the art and emerging converter technologies
- · Extended simulation capability

#### **Impact**

- Contribution to AEMO's Integrated System Plan 2018
- Submission to AEMC's Generation and Transmission Investment consultation – 2018

# Capabilities and facilities

- The largest real-time digital simulator in Australia
- Fully configurable 4-terminal multiterminal HVDC hardware prototype
- Integration of simulators with laboratory hardware

### More Information

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