

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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