

## PROJECT PROFILE

## Wandoan South - 100MW/150MWh BESS



**VENA  
ENERGY**

**Outcomes:**

1. Improve grid stability and support Queensland's shift to renewable energy.
2. Deploy a lithium-ion battery solution within a climate-controlled building to tackle mission-critical dispatches under harsh site conditions.
3. System participation in the wholesale market and delivery of frequency control ancillary services (FCAS).

## Challenge

The Wandoan South BESS represents a step change in Queensland's transition to a cleaner energy future and will lead the way for more investment in the state's adoption of renewable energy.

With the capacity to power up to 57,000 average homes, the Wandoan South BESS will make a positive economic contribution to the local, regional, and national economies as one of largest storage systems in Australia.

## Doosan GridTech® Solution

Doosan's scope of work included the turnkey design, engineering, procurement, factory inspections and testing, delivery to site, construction, start-up, commissioning and testing of all plant and equipment for the BESS.

Over 500,000 lithium-ion battery cells are housed in a climate-controlled building to assure their performance against harsh weather conditions. Other technical project objectives were:

- Deliver a BESS capable of generating a net 100 MW output at a power factor of 0.93 into the 132kV network at the substation connection point — following the National Electricity Rules (NER) and Generator Performance Standards (GPS).
- Assure energy storage discharge capacity of 150 MWh at the connection point and provide reactive power as well as voltage control at the 132kV connection point bus.

The Doosan GridTech Intelligent Controller® (DG-IC®) deploys advanced artificial intelligence to manage the system. It is one of the first battery control platforms built on open standard interfaces and programmed to face the rigid requirements of Australia's transmission network.