

MEDIA RELEASE

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INDUSTRY INNOVATION AWARDS FINALISTS

Energy Networks Australia CEO Andrew Dillon has announced the shortlist for the annual <u>Energy Network Industry Innovation Award</u>.

The finalists are Energy Queensland, SA Power Networks, Transgrid and Western Power.

"This is the most momentous period of change for the energy sector with rapidly growing levels of distributed energy resources such as solar and household batteries," Mr Dillon said.

"Networks are creating a smarter grid, giving customers more control over their energy use and encouraging better management of electricity demand.

"Finding innovative solutions to problems is a big part of creating a smarter grid for the future.

"These awards are a way to recognise ground-breaking initiatives, technology, services or solutions that have benefits to customers and help us to share learnings across the sector."

Energy Networks Australia congratulates nominees for the extremely high standard of the 11 entries to this year's laward. The winner will be announced in October.

All nominations will be published in a report to celebrate the innovative work being done by energy networks across the nation.

Background information on finalists

Energy Queensland

Smart solar export in real-time via Dynamic Operating Envelopes

The Cleveland Solar Dynamic Operating Envelope (DOE) Trial has successfully demonstrated the innovative application of available cost-effective technologies to implement a DOE that efficiently manages surplus energy exported to the network from a commercial scale 50kVA solar photovoltaic system.

The industry-leading DOE encompasses a range of allowable export values which the local network can accommodate based on real-time network conditions. Today, a comparatively small upfront cost can unlock added revenue for customers through export. Tomorrow this intelligence may enable customers to participate in energy markets, directly or through an aggregator, using their system to reap additional economic benefits.

SA Power Networks

Advanced VPP Grid Integration Trial

The project is the first real-world demonstration of the provision by a distribution network service provider, via an open interface (API), of dynamic, locational export limits (operating envelopes) to a virtual power plant (VPP) operator actively trading in the National Electricity Market.

It was the first project to demonstrate the active adaptation of dispatch limits by a VPP operator to maximise access to the energy market without breaching distribution network constraints, a key capability for the future energy system.

Since October 2019 this innovation has enabled Tesla's 1,000-customer SA-VPP to dispatch at higher power levels and generate greater value while trading actively in wholesale and Frequency Control Ancillary Services (FCAS) markets.

Transgrid

Unmanned aircraft (drone) power line stringing program

TransGrid has partnered with Infravision to develop an unmanned aircraft (drone) power line stringing program.

Infravision is a drone technology company specialising in solutions for the transmission industry, to develop a safer method to conduct aerial transmission line stringing using heavy-lift drones. As a result of the engagement, Infravision developed a connected hardware system using drones and networked smart winches to provide a safer, more costeffective and more customer-focused method for power line stringing in the transmission industry.

Western Power

Autonomous Grid modelling and solution.

Western Power has developed a long-term modelling and planning capability, referred to as the Grid Transformation Engine, that considers a range of energy supply and demand scenarios to enable us to take tangible steps toward a future grid vision that will fundamentally change the network of today.

This has seen Western Power deliver 52 stand-alone power systems in 2020 with a further 100 units planned for 2021.

As a world leader in using this technology, Western Power is making significant headway in improving power reliability and network efficiency; and delivering a lower carbon energy future for Western Australians.

For a web version of this media release, <u>click here</u>.

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Energy Networks Australia is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.