

2 DECEMBER 2020

Distributed energy marketplace trial giving consumers an edge

On behalf of the Australian Government, the Australian Renewable Energy Agency (ARENA) has today announced \$12.9 million in funding to the Australian Energy Market Operator (AEMO) for the development of a major Victorian Distributed Energy Resources (DER) Marketplace trial named Project Edge.

Based in the Hume region of north east Victoria, the \$28 million project will see AEMO partner with network AusNet Services and Mondo to coordinate the development of a replicable model for trading of electricity and grid services from DER that can be expanded across the National Electricity Market (NEM).

The three-year trial will create a prototype market for DER to be dispatched and traded as part of the NEM. Registered market participants, using customers' DER, will submit bids to the market platform, and in turn will make these bids visible to distribution networks to increase the reliability and resilience of the whole system.

Project Edge will initially involve around 50 residential customers, but then scale up to 1000 residential, commercial and industrial customers. The trial will provide AEMO, AusNet and Mondo visibility and active control of the DER, helping to reduce electricity costs for customers and managing challenges associated with a decentralised grid.

ARENA's funding will assist the development of the software and systems underpinning the first DER marketplace in Australia, with the aim of providing necessary insight and visibility over the distribution electricity system to AEMO and network operators to optimally balance the provision of grid services, ancillary services and energy from DER within the operational constraints of the distribution network.

ARENA has previously supported over \$100 million of DER projects, and established the Distributed Energy Integration Program (DEIP) a collaboration of government agencies, market authorities, industry and consumer associations aimed at maximising the value of customers' DER for all energy users.

ARENA CEO Darren Miller said this landmark trial would provide the blueprint for integrating DER into the grid.

"As the uptake of rooftop solar, home batteries, home energy management systems, electric vehicles and smart appliances is expected to grow, it is clear that these technologies are going to transform our electricity system. While these devices and technologies can make our grid more reliable, affordable and lower emission, rapid uptake is already impacting how the grid is managed and highlighting the limitations of our existing market frameworks.

"This trial will help to develop trading mechanisms to maximise the economic benefits to customers and the system and minimise the costs of supply to all energy customers. We look forward to developing a marketplace for the services these technologies can provide, and paving the way for widespread adoption across Australia," he said.

AEMO's Executive General Manager of Emerging Markets and Services, Violette Mouchaileh said: "AEMO is working with the industry to design and test a world-first, two-way energy system and sophisticated market for consumers to participate in the NEM."

"Our trial with AusNet Services and Mondo, and financial support from ARENA, will facilitate the trading of aggregated electricity services from energy devices in peoples' homes and businesses in north-east Victoria.

"The trial forms part of AEMO's DER Program to enable a smooth transition from a one-way energy supply chain, to a world-leading system that maximises the value of DER for all consumers through effectively integrating DER into Australia's power systems and electricity markets."

Chad Hymas, Executive GM of Growth and Future Networks at AusNet Services said: "Australians have clearly embraced rooftop solar and have a growing appetite for DER. This trial aims to demonstrate how they can have even more choice when it comes to energy for our homes and businesses."

"The AusNet Services and Mondo teams are excited to be using our locally developed 'Ubi' hardware and software to demonstrate how a future energy market can support fully realising the financial and environmental benefits of all our energy resources," he said.

ARENA media contacts:
0410 724 227
media@arena.gov.au

For more information
arena.gov.au