



Project EDGE

Overview for Aggregators

December 2021

Version: Draft

Project EDGE (Energy Demand and Generation Exchange) is seeking two additional Aggregators to participate in this world-first proof-of-concept DER Marketplace trial. The trial is a collaboration between the Australian Energy Market Operator (AEMO), AusNet Services and Mondo, with funding from the Australian Renewable Energy Agency (ARENA).

What is Project EDGE?

Project EDGE is a practical trial testing the capability for DER to deliver wholesale market and local network support services within the limits of a local distribution network via a DER Marketplace in an efficient, scalable and secure way.

The trial will take place off-market, with focus on the Victorian area of Hume, within AusNet Service’s jurisdiction.

Within EDGE, the Aggregators’ role will be to coordinate their fleet of consumer-owned DER to bid on, and deliver services to the wholesale market and local network while remaining within the prescribed dynamic operating envelopes. The bids, offers and service delivery verification will be completed through Project EDGE’s DER Marketplace – a decentralised data exchange hub.

Being an off-market trial (not integrated with AEMO market operation systems¹), settlement will be simulated without real dollars being exchanged between trial participants. This does not prohibit aggregators from rewarding their customers for participation in the trial.

Figure 1 Project EDGE is an off-market trial where Aggregators can access and deliver electricity services



What does Project EDGE aim to achieve?

Project EDGE aims to achieve the following objectives:

1. Demonstrate how DER fleets could participate in existing and future wholesale energy markets at scale.

¹ See <https://aemo.com.au/energy-systems/market-it-systems/nem-guides/nemde-queue-service>.

2. Demonstrate different ways to consider distribution network limits in the wholesale dispatch process.
3. Demonstrate how to facilitate standardised, scalable and competitive trade of local network services.
4. Demonstrate how data should be exchanged efficiently and securely between interested parties to support delivery of distributed energy services.
5. Develop a proof of concept, integrated software platform to facilitate delivery of objectives 1-4 in an efficient and scalable way.
6. Develop a detailed understanding of roles and specific responsibilities that each industry actor should play.
7. Conduct comprehensive cost benefit analysis to provide an evidence base for future regulatory decision making.
8. Conduct a customer focused social science study to understand customer opinions on the complexities of DER integration.
9. Deliver best practice stakeholder engagement throughout the project with a commitment to knowledge sharing.
10. Deliver recommendations, supported with evidence, on how and when the concepts demonstrated should be implemented operationally.

These objectives are underpinned by questions in the research plan that will be available on AEMO's Project EDGE webpage².

Why participate?

1. Direct exposure to new technology, approaches and solutions that will provide evidence-based input into current and future market design initiatives.
2. Ability to test, develop and learn how best to deliver services in an off-market environment without risk of financial penalty.
3. Opportunity to demonstrate the innovative nature of VPPs / Aggregators and be on the 'cutting edge' of the energy industry.
4. Obtain valuable insights from consumers via a Project led customer insights study.
5. Gain first-hand insights into how AEMO and DSO's may operate in future and contribute to the future design of the aggregator role.
6. Test new capability in a trial environment.

Interested applicants are advised to contact AEMO early in their consideration process to ensure they have the latest information and specifications.

For any further enquiries, please contact AEMO's Project EDGE team or visit AEMO's Project EDGE website:

- EDGE@aemo.com.au
- [AEMO's Project EDGE Website](#)

² See <https://aemo.com.au/initiatives/major-programs/nem-distributed-energy-resources-der-program/der-demonstrations/project-edge>.