



Project EDGE

Invitation for EXPRESSIONS OF INTEREST December 2021

Version: Draft



Aggregator participation in Project EDGE

Please complete this Expression of Interest using any other documents and information sources mentioned in this document.

The information in this Expression of Interest is not to be altered without the prior written consent of Australian Energy Market Operator Ltd (AEMO).

Important notice

PURPOSE & AUDIENCE

This document must be completed by Aggregator seeking to participate in Project EDGE.

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Prepared by: Project EDGE Team

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DOCUMENTS MADE OBSOLETE

No documents are made obsolete by publication of this document.

FEEDBACK

Your feedback is important and helps us improve our services and products. To suggest improvements, please contact AEMO's Support Hub. To contact AEMO's Support Hub use [Contact Us](#) on AEMO's website or Phone: 1300 AEMO 00 (1300 236 600) and follow the prompts.

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VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
Initial Draft	1 Dec 2021	Initial Draft

APPLICATION FORM SUBMISSION

To submit this application to AEMO:

- complete this Form
- print and sign the form using a written signature, or sign digitally
- email a signed copy to the AEMO Project EDGE team via email to EDGE@aemo.com.au.

1. Overview

AEMO, together with project participants AusNet Services and Mondo, is conducting a world-first proof-of-concept off market trial (“Project EDGE”) to test the capability for aggregated DER to deliver wholesale market and local network support services within distribution network limits. Project EDGE requires a limited number of additional aggregator participants to participate in the trial. The purpose of this Expression of Interest is to identify a short list of aggregator candidates which meet specified criteria who will then be invited to register with AEMO to participate in Project Edge.

1.1 Indicative timeline

Activity	Responsibility	Date	Requirement
Expression of Interest	Aggregators	1-28 February 2022	Aggregators interested in participating in Project EDGE and meet the associated requirements to submit EOI form.
Review EOI	AEMO	1 March 2022 – mid-March 2022	AEMO to review EOI forms and determine the appropriate aggregators to participate in Project EDGE to maximise learnings.
Successful aggregators notified	AEMO	Mid-March 2022	AEMO informs the aggregators selected to progress to onboarding.
Registration & Onboarding	Selected Aggregators	Mid-March 2022 – August 2022*	Aggregators progress through registration and onboarding requirements until all requirements are completed & prior to September 2022.
Participation in Project EDGE	Participating Aggregators	September 2022* - March 2023	Aggregators participating in EDGE to meet the requirements as set out for the project & agreed to as part of registration.

* Aggregators may commence participating in Project EDGE prior to August 2022 if all registration and onboarding requirements are met. September 2022 is the date at which the additional aggregators must be onboarded.

1.2 Additional aggregator value to Project EDGE

AEMO is seeking to onboard two aggregators (in addition to Mondo) to participate in the Project EDGE off-market trial, with the primary objective of obtaining data from a diversity of aggregators and expanded learnings from this.

1.3 Project EDGE value to aggregators

This trial will offer participating aggregators the opportunity to learn, test and build capability in an off-market environment where settlements will be simulated without funds being exchanged between the trial participants. Although participating aggregators will not be financially incentivised

for their participation in the project, Project EDGE will enable participants to test their capability to deliver services in innovative ways in a simulated off-market environment, without the risk of adverse consequences or financial penalties. They will also have the opportunity to gain valuable insights on the consumer experience via a project led customer insights study. Aggregators will have the opportunity to put forward positions and share evidence based on first-hand experience, potentially informing the future design of the two-sided marketplace via industry consultation processes. They will also have the opportunity to obtain information on how a future DER marketplace may operate, and conduct their own research & development within this space in a low risk environment.

Should you have any questions regarding this Expression of Interest, and/or Project EDGE, please contact EDGE@aemo.com.au.

1.4 Relevant Information

Prior to completing the Expression Of Interest, the following documents should be reviewed:

- [Project EDGE Aggregator Overview](#)
- [Project EDGE Data Specification Part A](#)
- [Project EDGE Data Specification Part B](#)
- [Project EDGE DUID Telemetry Overview](#)
- [Project EDGE Wholesale Service Qualification Guide](#)
- [Project EDGE Wholesale Service Qualification Test sample sheet](#)
- [Project EDGE Local Services Exchange draft overview](#)
- [Project EDGE Energy Web Foundation solution introduction and information](#)

The documents provide important information on the requirements and capability Aggregators must be able to meet to participate in Project EDGE. By completing and submitting the EOI, the Aggregator is agreeing that they can, or will be able to prior to registering meet these requirements.

2. Mandatory Requirements

The Applicant is able to meet the data specification requirements.

Aggregator participants in Project EDGE will be required to meet the data integration and sharing requirements as outlined in the Data Specification. This is an integral component of enabling aggregators to participate in Project EDGE to gain an understanding of how DER can deliver services. While aggregators may not currently be able to meet this requirement, there is a commitment to developing the capability to meet the data specification.

The Applicant is able to meet the Wholesale Service Qualification requirements.

The DER devices forming the Aggregator portfolio must be able to meet the capabilities as outlined in the Wholesale Service Qualification document, and complete the associated tests. While aggregators may not currently be able to meet this requirement, there is a commitment to developing the capability to meet the wholesale service qualification requirements.

3. Selection criteria

Applicants who can best demonstrate the following desired characteristics will be prioritised for selection.

The Applicant is willing to develop capability to deliver the services being tested in the Project.

The iterative nature of the trial includes testing new service delivery approaches and may require uplift from participants to meet the service requirements. While the Project Partners aim to provide transparency on the services to be tested, as the trial progresses, new or alternative service requirements may arise.

At least one successful Applicant is both an Aggregator and a registered Retailer.

Project EDGE is seeking to represent a diversity of participants to ensure knowledge generated about DER service provision and efficient scalable data exchange benefits from this diversity. The project is interested in understanding the interaction between behind the meter aggregators and retailers as Financially Responsible Market Participants within the context of a DER marketplace. The additional service opportunities for retailers enabled by a DER marketplace and its data hub model for efficient and scalable data exchange is another key area of interest to the project.

The Applicant's customers are available to participate in consumer insights studies.

One aspect of Project EDGE is understanding why and how consumers are willing to sell their DER capacity to participate in service delivery. The project will undertake a consumer insights study via the Consumer Insights Study partner, Deakin University and opportunities may arise to engage the Applicant's consumers to obtain valuable insights into consumer willingness and experiences of participation in Project EDGE. Applicants that either have agreements in place with consumers which enable surveys and communications from third parties, or who have the ability to accommodate these surveys and obtain information for use by the project will be prioritised.

The Applicant is able and willing to participate in surveys and interviews and share insights for the purpose of knowledge sharing and understanding.

The Project Partners may seek feedback from time to time to understand the aggregator's experience of participating in the Project, and for inclusion the Project's knowledge sharing reports and Cost Benefit Analysis (CBA). The Project Partners may also seek to gather additional data and insight about events of interest that occur within the project to maximise the knowledge generated for industry.

The Applicant has customers in target areas.

In order to maximise outcomes from the trial the Project Partners have determined key target locations and customer concentrations for testing of network limits and service delivery. Refer to the Section C for full details.

The Applicant will be able to participate in both wholesale and local network support services in project EDGE.

Testing the delivery of wholesale energy and local network services in parallel (i.e 'value-stacking') is one area to be tested in EDGE and would require an aggregator willing to participate in both simultaneously from time to time. Local network support services refer to services defined by DNSPs and delivered by Aggregator(s) at a localised level of the distribution network. In EDGE, these services will be traded via a Local Services Exchange. Wholesale energy services in EDGE will align to the current NEM wholesale market but will be run in an off-market environment, where Aggregators will bid and be dispatched at a portfolio level. EDGE has aligned to the ESB P2025 reform work and will test a simple bidding arrangement ('lite') (one value per interval, self-dispatch) and a fully scheduled arrangement (price/quantity pairs). Greater participation in all services will enhance learnings and outcomes from the project.

Proposed Services:

Please select the ones you are interested/expecting to participate in.

Note: Further detail on the Local Services Exchange is available in the Project EDGE Local Services Exchange – draft overview. These demand services and voltage services will be further defined as the project progresses.

Wholesale Energy

Local Service Exchange (demand & voltage)

3.1 Selection criteria met

Please tick the following boxes that align to the Applicants current ability to meet the selection criteria. Comment on the actions that will be taken to meet a criterion where it is not currently met, including details of the development effort required to meet the criteria and any potential challenges identified.

The Applicant is able to meet the data specification.

Yes

No

If the answer is no, please provide details:

The Applicant is able to meet the Wholesale Service Qualification requirements

Yes

No

If the answer is no, please provide details:

The Applicant is willing and able to uplift capability to deliver the services being tested in the project.

Yes

No

If the answer is no, please
provide details:

The Applicant is both a retailer and an aggregator.

Yes

No

If the answer is no, please
provide details:

Customer agreements enable data sharing for participation in trial

Yes

No

If the answer is no, please
provide details:

Customer agreements enable their participation in consumer insights studies

Yes

No

If the answer is no, please
provide details:

The Applicant has customers in the target areas

Yes

No

If the answer is no, please
provide details:

The Applicant will participate in both wholesale market and local network support service delivery

Yes

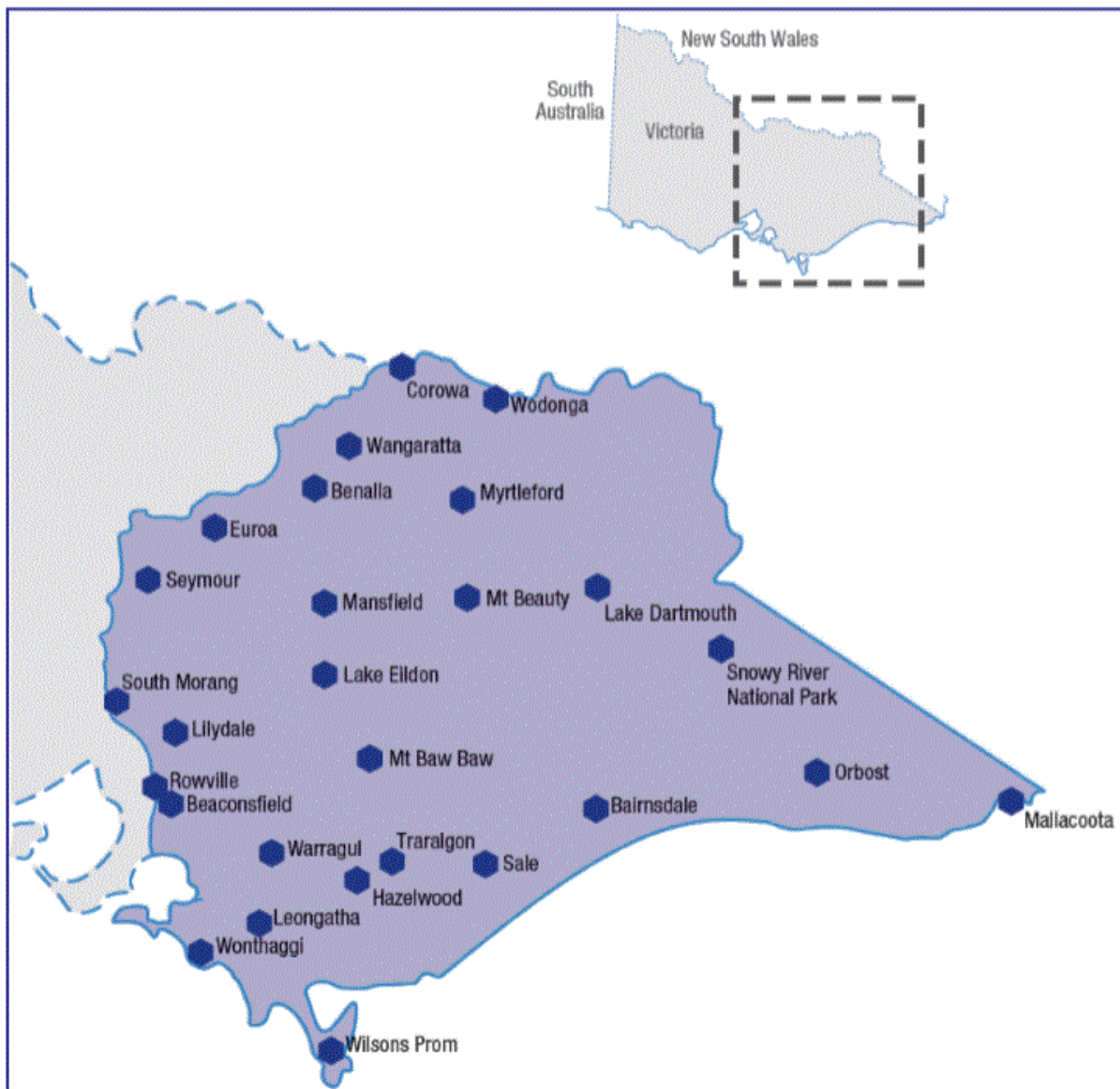
No

If the answer is no, please
provide details:

4. Target Customer Locations

AusNet Electricity Distribution System

Figure 1 AusNet Services Electricity Distribution Areas



The EDGE trial is being conducted within the Victorian electricity distribution system operated by AusNet Services. Accordingly, aggregation participants in Project EDGE will be required to represent distributed energy resources connected to the AusNet distribution grid (shown above). The Hume region has been the initial focus area for customer acquisition for the trial, specifically around the

township of Yackandandah. This is due to existing customer installations and agreements with Mondo, the sole aggregator for the first part of the EDGE trial.

It is not necessary for additional aggregators considering participation in the EDGE trial to focus on the same network area as Mondo for their customer acquisition. However, it must be noted that the calculation and issuing of dynamic operating envelopes for DER customers typically requires AusNet Services to install transformer monitors at the head of low voltage circuits where active DER customers are connected. As there are resourcing and scheduling constraints to AusNet Services' ability to install large numbers of these monitors for the trial, it will be necessary for AusNet Services to assess the viability and value of each local installation of these monitors before confirming the participation of associated DER customers in the trial.

For the effective trialling of:

- a) The use of optimised flexible operating envelopes to unlock grid capacity for constrained DER customers hence allowing them to export more of their surplus electricity, and;
- b) The use of aggregated DER to provide local services (network support services),

the EDGE trial requires sufficient diversity and clustering (e.g., 3 or more on a given circuit) of active DER customers. A sufficient sample of trial customers who are currently export constrained (for example 3KW) is also necessary. AusNet Services has provided a list¹ of locations to assist intending EDGE aggregators to target DER customers for the trial. If you currently have customers within the listed postcodes, please include this in the spreadsheet provided. This will assist the project in assessing the best locations for testing local network support services.

Can you confirm that you currently have customers within the AusNet services jurisdiction?

Yes No

If yes, please note how many customers you currently have within the jurisdiction:

Details:

If not, how many customers do you intend to recruit within the jurisdiction and by what date?

Details:

¹ The spreadsheet of postcodes included are available at: <https://aemo.com.au/-/media/files/initiatives/der/2021/edge-preferred-postcodes-list.xls>

5. Applicant Details

Declaration

The Applicant authorises AEMO to contact any organisation named in this Application and any attachment to this Application, any Jurisdictional Regulator, and any other party AEMO deems relevant for the purposes of verifying the contents of this Application and to enable AEMO to satisfy itself that the Applicant meet the Trial Specifications above.

I, <Full Name>, <Position>, declare that I am authorised by the Applicant to submit this Application on the Applicant's behalf and certify that the contents of this Application and any further submissions are true and correct.

Signature:

Date: 17/12/2021

When your application is complete, please sign (digitally or sign and scan) and send a copy to the AEMO Project EDGE team: EDGE@aemo.com.au

Company Details

Company Name:

Trading Name:

ABN:

ACN:

Registered Category

Retailer

Small Generation
Aggregator

.....
Other (please specify
incl 'None')

Current Participant ID
(if applicable)

6. Aggregation Portfolio Details

Please provide details of how the Applicant's aggregated portfolio of DER.

Description of Aggregator

Please provide a brief description of the aggregator, the technology utilised (control and DER mix) and how the aggregator portfolio will be operated.

Details:

Aggregator consortium member details

If the Applicant is collaborating with a third party to manage or orchestrate the aggregated fleet, or to submit data to the DER Marketplace, you are considered an Aggregator consortium for the purposes of this Application. Please provide details of any third parties in the following table.

Are you applying to participate as a consortium?

Yes No

Third party Aggregator coordinator

Entity Name:

ABN:

7. Testing and compliance

In order to participate in Project EDGE, successful applicants will be required to complete service capability verification tests as outlined in the Wholesale Service Qualification document.

8. Next steps

Please complete this EOI form by 28 February 2022. Following receipt by AEMO, you will receive a notice that the EOI has been received. All applications will be reviewed and any feedback or questions will be raised by the project team by Tuesday, 15 March 2022.

If you are short-listed to proceed to registration you will be notified by mid-March 2022.

Should you have any questions in the interim, please contact EDGE@aemo.com.au.