Appendix 3. Use Cases

June 2022

Appendix to the Scheduled Lite: Draft High Level Design Consultation Paper

Important notice

Purpose

This is Appendix 3 to Scheduled Lite: Draft High Level Design Consultation Paper, available at https://aemo.com.au/initiatives/trials-and-initiatives/scheduled-lite

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Version control

Version	Release date	Changes
1.0	21/06/2022	Initial consultation version

A3. Use Cases

This section describes examples of use cases for each Scheduled Lite Model. Each use case first describes the context of the Trader in Scheduled Lite, including their main characteristics and scenario features that highlight any special events/measures/considerations that would influence performance. The expected treatment for each design element of the Model for that scenario is then summarised in a table.

1.1 Visibility Model

1.1.1 Use Case – DER aggregation response to energy spot prices

This use case is based on the participation of an aggregation of demand response in the Visibility Model.

Trader profile

ABC Energy is a retailer with a portfolio of large C&I customers. The portfolio includes shopping centres, factories, and processing facilities. The Retailer's contracts with its customers allow it to call on a reduction in demand. The demand response of the portfolio is 20MW across air conditioning devices and electrical equipment that can be controlled remotely.

Scenario features -

Working assumptions

- ABC Energy holds a retailer authorisation.
- ABC Energy registers a Visibility Unit. ABC Energy classifies the (subset of) NMIs with demand response into the Visibility Unit.

Business Model

- To maximise value and optimise device efficiency:
  - Intention of reducing 20MW of demand when the spot market price is equal or exceeds $1,000/MWh during a specific period of time.
  - Customer's contract restricts consumption reduction to a maximum of 4 hours, before returning to average consumption regardless of spot prices.
  - The only incremental effort for ABC Energy to participate in the Visibility Model is to share information on its market intentions with AEMO.

Weather Conditions

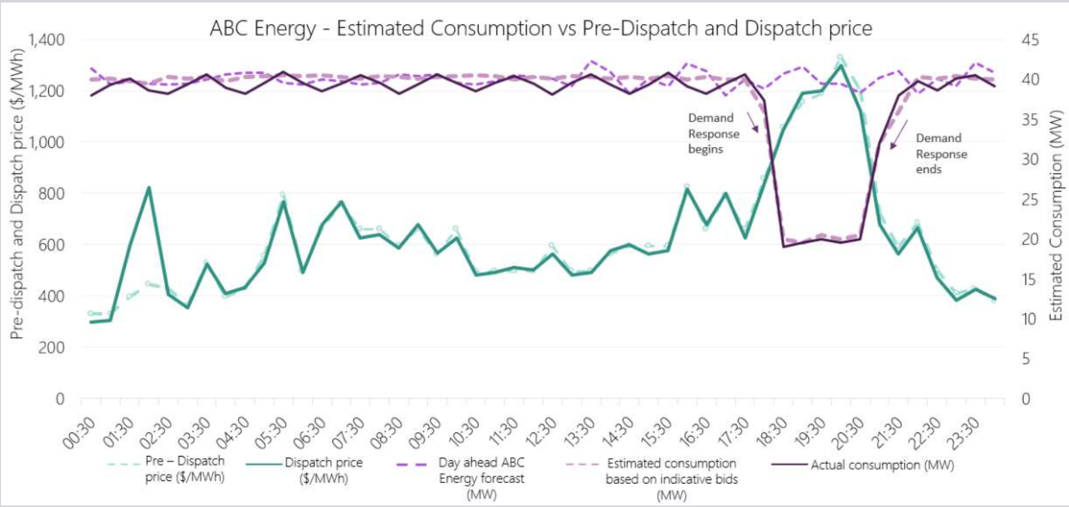
- Demand ratings are for Summer.

Design elements description

Table 1 below summarises the expected treatment of ABC Energy participating in the Scheduled Lite Visibility Model.

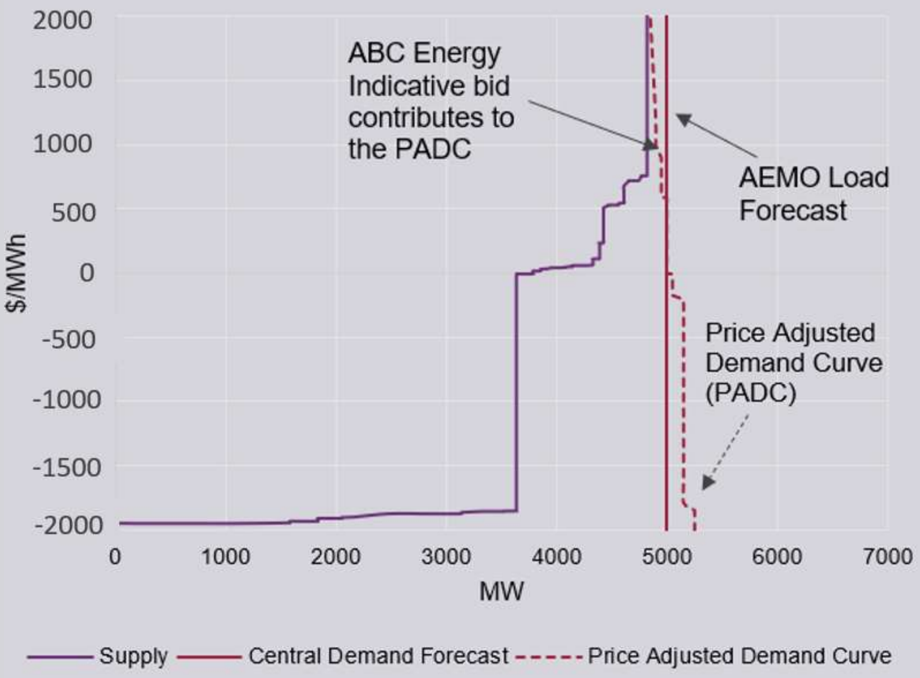
Table 1 Visibility model use case – DER aggregation response to energy spot prices

Design Element	Description
Registration	ABC Energy: • is already registered in the NEM as a Market Customer and obtains a DUID for its Visibility Unit • is able to manage their Visibility Unit via the Portfolio Management System, e.g. classify/declassify NMIs for each Visibility Unit.

Design Element	Description
Data Exchange / Telemetry	ABC Energy exchanges data via AEMO's API
Data Types	ABC Energy submits the following data for the Visibility Unit: • real time information every 5 minutes with at least 5 minute granularity. • forecast of consumption volumes over a multi-day horizon. For ABC Energy this forecast would be aggregate forecast of all the resources in the portfolio. • indicative bids within pre-dispatch timeframes: reflecting ABC Energy's consumption intentions based on its business model (e.g. reflecting intentions to reduce consumption when prices exceed $1,000/MWh)
Operations	AEMO utilises the information provided by ABC Energy as follows: • Indicative Bid information is incorporated, alongside that of other Traders, into an adjusted demand curve. • The pre-dispatch process determines the forecast demand for Visibility Units based on the prevailing conditions, demand and bids for all resources. • This price adjusted demand curve is published to the market and a private schedule is provided to ABC Energy. **Figure 1 ABC Energy Estimated Consumption – Pre Dispatch and Dispatch price**  Figure 2 shows a 'zoomed in' view of the price adjusted demand curve for one 30-minute interval, representing the first 5-minute interval of energy spot prices at $300/MWh. ABC Energy's information (i.e. indicative bid) contributes to the price adjusted demand curve along with other Visibility Units, meaning that ABC Energy's information will not be disclosed to the market, rather it would provide insights to the market in aggregate.

<table>
<tr><th>Design Element</th><th>Description</th></tr>
<tr><td></td><td>

Figure 2 Price Adjusted Demand Curve (PADC)



</td></tr>
<tr><td>Compliance</td><td>ABC Energy meets performance thresholds over the assessment period, therefore accessing relevant incentives.</td></tr>
<tr><td>Incentives</td><td>

- ABC Energy obtains a reduction in allocation of FCAS cost recovery
- ABC Energy utilises the pre-dispatch scheduled as an input to its business decision-making tools.

</td></tr>
</table>

<u>*Expected market outcomes:*</u>

ABC Energy's ability to coordinate price responsive resources to reduce energy usage (i.e. reducing air conditioning electricity demand in response to a price signal), may assist in the management of peak demand by flattening late afternoon-evening peaks. Efficient management of peak demand in operational timeframes would deliver an improvement in accuracy of energy wholesale prices, and in the long-term, would translate into network planning/expenditure optimisation. Those benefits would be accrued by all consumers.

1.1.2 Use Case – IRP (Small Resource Aggregator)

This use case explores participation in the Visibility Model by an IRP (Small Resource Aggregator), which aggregates and trades the generation output of (exempt) small generating units in the spot market.[1] At present, AEMO does not have operational awareness of the price-responsive intentions of these small generating units[2] and thus they cannot be accurately reflected in demand forecasts. The Visibility Model would address this by obtaining forecasts and indicative bids from the Trader, providing greater awareness of its intended behaviour and incorporating this information to enhance demand forecasting and improve market efficiency.

Trader profile

- The Trader, SRA Inc., is registered as an IRP (Small Resource Aggregator) and has classified three exempt small generating units as its market connection points for the purpose of aggregating and selling the output into the spot market.
- Its 25 MW portfolio of resources, which have a primary purpose to provide back-up generation to waste facilities, include two 10 MW gas-powered back-up generators and one 5 MW diesel back-up generator—all of which AEMO has exempted from the requirement to register as a Generator. All of the small generating units have been established on separate connection points in accordance with Flexible Trader Model 1 (FTM1) arrangements, and do not contain any retail load. All of the generating units are located in the same zone.
- The Trader has a contract with the waste facilities enabling it to sell the output of the generating units (through their separate connection points) into the spot market when the spot price exceeds $500/MWh and the generators are not required to provide back-up generation (e.g. during a local network outage). The small generating units do not otherwise inject to the grid.
- The retail load connection points of the waste facilities are managed through separate retail contracts and are not spot price exposed (SRA Inc. is not an authorised retailer and is not the financially responsible Market Participant for any retail load).

Scenario features

Working assumptions

- SRA Inc. is registered with AEMO as an IRP (Small Resource Aggregator) and has classified the connection points that connect the small generating units in its portfolio as its market connection points.

Business Model

- SRA Inc. aggregates small generating units and trades their output in the spot market when prices are high.
- Its contract with its customers enables it to sell generation from its connection points into the spot market when prices exceed $500/MWh and when the resources are not required for back-up supply.

Market scenario

- Spot prices exceed $500/MWh for a short period of time due to weather conditions impacting available generation in the NEM. There is no current requirement for the generating units to provide back-up generation to the waste facilities.

Design elements description

Table 2 below summarises the expected participation of SRA Inc.'s portfolio participating in the Scheduled Lite Visibility Model.

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[1] The IESS rule change folds Small Generation Aggregators into the IRP under the Small Resource Aggregator label. For an overview of SGAs, see: AEMO, 2021. *SGA Factsheet.* Available at https://aemo.com.au/-/media/files/electricity/nem/participant_information/registration/small-generation-aggregator/small-generator-aggregator-fact-sheet.pdf?la=en

[2] i.e. generating units <30 MW which AEMO has exempted from the requirement to register as a Generator

Table 2 Visibility Model Use Case – participation of back-up generation via IRP (Small Resource Aggregator)

Design Element	Description
Registration	SRA Inc. is registered as an IRP (Small Resource Aggregator) and has classified its connection points into a Visibility Unit in the relevant zone. The Trader is able to manage its Visibility Units via the Portfolio Management System, e.g. identify NMI as unavailable due to operational issues.
Data Exchange / Telemetry	The Trader transfers Visibility Unit data via AEMO's designated API.
Data Types	The Trader submits the following data for its Visibility Unit: • real time information every 5 minutes with at least 5 minute granularity. • forecast of anticipated active power flows over a multi-day horizon. For SRA Inc. this forecast would be aggregate forecast of all the resources in its portfolio. • indicative bids within pre-dispatch timeframes, reflecting generation intentions at different price points based on its business model (e.g. to sell output when prices exceed $500/MWh subject to operational restrictions)
Operations	AEMO utilises the information provided by the Trader as follows: • Indicative Bid information is incorporated, alongside that of other Traders, into a price adjusted demand curve. This improves the accuracy of AEMO's load forecasts. • The pre-dispatch process determines the forecast demand for Visibility Units based on the prevailing conditions, demand and bids for all resources. • This price adjusted demand curve is published to the market and a private schedule is provided to SRA Inc.
Compliance	ABC Energy meets performance thresholds over the assessment period, therefore accessing relevant incentives.
Incentives	• SRA Inc. obtains a reduction in allocation of FCAS cost recovery • Trader utilises the pre-dispatch schedule as an input to its business decision-making tools.
Expected market outcomes: SRA Inc.'s ability to provide additional supply to the market when it is most valued (e.g. during peak demand or when available supply is low) supports efficient and reliable market operation. Through participation in the Visibility Model, SRA Inc. provides AEMO with enhanced awareness of its flexibility and price responsive intentions, supporting the accuracy of the scheduling process. At a system level, this could benefit energy consumers through more efficient operational decisions and support reduced system costs for all consumers. SRA Inc. is also able to utilise the pre-dispatch schedule to support efficient operation of its portfolio.	

Alternative scenarios

- As large users, the waste facilities in this use case could enter a spot price pass through contract and utilise their demand flexibility to reduce their consumption, or utilise on-site generation to offset their consumption, in response to high wholesale prices to reduce operating expenditure. These facilities could participate in Scheduled Lite directly (if they register as a market participant with AEMO) or via a Trader to provide forecasts and indicative bids of their intended price responsive behaviour. As a Visibility Trader, the participant would be able to accrue incentives such as receiving pre-dispatch schedules, which could support their operations, and potentially access visibility service payments.

1.1.3 Use Case – Non-Scheduled Generator response to energy spot prices

This use case is based on the participation of a Non-Scheduled Generator in the Visibility model.

Trader Profile

CK Solar Farm is a 15 MW non-scheduled generating unit.

Scenario features

Working assumptions

- CK Solar Farm complies with all relevant requirements (e.g. applicable performance standards) and therefore its registration application will be approved.

Business Model

- To maximise profits

Market scenario

- Negative spot market price
- Scheduling and dispatch errors reach a threshold where AEMO decides to open a tender process to procure visibility to improve operational awareness

Table 3 Visibility Model Use Case – Non-scheduled Generator response to energy spot prices

Design Element	Description
Registration	CK Solar Farm: • registers as an IRP[3] • classifies non-scheduled generating unit NMI as a Visibility Unit
Data Exchange / Telemetry	CK Solar Farm transfers Visibility Unit data via AEMO's designated API
AEMO opens a tender process to procure visibility service	
Data Types	• CK Solar Farm submits intention of participation to provide visibility service • CK Solar Farm submits the following data: – real time information every 5 minutes – indicative bids within pre-dispatch timeframes, reflecting its business intentions4 – forecast of availability within STPASA timeframes – forecast of passive consumption/generation within STPASA timeframes • Information submitted by CK Solar Farm would be then interpreted and utilised by AEMO as described in the Operations section below.
Operations	• AEMO approves and procures visibility service from CK Solar Farm [5] • AEMO interprets information provided by CK Solar Farm as follows (see Figure 3): – forecast information showing expected generation of the PV system, with real time information provided every 5 minutes – indicative bids reflecting CK Solar Farm's response to energy spot prices; it is expected that CK Solar Farm will turn off generation until spot prices increase to a positive value – real time information showing CK Solar Farm is price responding i.e. turning off generation due to energy spot prices being negative

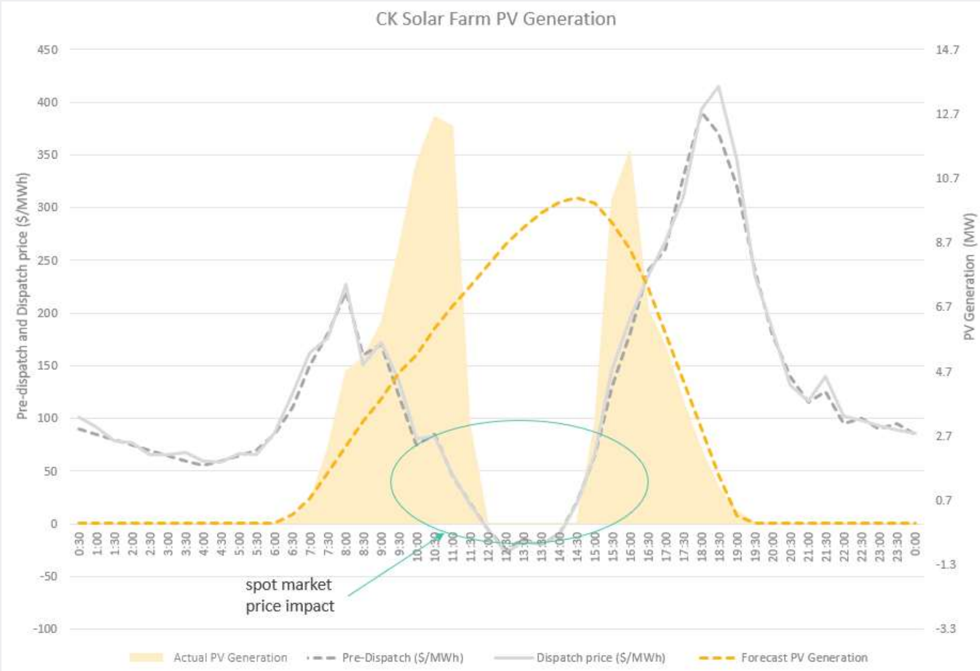
[3] Could also be registered as a Generator

[4] As per Relevant scenario features/Business case: *"To maximise profits optimise performance"*

[5] CK Solar Farm complies with tender requirements

<table>
<tr><th>Design Element</th><th>Description</th></tr>
<tr><td></td><td>

Figure 3 CK Solar Farm PV generation



AEMO utilises the information provided by CK Solar Farm as follows:

1) Indicative Bid information is aggregated to the regional level and is used to produce an adjusted demand curve based on the pre-dispatch schedule. This price adjusted demand curve is published to the market.
2) The forecast by CK Solar Farm is utilised in load forecasting with the intent to improve the accuracy of AEMO load forecasts
3) AEMO is able to determine when CK Solar Farm is diverging from its forecast with the use of real time information, providing AEMO with improved operational awareness. e.g. enhancement of power system visibility as CK Solar Farm data shows its response to negative spot market price in accordance with its business model

</td></tr>
<tr><td>Compliance</td><td>CK Solar Farm meets performance thresholds, therefore accesses incentives</td></tr>
<tr><td>Incentives</td><td>

CK Solar Farm obtains capability payment according to the visibility service provided[6]
CK Solar Farm obtains reduction in cost allocation of:

FCAS cost recovery
Network support cost recovery
Interventions cost recovery

CK Solar Farm utilises as an input to its business decision tools, the price adjusted demand curve and pre-dispatch schedules provided by AEMO e.g. CK Solar Farm manages operations more cost-effectively

</td></tr>
<tr><td colspan="2">

<u>Expected market outcomes:</u>

CK Solar Farm's participation in AEMO's tender process by providing its generation data and indicating its intention to switch off during negative prices, assisted in reducing demand forecast errors associated with increased variability from growth in weather-dependant generation.

Awareness of CK Solar farm's switch off action intention in response to market prices, rather than a disconnection-reaction to a disturbance/failure enables AEMO to enhance operational planning for the afternoon period, when low reserve conditions and high prices are expected. This could potentially result in lower system services costs, benefiting all consumers.
</td></tr>
</table>

[6] Subject to AEMO tender terms

1.2 Dispatchability Model

1.2.1 Use Case – DER Aggregation by a retailer via standard connection point participating in energy

This use case is based on the participation of a Retailer, 'Ralph Energy' which participates via aggregated standard end user connection points in the Dispatchability Model.

Participation Profile

Ralph Energy chooses to participate in the Dispatchability Model via standard connection point arrangements, meaning Ralph Energy is responsible for all resources (passive and controllable) behind the meter at each participating site. Ralph Energy has an aggregated portfolio of 1000 households, which have behind the meter batteries with an aggregated capacity of 10 MW. Ralph Energy has an agreement with their customers to be able to control the batteries[7].

When bidding and receiving dispatch targets, Ralph Energy will have to take into account the passive household load connected by the standard connection point

Scenario features

Working assumptions

- Ralph Energy complies with all relevant requirements (e.g. applicable performance standards, minimum aggregated portfolio threshold[8]) and therefore its registration application will be approved

Business Model includes

- Maximising value of controllable resources by participating in energy dispatch

Market scenario

- Batteries are in a neutral state, meaning it can fully discharge/charge in the next interval
- The passive load is stable and relatively certain at 1 MW for the next dispatch interval9
- Energy spot price spikes suddenly

Design elements description

Table 4 below summarises the expected treatment of Ralph Energy participating in the Scheduled Lite Dispatchability Model.

Table 4 Dispatchability Model Use Case – DER Aggregation by a retailer via standard connection point participating in energy

Design Element	Description
Registration	Ralph Energy: • is already registered as a Market Customer[10] • classifies end user standard connection points into a Dispatchability Unit according to zone specifications

[7] In practice, the agreements might include the use of batteries to smooth the passive load, meaning that some portion of the battery's capacity would probably be reserved for that purpose and, consequently, would not be able to participate in the market. For the purpose of this Use Case, we assume the whole capacity of the battery is used to participate in the energy market.

[8] Subject to zone requirements, see section **Error! Reference source not found.**

[9] For the purpose of this Use Case, the batteries are participating separately and cover the forecasted passive load. The Use Case assumes that the passive load is stable and easily forecastable, therefore no need to reserve battery capacity to smooth it out

[10] Ralph Energy could also choose to register as an IRP

<table>
<tr><th>Design Element</th><th>Description</th></tr>
<tr><td></td><td>obtains a DUID per its Dispatchability Unit. Ralph Energy would be able to manage its Dispatchability Unit via Portfolio Management System, e.g. classify/declassify NMIs</td></tr>
<tr><td>Data Exchange / Telemetry</td><td>Ralph Energy:
transfers real time data for its Dispatchability Unit via SCADA for DER
submits bids via Market Portal</td></tr>
<tr><td>Constraints</td><td>Ralph Energy adheres to DOEs/local network services when bidding / supplying energy</td></tr>
<tr><td>Bids</td><td>Ralph Energy forecasts its passive load to be 1 MW for the relevant dispatch interval
Table 5, below contains Ralph Energy's intended use of the batteries, relative to market price

Table 5 Ralph Energy intentions
<table>
<tr><th>Market Price Range ($/MWh)</th><th>Ralph Energy intentions</th></tr>
<tr><td>Negative Prices</td><td>To charge batteries
Intention: Bids -10 MW</td></tr>
<tr><td>0 to 300</td><td>No battery action
Intention: Bids 0 MW</td></tr>
<tr><td>Above 300</td><td>To discharge batteries
Intention: Bids 10 MW</td></tr>
</table>
Ralph Energy Bids will have to reflect its intentions
Note: Detail on the bid structure will be developed in the implementation stage.</td></tr>
<tr><td>Dispatch Process</td><td>AEMO receives bids and uses NEMDE to determine the energy dispatch and issues a single bi-directional dispatch instruction.
As the energy price sparks suddenly, setting it at $3000/MWh, therefore AEMO will issue a dispatch instruction to the Unit to generate 9MW[11]. Noting that, for the purpose of this example, the passive load is stable and easily forecastable, therefore no need to reserve battery capacity to smooth it out</td></tr>
<tr><td colspan="2">Ralph Energy receives a single bi-directional dispatch instruction against its DUID.
Ralph Energy disaggregates the dispatch instruction amongst its Dispatchability Unit and controls all batteries to fully discharge</td></tr>
<tr><td>Operations</td><td>Ralph Energy submits PASA availability for its Dispatchability Unit for future intervals
Ralph Energy price and quantity Bids reflect availability for its Dispatchability Unit for future intervals</td></tr>
<tr><td>Compliance</td><td>Ralph Energy follows and complies with dispatch instructions, meeting performance thresholds</td></tr>
<tr><td>Incentives</td><td>Ralph Energy receives payment for energy generated</td></tr>
</table>

[11] The batteries are covering the passive load of 1MW, and therefore would be capable of generating 9MW

1.2.2 Use Case– DER Aggregation by a DER Trader via secondary connection point participating in energy and contingency FCAS

This use case is based on the participation of a DER Trader, 'Botero Energy' in the Dispatchability Model via secondary connection point, which is enabled by Flexible Trader Model 2[12].

Participation Profile

Botero Energy has an aggregated DER portfolio of secondary connection points at 500 households with price responsive resources. The portfolio is comprised of 500 behind the meter batteries with an aggregated capacity of 5 MW.

Working assumptions

- Botero Energy complies with all relevant requirements (e.g. applicable performance standards, minimum aggregated portfolio threshold) and therefore its registration application will be approved

Business Model includes

- Maximising value of controllable resources by participating in energy and contingency FCAS

Market scenario

- Batteries are fully charged

Design elements description

Table 6 below summarises the expected treatment of Botero Energy participating in the Scheduled Lite Dispatchability Model.

Table 6 Dispatchability Model Use Case – DER Aggregation by a DER Trader via secondary connection point participating in energy and contingency FCAS

Design Element	Description
Registration	Botero Energy: • registers as IRP • classifies end user secondary connection points into a Dispatchability Unit according to zone specifications • obtains a DUID per its Dispatchability Unit. Botero Energy would be able to manage its Dispatchability Unit via Portfolio Management System, e.g. classify/declassify NMIs
Data Exchange / Telemetry	Botero Energy: • transfers real time data for its Dispatchability Unit via SCADA for DER • submits bids via Market Portal
Constraints	Botero Energy adheres to DOE/local network services when bidding / supplying energy, ancillary services.
Bids	Botero Energy will reflect with its bids that they only have capacity to generate (discharge batteries). This capacity would need to be split across energy and FCAS through its trapezium • Energy bids reflects how much Botero Energy is willing to generate across their portfolio against market prices • FCAS Bids refelct Botero Energy's intention to provide Contingency FCAS raise for a slightly lower price, reflecting that is an enablement, so they will not necessarily discharge, and thus the opportunity cost for Contingency FCAS enablement is lower. Note: Detail on the bid structure will be developed in the implementation stage.
Dispatch process	AEMO receives Bids, uses NEMDE to co-optimise between Energy and FCAS, ensuring that the Dispatchability Unit can reserve the required headroom if enabled for FCAS and does not over dispatch.

[12] This use case is based on the assumption of participation in the Dispatchability Model via secondary connection point, facilitated by FTM2 (see section 3.1). FTM2 arrangements are subject to a recent rule change request by AEMO.

Design Element	Description
	AEMO issues dispatch instructions to the Dispatchability Unit to generate 2 MW and provide FCAS contingency raise of 3MW
Botero Energy receives a single bi-directional dispatch instruction against its DUID, obtaining enablement for FCAS contingency provision **Botero Energy disaggregates the dispatch instruction amongst its Dispatchability Unit**	
Operations	• Botero Energy submits PASA availability for its Dispatchability Unit for future intervals • Botero Energy price and quantity Bids reflect availability for its Dispatchability Unit for future intervals
Compliance	Botero Energy: • follows and complies with dispatch instructions • meets performance thresholds, including but not limited with, ensuring compliance with the MASS i.e. maintaining the appropriate headroom that would enable delivery of FCAS contingency raise
Incentives	Botero Energy receives payment for energy generated and for provision of FCAS contingency raise

Alternative pathways for participation

- Opt-in Arrangement: As a result of different factors, e.g. an unexpected communication fault, Botero Energy is unable to comply with performance thresholds (e.g. to follow a dispatch instruction) and therefore decides to opt-out of the mechanism until capabilities return to normal. Consequently, Botero Energy's performs as a Visibility Unit, submitting indicative bids, reflecting the intention of withdrawal/injection based on market price; without the requirement of following a dispatch instruction.
- Capacity Threshold considerations: aggregations with a capacity less than 5MW, could choose to participate in the Visibility Model where they would provide indicative bids -reflecting the intention of withdrawal/injection based on market price whilst it grows in size and refines capabilities, to graduate from the Visibility Model to the Dispatchability Model. Noting that, as a Visibility Trader, the participant will receive Pre-dispatch schedules that they could use to mature their operations.

1.2.3 Use Case – IRP (Small Resource Aggregator)

This use case outlines a 'Dispatchability Model' version of the scenario outlined in section 1.1.2; that is, an IRP (Small Resource Aggregator – SRA Inc.) with a 25 MW portfolio of small generating units which have a primary purpose to provide back-up supply to waste facilities. Participation in the Dispatchability Model would require SRA Inc. to establish more sophisticated operational capabilities relative to the Visibility Model, including the ability to receive and conform to dispatch instructions. However, it would also provide an avenue for SRA Inc to deploy its portfolio to participate in new market services such as regulation FCAS.

Trader profile

See section 1.1.2. In this use case, SRA Inc.'s portfolio is willing to inject 15 MW at $300/MWh and its full capacity (25 MW) at $500/MWh, when the small generating units in its portfolio are not required for back-up supply (i.e. there is no local supply outage).

Scenario features

Working assumptions

- SRA Inc. is registered with AEMO as an IRP (Small Resource Aggregator) and has classified the connection points that connect the small generating units in its portfolio as its market connection points.
- SRA Inc.'s portfolio exceeds the proposed 5 MW minimum threshold for participation in the Dispatchability Model.

Business Model

- SRA Inc. aggregates small generating units and trades their output in the spot market when prices are high.
- Its contract with its customers enables it to sell generation from its connection points into the spot market when prices exceed $300/MWh (15 MW) and $500/MWh (25 MW) and when the resources are not required for back-up supply.

Market scenario

- Spot prices exceed $500/MWh for a short period of time due to weather conditions impacting available generation in the NEM. There is no current requirement for the generating units to provide back-up generation to the waste facilities.

Design elements description

Table 7 below summarises participation of SRA Inc. in the Scheduled Lite Dispatchability Model.

Table 7 Dispatchability Model Use Case – participation of back-up generation via IRP (Small Resource Aggregator)

Design Element	Description
Registration	SRA Inc. is registered as an IRP (Small Resource Aggregator) and has classified its small generating units into a Dispatchability Unit in the relevant zone. The Trader is able to manage its Dispatchability Units via the Portfolio Management System, e.g. classify/declassify NMIs.
Data Exchange / Telemetry	The Trader: • transfers real time data for its Dispatchability Unit via SCADA for DER • submits bids via Market Portal.
Constraints	The Trader adheres to DOEs/local network services when bidding and supplying energy

<table>
<tr><th>Design Element</th><th>Description</th></tr>
<tr><td>Bids</td><td>The Trader submits bids in accordance with its price-responsive intentions:
Table 8 Summary of SRA Inc.'s bidding
<table>
<tr><th>Market Price Range ($/MWh)</th><th>Trader's bids (cumulative)</th></tr>
<tr><td>Negative Prices</td><td>Bids 0 MW</td></tr>
<tr><td>0 to 300</td><td>Bids 0 MW</td></tr>
<tr><td>300 to 500</td><td>Bids 15 MW</td></tr>
<tr><td>Over 500</td><td>Bids 25 MW</td></tr>
</table>
Note: Detail on the bid structure will be developed in the implementation stage.</td></tr>
<tr><td>Dispatch Process</td><td>AEMO receives bids and uses NEMDE to determine the energy dispatch and issues a single dispatch instruction.
As the energy price increases to $500/MWh, AEMO will issue a dispatch instruction to the Unit to generate 25 MW.</td></tr>
<tr><td colspan="2">SRA Inc. receives a single dispatch instruction against its DUID.
SRA Inc. disaggregates the dispatch instruction amongst Dispatchability Unit and generates in accordance with its bid.</td></tr>
<tr><td>Operations</td><td>• SRA Inc. submits PASA availability for its Dispatchability Unit for future intervals
• SRA Inc.'s price and quantity Bids reflect availability for its Dispatchability Unit for future intervals</td></tr>
<tr><td>Compliance</td><td>SRA Inc. follows and complies with dispatch instructions, meeting performance thresholds</td></tr>
<tr><td>Incentives</td><td>SRA Inc. receives payment for energy generated</td></tr>
</table>

Alternative scenarios

- The proposed opt-in arrangements in the Scheduled Lite design would enable SRA Inc. to enter a passive (off) mode where, for example, its resources are required by the waste facilities for an extended period to manage local supply issues or where it considers it is not able to fulfill the obligations of participation in the Dispatchability Model.
- As a result of the recent Integrating Energy Storge Systems (IESS) rule change, SRA Inc. could potentially participate in ancillary service markets with its portfolio in addition to energy (i.e. where it complies with relevant requirements including the Market Ancillary Service Specification [MASS]), and is also able to aggregate small bidirectional units in addition to small generating units. Where it provides FCAS, this would be co-optimised with energy using NEMDE.