Participant categories in the National Electricity Market

Chapter 2 of the National Electricity Rules (NER) contains the registration requirements and eligibility criteria for each National Electricity Market (NEM) participant category. New applicants must familiarise themselves with these rules before registering.

The information outlined here is for guidance only, and is no substitute for reading and understanding the NER and associated NEM procedures.

Applicants must nominate one or more registration categories consistent with their intended activities in the NEM. The figure below describes the categories and classifications of registered participants in the NEM; these are further detailed in the pages below.

Figure 1: Registered participant categories and classifications

- **Generator**
  - Market generator
  - Non-market generator
  - Scheduled generator
  - Non-scheduled generator
  - Semi-scheduled generator
  - Ancillary services generating unit

- **Small generation aggregator**

- **Customer**
  - Market customer
  - First-tier customer
  - Second-tier customer
  - Market load
  - Ancillary service load
  - Scheduled load

- **Network service provider**
  - Market network service provider
  - Scheduled network service

- **Special participant**
  - System operator
  - Distribution system operator

- **Reallocator**

- **Trader**

- **Intending participant**
Generator

Any person who owns, controls, or operates a generating system connected to a transmission or distribution network must register as a generator, except where they meet the exemption criteria.

Exemptions may apply for certain generating systems under 5 MW, or under 30 MW with annual exports below 20 GWh. For more information about exemption criteria and applications, see AEMO’s Guideline on Generator Classification and Exemption.

Each registered generating unit must be classified as either “market” or “non-market”:

| Market | A market generator must sell all sent-out electricity through the market, and accept payments from AEMO for sent-out electricity at the spot prices applicable to its connection point. A generator must be classified “market” unless all of its electricity output is purchased by a local retailer or customer at its connection point. A market generator with relevant capabilities can also classify its units as ancillary service generating units. |
| Non-market | A generator whose entire electricity output is purchased by a local retailer or customer at its connection point must be classified as “non-market”. A non-market generator is not entitled to receive payment from AEMO for any electricity sent out at its connection point, except for any electricity sent out in accordance with a direction issued by AEMO to a scheduled generator. |

Each market and non-market generator must further be classified as either “scheduled”, “non-scheduled” or “semi-scheduled”:

| Scheduled | A generator with an aggregate nameplate capacity of 30 MW or more is usually classified as scheduled if it has appropriate equipment to participate in the central dispatch process managed by AEMO. |
| Non-scheduled | A generator will normally be classified as non-scheduled if:  
- Its primary purpose is for local use and the aggregate sent out generation rarely, if ever, exceeds 30 MW; or  
- Its physical and technical attributes make it impracticable for it to participate in central dispatch.  
Non-scheduled generators do not participate in the central dispatch process, but AEMO can specify additional conditions with which they must comply, usually for power system security reasons. |
| Semi-scheduled | A generating system with intermittent output (such as a wind or solar farm), and an aggregate nameplate capacity of 30 MW or more is usually classified as a semi-scheduled unless AEMO approves its classification as a scheduled or non-scheduled generating unit. AEMO can limit a semi-scheduled generator’s output in response to network constraints, but at other times the generator can supply up to its maximum registered capacity. |
Anyone intending to own or operate a generating system who has not yet completed all steps required to apply for registration as a generator may be able to register with AEMO as an intending participant.

The table below provides examples of generator classification and exemption categories. These examples do not specify all criteria that must be met.

<table>
<thead>
<tr>
<th>Typical capability</th>
<th>Examples</th>
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<tbody>
<tr>
<td><strong>Exempt</strong></td>
<td>Less than 5 MW, all purchased by a local retailer or a customer located at the same connection point (automatic exemption). 1 MW backup diesel generator in a high-rise building.</td>
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<tr>
<td></td>
<td>Less than 30 MW, all purchased by a local retailer or a customer located at the same connection point and annual export less than 20 GWh (application required). 20 MW biomass-fuelled generator with limited fuel supplies.</td>
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<tr>
<td><strong>Non-scheduled</strong></td>
<td>Non-market Less than 30 MW, all purchased by a local retailer or a customer located at the same connection point. 10 MW, all purchased by a customer at the same connection point.</td>
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<td></td>
<td>Market Between 5 MW and 30 MW, with some or all sent out energy sold in the NEM. 10 MW generator supplying the wholesale market.</td>
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<tr>
<td><strong>Semi-scheduled</strong></td>
<td>Non-market Intermittent output, greater than 30 MW, all purchased by a local retailer or a customer located at the same connection point. 150 MW wind farm, all purchased under contract to a local retailer.</td>
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<tr>
<td></td>
<td>Market Intermittent output, greater than 30 MW, with some or all sent out energy sold in the NEM. 150 MW wind farm supplying the wholesale market.</td>
</tr>
<tr>
<td><strong>Scheduled</strong></td>
<td>Non-market Greater than 30 MW, all purchased by a local retailer or a customer located at the same connection point. 40 MW hydro station, all purchased under contract to a local retailer.</td>
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<tr>
<td></td>
<td>Market Greater than 30 MW, with some or all sent out energy sold in the NEM. 2000 MW power station supplying the wholesale market.</td>
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To apply for registration as a generator, see AEMO's How to Register guide. Alternatively, proceed directly to the application forms.

**Small generation aggregator**

A small generation aggregator (SGA) is a registered participant who may supply electricity aggregated from one or more small generating units (under 30 MW) to a transmission or distribution system. The only SGA registration category is a market small generation aggregator.

To be eligible for registration as an SGA, applicants must satisfy AEMO that they intend to classify, within a reasonable period of time, one or more small generating units with separate connection points as market generating units. The small generating unit(s) must have a nameplate rating under 30 MW and the owner, operator, and controller must be exempted under clause 2.2.1(c) of the NER from the requirement to register the unit as a generator. More information about generator exemptions can be found in AEMO’s Guideline on Generator Classification and Exemption.

An SGA must:
• Sell all sent out generation through the spot market for all market connection points it is financially responsible for; and
• Purchase all electricity supplied through the national grid to the market connection points it is financially responsible for.

To apply for registration as an SGA, see AEMO’s How to Register guide. Alternatively, proceed directly to the application forms.

Customer

A customer is a registered participant that purchases electricity supplied through a transmission or distribution system to a connection point. Retailers and end users who buy electricity in the spot market must be registered as “market customers”. End users who purchase electricity through a retailer can elect to register as a “first-tier customer” or “second tier customer”.

To be eligible for registration as a customer, an applicant must satisfy AEMO that they intend to classify, within a reasonable period of time, electricity purchased at one or more connection points as one of the following:

<table>
<thead>
<tr>
<th>First-tier load</th>
<th>First-tier loads are settled through a local retailer and first-tier customers must not participate in the spot market. Registration as a first-tier customer is optional.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second-tier load</td>
<td>Second-tier loads are settled through a market customer who is not the local retailer. Second-tier customers must not participate in the spot market. Registration as a second-tier customer is optional.</td>
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</tbody>
</table>
| Market load     | A person who wishes (or is required) to have their load settled on the spot market must register as a market customer. A market customer must purchase all electricity related to the market load from the spot market. Local retailers must be registered as market customers and must classify any connection point that connects their local area to another part of the power system as a market load. If the market customer has appropriate equipment to receive and respond to dispatch instructions issued by AEMO, market loads may also be classified as one of the following:  
  - **Scheduled load:** This enables market customers to submit bids to purchase electricity for that load through the central dispatch process.  
  - **Ancillary service load:** This enables market customers with relevant capability to use their market load to provide specified market ancillary services to AEMO. |
| Intending load  | A person who intends to act as a customer but has not yet completed all the steps required to complete an application for registration as a customer, may be able to register with AEMO as an intending participant. |
| Retailer of Last Resort | A person can also register as a market customer for the purpose of acting as a retailer of last resort (ROLR). |
To apply for registration as a Customer, see AEMO’s How to Register guide. Alternatively, proceed directly to the application forms.

Network service provider

A person who owns, operates, or controls a transmission or distribution system must register with AEMO as a network service provider (NSP).

The Australian Energy Regulator (AER) may exempt a person from registering as a network service provider if the person meets specific criteria or if they are appointing an intermediary. See the AER’s Network Service Provider Registration Exemption Guideline. Applicants seeking an exemption from registration as an NSP should contact the AER directly. More information about intermediary exemptions is also available in AEMO’s Guide to Network Service Provider Classification and Exemption.

When registering, NSPs must categorize each of their network systems as either a transmission system or distribution system. NSPs either earn revenue from a regulated income or from the spot market. The latter must register as market NSPs and classify their services as scheduled network services. Market NSPs must participate in AEMO’s central dispatch process.

An existing NSP wishing to operate a new asset to provide market network services must submit a new application so AEMO can formally classify the new asset as a scheduled market network service and, where necessary, register the NSP as a market NSP for those services. A new regulated asset (connecting to an existing part of the NSP’s network) is not classified separately, and does not require a new application.

To apply for registration as an NSP, see AEMO’s How to Register guide. Alternatively, proceed directly to the application forms.

Special participants

A system operator or distribution system operator who carries out certain functions under the NER must register with AEMO in one of these “special participant” categories.

<table>
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<tr>
<th>System operator</th>
<th>A system operator, usually a transmission network service provider (TNSP), acts as AEMO’s agent or delegate to carry out some or all of AEMO’s rights, functions, and obligations under clause 4.3.3 of the NER.</th>
</tr>
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<tbody>
<tr>
<td>Distribution system operator</td>
<td>A distribution system operator is an NSP responsible for controlling or operating any part of a distribution system.</td>
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</table>

To apply for registration as a special participant, see AEMO’s How to Register guide. Alternatively, proceed directly to the application forms.
Reallocator

Anyone who wishes to participate in reallocation transactions under clause 3.15.11 of the NER must register with AEMO as a “reallocator”. A reallocator must be a “wholesale client” as defined in the Corporations Act (2001).

A reallocation transaction is undertaken with the consent of two market participants and AEMO. AEMO credits one market participant with a positive trading amount for a trading interval, and debits a matching negative trading amount to the other market participant for the same trading interval. These may be specified dollar amounts, or calculated by reference to a specified quantity of energy and price. These amounts are typically underpinned by a contract between the credit and debit parties, but AEMO is not a party to that contract.


To apply for registration as a reallocator, see AEMO’s How to Register guide. Alternatively, proceed directly to the application forms.

Trader

Anyone who wishes to participate in a Settlement Residue Auction (SRA) under rule 3.18 of the NER, and is not already registered with AEMO as a market customer or a generator, must register with AEMO as a “trader”.

To participate in the SRA you must also complete the Auction Participation Agreement (APA) and comply with the requirements of the Settlement Residue Auction Rules issued by AEMO under clause 3.18.3 of the NER.

To apply for registration as a trader, see AEMO’s How to Register guide. Alternatively, proceed directly to the application forms.

Intending participant

A person may apply for registration as an intending participant if they can reasonably satisfy AEMO that they intend to commence activities that require them to be a registered participant. Clause 2.7 of the NER provides further information. AEMO has published a Schedule of Rights and Obligations of Intending Participants.

To apply for registration as an intending participant, see AEMO’s How to Register guide. Alternatively, proceed directly to the application forms.