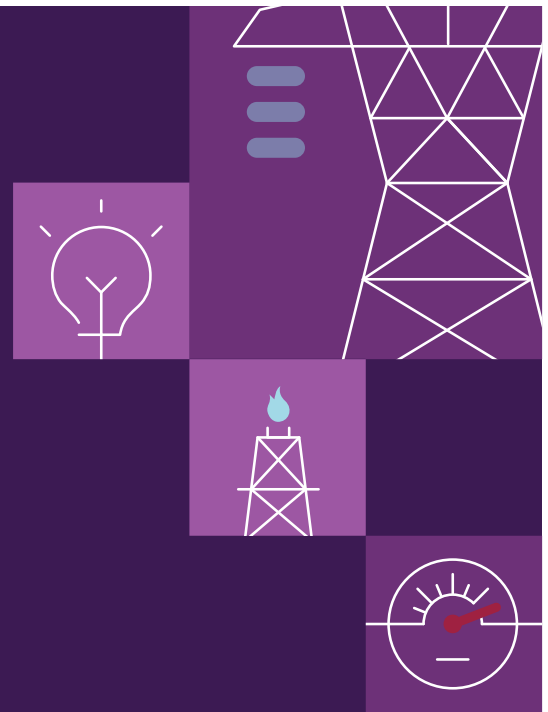




Guide to ~~Generator Exemptions and Classification of Generating Units~~ Production Unit Classification and Exemption



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Important Notice

Purpose

This document has been prepared by AEMO as required by 2.1.3(a) of the National Electricity Rules (Rules), and has effect only for the purposes set out in the Rules. The Rules and the National Electricity Law (NEL) prevail over this document to the extent of any inconsistency.

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Current version release details

Version	Effective date	Summary of changes
6.0	3 June 2024	Update to reflect National Electricity Amendment (Integrating energy storage systems into the NEM) Rule 2021.

1. Introduction

1.1. Purpose and scope

This Guide to ~~Production Unit Generator Exemptions and Classification and Exemption of Generating Units~~ (**Guide**) is *published* for the assistance of potential applicants for registration ~~as a Generator~~ in the National Electricity Market (**NEM**) and forms part of the *registration information resources and guidelines* AEMO maintains consistent with clause 2.1.3(a) of the National Electricity Rules (**NER**).

It ~~also~~ details the criteria for production units that are eligible for a standing exemption from registration and also how AEMO will assess applications for classification of *generating production units*, where an exemption does not apply.

The NER and the *National Electricity Law* (**NEL**) prevail over this Guide to the extent of any inconsistency.

1.2. Definitions and interpretation

1.2.1. Glossary

The words, phrases and abbreviations set out below have the meanings set out opposite them when used in this Guide.

Terms defined in the NEL or the NER have the same meanings in this Guide unless otherwise specified. Those terms are intended to be identified in this Guide by italicising them, but failure to italicise such a term does not affect its meaning.

Term	Definition
AC	Alternating Current
<u>ADC</u>	<u>Agregate Dispatch Conformance</u>
<u>DC</u>	<u>Direct Current</u>
<u>EPC</u>	<u>Engineering, procurement, and construction</u>
<u>LNSP</u>	<u>Local Network Service Provider</u>
MT PASA	<i>Medium term PASA</i>
MVA	Megavolt ampere
MW	Megawatt
NEL	<i>National Electricity Law</i>
NEM	<i>National Electricity Market</i>
NER	<i>National Electricity Rules</i>
NSP	<i>Network Service Provider</i>
<u>PASA</u>	<u>Projected Assessment of System Adequacy</u>
<u>Production unit</u>	<u>Plant used in the production of electricity and all related equipment essential to its functioning as a single entity. Generating units and bidirectional units are production units.</u>
<u>RERT</u>	<u>Reliability and Emergency Reserve Trader</u>
<u>SCADA</u>	<u>Supervisory eControl aAnd dData aAcquisition</u>
ST PASA	<i>Short term PASA</i>

1.2.2. Interpretation

This Guide is subject to the principles of interpretation set out in Schedule 2 of the NEL.

1.3. Related documents

Title	Location
Application for Exemption from Registration as a Generator	https://aemo.com.au/-/media/files/electricity/nem/participant_information/application-forms-and-supporting-documentation/application-for-registration-exemption---nem---generator.docx?la=en
Application for Registration as a Generator in the NEM	https://aemo.com.au/-/media/files/electricity/nem/participant_information/registration/generator/application-for-registration-as-a-generator.docx?la=en
Energy Conversion Model Guidelines (Solar)	http://www.aemo.com.au/-/media/Files/Electricity/NEM/Security_and_Reliability/Dispatch/Policy_and_Process/Energy_Conversion_Model_Guidelines_Solar.xlsx
Energy Conversion Model Guidelines (Wind)	http://www.aemo.com.au/-/media/Files/Electricity/NEM/Security_and_Reliability/Dispatch/Policy_and_Process/2016/Energy_Conversion_Model_Guidelines_Wind_20161209.xlsx
NEM Generator Registration Guide	https://aemo.com.au/-/media/files/electricity/nem/participant_information/registration/generator/nem-generator-registration-guide.pdf?la=en

1.4. Inquiries

All inquiries about this Guide should be directed to AEMO's Information and Support Hub at supporthub@aemo.com.au, or phone 1300 236 600.

2. ~~Overview of Exemptions from Registration as a Generator~~ or an Integrated Resource Provider

2.1. Authority to exempt

~~Clause 2.1A.2(a) of the NER provides that AEMO may, in accordance with the *registration information resources and guidelines*, exempt a person from the requirement to register *generating systems* or *integrated resource systems* in accordance with clause 2.1A.1, subject to such conditions as AEMO deems appropriate, where (in AEMO's opinion) an exemption is not inconsistent with the *national electricity objective*. Section 11(1)(a) of the NEL requires any person engaging in the activity of owning, controlling or operating a *generating system* in the NEM~~

~~to register as a *Generator*~~

~~. This requirement applies irrespective of whether that activity is carried out jointly with others, on the person's own behalf or on behalf of someone else.~~

~~An exemption from this requirement can be obtained under section 11(1)(b) if a person:~~

- ~~(a) is the subject of a derogation that exempts that person from the requirement to be registered as a Generator;~~
- ~~(b) is exempted by AEMO from the requirement to be registered as a Generator for that generating system, as provided for in clause 2.2.1(c) of the NER; or~~
- ~~(c) appoints an intermediary that is registered as the Generator for that generating system, in accordance with clause 2.9.3 of the NER.~~

2.2. What exemption means

A person exempted on the basis of the characteristics of the *generating system or integrated resource system* is not permitted to participate directly in the *market* or have its *generating production units* dispatched by AEMO, but may be required to comply with certain technical requirements in relation to their *production-generating units* and any conditions placed on the exemption by AEMO.

~~Exempted persons do not pay Participant fees with respect to their exempt production units.~~

Any person who is eligible for exemption but wishes to participate directly in the *wholesale market* must apply to AEMO for registration as an *IRP - Small Resource Aggregator Market Generator or a Market Customer*.

2.3. Exemption categories

Exemptions from the requirement to register as a *Generator or an Integrated Resource Provider* may be granted based either on the characteristics of the *generating system or integrated resource system* (nature, size, type and operation), or on the registration of an *intermediary* as the *Generator or Integrated Resource Provider*, as follows:

- (a) Standing exemptions are available to persons who own, operate or control a *generating system or integrated resource system* with a *nameplate rating* of less than 5MW when fully connected to a transmission or distribution system.
- (b) Applications for exemption may be made by persons who own, operate or control *generating systems or integrated resource systems (other than those that include battery systems or a bidirectional unit)* with a *nameplate rating* of less than 30MW and which are not eligible for the standing exemption.
- (c) Applications for exemption may be made by persons who own, operate or control *generating systems or integrated resource systems (other than those that include a bidirectional unit)* with a *nameplate rating* over 30MW:
 - (i) if the purpose for which exemption is sought is the provision of *unscheduled reserve* in accordance with an *unscheduled reserve contract*; or
 - (ii) for existing *generating systems or integrated resource systems* in exceptional circumstances at AEMO's absolute discretion.
- (d) Temporary notifiable exemptions may be available to persons who own, operate or control *generating systems or integrated resource systems* to which no other exemptions apply, during initial testing and commissioning where the aggregate *nameplate rating* of the *connected generating production units* is less than 5MW at any time.

- (e) Applications for exemption must be made by persons who own, ~~operate~~operate, or control a *generating system* or an *integrated resource system*, but have proposed an eligible person (an *intermediary*) to be registered as a *Generator* or *Integrated Resource Provider* for that *generating system* or as an *Integrated Resource Provider* for that *integrated resource system* on their behalf.

2.4. Exemption application process

If a person is not eligible for a standing exemption and wishes to apply to AEMO for an exemption from the requirement to register as a *Generator* or an *Integrated Resource Provider* under this Guide, the following process applies.

1. The applicant must apply to AEMO for approval for an exemption from the requirement to register as a *Generator* or an *Integrated Resource Provider* in the form prescribed by AEMO.
2. AEMO will advise the applicant of any further information or clarification which is required in support of its application if, in AEMO's reasonable opinion, the application:
 - is incomplete; or
 - contains information upon which AEMO requires clarification.
3. If the further information or clarification required pursuant to paragraph 2 is not provided to AEMO's satisfaction within 15 business days of AEMO advising the applicant, AEMO may, on notice to the applicant at any time after expiry of that period, elect to treat the application as withdrawn and the applicant will be taken to have withdrawn the application.
4. After AEMO is satisfied that all required information and clarifications have been provided, AEMO will determine whether the applicant is to be exempt from the requirement to register as a *Generator* or *Integrated Resource Provider*.
5. If AEMO is not satisfied that an applicant meets the eligibility requirements set out in this Guideline it will provide a reason for that determination.

3. Exemptions based on ~~GENERATING~~ production system characteristics

3.1. Determining nameplate rating

For the purpose of this section 3 of the Guide, where the rating of an item of *plant* is specified by the manufacturer in MVA and not MW, the *nameplate rating* is determined by converting the manufacturer's rating in MVA to the rating in MW by applying a conversion factor of 1.

The *nameplate rating* of a generating-production unit is not considered to be reduced due to applicable power factor, high ambient temperature, or by the application of any *control system* settings or other means of limiting the *active power* output of the generating-production unit.

In circumstances where a generating-production unit includes separate *plant* for the production of electricity, each of a different *plant* type and capable of separate operation but that share equipment (such as an inverter) essential to the functioning of each, the *nameplate rating* of the generating-production unit is determined by the *nameplate rating* of the shared equipment.

The *nameplate rating* of the *generating system* or the *integrated resource system* is the aggregate of the combined *nameplate ratings* of the *generating production units* comprising the *generating system* or the *integrated resource system*.

The *nameplate rating* for a *bidirectional unit* is determined by the maximum of the *nameplate rating* for consumption or production in MW of the unit.

Where the *nameplate rating* is determined by the maximum continuous output of a *production unit/s*, the inverter *nameplate rating* should not exceed 120% of the *nameplate rating* of the *production unit/s*. Where the inverter *nameplate rating* does exceed 120%, AEMO reserves the right to apply discretion in how the *nameplate rating* is determined for the purpose of this Guide.

~~3.2. No exemption for battery systems 5MW or more~~

~~AEMO treats battery systems differently to other types of *generating systems*. Battery systems are unique in that:~~

- ~~(a) they have extremely fast ramp rates;~~
- ~~(a) they can switch from maximum charge to maximum discharge within one cycle (Hz) (for example, a battery system with a nameplate rating of 5MW can switch from 5MW discharge to 5MW charge, resulting in an instantaneous change of generation of 10MW); and~~
- ~~(b) their operation cannot be readily forecast.~~

~~AEMO therefore requires all persons who own, operate or control battery systems with a *nameplate rating* of 5MW or more to be registered as *Generators*. This applies to persons with standalone battery systems as well as those that are proposed to be installed as part of a larger *generating system* with non-battery units.~~

3.3.3.2. Exemption at the connection point

- (a) Subject to paragraph (b), an application for exemption from registration as a *Generator* or an *Integrated Resource Provider* must be made with reference to the *generating system's* or the *integrated resource system's* *connection point*.
- (b) Where the *generating system* or *integrated resource system* -is connected to a *distribution system* or *transmission system* through an *embedded network* at a *parent connection point* and the *generating system* or *integrated resource system* -has a *child connection point*, an exemption application is made with reference to the *generating system's* or the *integrated resource system's* *child connection point*.
- (c) In circumstances where a *generating system* or an *integrated resource system* is connected to a *distribution system* or *transmission system* through an *embedded network* at a *parent connection point* but does not have a *child connection point*, the *generating system's* or the *integrated resource system's* *connection point* is considered to be the *embedded network parent connection point*.

3.4.3.3. Standing exemptions

3.4.1.3.3.1. Automatic exemptions

Most *generating systems* and *integrated resource systems* with a total *nameplate rating* of less than 5MW when fully connected to a *transmission or distribution system* are unlikely to cause a material degradation in the quality of *supply* to other *Network Users*.

Subject to section ~~3.4.23-34.2~~, any person who engages in the activity of owning, controlling, or operating a *generating system* or *integrated resource system* with a total *nameplate rating* of less than 5MW will be automatically exempt from the requirement to register as a *Generator* or *an Integrated Resource Provider* in relation to that activity, where both of conditions (a) and (b) apply:

- (a) either:
 - (i) the *generating system* or *integrated resource system* is not capable of exporting to a *transmission system* or *distribution system* in excess of 5 MW; or
 - (ii) the *generating system* or *integrated resource system* has no capability to synchronise to a *distribution system* or *transmission system*; and
- (b) where there is any potential for the *generating system* or *integrated resource system* to export *energy*, either:
 - (i) the *sent out ~~generation~~production* is purchased in its entirety by a *Market Participant* who is *financially responsible* for all electricity generated or consumed at the same *connection point*; or
 - (ii) each of the *generating ~~production~~ units* comprising the *generating system* or *integrated resource system* is classified as a *market generating unit* or a *market bidirectional unit* by an *IRP - Small Resource Aggregator* or *Market Customer*.~~Market Small Generation Aggregator.~~

3.4.2.3.3.2. Automatic exemption in embedded networks

Where the *generating systems* and *integrated resource systems* that are *connected* to a *distribution system* or *transmission system* through an *embedded network* at a *parent connection point*, have a combined total *nameplate rating* of less than 5MW, each person who owns, operates or controls those *generating systems* and *integrated resource systems* will be automatically exempt from ~~the a~~ requirement to register as a *Generator* and *an Integrated Resource Provider*. The exemption of each *generating system* and *integrated resource system* is subject to the conditions set out in section 3.34.1 (a) and (b) above.

3.4.3.3.3.3. No application for exemption required

AEMO does not require any person who is eligible for exemption in accordance with the criteria detailed in section ~~3.3.13-34.4~~ or 3.34.2 to submit an Application for Exemption from Registration as a *Generator* or *an Integrated Resource Provider* to AEMO. Any person in doubt as to whether their *generating system* or *integrated resource system* can meet the criteria detailed in section ~~3.3.13-34.4~~ or 3.34.2 should submit such an Application.

3.5.3.4. Applications for exemption – ~~generating production systems~~ less than 30 MW that are not eligible for the standing exemption

3.5.1.3.4.1. Generally

There is no standing exemption for persons who own, operate, or control any *generating system* or *integrated resource system* with a total *nameplate rating* of 5MW or more.

3.5.2.3.4.2. ~~Generating systems without significant battery systems~~ Production Systems without bidirectional units

An application for exemption can be made by a person who owns, controls, or operates a *generating system* or an *integrated resource system* with a total *nameplate rating* of less than 30 MW where:

- (A) the person is not eligible for a standing exemption, and
- (B) the ~~*generating system*~~ *integrated resource system* does not comprise or include a *bidirectional unit with a battery system with* a *nameplate rating* of 5 MW or more.

A person wishing to be exempt from the requirement to register as a *Generator* or an *Integrated Resource Provider* on this basis, must apply to AEMO by submitting an Application for Exemption from Registration as a *Generator* or an *Integrated Resource Provider*.

AEMO may grant an exemption in the circumstances described below -and subject to conditions described in section 3.45.4 below.

In general terms, AEMO will consider granting an application if both of conditions (a) and (b) apply:

- (b) either:
 - (i) the *generating system* or *integrated resource system* is expected to export less than 20 GWh in any 12-month period and is not part of an *embedded network*; or
 - (ii) Where the *generating system* or *integrated resource system* is connected to a *distribution system* or *transmission system* through an *embedded network*, the expected combined export at the *parent connection point* of all *generating systems and integrated resource systems* in the *embedded network* is less than 20 GWh in any 12-month period; or
 - (iii) extenuating circumstances apply, and the applicant cannot reasonably meet the requirements to register as a *Generator* or an *Integrated Resource Provider* for the *generating system* or as an *Integrated Resource Provider* for the *integrated resource system*,

and the operation of the *generating system* or *integrated resource system* will not adversely impact *power system security*; and

- (c) where there is any potential for the *generating system* or *integrated resource system* to export energy, either:
 - (i) the ~~*sent out generation production*~~ is purchased in its entirety by a *Market Participant* *RP - Small Resource Aggregator* or *Market Customer* who is *financially*

responsible for all electricity generated or consumed at the same connection point, or

- (ii) each of the ~~generating production~~ units comprising the generating system or integrated resource system is classified as a small market generating unit or a small market bidirectional unit by an IRP - Small Resource Aggregator or a Market Customer~~by a Market Small Generation Aggregator~~.

3.5.3.3.4.3. Compliance with technical requirements

Persons eligible to apply for exemption from the requirement to register as a Generator or an Integrated Resource Provider under section 3.4.23.45.2 are not automatically exempt from the requirement to comply with the technical requirements in Schedule 5.2 of the NER. Hence, when applying for an exemption, applicants will also need to provide to AEMO:

- (a) a copy of the *performance standards* agreed with their connecting NSP; or
- (b) a letter from their connecting NSP, dated within 12 months of the application's submission date, -stating that their *generating system or integrated resource system* is intended for use in a manner the NSP considers is unlikely to cause a material degradation in the quality of *supply* to other *Network Users*. If the NSP letter does not include details of the criteria the NSP used to assess the *generating system or integrated resource system* and results from the assessment conducted, AEMO may seek this information from the NSP directly. This information may be set out in a separate planning report.

3.5.4.3.4.4. Exemption conditions

In accordance with clause 2.1A.2(a)2.1(e) of the NER and the *registration information resource and guidelines*, AEMO may exempt a person that applies for an exemption under section 3.45.2, subject to such conditions as AEMO deems appropriate. -AEMO will impose conditions where AEMO considers it reasonably necessary to do so, including where it is required for the purposes of operational forecasting, situational awareness or power system security.

Depending on the relevant circumstances, such conditions may include:

- Time limits on the exemption
- Provision of SCADA
- Generator or Integrated Resource Provider Performance Standards
- That no ~~sent out generation occurs~~ sent out generation occurs
- That any ~~sent out generation production~~ is purchased in its entirety by a *Local Retailer* or *Customer* at the same connection point or each of the ~~generating production~~ units comprising the *generating system or integrated resource system* is classified as a small market generating unit or a small market bidirectional unit by an Integrated Resource Provider or a Market Customer~~Market Small Generation Aggregator~~
- Where the exemption is given for the purposes of online testing:
 - notification of testing activities to AEMO
 - limits on testing activities, including duration and units connected

- compliance with AEMO *Power System Security* guidelines
- No increases in *nameplate rating* and no additional generating production units at the facility
- No material change in operation that increases *sent out generation production*
- The annual provision of information regarding *sent out generation production*.

3.6.3.5. Applications for exemption – generating production systems 30 MW or above

3.6.1.3.5.1. Generally

There is no standing exemption for persons who own, operate, or control any *generating system* or integrated resource system with a *nameplate rating* of 30MW or more.

3.6.2.3.5.2. Generating systems and integrated resource systems other than battery systems providing unscheduled reserve

Any person who owns, controls, or operates a *generating system* or integrated resource system, other than a battery system, with a total *nameplate rating* of 30MW or above and a total bidirectional unit nameplate rating of less than 5 MW may apply to AEMO for an exemption by submitting an Application for Exemption from Registration as a *Generator* or Integrated Resource Provider if the sole purpose of *connecting* the *generating system* or integrated resource system to a *network* is for the provision of *unscheduled reserve* in accordance with a *reserve contract*.

AEMO will not grant an exemption for new *generating systems* or integrated resource systems with a total *nameplate rating* of 30MW or more other than for *unscheduled reserve* purposes.

AEMO may consider an application for an existing *generating system* or integrated resource system of this size in exceptional circumstances, at AEMO's absolute discretion. Such circumstances are expected to arise very rarely and commercial considerations will not be taken into account.

AEMO will not grant an exemption where the *generating systems* and integrated resource systems that are *connected* to a *distribution system* or *transmission system* through an *embedded network* at a *parent connection point*, have a combined total *nameplate rating* of over 30MW or a combined bidirectional unit nameplate rating of 5MW or more.

Subject to the NER, AEMO may grant an exemption in this category in its absolute discretion or subject to conditions it considers appropriate, as outlined in section 3.65.4 below.

3.6.3.3.5.3. Compliance with technical requirements

Persons eligible for exemption from the requirement to register as a *Generator* or Integrated Resource Provider under section 3.5.23-56.2 are not automatically exempt from the requirement to comply with the technical requirements in Schedule 5.2 of the NER. Hence, when applying for an exemption, applicants will also need to provide to AEMO:

- a copy of the *performance standards* agreed with their connecting NSP; or
- a letter from their connecting NSP, dated within 12 months of the application's submission date, *-stating that their generating system* or integrated resource system is

intended for use in a manner the NSP considers is unlikely to cause a material degradation in the quality of *supply* to other *Network Users*. If the NSP letter does not include details of the criteria used to assess the *generating system or integrated resource system* and results from the assessment conducted, AEMO may seek this information from the NSP directly. This information may be set out in a separate planning report.

3.6.4.3.5.4. Exemption conditions

In accordance with clause 2.2.1(c) of the NER and the *registration information resource and guidelines*, AEMO may exempt a person that applies for an exemption under section 3.56.2, subject to such conditions as AEMO deems appropriate. AEMO will impose conditions where AEMO considers it reasonably necessary to do so, including where it is required for the purposes of operational forecasting, situational awareness or power system security.

Depending on the relevant circumstances, such conditions may include:

- Time limits on the exemption
- Provision of SCADA
- *Generator or Integrated Resource Provider Performance Standards*
- That no *sent out generation* occurs
- That *electricity produced by the Market Generator or produced and consumed by the Integrated Resource Provider through the market connection point is sold or purchased by a Market Customer or an Integrated Resource Provider at that market connection point through the spot market any sent out generation is purchased in its entirety by a Local Retailer or Customer at the same connection point*
- Where the exemption is given for the purposes of online testing:
 - notification of testing activities to AEMO
 - limits on testing activities, including duration and units connected
 - compliance with AEMO *Power system Security* guidelines
- No increases in *nameplate rating* and no additional *generating production units* at the facility
- No material change in operation that increases *sent out generation or amount consumed*
- The annual provision of information regarding *sent out generation production*.

3.7.3.6. Notifiable exemptions for pre-commissioning work

This is a temporary exemption category. It may be available to persons who own, operate, or control a *generating system or integrated resource system* for which they are required, and have applied, to register as a *Generator or Integrated Resource Provider*, but wish to perform pre-commissioning work before their registration is complete. A notifiable exemption does not permit hold-point testing of a *Generator or an Integrated Resource Provider*.

3.7.1.3.6.1. Generally – less than 5MW connected

A notifiable exemption for these purposes is available if, and only for as long as, the combined *nameplate rating* of all *generating production units* simultaneously *connected* to a *transmission or distribution system* for testing purposes is less than 5MW, subject to:

- (a) provision of the information and documents set out in the notifiable exemption application form as updated from time to time;
- (b) confirmation by AEMO of the exemption;
- (c) compliance with the conditions of the exemption set out in section [3.6.33-67.3](#); and
- (d) commencement and expiry of the exemption in accordance with section [3.6.43-67.4](#).

3.7.2.3.6.2. Exceptional circumstances – 5 MW or over connected

In circumstances where a single *generating production unit* meets or exceeds the 5 MW nameplate rating, AEMO may, in its absolute discretion, consider granting a notifiable exemption where it is considered there is no risk to power system security. This kind of notifiable exemption will be considered on a case-by-case basis and is subject to:

- (a) provision of the information and documents set out in the notifiable exemption application form as updated from time to time;
- (b) confirmation by AEMO of the exemption;
- (c) compliance with the conditions of the exemption set out in section [3.6.33-67.3](#); and
- (d) commencement and expiry of the exemption in accordance with section [3.6.43-67.4](#).

3.7.3.3.6.3. Notifiable exemption conditions

Notifiable exemptions confirmed by AEMO remain valid only for the relevant period specified in accordance with section [3.6.43-67.4](#), and only for so long as the following conditions continue to be met:

- (a) An agreed set of performance standards for the generating system or integrated resource system must be in place;
- (b) AEMO must be notified at least one *business day* prior to the commencement of pre-commissioning work;
- (c) a ~~supervisory control and data acquisition (SCADA)~~ system that continuously monitors the output of the *connected* part of the *generating system* or integrated resource system must be installed and operational at all times when any part of the *generating system* or integrated resource system is being tested;
- (d) the maximum combined *nameplate rating* of all *generating production units* simultaneously *connected* at the *connection point* must be less than 5 MW;
- (e) an operating protocol between the Applicant (or its EPC contractor) and the connecting NSP must be in place and observed at all times and all instructions from AEMO or the NSP must be followed. The operating protocol must include:

- (i) operating procedures to ensure the highest combined nameplate rating of the generating production units simultaneously connected at any time is limited to less than 5MW;
 - (ii) identification of personnel responsible for work approvals and compliance with the operating protocol;
 - (iii) a plan for communication of the generation production restrictions and consequences of any breach to all on site and control room personnel;
 - (iv) procedures for the management of locks and keys used to secure generating production units, including storage and removal of keys from tagged out lockboxes, with no unauthorised access to production generating units;
 - (v) a communication plan to ensure notification of NSP and AEMO prior to any switching or changes in generating production unit status.
- (f) AEMO and the connecting NSP must be notified prior to the *connection* or *disconnection* of any generating production unit, and
- (g) the notified arrangements for the purchase of *sent out* generation production must remain in effect.

Non-compliance with any of these conditions, or operation of any part of the *connected generating system* or connected integrated resource system outside the period in section 3.6.43-67.4, immediately invalidates the exemption. As a result, you may have contravened section 11 of the National Electricity Law.

3.7.4.3.6.4. Duration of notifiable exemption

A notifiable exemption commences on the date specified by AEMO in its confirmation of the notifiable exemption, and expires on the first of the following to occur:

- (a) the end date of the notifiable exemption as specified in AEMO's confirmation, to be no more than 90 days after the commencement date; or
- (b) the effective date of registration of the exempted person as a *Generator* or Integrated Resource Provider in respect of the *generating system* or integrated resource system.

4. Intermediary exemptions

4.1. Applications

As noted in section 2.1, clause 2.9.3 of the NER enables a person that would ordinarily be required to register as a *Generator* or Integrated Resource Provider to apply for an exemption if an *intermediary* is to be registered in their stead.

Where a person proposes to appoint an *intermediary*:

- (a) that person must submit an Application for Exemption from Registration as a *Generator* or an Integrated Resource Provider; and
- (b) the proposed *intermediary* must submit an Application for Registration as a *Generator* or Integrated Resource Provider to AEMO.

Both applications must be received by AEMO before AEMO can consider the matter.

4.2. Criteria

AEMO must allow the exemption and approve the *intermediary* where the following requirements are met:

- (a) the *intermediary* consents in writing to act as *intermediary*, in a form reasonably acceptable to AEMO; and
- (b) the applicant establishes to AEMO's reasonable satisfaction that, from a technical perspective, the *intermediary* can be treated, for the purposes of the NER, as the applicant with respect to the relevant *generating system* or *integrated resource system* by providing relevant evidence, such as a *connection agreement*, joint venture agreement or the like.

(See clause 2.9.3(b) and (c) of the NER).

If more than one person owns, operates or controls a *generating system* or *integrated resource system*, they must appoint one of them (or another person who is entitled to register as a *Generator* or *Integrated Resource Provider*) as the *intermediary* and the rest must apply for exemption.

A person appointed as an *intermediary* must meet the requirements for registration as a *Generator*, *Integrated Resource Provider* or *Generator and Customer* (whichever is applicable) in its own right. The *intermediary* must either own, operate or control the relevant *generating system* or *integrated resource system*, or must otherwise source electricity from it.

Where the ownership of *generating production units* in a *generating system* or *integrated resource system* is split, that is, different persons own, control, or operate different *generating production units*, each person must apply separately for registration in respect of the activities they carry out, or seek an exemption, as appropriate.

4.3. Revocations

An exempted person (owner, operator, or controller) may revoke the appointment of an *intermediary* by giving notice of revocation to AEMO. The revocation must take effect at 4.30am, two *business days* after AEMO receives the notice, as required by clause 2.9.3 of the NER.

Hence, before revoking the appointment of an *intermediary*, the exempted person(s) should ensure that either:

- (a) a replacement *intermediary* is nominated and the *intermediary's* Application for Registration as a *Generator* or *Integrated Resource Provider* has been submitted to AEMO and is approved to take effect at the same time as the revocation takes effect; or
- (b) the exempted person(s) has submitted an Application for Registration as a *Generator*, *Integrated Resource Provider* or *Generator and Customer* (whichever is applicable) to take effect at the same time as the revocation takes effect.

5. Classification of generating production units

5.1. Generally

An applicant for registration as a *Generator, -Integrated Resource Provider or Generator and Customer (whichever is applicable)* must classify each of its generating production units in the categories contemplated by clause 2.2 of the NER. Classifications require AEMO's prior approval.

Classification of generating production units is by reference to whether a generating production unit consumes as well as produces energy, can transition linearly between production and consumption, will participate in *central dispatch*, and ~~and~~ whether the *Generator, -Integrated Resource Provider or Generator and Customer* will be selling its electricity through the *spot market*.

Generating-Production units are always classified by reference to these ~~two~~ dimensions.

For examples of typical classifications, see Appendix A.

5.1.1. Producing and consuming energy

A production unit will be classified as a *generating unit, bidirectional unit or generating unit and load* depending on whether it consumes energy and if it can transition linearly from consuming to producing electricity and vice versa.

There are three types of classification on this dimension:

- (a) *Generating unit* – The *production unit* produces but does not consume electricity (except for auxiliary load).
- (b) *Bidirectional unit* – The *production unit* produces and consumes electricity and can transition linearly.
- (c) *Generating unit and load* – The *production unit* produces and consumes electricity, i.e., it is a *bidirectional unit*, and cannot transition linearly.

There are rules about the classification of *production units* in Chapter 2 of the NER but, in each case, classification is subject to AEMO's approval.

5.1.1.5.1.2. Participating in central dispatch

These matters are dealt with in the SO_OP_3705 Dispatch Procedure¹.

A *generating production unit* will be classified as a *scheduled generating unit, non-scheduled generating unit or semi-scheduled generating unit* depending on the extent to which it will be participating in central dispatch.

There are three types of classification on this dimension:

- (a) *Scheduled* – The *generating production unit* participates in central dispatch.

¹ Accessible via AEMO website https://www.aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/dispatch-procedure-consultation/soop3705-dispatch-procedure-change-marked-draft.pdf?la=en

~~(b) — Non-Scheduled — The production generating unit does not participate in central dispatch.~~

~~(c) — Semi-Scheduled — The production unit (a generating unit) will participate in central dispatch in specified circumstances.~~

~~There are rules about the classification of generating production units in Chapter 2 of the NER but, in each case, classification is subject to AEMO's approval.~~

5.1.2.5.1.3. Market participation

A Generator will be classified as a *Market Generator* or *Non-Market Generator* and an *Integrated Resource Provider* will be classified as an *Integrated Resource Provider*² or *Non-Market Integrated Resource Provider* depending on whether the electricity it produces will be sold through the *spot market*. There are two types of classification on this dimension:

- (a) Market – All electricity produced by the *Market Generator* or produced and consumed by the *Integrated Resource Provider* is sold or bought through the *spot market* at the applicable *spot prices*.
- (b) Non-Market – All electricity produced by the *Generator* or produced and consumed by the *Integrated Resource Provider* through the *connection point* is is consumed sold or bought by a *Market Customer* at that *connection point* through the *spot market*. ~~by a market load at the generating unit's connection point.~~

5.2. Classification as a scheduled generating unit

Clause 2.2.2 of the NER requires a *generating unit* with a *nameplate rating* of 30MW or more, or if part of a group of *generating production units* connected at a common *connection point* with a combined *nameplate rating* of 30MW or more to be classified as a *scheduled generating unit* (where its output is non-intermittent) unless AEMO approves a different classification.

AEMO is required by clause 2.2.2(b) of the NER to approve the classification of a *generating unit* with a *nameplate rating* of 30MW or more, or is part of a group of *production generating units* connected at a common *connection point* with a combined *nameplate rating* of 30MW or more, as a *scheduled generating unit* if AEMO is satisfied that the applicant has:

1. submitted data in accordance with schedule 3.1 of the NER; and
2. adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses.

AEMO has discretion under clause 2.2.2(b1) of the NER to approve classification as a *scheduled generating unit* for a *generating unit* with a *nameplate rating* of less than 30MW, or that is part of a group of *generation production units* connected at a common *connection point* with a combined *nameplate rating* of less than 30MW, on such terms and conditions as AEMO considers appropriate. If *generation production* of more than 5MW but less than 30MW is to be connected in a *network area* with existing or forecast congestion, consider applying to classify the *generating units* as *scheduled*. If classified as *non-scheduled generating units*, it is likely that system conditions will require the imposition of conditions under clauses 2.2.3(c) and 3.8.2(e) of the NER.

² An *Integrated Resource Provider* is a *Market Participant* unless it is a *Non-Market Integrated Resource Provider*.

5.3. Classification as a non-scheduled generating unit

Clause 2.2.3(a) of the NER requires a *generating unit* with a *nameplate rating* of less than 30 MW (not being part of a group of *generating production units* connected at a common connection point with a combined nameplate rating of 30 MW or greater) to be classified as a *non-scheduled generating unit* unless AEMO approves a different classification.

AEMO has discretion, and will accept an application, to classify a *generating unit* or group of *generating units* with a combined *nameplate rating* of less than 5 MW that is part of a group of production units with a combined nameplate rating of 30 MW or more connected at a common connection point or more as a non-scheduled generating unit. Applications will be the subject of technical assessment including impact to power system security.

AEMO is required by clause 2.2.3(b) of the NER to approve the classification of a *generating unit*, with a *nameplate rating* of greater than 30 MW or a *generating unit* that is part of a group of *generating production units* connected through a common *connection point* with a combined *nameplate rating* of 30 MW or greater, as a *non-scheduled generating unit* if AEMO is satisfied that the physical and technical attributes of the *generating unit* are such that it is not practicable for it to participate in *central dispatch*.

5.3.1. Physical and technical attributes

AEMO considers each application based on the ‘physical and technical attributes’ of the *generating unit* on its merits. For example, this requirement would typically be met where:

- (a) the *generating unit*’s fuel or energy source is dependent on an industrial process not related to the production of electricity; or
- (b) the *generating unit* is unable to vary its output in response to a *dispatch instruction* for some technical reason (other than fuel supply constraints).

~~5.3.2. Battery systems~~

~~5.3.4. The operating characteristics of battery systems referred to in section 3 are relevant in determining their appropriate classification as *generating units*.~~

~~5.3.5. If a battery system has a *nameplate rating* of at least 5MW but less than 30MW, consider applying to AEMO to classify the *generating units* as *scheduled*. If it is proposed that they be classified as *non-scheduled generating units*, their operating characteristics will require the imposition of conditions under clauses 2.2.3(c) and 3.8.2(e) of the NER.~~

~~5.3.6~~ 5.3.2. Conditional classification

If AEMO considers it is necessary for any reason, (including *power system security*) for a *Generator* or an *Integrated Resource Provider* to comply with some of the obligations of a *Scheduled Generator* ~~or *Semi-Scheduled Generator*~~ in respect of a *non-scheduled generating unit*, AEMO is empowered by clauses 2.2.3(c) and 3.8.2(e) of the NER to approve the classification on such terms and conditions as AEMO considers reasonably necessary.

Terms and conditions applicable to a *Scheduled Generator* that AEMO may impose in relevant circumstances include, without limitation:

- Provision of ST PASA information (such as expected plant availability and PASA availability) similar to that contemplated in clause 3.7.3(e) of the NER.
- Provision of MT PASA information (such as expected plant availability) similar to that contemplated in clause 3.7.2(d) of the NER.
- Submission of dispatch information (such as expected MW capability) similar to that contemplated in clause 3.8.2 of the NER.
- Compliance with dispatch instructions similar to that contemplated in clauses 4.9.2(b), 4.9.2(c) and 4.9.4(b) of the NER on reactive power dispatch.
- Provision of SCADA
- Provision of predispach and PASA information
- Provision of information for the purposes of an AEMO intervention event similar to that contemplated by clause 4.8.5A(d) of the NER

Terms and conditions applicable to a *Semi-Scheduled Generator* that AEMO may impose in relevant circumstances include, without limitation:

- Provision of an energy conversion model as contemplated in clause 2.2.7(c)(2) of the NER.

5.4. Classification as a scheduled bidirectional unit

Clause 2.2.2 of the NER requires a *bidirectional unit* that is capable of transitioning linearly between production and consumption with a *nameplate rating* of 5MW or more, or if part of a group of *bidirectional units* connected at a common *connection point* with a combined *nameplate rating* of 5MW or more, to be classified as a *scheduled bidirectional unit* unless AEMO approves a different classification.

AEMO is required by clause 2.2.2(b) of the NER to approve the classification of a *bidirectional unit* with a *nameplate rating* of 5MW or more, or is part of a group of *bidirectional units* connected at a common *connection point* with a combined *nameplate rating* of 5MW or more, as a *scheduled bidirectional unit* if AEMO is satisfied that the applicant has:

1. submitted data in accordance with schedule 3.1 of the NER; and
2. adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses.

3. is capable of transitioning linearly from consuming to producing electricity and vice versa

AEMO has discretion under clause 2.2.2(b1) of the NER to approve classification as a *scheduled bidirectional unit* for a *bidirectional unit* with a *nameplate rating* of less than 5MW for production or consumption, or that is part of a group of *bidirectional units* connected at a common *connection point* with a combined *nameplate rating* for production or consumption of less than 5MW, on such terms and conditions as AEMO considers appropriate.

5.4.5.5. Classification as a scheduled generating unit and a scheduled load

Clause 2.2.2 of the NER requires a *bidirectional unit* that is not capable of transitioning linearly between production and consumption with a *nameplate rating* of 5MW or more, or if part of a group of *bidirectional units connected* at a common *connection point* with a combined *nameplate rating* of 5MW or more, to be classified as a *scheduled generating unit and a scheduled load* unless AEMO approves a different classification.

AEMO is required by clause 2.2.2(b2) of the NER to approve the classification of a *bidirectional unit* that is not capable of transitioning linearly between production and consumption with a *nameplate rating* of 5MW or more, or is part of a group of *bidirectional units connected* at a common *connection point* with a combined *nameplate rating* of 5MW or more, as a *scheduled bidirectional unit* if AEMO is satisfied that the applicant has:

1. submitted data in accordance with schedule 3.1 of the NER; and
2. adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses; and-
3. in the case of a *bidirectional unit*, the unit is capable of transitioning linearly from consuming to producing electricity and vice versa.

AEMO has no discretion under the NER to classify a *bidirectional unit* that cannot transition linearly between production and consumption with a *nameplate rating* of less than 5MW, or if part of a group of *bidirectional units connected* at a common *connection point* with a combined *nameplate rating* of less than 5 MW, as a *scheduled generating unit and a scheduled load*.

5.6. Classification as a non-scheduled bidirectional unit

Clause 2.2.3(a1) of the NER requires a *bidirectional unit* with a *nameplate rating* of less than 5MW (not being part of a group of *bidirectional units connected* at a common *connection point* with a combined *nameplate rating* of 5MW or more) to be classified as a *non-scheduled bidirectional unit* unless AEMO approves a different classification.

AEMO is required by clause 2.2.3(b) of the NER to approve the classification of a *bidirectional unit*, with a *nameplate rating* of 5MW or greater or a *bidirectional unit* that is part of a group of *bidirectional units* connected through a common *connection point* with a combined *nameplate rating* of 30 MW or greater, as a *non-scheduled bidirectional unit* if AEMO is satisfied that the physical and technical attributes of the *bidirectional unit* are such that it is not practicable for it to participate in *central dispatch*.

5.6.1. Physical and technical attributes

AEMO considers each application based on the ‘physical and technical attributes’ of the *bidirectional unit* on its merits. For example, this requirement would typically be met where:

- (a) the *bidirectional unit*’s fuel or energy source is dependent on an industrial process not related to the production of electricity; or
- (b) the *bidirectional unit* is unable to vary its output in response to a *dispatch instruction* for some technical reason (other than fuel supply constraints).

5.6.2. Conditional classification

If AEMO considers it is necessary for any reason, (including power system security) for an Integrated Resource Provider to comply with some of the obligations of a Scheduled Integrated Resource Provider or Semi-Scheduled Generator in respect of a non-scheduled bidirectional unit, AEMO is empowered by clauses 2.2.3(c) and 3.8.2(e) of the NER to approve the classification on such terms and conditions as AEMO considers reasonably necessary.

Terms and conditions applicable to a Scheduled Integrated Resource Provider that AEMO may impose in relevant circumstances include, without limitation:

- Provision of ST PASA information (such as expected plant availability and PASA availability) similar to that contemplated in clause 3.7.3(e) of the NER.
- Provision of MT PASA information (such as expected plant availability) similar to that contemplated in clause 3.7.2(d) of the NER.
- Submission of dispatch information (such as expected MW capability) similar to that contemplated in clause 3.8.2 of the NER.
- Compliance with dispatch instructions similar to that contemplated in clauses 4.9.2(b), 4.9.2(c) and 4.9.4(b) of the NER on reactive power dispatch.
- Provision of SCADA
- Provision of predispatch and PASA information
- Provision of information for the purposes of an AEMO intervention event similar to that contemplated by clause 4.8.5A of the NER.

Terms and conditions applicable to a Semi-Scheduled Generator that AEMO may impose in relevant circumstances include, without limitation:

- Provision of an energy conversion model as contemplated in clause 2.2.7(c)(2) of the NER.

5.5.5.7. Classification as a semi-scheduled generating unit

Clause 2.2.7 of the NER requires a *generating unit* with a *nameplate rating* of 30MW or more, or one of a group of ~~generating~~ *generating production units* connected at a common *connection point* with a combined *nameplate rating* of 30MW or more, or if part of a group of production units connected at a common connection point with a combined nameplate rating of 30MW or more, to be classified as a *semi-scheduled generating unit* where its output is *intermittent*, unless AEMO approves a different classification.

AEMO will approve classification as a *semi-scheduled generating unit* if AEMO is satisfied that the applicant has:

- submitted data in accordance with Schedule 3.1 of the NER;
- submitted an *energy conversion model* containing the information described in the Energy Conversion Model Guidelines; and
- adequate communications and telemetry to support the issuing of *dispatch instructions* and the audit of responses.

AEMO has discretion under clause 2.2.7(e) of the NER to approve classification as a *semi-scheduled generating unit* for a *generating unit* with a *nameplate rating* of less than 30MW, or

that is part of a group of *generating units connected* at a common *connection point* with a combined *nameplate rating* of less than 30MW, on such terms and conditions as AEMO considers appropriate. If *intermittent generation production* of at least 5MW but less than 30MW is to be connected in a *network area* with existing or forecast congestion, consider applying to classify the *generating units* as *semi-scheduled*. If classified as *non-scheduled generating units*, it is likely that system conditions will require the imposition of conditions under clauses 2.2.3(c) and 3.8.2(e) of the NER.

5.6.5.8. Classification of coupled production units

A coupled production unit is one with separate plant for the production of electricity, each of a different type capable of separate operation, that share equipment, e.g., an inverter, essential to the functioning of each. The plant is typically bidirectional and intermittent in type.

Where a coupled production unit, or one of a group of coupled production units, connected at a common connection point with a nameplate rating of 5 MW or more, meet the criteria set out in this Guide and the NER a person may apply to classify:

- the bidirectional plant as a scheduled bidirectional unit and the intermittent plant as a semi-scheduled generating unit
- the bidirectional plant as a scheduled bidirectional unit and the intermittent plant as a non-scheduled generating unit
- the bidirectional plant as a non-scheduled bidirectional unit and the intermittent plant as a semi-scheduled generating unit
- the bidirectional plant as a non-scheduled bidirectional unit and the intermittent plant as a non-scheduled generating unit
- all plant as a scheduled bidirectional unit
- all plant as a semi-scheduled generating unit.

AEMO will only consider an application for classification of a coupled production unit with a nameplate rating of less than 5 MW as either a scheduled bidirectional unit or a non-scheduled bidirectional unit. Multiple classification requests will not be accepted.

Clause 2.2.7(c1) of the NER provides AEMO discretion to approve a request for classification as a semi-scheduled generating unit if it is satisfied that the output of the generating unit is intermittent, and AEMO is satisfied:

- (a) the output of some or all generating plant comprised in the bidirectional unit is intermittent
- (b) except for auxiliary load, the bidirectional unit will not consume electricity delivered from the national grid at the connection point for the bidirectional unit
- (c) the applicant has:
 - (i) submitted data in accordance with Schedule 3.1 of the NER;
 - (ii) submitted an energy conversion model; and
 - (iii) adequate communications and telemetry to support the issuing of dispatch instructions and the audit of responses.

Clause 2.2.7(c3) of the NER restricts the maximum production for a coupled production unit approved for classification as a semi-scheduled generating unit to that part of the coupled production unit that is intermittent.

AEMO will consider an application for classification of a coupled production unit as a semi-scheduled generating unit under the following circumstances:

- the non-intermittent capacity is less than 5 MW
- the non-intermittent capacity is less than 2.5% of the intermittent capacity, except in the case where the participant commits to providing a self-forecast³ for dispatch purposes
- DC SCADA feeds are provided for the intermittent capacity and the non-intermittent capacity (in addition to AC output feed).

~~Clause 2.2.7(i) of the NER requires AEMO to approve the classification of one or more generating units as one semi-scheduled generating unit provided:~~

~~they are connected at a single site with:~~

~~the same intra-regional loss factor; or~~

~~if two intra-regional loss factors are determined for the site under clause 3.6.2(b)(2), the same two intra-regional loss factors;~~

~~each has a capacity of not more than 6MW; and~~

~~they have similar energy conversion models,~~

5.7.5.9. Classification as a market generating production unit

Clause 2.2.4(a) of the NER requires that a *generating unit* must be classified as a *market generating unit* unless AEMO approves its classification as a *non-market generating unit* under clause 2.2.5(a).

Clause 2.2.5A(a) of the NER requires that a *bidirectional unit* must be classified as a *market bidirectional unit* unless AEMO approves its classification as a *non-market bidirectional unit* under clause 2.2.5B(a).

5.8.5.10. Classification as a non-market production generating unit

Clause 2.2.5(a1)(a) of the NER requires that a *generating unit* must be classified as a *non-market* that a *generating generating unit* if:

(a) the generating unit is classified as a non-scheduled generating unit; and

(b) a *Market Customer* has classified the connection point for the *generating unit* as one of its *market connection points*.

~~whose entire output is consumed by a *market load* at the same *connection point*, at which there is not expected to be any *sent out generation*, must be classified as a *non-market generating unit*.~~ Clause 2.2.5B(b) of the NER requires that a *bidirectional unit* must be classified as a *non-market bidirectional unit* if:

³ <https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/operational-forecasting/solar-and-wind-energy-forecasting/participant-forecasting>

- a) the bidirectional unit is classified as a non-scheduled bidirectional unit; and
- a)b)a Market Customer has classified the connection point for the bidirectional unit as one of its market connection points.
- ~~6. Consumed by a market load~~
- ~~8. AEMO will be satisfied that the entire output of a generating unit is 'consumed by a market load' if the Market Customer who is financially responsible for the connection point (whether or not that person is also the applicant) demonstrates to AEMO that, at all times under normal conditions, there is no export of electricity from the relevant connection point. That is, there must be a net consumption by the Market Customer at the connection point at all times under normal conditions.~~
- ~~9. For the purposes of this requirement, 'normal conditions' means periods of operation without load shedding or other abnormal events that would cause a reduction in the expected demand. This is intended to cover an unexpected event that causes the market load to fall below the output of the relevant generating unit. Flows of electricity to the network under these infrequent and unusual circumstances can be tolerated without requiring the Generator to be a Market Generator.~~
- ~~10. At the same connection point~~
- ~~12. The expression 'at the same connection point' means that the market load and the generating unit effectively need to be connected in such a way that the metering installation for the common connection point registers the net energy flow of the market load and the non-market generation. Transmission network or distribution network equipment cannot be used to connect the generating unit to the market load.~~

~~13.6. Market generators' consumption limits registering as market customers~~

~~13.1.6.1. Auxiliary load~~

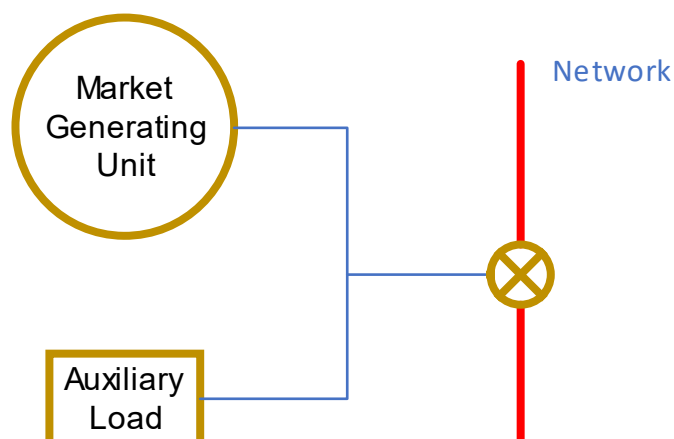
Clause 2.2.4(d) of the NER states that a *Market Generator* must purchase all electricity supplied through the *national grid* to the *Market Generator* at its *connection point* from the *spot market* and pay AEMO for electricity supplied at that *connection point* in accordance with Chapter 3 of the NER.

When read in conjunction with clause 2.2.4(b), AEMO interprets this to mean that a person may choose to be registered as a Market Generator in preference to an need not be registered as a Market Customer/Integrated Resource Provider where:

- (a) its purchases of electricity from the *spot market* are made through the same *connection point* through which it exports electricity; and
- (b) the electricity is consumed primarily as *auxiliary load*, being electricity consumed by equipment such as exciters, conveyors, mills/mills, or cooling pumps, and by buildings adjacent to a *power station* that service the *power station*.

This may be illustrated by way of example:

Figure 1 Single point of connection



In Figure 1, ~~a person may choose to register as there would be no requirement for the Market Generator or an Integrated Resource Provider to be registered as a Market Customer.~~

~~13.2. The Legacy classifications~~

~~There currently exist a number of classifications that AEMO no longer considers to be appropriate.~~

~~In the future, the only type of situation where a Market Generator can purchase electricity from the national grid, without also being required to register as a Market Customer, is that described in section 6.1.~~

~~13.3. Battery systems~~

~~The electricity consumed to charge a battery system intended for subsequent energy production is a primary input and ordinarily treated as a market load. However, where a battery system has a nameplate rating of less than 5MW, AEMO will consider the electricity consumed to charge the battery system as auxiliary load. In these circumstances, separate 'market load' classification is not required for the battery system.⁴~~

~~To support AEMO's ability to maintain or restore power system security, the electricity generated or consumed by a battery system of 5MW or more will need to be capable of being dispatched by AEMO. To do this, AEMO will require a Market Generator to be registered as a Market Customer as well, and the load represented by the battery system's consumption will need to be classified as a scheduled load.~~

~~Exceptions may be considered for a battery system that is part of a generating system comprising another type of generation, in circumstances where the battery will never be charging from the grid. AEMO will consider a proposal that does not require registration as a Market Customer, provided that appropriate arrangements are put in place for the charging~~

⁴ ~~Unless a Market Customer is financially responsible for the small battery system's connection point, in which case the Market Customer would classify it as market load rather than a generating unit.~~

~~activity to be dispatched through central dispatch for reasons of power system security and adequate operation.~~

Appendix A. Examples of classifications

Description	Typical classification
500kW solar panel and AC inverter	Exempt
1MW backup diesel <i>generating unit</i> in a high-rise high-rise building	Exempt
4MW battery storage facility	Exempt
8MW battery storage facility	Scheduled Generator & Market Generator Scheduled bidirectional unit and Market bidirectional unit
10MW thermal <i>power station</i> or wind farm whose entire output is consumed by a <i>market load</i> at the same <i>connection point</i>	Non-scheduled generating unit Scheduled Generator and Non-market generating unit Market Generator
10MW thermal <i>power station</i> supply for an electrically isolated country town	Exempt
20MW battery storage facility within a <i>power station</i>	Scheduled bidirectional unit and Market bidirectional unit Scheduled Generator & Market Generator
20MW solar farm connecting in <i>network</i> location with existing/forecast congestion <i>connected</i> directly to a <i>transmission system</i>	Semi-scheduled generating unit and Market generating unit Semi-Scheduled Generator & Market Generator
<u>6 MW battery storage and 15 MW windfarm at a common connection point</u>	Scheduled bidirectional unit and Market bidirectional unit Non-scheduled generating unit and Market generating unit
<u>4 MW battery storage and 28 MW wind farm coupled production units sharing inverters with no production exported to the <i>network</i>.</u>	Non-scheduled bidirectional unit and Market bidirectional unit Semi-scheduled generating unit and Market generating unit OR Semi-scheduled generating unit and Market generating unit
<u>4 MW diesel generator and 28 MW battery storage sharing inverters sharing a common <i>connection point</i> to the <i>network</i>.</u>	Non-scheduled generating unit and Market generating unit Scheduled bidirectional unit and Market bidirectional unit
<u>20 MW battery storage and 20 MW solar panels in <i>coupled production units</i> sharing inverters</u>	Scheduled bidirectional unit and Market bidirectional unit Semi-scheduled generating unit and Market generating unit
45MW <i>generating unit</i> using 10MW locally within its own site	Scheduled generating unit and Market generating unit Scheduled Generator & Market Generator
50MW co- generation production plant or run of river hydro station	Scheduled generating unit and Market generating unit Scheduled Generator & Market Generator
150MW wind farm with all output sold to the market	Semi-scheduled generating unit and Market generating unit Semi-Scheduled Generator & Market Generator
200MW brown coal <i>generating unit</i> with a 60% minimum load capability	Scheduled generating unit and Market generating unit Scheduled Generator & Market Generator
200MW power station connected to a transmission system	Scheduled generating unit and Market generating unit Scheduled Generator & Market Generator
<u>250MW pumped hydro station</u>	Scheduled bidirectional unit and Market bidirectional unit

