

# Guide to Registration Exemptions and Production Unit Classifications

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#### Purpose

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

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# **Figures**

Figure 1 Single point of connection ..... Error! Bookmark not defined.



#### 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 Registration Exemptions and Production Unit Classifications (Guide):

- <u>-il</u>s *published* for the assistance of potential applicants for registration in the National Electricity Market (**NEM**).
- <u>and fF</u>orms part of the *registration information resources* and guidelines <u>which AEMO</u> maintains consistent with clause 2.1.3(a) of the National Electricity Rules (**NER**).
- <u>It-Detailsdetails:</u>
  - Tthe process for applying for an exemption from the requirement to register as a Generator or Integrated Resource Provider.

  - <u>Tthe matters which AEMO will take into account</u> <u>the criteria for production units that</u> are eligible for a standing exemption from registration and also how AEMO will<u>when in</u> assessing applications for classification of production units, where an exemption does not apply...
  - <u>Tthe circumstances under which AEMO will impose terms and conditions of</u> classification or exemption, as well as <u>-and-the nature of theese terms and conditions</u>.

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.

The terms which are defined in the NEL or the NER have the same meanings in this Guide, unless otherwise specified. These 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>BDU</u>	Bidirectional Unit
DC	Direct Current
EPC	Engineering, procurement, and construction
<u>GS</u>	Generating System
<u>GU</u>	Generating Unit
IRP	Integrated Resource Provider
IRS	Integrated Resource System
MT PASA	Medium term PASA



Term	Definition
MVA	Megavolt ampere
MW	Megawatt
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules
NSP	Network Service Provider
PASA	Projected Assessment of System Adequacy
<u>PU</u>	Production Unit
SCADA	Supervisory Control And Data Acquisition
ST PASA	Short term PASA

#### 1.2.2. Determining nameplate rating

For the purpose of this 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 for asynchronous production units; or
- machine rating for synchronous production units,

in MVA to the rating in MW by applying a conversion factor of 1.

The nameplate rating of a coupled production unit is determined by the nameplate rating of the shared equipment.

<u>The nameplate rating for of a BDU is measured separately for output and consumption. The</u> <u>nameplate rating threshold in the NER will be met or exceeded by -and determined by the</u> <u>maximum of the BDU if it is met or exceed with respect to either the output or nameplate rating</u> for consumption <u>nameplate rating</u> or production in MW of the <u>unitBDU (or both).</u>

The nameplate rating of the GS or the IRS is the aggregate of the combined nameplate ratings of the PUs which compriseing the GS or the IRS.

#### 1.2.2.1.2.3. 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 <u>or an IRP</u>	https://aemo.com.au/-/media/files/electricity/nem/participant_information/application-forms- and-supporting-documentation/application-for-registration-exemptionnem generator.docx?la=en
Application for Registration as a Generator <u>or an IRP</u> 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



Title	Location
NEM Generator or IRP	https://aemo.com.au/-/media/files/electricity/nem/participant_information/registration/
Registration Guide	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 <u>supporthub@aemo.com.au</u>, or phone 1300 236 600.

# 2. Exemptions from Registration as a Generator or an IRP

# 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 under clause 2.1A.1 to register -for the GS or IRS in respect of certain generating systemsGS or integrated resource systemsIRS 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.

## 2.2. What exemption means

A person <u>who is</u> exempted on the basis of the characteristics of the *GS* or *IRS* is not permitted to participate directly in the *market* or have its <u>*PUs*</u> *dispatched* by AEMO<u>other than as *ancillary*</u> <u>service units</u> where applicable, but may be required to comply with certain technical requirements in relation to their *PUs* and any conditions placed on the exemption by AEMO.

Any person who is eligible for exemption but wishes to participate directly in the *wholesale* market and to classify a PU must apply to AEMO for registration as a <u>n IRP - Small Resource</u> Aggregator Market Generator or as an IRP as relevant. Market Customer...<sup>1</sup>

# 2.3. Exemption categories

Exemptions from the requirement to register as a *Generator* or an *IRP* may be granted based either on the characteristics of the *GS* or *IRS* (nature, size, type and operation), or on the registration of an *intermediary* as the *Generator* or *IRP*, as follows:

- (a) Standing exemptions are available to a person who owns, operates or controls a GS or IRS with a nameplate rating of less than 5MW when fully connected to a transmission <u>system</u> or distribution system.
- (b) <u>An Aapplications for exemption may be made by a persons who owns</u>, operates or controls a GS or IRS (other than an IRS which comprises or includes a BDU with a <u>nameplate rating of 5MW or greater</u>) with a nameplate rating of less than 30MW, which is



are not eligible for the standing exemption and in relation to IRS, doprovided it does not comprise or include a BU with a nameplate rating of 5MW or greater.

- (c) <u>An Aapplications for exemption may be made by a persons who owns</u>, operates or controls <u>a</u> *GS* or *IRS* (other than those an IRS which that comprises or includes a B<u>D</u>U with a nameplate rating of 5MW or greater) with a nameplate rating over of greater than 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 *GS* or *IRS* in exceptional circumstances at AEMO's absolute discretion.
- (d) <u>A\_Ttemporary notifiable exemptions may be available to a persons who owns</u>, operates or controls a GS or IRS to which no other exemptions apply, during initial testing and precommissioning where the aggregate nameplate rating of the connected PUs is less than 5MW at any time.
- (e) <u>An Aapplications</u> for exemption must be made by <u>a persons</u> who owns, operates, or controls a GS or an IRS, but <u>have has</u> proposed an eligible person (an *intermediary*) to be registered as a *Generator* or IRP for that GS or as an IRP for that IRS on their the <u>person's</u> 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 *IRP* 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 *IRP* in the form prescribed by AEMO.
- 2. AEMO will advise the applicant of any further information or clarification which is required into\_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 *IRP*.
- 5. If AEMO is not satisfied that an applicant meets the eligibility requirements set out in this Guide, then AEMO -it-will provide a reason for that determination.



# 3. Exemptions based on system characteristics

# 3.1. Determining nameplate rating [moved to new 1.1.2]

For the purpose of this section 3 of the <u>G</u>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 <u>production</u> 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 <u>production</u> unit*.

In circumstances where a *generating <u>production</u> 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 <u>production</u> unit* is determined by the *nameplate rating* of the shared equipment.

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.

The nameplate rating of the generating system or the integrated resource system is the aggregate of the combined nameplate ratings of the generating <u>production</u> units comprising the generating system<u>or the integrated resource system</u>.

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.

# 3.1. No exemption for <u>BDU</u> 5MW or <u>greater</u>

AEMO therefore requires all <u>a</u> persons who owns, operates or controls <u>battery systems a BDUs</u> with a *nameplate rating* of 5MW or greater to be registered as <u>an</u> <u>Generators IRPs</u>. This <u>requirement</u> applies to persons with <u>a</u> standalone <u>battery systems BDUs</u>, as well as those <u>a</u> <u>BDU</u> that are is proposed to be installed as part of a larger <u>generating systemIRS</u> with <u>a</u> non-battery <u>BDU</u> units.

# 3.2. Exemption at the connection point

- (a) Subject to paragraph (b), an application for exemption from registration as a *Generator* or an *IRP* must be made with reference to the *GS*'s or the *IRS*'s connection point.
- (b) Where the GS or IRS is connected to a distribution system or transmission system through an embedded network at a parent connection point and the GS or IRS has a child connection point, an exemption application is made with reference to the GS's or the IRS's child connection point.
- (c) In circumstances where a GS or an IRS 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 GS's or the *IRS's connection point* is considered to be the *embedded network parent connection point*.

# 3.3. Standing exemptions

#### 3.3.1. Automatic exemptions

Most GS and IRS with a total *nameplate rating* of less than 5MW when fully connected to a *transmission* <u>system</u> or *distribution system* are unlikely to cause a material degradation in the quality of *supply* to other *Network Users*.

Subject to section 3.3.2, 3.3.2any person who engages in the activity of owning, controlling, or operating a *GS* or *IRS* with a total *nameplate rating* of less than 5MW will be automatically exempt from the requirement to register as a *Generator* or an *IRP* in relation to that activity, where both of conditions (a) and (b) apply:

- (a) either:
  - (i) the GS or IRS is not capable of exporting to a *transmission system* or *distribution system* in excess of 5 MW; or
  - (ii) the GS or IRS has no capability to synchronise to a *distribution system* or *transmission system*; and
- (b) where there is any potential for the GS or *IRS* to export *energy*, either:
  - (i) the *sent out generation* 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) the connection *point* is classified as a *market connection point* by an *IRP* (in its capacity as a *Small Resource Aggregator*).

#### 3.3.2. Automatic exemption in embedded networks

Where the *GS* and *IRS* 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 *GS* and *IRS* will be automatically exempt from a requirement to register as a *Generator* and an *IRP*. The exemption of each *GS* and *IRS* is subject to the conditions set out in section 3.3.1 3.3.1(a) and (b) above.

#### 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 3.3.1 or 3.3.23.3.13.3.2to submit to <u>AEMO</u> an application for exemption from registration as a *Generator* or an *IRP* to <u>AEMO</u>. Any person in doubt as to whether their *GS* or *IRS* can meet the criteria detailed in section 3.3.1 or 3.3.2 should submit such an application.



# 3.4. Applications for exemption – systems less than 30 MW that are not eligible for the standing exemption

#### 3.4.1. Generally

There is no standing exemption for a person who owns, operates or controls a *GS* or *IRS* with a total *nameplate rating* of 5MW or greater.

#### 3.4.2. Systems without significant BDUs

An application for exemption can be made by a person who owns, <u>operates or</u> controls <del>, or</del> <del>operates</del> a *GS* or an *IRS* with a total *nameplate rating* of less than 30 MW where:

- (a) the person is not eligible for a standing exemption, and
- (b) the *IRS* does not comprise or include a *BDU* with a *nameplate rating* of 5 MW or greater.

A person <u>who</u> wish<u>esing</u> to be exempt from the requirement to register as a *Generator* or an *IRP* on this basis, must apply to AEMO by submitting an application for Exemption exemption from Registration registration as a *Generator* or an *IRP*.

AEMO may grant an exemption in the circumstances described below and subject to conditions described in section 3.4.4 3.4.4below.

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

- (c) either:
  - (i) the *GS* or *IRS* 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 GS or IRS is connected to a distribution system or transmission system through an embedded network, the expected combined export at the parent connection point of all GS and IRS 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 *IRP* for the *GS* or as an *IRP* for the *IRS*,

and the operation of the GS or IRS will not adversely impact power system security; and

- (d) where there is any potential for the GS or IRS to export energy, either:
  - (i) the sent out generation 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
  - each of the <u>connection point</u> is classified as a market connection point by an IRP (in its capacity as a Small <u>Resource</u> Aggregator).



#### 3.4.3. Compliance with technical requirements

<u>A Ppersons who is</u> eligible to apply for exemption from the requirement to register as a *Generator* or an *IRP* under section 3.4.23.4.2 are is not automatically exempt from the requirement to comply with the technical requirements in Schedule 5.2 of the NER. <u>HenceAccordingly</u>, when applying for an exemption, <u>the</u> applicants will also need to provide to AEMO:

- (a) a copy of the *performance standards* <u>which are</u> agreed with <u>their the person's</u> connecting NSP; or
- (b) a letter from their the person's connecting NSP, dated within 12 months of the application's submission date, stating that their the person's GS or IRS is intended for use in a manner which 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 which the NSP used to assess the GS or IRS and results from the assessment conducted, then AEMO may seek this information from the NSP directly. This information may be set out in a separate planning report.

#### 3.4.4. Exemption conditions

In accordance with clause 2.1A.2(a) of the NER-and the registration information resource and guidelines, AEMO may exempt a person that who applies for an exemption under section 3.4.2, subject to such conditions as AEMO deems appropriate. AEMO will impose conditions where AEMO considers it reasonably necessary to do so, including where the condition 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 IRP performance standards
- That no sent out generation occurs
- That any sent out generation is purchased in its entirety by a Local Retailer or *CustomerMarket Participant* at the same connection point or each of the GS's or IRS's <u>connection point</u> is classified as a market <u>connection point</u> generating unit or a small market <u>bidirectional unit</u> by an IRP or a Market CustomerMarket(in its capacity as a -Small Generation Resource 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 production units at the facility
- No material change in operation that increases sent out generation
- The annual provision of information regarding sent out generation



# 3.5. Applications for exemption – systems 30 MW or above

#### 3.5.1. Generally

There is no standing exemption for a person who owns, operates or controls a *GS* or *IRS* with a *nameplate rating* of 30MW or greater.

#### 3.5.2. Systems providing unscheduled reserve

Any <u>A</u> person who owns, controls, or operates a GS or *IRS* <u>-(other than those that comprise or include a</u> *BDU* with a nameplate rating of 5 MW or greater) a battery system, with a total nameplate rating of 30MW or above may apply to AEMO for an exemption by submitting an A<u>a</u>pplication for <u>e</u>Exemption from <u>r</u>Registration as a *Generator* or *IRP*. - if the sole purpose of *connecting* the GS or *IRS* to a *network* is for the provision of *unscheduled reserve* in accordance with a *reserve contract*.

AEMO will not grant an exemption for new GS or IRS with a total *nameplate rating* of 30MW or <u>moregreater</u>, other than for *unscheduled reserve* purposes.

AEMO may consider an application for an existing *GS* or *IRS* 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 GS or IRS (other than those that comprise or include a BDU with a nameplate rating of 5MW or greater) 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.

Subject to the NER, AEMO may grant an exemption in this category in its absolute discretion or subject to conditions it which AEMO considers appropriate, as outlined in section 3.5.4 below.

#### 3.5.3. Compliance with technical requirements

<u>A Ppersons who is eligible for exemption from the requirement to register as a *Generator* or *IRP* under section 3.5.23.5.2 are is not automatically exempt from the requirement to comply with the technical requirements in Schedule 5.2 of the NER. <u>HenceAccordingly</u>, when applying for an exemption, <u>the applicants will also need to provide to AEMO</u>:</u>

- (a) a copy of the *performance standards* agreed with their the person's connecting NSP; or
- (b) a letter from their the person's connecting NSP, dated within 12 months of the application's submission date, stating that their the person's GS or IRS 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 GS or IRS 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. Exemption conditions

In accordance with clause 2.<u>1A.2(a) of the NER and the *registration information resource and guidelines*, AEMO may exempt a person that applies for an exemption under section 3.5.2, subject to such conditions as AEMO deems appropriate. AEMO will impose conditions where</u>



AEMO considers it reasonably necessary to do so, including where it-the condition 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 IRP performance standards
- That no sent out generation occurs
- That any *sent out generation* is purchased in its entirety by a *Local Retailer* or *Customer<u>Market Participant</u>* 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 PU 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.

# 3.6. Notifiable exemptions for pre-commissioning work

This is a temporary exemption category. It may be available to <u>a persons</u> who own<u>s</u>, operate<u>s</u>, or control<u>s</u> a *GS* or *IRS* for which <u>they are the person is</u> required, and <u>has have</u> applied, to register as a *Generator or IRP*, but <u>who</u> wish<u>es</u> to perform pre-commissioning work before <u>the person's</u> registration is complete. A notifiable exemption does not permit hold-point testing of a *GS* or an *IRS*.

#### 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 *PU* simultaneously *connected* to a *transmission* <u>system</u> 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 3.6.3; and
- (d) commencement and expiry of the exemption in accordance with section 3.6.43.6.4.

#### <u>3.6.2.</u> Exceptional circumstances – 5 MW or over greater connected

In circumstances where a single <u>GU production unit</u> 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 3.6.33.6.4.3.6.3; and
- (d) commencement and expiry of the exemption in accordance with section 3.6.43.6.4.3.6.4

#### 3.6.2.3.6.3. Notifiable exemption conditions

Notifiable exemptions confirmed by AEMO remain valid only for the relevant period specified in accordance with section 3.6.4 3.6.4.3.6.4, and only for so long as the following conditions continue to be met:

- (a) An agreed set of *performance standards* for the GS or IRS must be in place;
- (b) AEMO must be notified at least one *business day* prior to the commencement of precommissioning work;
- (c) a SCADA system that continuously monitors the output of the *connected* part of the *GS* or *IRS* must be installed and operational at all times when any part of the *GS* or *IRS* is being tested;
- (d) the maximum combined *nameplate rating* of all *PUs* <u>which are</u> 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 <u>that</u> the highest combined *nameplate rating* of the *PUs* which are 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 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 *PUs*, including storage and removal of keys from tagged out lockboxes, with no unauthorised access to *PUs*; and
  - (v) a communication plan to ensure notification of NSP and AEMO prior to any switching or changes in *PU* status<sub>i</sub>.
- (f) AEMO and the connecting NSP must be notified prior to the *connection* or *disconnection* of any *PU*; and
- (g) the notified arrangements for the purchase of sent out generation must remain in effect.

Non-compliance with any of these conditions, or operation of any part of the *connected GS* or *IRS* outside the period in section 3.6.43.6.43.6.4, immediately invalidates the exemption. As a result, <u>you a person</u> may have contravened section 11 of the NEL.



#### 3.6.3.3.6.4. Duration of notifiable exemption

A notifiable exemption commences on the date <u>which is</u> specified by AEMO in its confirmation of the notifiable exemption. <u>The exemption</u>, 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 *IRP* in respect of the *generating system*, or as an *IRP* in respect of the *IRS*.

# 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 *IRP* 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 *IRP*; and
- (b) the proposed *intermediary* must submit an application for registration as a *Generator* or *IRP* 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 GS or IRS by providing relevant evidence, such as a *connection agreement*, joint venture agreement or the like.

(Clause 2.9.3(b) and (c) of the NER provides further information).

If more than one person owns, operates or controls a *GS* or *IRS*, they then the persons must appoint one of them (or another person who is entitled to register as a *Generator* or *IRP*) as the *intermediary*.<u>-and tT</u>he rest of the persons must apply for exemption.

A person <u>who is</u> appointed as an *intermediary* must meet the requirements for registration as a *Generator* or *IRP<u>or Generator and Customer</u>*(whichever is applicable) in its own right. The *intermediary* must either own, operate or control the relevant *GS or IRS*, or must otherwise source electricity from it.



Where the ownership of *PUs* in a *GS* or *IRS* is split, that is, different persons own, control, or operate different *PUs*, each person must apply separately for registration in respect of the activities <u>which</u> they carry out, or seek an exemption, as appropriate.

# 4.3. Revocations

An exempted person (being an 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 *IRP* (whichever is applicable) has been submitted to AEMO<u>and is</u> approved to take effect at the same time as the revocation takes effect; or
- (b) the exempted person(s) has submitted an <u>Application application</u> for <u>Registration</u> registration as a *Generator*, or *IRP* or <u>Generator and Customer</u> (whichever is applicable),

to take effect at the same time as the revocation takes effect.

# 5. Classification of production units

# <u>5.1.</u> Generally

An applicant for registration as a Generator<sub> $\Sigma$ </sub> or *IRP* <u>or Generator and Customer (whichever is</u> <u>applicable)</u> must classify each of its *PUs* in the categories contemplated by clause 2.2 of the NER. <u>The Cc</u>lassifications require AEMO's prior approval.

<u>The C</u>classification of *PUs* is by reference to whether a *PU* will participate in *central dispatch*, and whether the *Generator* or the *IRP* <u>or Generator and Customer</u> will be selling its electricity through the *spot market*.

PUs are always classified by reference to these two dimensions.

For examples of typical classifications, see Appendix A.

#### 5.1.1. Participating in central dispatch

<u>A PU will be classified depending if it is a GU or BDU and on the extent to which it will be participating in central dispatch.</u>

On this dimension there are:

- Tthree types of classification for GUs:

- o scheduled GU;;
- non-scheduled GU;, or
- o semi-scheduled GU.
- Five types of classification for BDU:



- o scheduled BDU;
- o non-scheduled BDU;
- o a scheduled GU and a scheduled load;
- two separately classified *plant*, one being a *semi-scheduled GU* and the other a *scheduled BDU* (that is also a *coupled production unit*); or
- o semi-scheduled GU (that is also a coupled production unit).

Chapter 2 of the NER sets out the rules in respect of the classification of *PUs*. In each case, a classification is subject to AEMO's approval.

#### 5.1.2. Market participation

(a) Market Participants

#### Under NER Chapter 10:

- (i) A Market Generator is a Generator or IRP in relation to GUs it has classified as market GUs in accordance with Chapter 2.
- (ii) An *IRP* other than a *Non-Market IRP* is a *Market Participant*. A *Non-Market IRP* is an *IRP* who has classified a *BDU* as a *non-market BDU* in accordance with Chapter 2. A *market BDU* is a *BDU* that has been classified as a *market BDU* in accordance with Chapter 2.

#### These Market Participants must:

- (iii) Sell all sent out generation from their market units through the spot market and accept payments from AEMO for sent out generation in accordance with Chapter 3 (clauses 2.2.4(c), 2.2.5A(b)).
- (iv) Purchase all electricity supplied through the *national grid* to the *connection points* for each of their market units from the *spot market* and make payments to AEMO for such electricity in accordance with Chapter 3 (clauses 2.2.4(d), 2.2.5A(c)).
- (b) Non-Market Participants

Under NER Chapter 10:

- (i) A Non-Market Generator is a Generator or IRP who has classified a GU as a nonmarket GU in accordance with Chapter 2.
- (ii) A Non-Market IRP is an IRP who has classified a BDU as a non-market BDU in accordance with Chapter 2.

These non-Market Participants may, through a Market Customer.

- (iii) sell all sent out generation from their non-market units through the spot market and accept payments from the Market Customer for sent out generation. These non-Market Participants are not entitled to receive payments from AEMO for sent out generation (clauses 2.2.5(c), 2.2.5B(d)).
- (iv) purchase all electricity supplied through the *national grid* to the *connection points* for each of their non-market units from the *spot market* and make payments to the *Market Customer* for such electricity.



# 5.1.5.2. Classification as a scheduled GU

Clause 2.2.2(<u>a</u>) of the NER requires a *GU* <u>which has</u> <u>with a</u> *nameplate rating* of 30MW or <u>moregreater</u>, or <u>if is</u> part of a group of *PUs connected* at a common *connection point* with a combined *nameplate rating* of 30MW or greater, to be classified as a *scheduled GU* (where its <u>output is not-intermittent</u>) 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* which has a *nameplate rating* of 30MW or greater, or is part of a group of *PUs connected* at a common *connection point* with a combined *nameplate rating* of 30MW or greater, as a *scheduled GU* 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 GU* for a *GU* which has a *nameplate rating* of less than 30MW, or that is part of a group of *PUs 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 <u>a generation GU</u> of moregreater than 5MW but less than 30MW is to be connected in a *network* area with existing or forecast congestion, <u>then the applicant may</u> consider applying to classify the GUs as a scheduled GU. If <u>the GU is</u> classified as *non-scheduled* GU, <u>then</u> 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. <u>AEMO will only approve the classification as a scheduled GU</u>, if the maximum generation of the scheduled GU, the scheduled GU to which the scheduled GU may be dispatched is at least 1 MW.

#### 5.2.1. Conditional classification

In accordance with clause 2.2.2(b1) of the NER-, AEMO may approve the classification of a *GU* which has a *nameplate rating* of less than 30 MW, or a *GU* that is part of a group of *PUs* connected at a common connection point with a combined *nameplate rating* of less than 30 MW, as a *scheduled GU*, subject to such conditions as AEMO deems appropriate.

<u>AEMO will impose conditions where AEMO considers it reasonably necessary to do so,</u> including where the condition- is required for the purposes of operational forecasting, situational awareness or power system security.

Depending on the relevant circumstances, such conditions may include:

- The annual provision of information regarding participation in central dispatch.
- Where the output of the generating unit is intermittent, the provision of:
  - o Forecasting capability over the dispatch, pre-dispatch and PASA timeframes.
  - Energy conversion model and related SCADA data for situational awareness which -allow AEMO to produce forecasts.



# 5.2.5.3. Classification as a non-scheduled GU

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

AEMO has discretion, and will accept an application, to classify a *GU* or group of *GUs* with a combined *nameplate rating* of less than 5 MW that is part of a group of *PUs* with a combined nameplate rating of 30 MW or greater *connected* at a common *connection point* as a *non-scheduled GU*. The application 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 *GU* with a *nameplate rating* of greater than 30 MW or a *GU* that is part of a group of *Pus* connected through a common *connection point* with a combined *nameplate rating* of 30 MW or greater, as a *non-scheduled GU* if AEMO is satisfied that the physical and technical attributes of the *GU* are such that it is not practicable for it to participate in *central dispatch*.

#### 5.2.1.5.3.1. Physical and technical attributes

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

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

#### 5.2.2.5.3.2. Conditional classification

If AEMO considers it is necessary for any reason (including *power system security*) for a *Generator* or an *IRP* to comply with some of the obligations of a *Scheduled Generator* or *Semi-Scheduled Generator* in respect of a *non-scheduled GU*, <u>then</u> 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.

The 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 predispatch 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.

The terms and conditions applicable to a *Semi-Scheduled Generator* that AEMO may impose in relevant circumstances include, without limitation, the provision of an *energy conversion model* as contemplated in clause 2.2.7(c)(2) of the NER.

# 5.3.5.4. Classification as a scheduled BDU

Clause 2.2.2(<u>a1</u>) of the NER requires a *BDU* that is capable of transitioning linearly between production and consumption with which has a nameplate rating of 5MW or greater, or is part of a group of *BDUs connected* at a common *connection point* with a combined *nameplate rating* of 5MW or greater, to be classified as a *scheduled BDU* unless AEMO approves a different classification.

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

- 1. the applicant has submitted data in accordance with schedule 3.1 of the NER; and
- 2. <u>the applicant has adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses-<u>and</u></u>
- 3. <u>the *BDU*</u> is capable of transitioning linearly from consuming to producing electricity and vice versa.

#### 5.3.1.5.4.1. Conditional classification

AEMO has discretion under clause 2.2.2(b1) of the NER to approve classification as a *scheduled BDU* for of:

- a BDU with which has a nameplate rating of less than 5MW for production or consumption; or
- <u>that is part of a group of BDUs connected at a common connection point with a</u> combined *nameplate rating* for production or consumption of less than 5MW,

on such terms and conditions as AEMO considers appropriate.

<u>AEMO will impose conditions where AEMO considers it reasonably necessary to do so,</u> 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 ÷

• the annual provision of information regarding participation in central dispatch.

<u>AEMO will only approve the classification as a scheduled BDU if the maximum generation and consumption to which the scheduled BDU may be dispatched is at least 1 MW.</u>



# 5.5. Classification as a scheduled GU and a scheduled load

Clause 2.2.2 of the NER requires a *BDU* that is not capable of transitioning linearly between production and consumption with a *nameplate rating* of 5MW or moregreater, or if <u>is</u> part of a group of *BDUs connected* at a common *connection point* with a combined *nameplate rating* of 5MW or moregreater, to be classified as a *scheduled GU and a scheduled load*<u>unless AEMO</u> approves a different classification.

AEMO is required by clause 2.2.2(b2) of the NER to approve the classification of a *BDU* that is not capable of transitioning linearly between production and consumption which has a *nameplate rating* of 5MW or greater, or is part of a group of *BDUs connected* at a common *connection point* with a combined *nameplate rating* of 5MW or greater, as a *scheduled* <u>*GU* and</u> <u>*scheduled load*</u> if AEMO is satisfied that the applicant has:

- 1. the applicant has Ssubmitted data in accordance with schedule 3.1;
- 2. <u>the applicant has adequate communications and/or telemetry to support the issuing of</u> *dispatch instructions* and the audit of responses; and
- 3. the *BDU* is <u>not</u> capable of transitioning linearly from consuming to producing electricity and vice versa.

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

#### 5.5.1. Conditional classification

In accordance with clause 2.2.2(b3) of the NER-, AEMO may approve the classification of a BDU which has a nameplate rating of 5MW or greater, or a BDU that is part of a group of BDUs connected at a common connection point with a combined nameplate rating of 5MW or greater, as a scheduled GU, 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 :

• the annual provision of information regarding participation in central dispatch.

# 5.4.5.6. Classification as a non-scheduled BDU

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

AEMO is required by clause 2.2.3(b) of the NER to approve the classification of a *BDU*, with a *nameplate rating* of 5MW or greater or *BDU* that is part of a group of *BDUs* connected through a common *connection point* with a combined *nameplate rating* of <u>305 MW</u> or greater, as a *non-scheduled BDU* if AEMO is satisfied that the physical and technical attributes of the *BDU* are such that it is not practicable for it to participate in *central dispatch*.



#### 5.4.1.5.6.1. Physical and technical attributes

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

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

#### 5.4.2.5.6.2. Conditional classification

If AEMO considers it is necessary for any reason (including *power system security*) for an *IRP* to comply with some of the obligations of a *Scheduled IRP* or *Semi-Scheduled Generator* in respect of a *non-scheduled BDU*, then 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.

The terms and conditions applicable to a *Scheduled IRP* 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(d) of the NER.

The terms and conditions applicable to a *Semi-Scheduled Generator* that AEMO may impose in relevant circumstances include, without limitation the 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 GU

Clause 2.2.7(a) of the NER requires a *GU* which has a *nameplate rating* of 30MW or greater, or one of a group of *PUs connected* at a common *connection point* with a combined *nameplate rating* of 30MW or more, or if is part of a group of *production units<u>PUs</u> connected* at a common *connection point* with a combined *nameplate rating* of 30MW or greater, to be classified as a *semi-scheduled GU* where its output is *intermittent*, unless AEMO approves a different classification.



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

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

#### 5.5.1.5.7.1. Conditional classification

AEMO has discretion under clause 2.2.7(e) of the NER to approve the classification as a *semi-scheduled GU* of a *GU* which has a *nameplate rating* of less than 30MW, or that is part of a group of *GUs connected* at a common *connection point* with a combined *nameplate rating* of less than 30MW, on such terms and conditions as AEMO considers appropriate.

<u>AEMO will impose conditions where AEMO considers it reasonably necessary to do so,</u> <u>including where it is required for the purposes of operational forecasting, situational awareness</u> <u>or power system security.</u>

Depending on the relevant circumstances, such conditions may include :

• <u>**T**the annual provision of information regarding participation in *central dispatch*.</u>

If *intermittent generation* of at least 5MW but less than 30MW is to be connected in a *network* area with existing or forecast congestion, then the applicant may consider applying to classify the *GUs* as <u>a</u> semi-scheduled <u>unitGU</u>. If the *GU* is classified as <u>a</u> non-scheduled *GUs*, then 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. <u>AEMO will only approve the classification as a semi-scheduled GU</u>, if the maximum generation of the semi-scheduled GU, to which the semi-scheduled GU may be dispatched is at least 1 MW.

In accordance with clause 2.2.7(e) of the NER and the *registration information resource and* guidelines, AEMO may approve the classification of a *GU* with a nameplate rating of less than 30 MW, or a *GU* that is part of a group of *PUs* connected at a common connection point with a combined nameplate rating of less than 30 MW, as a semi-scheduled *GU*, subject to such conditions as AEMO deems appropriate.

<u>AEMO will impose conditions where AEMO considers it reasonably necessary to do so,</u> 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:

• The annual provision of information regarding participation in contral dispatch.

# 5.6.5.8. Classification of coupled PUs

A *coupled PU* is one with separate *plant* for the production of electricity, each of a different *plant* type and capable of separate operation, that share equipment (such as an inverter) essential to the functioning of each. The *PU* is typically a *BDU* and both *intermittent* and non-*intermittent* in type.



Under clause 2.2.2(a1)(3) of the NER, a *BDU* which has a *nameplate rating* of 5 MW or greater or is part of a group of *BDUs connected* at a common *connection point* with a combined *nameplate rating* of 5 MW or greater must be classified as a *scheduled BDU*, unless AEMO approves the classification of the *scheduled BDU* that is a *coupled PU* as two separately classified *plant* in accordance with clause 2.2.2(b4) of the NER:

• one being a semi-scheduled GU under clause 2.2.7(b) of the NER; and

• the other being a scheduled BDU under clause 2.2.2(b4) or 2.2.3 of the NER.

Under clause 2.2.3(a1) of the NER, a *BDU* with a *nameplate rating* of less than 5 MW (not being part of a group of *BDUs* with a combined *nameplate rating* of 5 MW or greater) must be classified as a *non-scheduled BDU*, unless AEMO approves its classification as a *scheduled BDU* under clause 2.2.2(b) of the NER.

Accordingly, AEMO will not approve any application to classify the *BDU* in multiple or different categories, for example, as a *semi-schedueld scheduled generating unitGU*.-.

<u>Clause 2.2.7(c1) of the NER provides AEMO discretion to approve an application -request for</u> <u>classification of to classify a BDU that is a coupled PU as a semi-scheduled GU, and if AEMO is</u> <u>satisfied that:</u>

- (a) the output of some or all generating plant comprised in the BDU is intermittent;
- (b) except for *auxiliary load*, the *BDU* will not consume electricity delivered from the *national grid* at the *connection point* for the *BDU*; and
- (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.

AEMO will consider an application to classify a *BDU* that is a *coupled* <u>*PU*</u> as a *semi-scheduled GU* under the following circumstances:

- the total non-intermittent capacity is less than 5 MWdc;
- the total non-intermittent MWdc capacity is less than 2.5% of the total intermittent MWdc capacity, except in the case where the participant commits to providing a self-forecast<sup>2</sup> for dispatch purposes; and
- MWdcDC SCADA feeds are provided to AEMO for the intermittent capacity and the nonintermittent capacity (in addition to MWacAC output feed).

<u>Clause 2.2.7(c3) of the NER requires the maximum generation for a coupled PU approved for</u> <u>classification as a semi-scheduled GU to be limited to the maximum generation of the part of</u> <u>the coupled PU that is intermittent.</u>

<sup>&</sup>lt;sup>2</sup> <u>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</u>



#### 5.8.1. Conditional classification – two separately classified plant

In accordance with clause 2.2.2(b4) of the NER, AEMO may approve the classification of a *BDU* that is a *coupled PU*<sub>T</sub> which has a *nameplate rating* of 5 MW or greater, or a *BDU* that is part of a group of *BDUs* connected at a common *connection point* with a combined *nameplate rating* of 5 MW or greater, as two separately classified *plant* – a *semi-scheduled GU* and a *scheduled BDU* –<sub>T</sub> subject to such conditions as AEMO deems appropriate.

<u>AEMO will impose conditions where AEMO considers it reasonably necessary to do so,</u> 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:

• Aappropriate logic to apportion availability between units that shared equipment to avoid unachievable dispatch outcomes. For a *semi-scheduled GU*, -this condition refers to the Local Limit signal communicated via SCADA.

#### 5.8.2. Conditional classification – semi-scheduled

In accordance with clause 2.2.7(c1) of the NER AEMO may approve the classification of a *BDU* that is a *coupled PU* which has a *nameplate rating* of 5MW or greater, or a *BDU* that is part of a group of *BDUs connected* at a common *connection point* with a combined *nameplate rating* of 5MW or greater, as a *semi-scheduled GU*, subject to such conditions as AEMO considers 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:

- no material change in total non-intermittent capacity;
- no material change in the proportion of total non-intermittent capacity to the proportion of total intermittent capacity;
- the IRP must provide a dispatch self forecast; and
- MWdc SCADA feeds are provided to AEMO for the intermittent capacity and the nonintermittent capacity (in addition to MWac output feed).

# 5.7.5.9. Classification as a market PU

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

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

# 5.8.5.10. Classification as a non-market PU

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

(a) the *GU* is classified as a *non-scheduled GU*; and



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

Clause 2.2.5B(b) of the NER requires that a *BDU* must be classified as a *non-market BDU* if:

- c) the BDU is classified as a non-scheduled BDU; and
- d) a *Market Customer* has classified the *connection point* for the *BDU* as one of its *market connection points*.



# Appendix A. Examples of classifications

Description	Typical classification
500kW solar panel and AC inverter	Automatically exempt
1MW backup diesel generating unit in a high-rise building	Automatically exempt
4MW battery storage facility	Automatically exempt
20MW diesel rotary uninterruptible power supply system within a data centre	Required to apply for exemption
8MW battery storage facility	Scheduled bidirectional unit and Market bidirectional unit
10MW thermal power station or wind farm whose connection point is classified by a Market Customer as a market connection point	Non-scheduled generating unit and Non-market generating unit
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
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
6 MW battery storage and 15 MW windfarm at a common connection point	Scheduled bidirectional unit and Market bidirectional unit Non-scheduled generating unit and Market generating unit
DC-coupled system, comprised of 4 MW battery storage and 28 MW wind turbines sharing inverters and the only electricity the system consumes at the connection point is auxiliary load	Semi-scheduled generating unit and Market generating unit
DC-coupled system, comprised of 20 MW battery storage and 20 MW solar panels sharing a 20 MW inverter. The system consumes electricity at the connection point in addition to auxiliary load.	Scheduled bidirectional unit and Market bidirectional unit OR Scheduled bidirectional unit and Market bidirectional unit Semi-scheduled generating unit and Market generating unit
45MW generating unit using 10MW locally within its own site	Scheduled generating unit and Market generating unit
50MW co-generation plant or run of river hydro station	Scheduled generating unit and Market generating unit
150MW wind farm with all output sold to the market	Semi-scheduled generating unit and Market generating unit
200MW brown coal <i>generating unit</i> with a 60% minimum load capability	Scheduled generating unit and Market generating unit
200MW power station connected to a transmission system	Scheduled generating unit and Market generating unit
250MW pumped hydro station, that is not capable of transitioning linearly from consuming to producing electricity	Scheduled generating unit, scheduled load and Market generating unit