

Voluntarily Scheduled Resource Guidelines

Prepared by: AEMO Operations

Version: 1

Effective date: 23 May 2027

Status: DRAFT

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Date: 03 June 2025

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Current version release details

Version	Effective date	Summary of changes
1.0	23 May 2027	Draft Guidelines

Note: There is a full version history at the end of this document.

1. Introduction

1.1. Purpose and scope

These are the *voluntarily scheduled resource guidelines* (Guidelines) made under clause 3.10A.3 of the National Electricity Rules (NER).

These Guidelines have effect only for the purposes set out in the NER. The NER and the National Electricity Law (NEL) prevail over these Guidelines to the extent of any inconsistency.

These Guidelines have been developed to assist *Voluntarily Scheduled Resource Providers* understand and assess the requirements for participation in *central dispatch*. Table 1 outlines the specifications covered in these Guidelines under clause 3.10A.3 of the NER.

Table 1 Section of the Guidelines and specifications covered under clause 3.10A.3 of the NER

Guidelines section	Specifications
VSR nomination	<ul style="list-style-type: none"> Requirements for nominating one or more <i>qualifying resources</i> as a <i>voluntarily scheduled resource</i> in accordance with clause 3.10A.1 A requirement that the <i>Voluntarily Scheduled Resource Provider</i> is the <i>financially responsible Market Participant</i> in respect of a <i>market connection point</i> nominated as a <i>voluntarily scheduled resource</i> The minimum threshold for nameplate rating, or combined nameplate rating, of a <i>voluntarily scheduled resource</i>
Portfolio management	<ul style="list-style-type: none"> The requirements and process for aggregation of <i>voluntarily scheduled resources</i> in accordance with clause 3.8.3, including the circumstances in which AEMO may request <i>Voluntarily Scheduled Resource Providers</i> that have aggregated <i>voluntarily scheduled resources</i> to declare individual qualifying resource availability and operating status to AEMO pursuant to clause 3.8.3(f1) or to disaggregate pursuant to clause 3.8.3(b6)
Determining VSR zones and loss factors	<ul style="list-style-type: none"> A methodology for determining zones in which <i>voluntarily scheduled resources</i> participate in <i>central dispatch</i> as well as the <i>loss factor</i> that is to apply in each zone for the purpose of clause 3.8.6(h) Requirements and conditions on <i>Voluntarily Scheduled Resource Providers</i> for aggregating <i>qualifying resources</i> as <i>voluntarily scheduled resources</i> in accordance with clause 3.8.3 (including that all <i>qualifying resources</i> that form part of an aggregated <i>voluntarily scheduled resource</i> must be within the same zone) Guidance for <i>Voluntarily Scheduled Resource Providers</i> on processes for the aggregation of <i>voluntarily scheduled resources</i> into the zones determined Validation processes for AEMO Where AEMO proposes to implement a change to any zone in which <i>voluntarily scheduled resources</i> participate in <i>central dispatch</i> (including implementing a new zone), guidance for <i>Voluntarily Scheduled Resource Providers</i> on the processes and timing for the implementation of such change in zones, including the minimum lead time before the change would take effect
Capability assessment	<ul style="list-style-type: none"> A framework for testing the capabilities of <i>qualifying resources</i> prior to their request for nomination as a <i>voluntarily scheduled resource</i> The types of data to be provided by a <i>Voluntarily Scheduled Resource Provider</i> to AEMO and by AEMO to a <i>Voluntarily Scheduled Resource Provider</i> Information about the requirements for telemetry and communications equipment
Deactivation and temporary hibernation	<ul style="list-style-type: none"> The matters required by clause 3.10A.2
Bidding	<ul style="list-style-type: none"> Operational requirements for a <i>voluntarily scheduled resource</i>
NEMDE processes	<ul style="list-style-type: none"> Any other information that AEMO considers reasonably necessary
Dispatch	<ul style="list-style-type: none"> Operational requirements for a <i>voluntarily scheduled resource</i>
Conformance	<ul style="list-style-type: none"> The <i>dispatch</i> conformance criteria

Guidelines section	Specifications
Metering	<ul style="list-style-type: none"> The acceptable types of metering installation for participating <i>market connection points</i>
Data and information sharing	<ul style="list-style-type: none"> The processes for: <ul style="list-style-type: none"> <i>Voluntarily Scheduled Resource Providers</i> to share data with <i>Distribution Network Service Providers</i> or (where relevant) <i>Transmission Network Service Providers</i> the disclosure of data collected by AEMO from <i>Voluntarily Scheduled Resource Providers</i> to <i>Distribution Network Service Providers</i> and <i>Transmission Network Service Providers</i> (as applicable), including obligations of confidentiality that will apply to any such disclosures

1.2. Definitions and interpretation

1.2.1. Glossary

Terms defined in the National Electricity Law and the NER have the same meanings in these Guidelines unless otherwise specified in this clause.

Terms defined in the NER are intended to be identified in these Guidelines by italicising them, but failure to italicise a defined term does not affect its meaning.

In addition, the words, phrases and abbreviations in the table below have the meanings set out opposite them when used in these Guidelines.

Term	Definition
AEMO	Australian Energy Market Operator
BDU	Bidirectional Unit
DNSP	Distribution Network Service Provider
DOE	Dynamic operating envelope
EMMS	Electricity market management system
FCAS	Frequency control ancillary services
FEL	Flexible Export Limit
FPP	Frequency Performance Payments
FRMP	Financially Responsible Market Participant
IPRR	Integrating price responsive resources into the NEM – rule change
MASS	Market Ancillary Services Specification
MSATS	Market settlement and transfer solutions
MW	Megawatt
MWh	Megawatt hour
NEM	National Electricity Market
NEMDE	National Electricity Market Dispatch Engine
NER	National Electricity Rules
NMI	National Metering Identifier
NSP	Network service provider
PD / Pre-Processing	Pre-dispatch or other known as ‘Pre-Processing’ feeds into ‘NEMDE’
PMS	Portfolio Management System

Term	Definition
Price-Responsive resources	Price-responsive resources refer to the wide range of residential, community, commercial and industrial energy resources and load that are not currently scheduled through the market dispatch process and do, or could, respond (individually or as part of aggregation) to market price signals. It includes but not limited to household CER such as solar PV, batteries, EVs, flexible hot water systems, pool pumps and industrial loads with components of controllable demand (for example smelters, foundries and manufacturing facilities).
PV	Photovoltaic
RERT	Reliability and emergency reserve trader
SCADA	Supervisory Control and Data Acquisition
TI	Trading Interval, a period for which AEMO settles trading amounts in the NEM. A trading interval is defined in the Rules as a 5-minute period.
TNI	Transmission node identifier
TNSP	Transmission Network Service Provider
VSR	Voluntarily scheduled resource
VSRP	Voluntarily Scheduled Resource Provider

Definition conventions

To assist with interpretation of the above acronyms and terms during the use of these Guidelines, the following convention has been used:

- (a) Unless otherwise specified, the term *voluntarily scheduled resource* refers to the aggregation of *qualifying resources* at the *dispatchable unit identifier*-level
 - (i) A *qualifying resource* is the individual, *NMI*-level resource that is nominated and aggregated to form a *voluntarily scheduled resource*.
- (b) Given that *inactive voluntarily scheduled resources* are treated as scheduled resources, subject to the exceptions outlined in NER 3.10A.2(f), requirements and obligations in the NER that apply to scheduled resources apply to both active *voluntarily scheduled resources* and *inactive voluntarily scheduled resources*. *Hibernated voluntarily scheduled resources* are not considered or treated as scheduled resources and therefore are not included.

1.2.2. Interpretation

The following principles of interpretation apply to these Guidelines unless otherwise expressly indicated:

- (a) These Guidelines are subject to the principles of interpretation set out in Schedule 2 of the National Electricity Law.
- (b) References to time are references to Australian Eastern Standard Time.
- (c) A reference to a clause is a reference to a clause of the NER.

- (d) A reference to a section is a reference to a section of this Guideline.

1.3. Related documents

Title	Location
Application for registration as a Generator, Integrated Resource Provider or Market Customer.	https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/participate-in-the-market/registration
Guide to Ancillary Services in the National Electricity Market	https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/system-operations/ancillary-services
Market ancillary services specification	https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/system-operations/ancillary-services/market-ancillary-services-specification-and-fcas-verification-tool
Frequency Contribution Factors Procedure	https://aemo.com.au/consultations/current-and-closed-consultations/frequency-contribution-factors-procedure
FCAS Model in NEMDE	https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/market-operations/policy-and-process-documentation
Pre-Dispatch Procedure (SO_OP_3704)	https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/system-operations/power-system-operation/power-system-operating-procedures
Dispatch procedure (SO_OP_3705)	https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/system-operations/power-system-operation/power-system-operating-procedures
Demand Side Participation Information Guidelines	https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-approach/forecasting-and-planning-guidelines/demand-side-participation-information-guidelines
Power System Data Communications Standard	https://aemo.com.au/energy-systems/market-it-systems/electricity-system-guides/power-systems
Dispatch Data	Data communicated to AEMO to support the central dispatch process, as defined in the Power System Data Communications Standard.
Portfolio Management System	Link to come at a later date
Bidirectional unit price band bid validation	https://aemo.com.au/initiatives/major-programs/nem-reform-program/nem-reform-program-initiatives/integrating-energy-storage-systems-project/integrating-energy-storage-systems-participant-toolbox/bidirectional-unit-transition-and-cutover
Market settlement and transfer solutions (MSATS) Procedures	https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/market-operations/retail-and-metering/market-settlement-and-transfer-solutions-msats
Markets Portal Guide to User Rights Management	https://markets-portal-help.docs.public.aemo.com.au/Content/UserRightsManagement/URM.htm

2. Voluntarily scheduled resource nomination

2.1. Requirements of a qualifying resource, voluntarily scheduled resource and Voluntarily Scheduled Resource Provider

NER 3.10A.3(b)(1) requires AEMO to specify in the Guidelines requirements for nominating one or more *qualifying resources* as a *voluntarily scheduled resource* in accordance with NER 3.10A.1. Table 2 lists the requirements under the NER and that have been determined by AEMO for a *qualifying resource*, *voluntarily scheduled resource* and *Voluntarily Scheduled Resource Provider*.

- (a) A *Voluntarily Scheduled Resource Provider* must be registered as a *Generator*, *Integrated Resource Provider* or *Market Customer*.
- (b) The person registered as a *Generator*, *Integrated Resource Provider* or *Market Customer* will become a *Voluntarily Scheduled Resource Provider* through approval in respect of one or more *qualifying resources* to be aggregated under NER 3.8.3 as a *voluntarily scheduled resource*.

2.1.1. Minimum threshold for a voluntarily scheduled resource

NER 3.10A.3(b)(5)(iii) requires AEMO to specify the minimum threshold for nameplate rating, or combined nameplate rating, of a *voluntarily scheduled resource*.

- (a) The minimum threshold for nameplate or combined nameplate rating of a *voluntarily scheduled resource* is 1 MW for either *production* or *consumption* or both.
 - (i) If the nameplate or combined nameplate rating of a *voluntarily scheduled resource* is different for *production* and *consumption*, the maximum of the two ratings in MW will be used to determine the *voluntarily scheduled resource* meets the minimum threshold.
- (b) The nameplate rating for a *qualifying resource* within a *voluntarily scheduled resource* must be determined by the *Voluntarily Scheduled Resource Provider* as the maximum continuous *production* or *consumption* or both in MW at the *market connection point*, not just the price-responsive component.
- (c) The nameplate or combined nameplate rating of a *voluntarily scheduled resource* for *production* or *consumption* or both must be calculated as the net aggregate value in MW for all the *qualifying resources* in a *voluntarily scheduled resource* that can produce or consume or both.
- (d) If a *qualifying resource* is at a *secondary settlement point*, the nameplate rating for *production* or *consumption* or both must correspond with the nameplate rating at that *secondary settlement point* and not at the *primary connection point*.

The minimum threshold for nameplate rating, or combined nameplate rating, is distinct from the minimum bid size that applies to a *voluntarily scheduled resource*. Minimum bid size is set at the current system minimum of 1 MW for bidding.

- (e) In order for a *voluntarily scheduled resource* to be nominated, the *voluntarily scheduled resource* must have a sufficient nameplate or combined nameplate rating to meet the 1 MW minimum bid size for either *production* or *consumption* or both.

Table 2 Description of the requirements for a qualifying resource, voluntarily scheduled resource, and Voluntarily Scheduled Resource Provider/financially responsible Market Participant

Component or proponent	NER	Description	Requirements
Qualifying resource(s)	3.10A.1(a)	Individual <i>NMI</i> or <i>NMIs</i> at a <i>market connection point</i>	<ul style="list-style-type: none"> • <i>Market connection point</i> meets the <i>metering installation</i> requirements in section 11
	3.10A.3(b)(1)	<i>Qualifying resource</i> means: <ul style="list-style-type: none"> • a <i>market generating unit</i> that is a <i>non-scheduled generating unit</i> • a <i>market bidirectional unit</i> that is a <i>non-scheduled bidirectional unit</i> • a <i>market connection point</i> that is <i>non-scheduled load</i> • one or more <i>small generating units</i> or <i>small bidirectional units</i> (or any combination) at a <i>small resource connection point</i> classified as a <i>market connection point</i> in accordance with clause 2.2.8 	<ul style="list-style-type: none"> • <i>Qualifying resource</i> is not already: <ul style="list-style-type: none"> – nominated by another <i>Voluntarily Scheduled Resource Provider</i> – nominated by a <i>Demand Response Service Provider</i> to be a <i>qualifying load</i> for a <i>wholesale demand response unit</i> – entered into a <i>reliability and emergency reserve trader</i> (RERT) <i>reserve contract</i> with AEMO • Meets relevant standards outlined in section 5.1.1 • Comply with individual distribution connection agreements, such as set up with emergency backstop capabilities where required (responsibility of the <i>Voluntarily Scheduled Resource Provider</i>)
	3.10A.3(b)(4)		
	3.10A.3(b)(5)(v)		
Voluntarily scheduled resource	3.8.3	Aggregation of one or more <i>qualifying resources</i> into a single <i>dispatchable unit identifier</i> within the same VSR zone	<ul style="list-style-type: none"> • Be in the same VSR zone
	3.10A.1(b)		<ul style="list-style-type: none"> • Meet the operational requirements for telemetry and communications in section 5.4 and in section 5.1.3
	3.10A.1(c)		
	3.10A.3(b)(1)		<ul style="list-style-type: none"> • Minimum nameplate or combined nameplate rating of 1 MW for either <i>production</i> or <i>consumption</i> or both (section 2.1.1)
	3.10A.3(b)(2)		<ul style="list-style-type: none"> • Can only be scheduled and <i>dispatched</i> via the relevant <i>Voluntarily Scheduled Resource Provider</i> and not across multiple aggregated service providers
	3.10A.3(b)(5)		<ul style="list-style-type: none"> • Poses no threat to maintaining <i>power system security</i>
Voluntarily Scheduled Resource Provider	3.10A.1	<ul style="list-style-type: none"> • A Market Participant whose <i>qualifying resource(s)</i> have been approved for nomination as a <i>voluntarily scheduled resource</i> • May participate in the <i>VSR incentive mechanism</i> 	<ul style="list-style-type: none"> • Must be registered as a <i>Generator, Integrated Resource Provider</i> or <i>Market Customer</i>
	3.10A.3(b)(6)(i)		<ul style="list-style-type: none"> • Complies with the obligations that apply to a <i>Generator, Integrated Resource Provider</i> or <i>Market Customer</i> • Responsible for ensuring each <i>qualifying resource</i> and the <i>voluntarily scheduled resource</i> aggregation complies with the requirements in these Guidelines

Component or proponent	NER	Description	Requirements
Financially responsible Market Participant	3.10A.1 3.10A.3(b)(3)	In respect of the <i>market connection point(s)</i> (of the <i>qualifying resource(s)</i>) nominated in a <i>voluntarily scheduled resource</i>	<ul style="list-style-type: none">• The <i>Voluntarily Scheduled Resource Provider</i> must be the <i>financially responsible Market Participant</i>

2.2. Application process to nominate a qualifying resource as a voluntarily scheduled resource

A *Voluntarily Scheduled Resource Provider* may apply to AEMO to nominate one or more *qualifying resources* as a *voluntarily scheduled resource*.

The *qualifying resource(s)* are not required to be nominated individually with AEMO prior to their nomination as part of the aggregation of *qualifying resource(s)* into a *voluntarily scheduled resource*.

The nomination process for a *voluntarily scheduled resource* includes:

- (a) A person registered as a *Generator, Integrated Resource Provider* or *Market Customer* will submit an application to nominate a *qualifying resource*, or aggregation of *qualifying resources*, as a *voluntarily scheduled resource* using AEMO's Portfolio Management System.
- (b) In accordance with NER 3.10A.1(c) and these Guidelines, applications must include the information outlined in Table 3.
- (c) AEMO must, within 5 business days of receiving a nomination application for a *voluntarily scheduled resource*, advise the applicant of any further information or clarification which is required in support of its application.
- (d) If the further information or clarification requested is not provided to AEMO's satisfaction within 15 business days of the request, then AEMO may deem the applicant to have withdrawn the application.
- (e) AEMO will evaluate applications to nominate one or more *qualifying resources* into a *voluntarily scheduled resource* and reply within 20 business days of receiving the application or the receipt of additional information requested by AEMO under paragraph 2.2(c) setting out whether AEMO approves or rejects the application and, if approved the conditions that apply to the approval.
 - (i) AEMO will approve applications for nomination of one or more *qualifying resources* as a *voluntarily scheduled resource* if it is reasonably satisfied that it meets the requirements in Table 2 and under NER 3.10A.1(f) and in respect of aggregation in NER 3.8.3, including that AEMO is reasonably satisfied that:
 - (A) The request is made in respect of one or more *qualifying resources*.
 - (B) The applicant has submitted data in accordance with Table 3.
 - (C) The applicant passes the technical capability assessment outlined in section 5.1.3, including tests that the *voluntarily scheduled resource* can submit bids, receive dispatch instructions and meet dispatch targets.
 - (D) The applicant has adequate communications and telemetry in place to support the exchange of required data under these Guidelines and the

Power System Data Communications Standard for the proposed *voluntarily scheduled resource*.

- (ii) AEMO will not approve applications for nomination of one or more *qualifying resource(s)* as a *voluntarily scheduled resource* if it determines that:
 - (A) AEMO must represent the *voluntarily scheduled resource* as two or more dispatchable units in constraints used in *central dispatch* in order to maintain *power system security*.
- (iii) AEMO will not give approval to a person under paragraph 2.2(e) in respect of a *qualifying resource* that is nominated as a *voluntarily scheduled resource* by a different person.

Table 3 Information requirements for nomination applications of a voluntarily scheduled resource

INFORMATION	DETERMINED BY
Qualifying resource information	
The NMI and market connection point associated with each <i>qualifying resource</i>	Table 2, section 2.1
Validation that the <i>qualifying resource(s)</i> meet the requirements in Table 2	Table 2, section 2.1
Voluntarily scheduled resource information	
The nameplate rating or combined nameplate rating for the <i>voluntarily scheduled resource</i>	Section 2.1.1
Technology composition of the <i>voluntarily scheduled resource</i>	Noting if the <i>voluntarily scheduled resource</i> is: <ul style="list-style-type: none"> • Mixed technology, or • The technology type of the <i>voluntarily scheduled resource</i> that is representative of all <i>qualifying resources</i> within that <i>voluntarily scheduled resource</i>
Validation that the <i>voluntarily scheduled resource</i> meets the requirements in Table 2	Table 2, section 2.1
Status of the <i>voluntarily scheduled resource</i> to apply from its effective date	May be an active <i>voluntarily scheduled resource</i> or inactive <i>voluntarily scheduled resource</i> , but not a <i>hibernated voluntarily scheduled resource</i> .
<u>Schedule 3.1 bid validation data:</u>	
Maximum <i>production</i> of the <i>voluntarily scheduled resource</i> , to which the <i>voluntarily scheduled resource</i> may be dispatched	MW (produced) <ul style="list-style-type: none"> • Maximum <i>production</i> associated with each market connection point of the <i>qualifying resources</i> within a <i>voluntarily scheduled resource</i> that can be dispatched (used to validate dispatch bids) • Where relevant, includes non-price-responsive components behind the market connection point of <i>qualifying resource(s)</i>
Maximum <i>consumption</i> of the <i>voluntarily scheduled resource</i> , to which the <i>voluntarily scheduled resource</i> may be dispatched	MW (consumed) <ul style="list-style-type: none"> • Maximum <i>consumption</i> associated with each market connection point of the <i>qualifying resources</i> within a <i>voluntarily scheduled resource</i> that can be dispatched (used to validate dispatch bids) • Where relevant, includes non-price-responsive components behind the market connection point of <i>qualifying resource(s)</i>
Maximum ramp rate of the <i>voluntarily scheduled resource</i>	MW/minute

INFORMATION	DETERMINED BY
	<ul style="list-style-type: none"> <i>Voluntarily scheduled resource</i> must meet requirements of AEMO's Dispatch procedure under Section 2.8 Ramp rates in energy dispatch instructions.
Maximum storage capacity of the voluntarily scheduled resource	MWh <ul style="list-style-type: none"> Where relevant, the maximum storage capacity of all battery energy storage systems (BESS) or other storage systems within the <i>voluntarily scheduled resource</i> If the voluntarily scheduled resource contains no storage capacity, value is to be submitted as 0

2.3. Effect of approval for nomination as a *voluntarily scheduled resource*

- (a) Once a *voluntarily scheduled resource* has been approved, the *Voluntarily Scheduled Resource Provider* may then apply in a separate process to be classified for participation in *market ancillary services*, including Contingency or Regulation Frequency Control Ancillary Services (FCAS).
 - (i) For application and approval to provide *market ancillary services*, the *voluntarily scheduled resource* must meet the Market Ancillary Services Specification (MASS)¹ and technology specific registration requirements to be an *ancillary service unit*.
- (b) To receive a contribution factor under Frequency Performance Payments², a *voluntarily scheduled resource* must meet the Frequency Performance Payments aggregated telemetry requirements. Otherwise, a *voluntarily scheduled resource* will be considered in the residual.

Following approval for a *voluntarily scheduled resource*, a *Voluntarily Scheduled Resource Provider* will be able to manage their *voluntarily scheduled resource* portfolio, including the removal or addition of *qualifying resources* in the *voluntarily scheduled resource*, through the process outlined in section 3.

- (c) After approval, a *Voluntarily Scheduled Resource Provider* will be responsible under NER 3.10A.1(m) for notifying AEMO:
 - (i) As soon as practicable, and in any event, no later than 10 business days, after becoming aware that a resource forming part of a *voluntarily scheduled resource* ceases to be a *qualifying resource*.
- (d) If a *Voluntarily Scheduled Resource Provider* gives AEMO a notice under paragraph 2.3(c) in respect of a *qualifying resource* in a *voluntarily scheduled resource*, that *qualifying*

¹ See: <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/system-operations/ancillary-services/market-ancillary-services-specification-and-fcas-verification-tool>

² See: <https://aemo.com.au/initiatives/major-programs/nem-reform-program/nem-reform-program-initiatives/frequency-performance-payments-project>

resource ceases to be a *voluntarily scheduled resource* from the time the relevant notice is given.

- (e) Under NER 3.10A.1(m)(i), AEMO will automatically revoke the nomination of a *qualifying resource* from a *voluntarily scheduled resource* if the *Voluntarily Scheduled Resource Provider* ceases to be the *financially responsible Market Participant* for that *qualifying resource*. Given AEMO's visibility over when this occurs, a *Voluntarily Scheduled Resource Provider* will not be required to separately provide notice to AEMO.

2.4. Incidences of voluntarily scheduled resource disaggregation

NER 3.10A.3(b)(2) states that AEMO must specify the requirements and process for aggregation of *voluntarily scheduled resources* in accordance with clause 3.8.3, including the circumstances in which AEMO may request *Voluntarily Scheduled Resource Providers* that have aggregated *voluntarily scheduled resources* to declare individual *qualifying resource* availability and operating status to AEMO pursuant to clause 3.8.3(f1) or to disaggregate pursuant to clause 3.8.3(b6).

AEMO may request *Voluntarily Scheduled Resource Providers* that have aggregated *qualifying resources* to declare individual *qualifying resource* availability and operating status to AEMO or to disaggregate under the following circumstances:

- (a) AEMO determines that it may need to represent the *voluntarily scheduled resource* within the aggregation as two or more dispatchable units in constraints used in *central dispatch* in order to maintain *power system security*;
- (b) AEMO detects ongoing non-conformance with the *dispatch* conformance criteria for a *voluntarily scheduled resource* aggregation.

In the event of such a request, AEMO will:

- (c) Provide an explanation to the *Voluntarily Scheduled Resource Provider* for the reason for the request in relation to AEMO's concerns on the impact of the *voluntarily scheduled resource* on *power system security*.
- (d) Work with the *Voluntarily Scheduled Resource Provider* to address the concerns and, if required, disaggregate the *voluntarily scheduled resource* to represent the *qualifying resources* within the aggregation as two or more dispatchable units in constraints used in *central dispatch* in order to maintain *power system security*.
- (e) The *Voluntarily Scheduled Resource Provider* must comply with AEMO in its actioning of paragraph 2.4(d) if AEMO has fulfilled its obligations in paragraph 2.4(c).

3. Portfolio management

3.1. Portfolio management requirements for a *Voluntarily Scheduled Resource Provider*

Information on how AEMO will manage *voluntarily scheduled resource* portfolio updates, and AEMO's expectations of a *Voluntarily Scheduled Resource Provider*, are outlined in the Portfolio Management System guides. This includes:

- The establishment and maintenance of *voluntarily scheduled resource* aggregations and portfolios, including:
 - Nomination and revoking the nomination of a *voluntarily scheduled resource*
 - Addition and removal of *qualifying resources*
 - *Voluntarily scheduled resource* configurations
 - Regular updates to standing data, including the backstop capability status of a *voluntarily scheduled resource*
 - Implementing and managing deactivation and temporary hibernation.
 - Portfolio management capabilities to manage declassification of *qualifying resources* (NMIs) and customer churn.
 - Updates to AEMO Validation processes to manage *voluntarily scheduled resources*, including *voluntarily scheduled resources* management within VSR zones
- (a) A *Voluntarily Scheduled Resource Provider* will be responsible for ensuring that they comply with the requirements in the Portfolio Management System guides in relation to their *voluntarily scheduled resource*.

3.2. Portfolio updates

3.2.1. Applications to add or remove *qualifying resources* from a *voluntarily scheduled resource* aggregation

- (a) A *Voluntarily Scheduled Resource Provider* may apply to add one or more *qualifying resources* to its *voluntarily scheduled resource* by submitting the relevant nomination request within AEMO's Portfolio Management System.
- (b) A *Voluntarily Scheduled Resource Provider* may apply to remove one or more *qualifying resources* from its *voluntarily scheduled resource* by submitting the relevant nomination request within AEMO's Portfolio Management System.

- (c) Within 5 business days of receiving an application under paragraph 3.2.1(a) or (b), *AEMO* will review the application and advise the *Voluntarily Scheduled Resource Provider*:
 - (i) of any further information or clarification which is required in support of its application, in *AEMO*'s reasonable opinion; or
 - (ii) that *AEMO* considers the application to be complete.
- (d) If *AEMO* requests a *Voluntarily Scheduled Resource Provider* to provide further information or clarification under paragraph 3.2.1(c), the *Voluntarily Scheduled Resource Provider* should provide this information as soon as practicable, in the form and manner requested by *AEMO*.
- (e) Upon receipt of the further information or clarification, *AEMO* will repeat the review at paragraph 3.2.1(c).
 - (i) If the further information or clarification requested pursuant to paragraph 3.2.1(c) is not provided to *AEMO*'s satisfaction within 15 business days of the request, then the *Voluntarily Scheduled Resource Provider* may be deemed to have withdrawn the application.

3.2.2. Churn of qualifying resources that impacts minimum thresholds

The removal of one or more *qualifying resources* from a *voluntarily scheduled resource* by a *Voluntarily Scheduled Resource Provider* may result in the *voluntarily scheduled resource* dropping below the minimum threshold specified in section 2.1.1.

As the minimum threshold is set to align with the minimum bid size, required to meet a 1 MW bid for either *production* or *consumption* or both, a *voluntarily scheduled resource* that drops below the minimum threshold would no longer be able to submit a *dispatch* bid.

In the case of churn resulting in a *voluntarily scheduled resource* dropping below the minimum threshold:

- (f) The status of the *voluntarily scheduled resource* will be updated to hibernation status (forced hibernation).

Forced hibernation due to churn may either occur:

- (g) Through a hibernation notice submitted by the *Voluntarily Scheduled Resource Provider* with the reason code 'H – Forced Hibernation.'
 - (i) If the *Voluntarily Scheduled Resource Provider* is forced to hibernate and cannot comply with the notice period required for a hibernation notice under section 6.4.1, the *Voluntarily Scheduled Resource Provider* must bid unavailable for that *voluntarily scheduled resource* until it commences hibernation whilst it is unable to comply with the minimum bid threshold.

- (h) By AEMO, upon identification that a *voluntarily scheduled resource* is below the minimum threshold.

The addition of one or more *qualifying resources* to a *voluntarily scheduled resource* by a *Voluntarily Scheduled Resource Provider* may result in the *voluntarily scheduled resource* exceeding the threshold related to the frequency requirement of aggregated telemetry data under section 5.4.1.

- (i) The *Voluntarily Scheduled Resource Provider* must work with AEMO to ensure it complies with the Power System Data Communication Standard when exceeding the aggregated telemetry data threshold. Compliance is required either before or at the nomination of additional *qualifying resources* into the *voluntarily scheduled resource* that would see it exceed the threshold.

4. Determining VSR zones and loss factors

NER 3.10A.3(c)(1) requires AEMO to specify the methodology it has used to determine zones in which *voluntarily scheduled resources* participate in *central dispatch* as well as the *loss factor* that is to apply in each zone for the purpose of clause 3.8.6(h).

4.1. AEMO's methodology for determining loss factors

- (a) All *voluntarily scheduled resources*, independent of VSR zone, will be allocated a *loss factor* of one.
- (b) *Qualifying resources* within a *voluntarily scheduled resource* will be settled under existing retail settlement processes, which account for the relevant *distribution loss factor* and transmission loss factor for each transmission node identifier (TNI) the *market connection point* for the *qualifying resource* is under.

4.2. AEMO's methodology for determining zones

- (a) When determining its methodology, AEMO uses the factors outlined in Table 4 to assess the suitability of zones.

Table 4 Factors to assess the suitability of zone classifications

Factor	Explanation
Size and ease of participation	Larger zones will, generally, contain more <i>qualifying resources</i> and therefore be more likely to support the development and growth of <i>voluntarily scheduled resources</i> .
Transmission system security	Zones must be set in a way that supports AEMO's effective management of <i>power system security</i> at the transmission level.
Load forecasting	Zones must be set in a way that allows <i>voluntarily scheduled resources</i> to be effectively integrated into the load forecasting process.

Factor	Explanation
Balance voluntarily scheduled resource risk to system security over time	Consider size of impact, including the expected <i>voluntarily scheduled resource</i> growth rate, and therefore risk that <i>voluntarily scheduled resources</i> will have on <i>power system security</i> .
Stability	Changes to VSR zone boundaries will be potentially highly disruptive to <i>voluntarily scheduled resource</i> operations and development, and therefore should be minimised.
Be consistent with future backstop arrangements and related activities	Ensure VSR zones are compatible and support backstop arrangements.

- (b) Based on the factors for assessing the suitability of zone classification identified in Table 4 AEMO will use the congestion modelling zones as the basis for VSR zones, however has amalgamated a number of zones in order to better support participation.
- (c) The 12 VSR zones to be used are shown in Table 5.

Table 5 VSR zones and their constituent transmission congestion modelling zones

Number	<i>voluntarily scheduled resource zone</i>	Constituent congestion modelling zones
Queensland (QLD)		
1	Q_CENTRAL	CENTRAL_QUEENSLAND_EXCIND
2	Q_NTH + Q_FARNORTH	NORTHERN_QUEENSLAND_EXCFNQ FAR_NORTHERN_QUEENSLAND
3	Q_SOUTHWEST + Q_SOUTHEAST	SOUTH_WESTERN_QUEENSLAND SOUTH_EASTERN_QUEENSLAND
New South Wales (NSW) and Australian Capital Territory (ACT)		
4	N_NORTH	NORTHERN_NSW
5	N_SWNSW + N_CANBERRA	South West NSW CANBERRA_NSW
6	N_SYDNEY	SYDNEY_NSW
7	N_CENWEST	CENTRAL_WESTERN_NSW
Victoria (VIC)		
8	V_MELBOURNE	MELBOURNE_VIC
9	V_STATEGRID	220kV <i>network</i> outside Mel (Stategrid)
Tasmania (TAS)		

10	TAS	TAS REGION NORTHERN_TASMANIA_EXCWT NORTH_WESTERN_TASMANIA WESTCOAST_TASMANIA
South Australia (SA)		
11	S_ADELAIDE + S_NORTH + S_RIVERLAND	ADELAIDE_SA NORTHERN_SA RIVERLAND_SA
12	S_SOUTHEAST	SOUTH_EASTERN_SA

4.3. Zonal aggregation requirements

4.3.1. Requirements and conditions for aggregating in a zone

NER 3.10A.3(c)(2) requires *AEMO* to specify the requirements and conditions on *Voluntarily Scheduled Resource Providers* for aggregating *qualifying resources* as *voluntarily scheduled resources* in accordance with the central dispatch aggregation guidelines (clause 3.8.3).

In addition to the requirement specified in clause 3.8.3 that all *qualifying resources* that form part of an aggregated *voluntarily scheduled resource* must be within the same zone, *AEMO* will not approve an application from a *Voluntarily Scheduled Resource Provider* to aggregate *qualifying resources* unless it is reasonably satisfied that:

- (a) The *qualifying resources* that form part of the aggregated *voluntarily scheduled resource* meet the requirements in Table 2.
- (b) The *voluntarily scheduled resource* meets the requirements in Table 2, including that the *voluntarily scheduled resource* poses no threat to maintaining power system security.

4.3.2. Processes for validating zone compliance

NER 3.10A.3(c)(3) requires that *AEMO* specify guidance for *Voluntarily Scheduled Resource Providers* on processes for the aggregation of *voluntarily scheduled resources* into the zones determined under NER 3.10A.3(c)(1).

- (c) *Voluntarily Scheduled Resource Providers* will have access within *AEMO*'s systems to information on the VSR zone that a *NMI* related to the *market connection point* for a *qualifying resource* is connected within.

NER 3.10A.3(c)(4) requires that *AEMO* specify its validation processes for zonal aggregations.

- (d) AEMO will check the VSR zone that each *qualifying resource* is in during nomination and validate that all *qualifying resources* nominated into a *voluntarily scheduled resource* are in the same VSR zone.

4.4. Review of zones

Under NER 11.180.5, AEMO must not prior to 23 May 2030 implement any change to a zone in which *voluntarily scheduled resources* are able to participate in *central dispatch*.

Review of zones will be considered in AEMO's review of the *voluntarily scheduled resource guidelines* that must occur by 1 May 2030 under NER 11.180.3(c).

- (a) If AEMO considers that changes are necessary or desirable to VSR zones during this review, it will amend and consult on the VSR zones under the Rules consultation procedures.
- (b) After 23 May 2030, review of VSR zones will be triggered by changes made in congestion zones, or in AEMO-initiated review processes of these Guidelines that will follow the Rules consultation procedures.

NER 3.10A.3(c)(5) requires AEMO, in the case of proposing to implement a change to any zone in which *voluntarily scheduled resources* participate in *central dispatch* (including implementing a new zone), to provide guidance for *Voluntarily Scheduled Resource Providers* on the processes and timing for the implementation of such change in zones, including the minimum lead time before such change would take effect.

In the event of a change to zones, AEMO will:

- (a) Provide a minimum lead time of 12 months.

5. Capability assessment

5.1. Initial capability assessment during nomination

5.1.1. Initial screening of capabilities of *qualifying resources* nominated as a *voluntarily scheduled resource*

NER 3.10A.3(b)(4) requires AEMO to provide a framework for testing the capabilities of *qualifying resources* prior to their request for nomination as a *voluntarily scheduled resource*.

During nomination, AEMO will conduct a pre-screening that will test the following capabilities of *qualifying resources* that have been nominated as a *voluntarily scheduled resource*:

- (a) Metering installation type meets requirements, as outlined in Section 11.
- (b) *Voluntarily Scheduled Resource Provider* is the *financially responsible Market Participant* for the *qualifying resource*.
- (c) Qualifying resource is not already:
 - (i) Nominated by another *Voluntarily Scheduled Resource Provider*; or
 - (ii) Nominated by a DSRP to be a *qualifying load* for a *wholesale demand response unit*; or
 - (iii) Entered into a RERT *reserve contract* with AEMO.
- (d) *Voluntarily Scheduled Resource Provider* warrants that the *qualifying resource* meets relevant standards and capabilities, including where appropriate:
 - (i) AS/NZS4777.2:2020.
- (e) *Voluntarily Scheduled Resource Provider* warrants that the *qualifying resource* complies with its individual distribution connection agreement, such as set up with emergency backstop capabilities where required.

5.1.2. Initial screening of a *voluntarily scheduled resource*

Pre-screening will collect and validate the following information on the *voluntarily scheduled resource*:

- (a) Schedule 3.1 Bid Validation data, including:
 - (i) *Voluntarily scheduled resource* name
 - (ii) *Dispatchable unit identifier*
 - (iii) Maximum *production* of the *voluntarily scheduled resource*, to which the *voluntarily scheduled resource* may be *dispatched* MW (produced)

- (iv) Maximum *consumption* of the *voluntarily scheduled resource*, to which the *voluntarily scheduled resource* may be *dispatched* MW (consumed)
- (v) Maximum *ramp rate* of the *voluntarily scheduled resource* MW/minute
- (vi) Maximum storage capacity of the *voluntarily scheduled resource*
- (b) Minimum nameplate rating, or combined nameplate rating, of the *voluntarily scheduled resource*, to ensure the *voluntarily scheduled resource* is above the minimum threshold.
- (c) Technology composition of the *voluntarily scheduled resource*, noting if the *voluntarily scheduled resource* is:
 - (i) Mixed technology, or
 - (ii) The technology type of the *voluntarily scheduled resource* that is representative of all *qualifying resources* within that *voluntarily scheduled resource*.

5.1.3. Technical capability assessment of nominated *voluntarily scheduled resource*

Following pre-screening, AEMO will conduct a technical capability assessment for the *voluntarily scheduled resource*, which will include:

- (a) Congestion modelling assessment
- (b) Aggregated telemetry data test (section 5.4)
- (c) Systems Readiness assessment, where AEMO seeks evidence that a *dispatchable unit identifier* can use AEMO's *preproduction* systems once a *dispatchable unit identifier* has been configured to do
- (d) EMMS Pre-Production implementation
- (e) Operational contacts for the *Voluntarily Scheduled Resource Provider*, to ensure 24/7 communication capability between AEMO operations and the *dispatchable unit identifier*

This technical capability assessment is a subset of those undertaken during the registration of a new bidirectional unit, tailored to the unique *voluntarily scheduled resource* unit type.

5.2. Aggregated telemetry check

AEMO will check periodically the accuracy of the aggregated telemetry data it receives for a *voluntarily scheduled resource* against aggregated revenue metering data for the *qualifying resource(s)* within the *voluntarily scheduled resource*.

During the aggregated telemetry check:

- (a) Revenue metering data for each *qualifying resource* within a *voluntarily scheduled resource* will be aggregated.
- (b) Aggregated revenue metering data will be checked against the aggregated telemetry data that AEMO received for the relevant *trading intervals*.

If the check identifies that the aggregated telemetry data received for the *voluntarily scheduled resource* was not a fair and accurate representation for the net *production* and *consumption* of the portfolio, AEMO:

- (c) Will share the outcome of the check with the *Voluntarily Scheduled Resource Provider*.
- (d) May re-assess the conformance rating of the *voluntarily scheduled resource* for the relevant *trading intervals* (for active *voluntarily scheduled resource*).
- (e) May consider impact on *voluntarily scheduled resource's* incentive payments under the *VSR incentive mechanism*.

5.3. Capability re-assessment due to significant portfolio changes

AEMO will conduct a brief capability re-assessment for a *voluntarily scheduled resource* in the following incidences:

- (a) Material change in *voluntarily scheduled resource* characteristics, including:
 - (i) Nameplate rating or combined nameplate rating of the *voluntarily scheduled resource* changes by the larger of:
 - (A) 0.5 MW; or
 - (B) 20% of the total nameplate rating or combined nameplate rating of the *voluntarily scheduled resource*.
 - (ii) *Qualifying resources* in a *voluntarily scheduled resource* aggregation change by the smaller of:
 - (A) 20 *qualifying resources*; or
 - (B) 20% of the total number of *qualifying resources* within the *voluntarily scheduled resource*.
- (b) A *voluntarily scheduled resource* submits a resumption notice.
- (c) A *voluntarily scheduled resource* submits a reactivation notice after a deactivation period lasting more than 12 months.

A *voluntarily scheduled resource* experiencing performance issues or identified as non-conforming will be subject to AEMO's usual conformance process, as outlined in section 10.

The capability re-assessment will include:

- (d) Evidence that the *voluntarily scheduled resource* can use AEMO's pre-production systems, including that a *voluntarily scheduled resource* can submit a bid and receive dispatch instructions.
- (e) Evidence the *voluntarily scheduled resource* can provide aggregated telemetry data at the required frequency.

5.4. Aggregated telemetry and communications equipment requirements

5.4.1. Aggregated telemetry data requirements

For *voluntarily scheduled resources* participating in *energy* only, AEMO's expectations and requirements for telemetry data are for the *voluntarily scheduled resource* only, whereby:

- (a) AEMO expects to receive one stream of aggregated telemetry data for the *voluntarily scheduled resource* that is a fair and accurate representation of the *voluntarily scheduled resource* portfolio.

AEMO is not specifying the telemetry data requirements for each *qualifying resource* within a *voluntarily scheduled resource*. The telemetry data requirements, calculation, and provision of aggregated telemetry data for a *voluntarily scheduled resource* is the responsibility of the *Voluntarily Scheduled Resource Provider*. AEMO will monitor the accuracy of the aggregated telemetry data it receives, as outlined in section 5.2, to ensure that it is a fair and accurate representation of the *voluntarily scheduled resource* portfolio.

- (b) *Voluntarily Scheduled Resource Providers* must provide the aggregated telemetry data specified in Table 8 for their *voluntarily scheduled resource*, including under requirements specified in section 5.4.2.
- (c) Aggregated telemetry data is expected in the form of Supervisory Control and Data Acquisition (SCADA) provided via the NSP or through a direct SCADA-Lite connection compliant with the Power System Data Communications Standard.
- (d) For *voluntarily scheduled resources* above the following thresholds, or where a *voluntarily scheduled resource* wishes to participate in Regulation FCAS (under the MASS) or receive a frequency performance payment (FPP) contribution factor, aggregated telemetry data must comply with the Power System Data Communications Standard:
 - (i) *Voluntarily scheduled resource* with a *nameplate* or *combined nameplate* rating for *production* or *consumption* or both above 5 MW.
 - (ii) *Qualifying resources* located in an area of the *power system* where existing scheduled plant:
 - (A) needs to be curtailed to maintain *power system security*; or
 - (B) is forecast to be curtailed as a result of committed investments and works, or other changes in the *power system*,for at least five hours per year.

Exemptions

- (e) NER 4.11.1(d)(1) gives *AEMO* discretion in approving remote monitoring equipment which, in *AEMO*'s reasonable opinion, is adequate to enable *AEMO* to remotely monitor the performance of a *voluntarily scheduled resource*.

Table 6 Aggregated telemetry data requirements for a voluntarily scheduled resource

	<i>Voluntarily scheduled resources</i> below thresholds	<i>Voluntarily scheduled resources</i> above thresholds
Definition	<ul style="list-style-type: none"> Aggregate net active power flow at <i>market connection point(s)</i> of all <i>qualifying resource(s)</i> in <i>voluntarily scheduled resource</i> No adjustment for distribution or transmission losses 	
Dimensional units	MW	MW
Minimum/maximum resolution	<ul style="list-style-type: none"> Minimum: 0.001 MW Maximum: 0.1 MW 	<ul style="list-style-type: none"> Minimum: 0.001 MW Maximum: 0.1 MW
Processing	Instantaneous	Instantaneous
Quality flag	Mandatory provision <ul style="list-style-type: none"> Set to bad quality if the sum of the <i>production</i> or <i>consumption</i> associated with the <i>qualifying resource</i> meters that have failed or report bad quality measurements exceeds 25% of the maximum <i>production</i> or <i>consumption</i> of the <i>voluntarily scheduled resource</i>, to which the <i>voluntarily scheduled resource</i> may be dispatched 	Mandatory provision <ul style="list-style-type: none"> Refer to the Power System Data Communications Standard
Validations	Must be a number Range: 0 to maximum <i>production</i> or <i>consumption</i> of the <i>voluntarily scheduled resource</i> , to which the <i>voluntarily scheduled resource</i> may be dispatched + 20%	Must be a number Range: 0 to maximum <i>production</i> or <i>consumption</i> of the <i>voluntarily scheduled resource</i> , to which the <i>voluntarily scheduled resource</i> may be dispatched + 20%
Minimum update frequency	Two data snapshots will be required for each five-minute <i>trading interval</i> (TI) where T marks the boundary/end of the current TI: <ul style="list-style-type: none"> One in the middle, T-150s (2 minutes and 30 seconds into the TI) One at the end, T-5s (5 seconds before the end of the TI) 	4 seconds

5.4.2. Communications requirements for *Voluntarily Scheduled Resource Providers*

- (f) Where a *Voluntarily Scheduled Resource Provider* is required to provide data, the *Voluntarily Scheduled Resource Provider*:
- must comply with the Power System Data Communications Standard, when transmitting data to *AEMO*.
 - The data in Table 6 is Dispatch Data for the purposes of the Power System Data Communications Standard.

- (g) *Voluntarily Scheduled Resource Providers* are formulating and submitting *dispatch bids* under the requirements outlined in section 3.5.6, including the use of NEM EMMS bidding systems and the EMMS portal.
- (h) 24-hour, seven days a week operational response capability when in active mode, whereby the *Voluntarily Scheduled Resource Provider* is capable of receiving and actioning verbal *dispatch instructions* from AEMO immediately.
- (i) The means of which the *Voluntarily Scheduled Resource Provider* follows AEMO's electronic or verbal *dispatch instructions* across the *voluntarily scheduled resources* will be at the discretion of the *Voluntarily Scheduled Resource Provider*. Actioning of electronic or verbal *dispatch instructions* will therefore be assessed at the *dispatchable unit identifier* level.
- (i) Where and if applicable, changes in circumstances in respect of *voluntarily scheduled resources* that could affect AEMO's management of *power system security*, including amendments to plant, are communicated to AEMO by the *Voluntarily Scheduled Resource Provider* for AEMO's awareness and management, including meeting the requirements of NER 4.8.1.

6. Deactivation and temporary hibernation

NER3.10A.3(b)(7) requires AEMO to specify matters required by clause 3.10A.2 regarding the deactivation and temporary hibernation of *voluntarily scheduled resources*.

Voluntarily Scheduled Resource Providers will be able to submit notices using AEMO's Portfolio Management System under the framework outlined in sections 6.2 and 6.3 to change the participation status of a *voluntarily scheduled resource* to be either active, inactive or hibernated.

- (a) *Voluntarily Scheduled Resource Providers* must follow the notice periods and notice information requirements in 6.4 when providing a notice to change the participation status of a *voluntarily scheduled resource* to AEMO.
 - (i) A *voluntarily scheduled resource* cannot change participation status within the trading day.

In the case of emergency situations, *Voluntarily Scheduled Resource Provider* must comply with NER 4.8.1 regarding the requirement to promptly advise AEMO at the time that the *Voluntarily Scheduled Resource Provider* becomes aware of any circumstance which could be expected to adversely affect the secure operation of the power system or any equipment owned or under the control of the *Voluntarily Scheduled Resource Provider* or a *Network Service Provider*. As such:

- (b) The notice periods and notice information requirements for changes to a *voluntarily scheduled resource's* participation status, outlined in Table 10 and Table 11, do not apply during emergencies (which fall under requirements outlined in NER 4.8.1).

6.1. Deactivation

Excluding the requirement in 6(a)(i) above, there is no minimum or maximum period for which a *voluntarily scheduled resource* may remain inactive, provided it continues to comply with the obligations for *voluntarily scheduled resources* under the NER, except to the extent its *inactive voluntarily scheduled resource* is exempted from the application of a provision of the NER under section 6.3.

- (a) A deactivation notice, as per NER 3.10A.2(c)(3), or reactivation notice will apply to each individual *qualifying resource* forming part of the aggregated *voluntarily scheduled resource*.
- (b) A deactivation notice is not required to specify a deactivation period end date. If a *Voluntarily Scheduled Resource Provider* includes a deactivation period end date in a deactivation notice, that date will be taken to be the reactivation notice under NER 3.10A.2(g) and the *voluntarily scheduled resource* will return to active status from that date.

An *inactive voluntarily scheduled resource* will continue to have that status until either:

- (c) The *Voluntarily Scheduled Resource Provider* submits a reactivation notice, in which case the *voluntarily scheduled resource* from the date specified will become an active *voluntarily scheduled resource*.
- (d) The *Voluntarily Scheduled Resource Provider* submits a hibernation notice, in which case the *voluntarily scheduled resource* from the date specified will become a *hibernated voluntarily scheduled resource*.
- (e) If a *Voluntarily Scheduled Resource Provider* includes a deactivation period end date in a deactivation notice, the *voluntarily scheduled resource* will return to active status from that date.

For its *inactive voluntarily scheduled resource*:

- (f) The *Voluntarily Scheduled Resource Provider* may submit a deactivation notice to extend the deactivation period of the *voluntarily scheduled resource* if it has provided a deactivation period end date, in which case the *voluntarily scheduled resource* will remain inactive.

A *Voluntarily Scheduled Resource Provider* may submit a reactivation notice to AEMO in respect of its *inactive voluntarily scheduled resource* at any time:

- (g) For *voluntarily scheduled resources* that have been deactivated for more than 12 months or inactive during a change of zones, they will be required to undergo a

capability re-assessment to ensure they still meet the technical and communication requirements of a *voluntarily scheduled resource*.

6.2. Temporary hibernation

NER 3.10A.2(k)(1) sets a hibernation period of at least 30 days and a maximum period of 18 months.

- (a) A *Voluntarily Scheduled Resource Provider* may submit a hibernation notice to AEMO at any time in respect of its *voluntarily scheduled resource*, including an *inactive voluntarily scheduled resource*.
- (b) A hibernation notice, as per NER 3.10A.2(k)(4), will apply to each individual *qualifying resource* forming part of the aggregated *voluntarily scheduled resource*.
- (c) Under NER3.10A.2(l)(2)(i), AEMO may impose conditions on the *hibernated voluntarily scheduled resource* for the duration of the hibernation period and the *Voluntarily Scheduled Resource Provider* must comply with those conditions. Conditions will be applied by AEMO:
 - (i) In circumstances where it deems that the hibernation of the *voluntarily scheduled resource* could cause a threat to *power system security* in AEMO's reasonable opinion.
- (d) Upon becoming hibernated, for the duration of the hibernation period the *voluntarily scheduled resource* will no longer be classified as a scheduled resource and will not participate in *central dispatch*.
 - (i) A *hibernated voluntarily scheduled resource* will be unable to access AEMO's bidding system during hibernation, and therefore cannot submit any bids (*energy* or FCAS).
- (e) Before commencing hibernation and losing access to AEMO's bidding system, a *Voluntarily Scheduled Resource Provider* must submit a bid, or bids, that marks the maximum availability of the *voluntarily scheduled resource* as zero ($\text{MaxAvail} = 0$) for the relevant hibernation period.

A *hibernated voluntarily scheduled resource* will continue to be hibernated until either:

- (f) The *Voluntarily Scheduled Resource Provider* submits a resumption notice to remove its status as hibernated and become an active *voluntarily scheduled resource*, in which case the *voluntarily scheduled resource* will become a scheduled resource again from the date specified.
- (g) The *Voluntarily Scheduled Resource Provider* submits a resumption notice to remove its status as hibernated and become an *inactive voluntarily scheduled resource*, in which case the *voluntarily scheduled resource* will become a scheduled resource again from the date specified.

- (h) The *Voluntarily Scheduled Resource Provider* submits a cessation notice to withdraw the nomination of a *hibernated voluntarily scheduled resource* (and with it their status as a *Voluntarily Scheduled Resource Provider*).
- (i) The maximum hibernation period ends, in which case the *qualifying resources* cease to be a *voluntarily scheduled resource* and will only be subject to the obligations applying due to its existing classification as a *generating unit*, *bidirectional unit* or *market connection point*, and the *Voluntarily Scheduled Resource Provider* ceases to be a *Voluntarily Scheduled Resource Provider* and retains only its original registration as a *Generator*, *Integrated Resource Provider* or *Market Customer*.

6.3. Obligations of a *Voluntarily Scheduled Resource Provider* with an inactive or hibernated voluntarily scheduled resource

A *Voluntarily Scheduled Resource Provider* whose *voluntarily scheduled resource* is approved as an *inactive voluntarily scheduled resource* or *hibernated voluntarily scheduled resource*:

- (a) Remains the *Voluntarily Scheduled Resource Provider* of that *voluntarily scheduled resource*, but with reduced obligations as specified in paragraphs 6.3(c), (d) and (e) and 6.3.1(f) and (g) below.
- (b) The *Voluntarily Scheduled Resource Provider* retains its underlying registration as a *Generator*, *Integrated Resource Provider* or *Market Customer*, and as a result the *Voluntarily Scheduled Resource Provider* must continue to comply with the obligations that apply to a *Generator*, *Integrated Resource Provider* or *Market Customer* in respect of the relevant *qualifying resource* that is part of either an *inactive voluntarily scheduled resource* or *hibernated voluntarily scheduled resource*.
- (c) NER 3.10A.2(f) and 3.10A.2(l)(2)(ii) outline the modifications that apply to a *Voluntarily Scheduled Resource Provider* while its *voluntarily scheduled resource* is an *inactive voluntarily scheduled resource* or *hibernated voluntarily scheduled resource*.
- (d) NER 3.8.2B outlines the requirements on a *Voluntarily Scheduled Resource Provider* to participate in *central dispatch* and how this is varied when the *voluntarily scheduled resource* is recorded as an *inactive voluntarily scheduled resource* or *hibernated voluntarily scheduled resource*.
- (e) An *inactive voluntarily scheduled resource* is eligible to participate in the Contingency FCAS market, provided it continues to meet the requirements specified in the MASS.

6.3.1. Modifications when a *voluntarily scheduled resource* is inactive

- (f) As outlined in Table 9, an *inactive voluntarily scheduled resource* remains a scheduled resource and therefore the *Voluntarily Scheduled Resource Provider* for an *inactive voluntarily scheduled resource* is still required to participate in *central dispatch* and submit *dispatch bids*, but is not required to conform to its *dispatch instructions* (in accordance with the modifications in clauses 3.10A.2(d), (e) and (f)).

- (g) In respect of its *inactive voluntarily scheduled resource*, a *Voluntarily Scheduled Resource Provider* is exempt from the application of the following clauses, except in relation to any *market ancillary services* to be provided by any *qualifying resource* forming part of the *voluntarily scheduled resource*:
- (i) NER 3.8.8
 - (ii) NER 3.8.23B
 - (iii) NER 3.8.22A
 - (iv) NER 4.8.9 (in relation to directions)
 - (v) NER 4.9.2
 - (vi) NER 4.9

6.3.2. Modifications when a *voluntarily scheduled resource* is hibernated

- (h) As outlined in Table 7, a *hibernated voluntarily scheduled resource* is not a scheduled resource and none of the requirements applying to scheduled resources apply to a *Voluntarily Scheduled Resource Provider* in respect of the *hibernated voluntarily scheduled resource*.
- (i) A *Voluntarily Scheduled Resource Provider* for a *hibernated voluntarily scheduled resource* does not participate in *central dispatch* and is not able to submit *dispatch bids* in respect of its *voluntarily scheduled resource*.
 - (ii) A *hibernated voluntarily scheduled resource* is not required to provide aggregated telemetry data.

Table 7 Modifications that apply to a *voluntarily scheduled resource* while it is inactive or hibernated, except in relation to any market ancillary services to be provided by any qualifying resource forming part of the *voluntarily scheduled resource*

Feature	NER clause	Active	Inactive	Hibernated
Submit <i>dispatch bids</i>	3.8.6	✓	✓	X
Subject to <i>dispatch bid validation</i>	3.8.8	✓	X (Not required under the NER but AEMO proposes to still perform validation)	X
Conform to <i>dispatch instructions</i>	3.8.23B	✓	X	X

Feature	NER clause	Active	Inactive	Hibernated
Bids and <i>rebids</i> must not be false or misleading	3.8.22A	✓	X (AEMO expects however that inactive bids are as representative as possible of intended <i>voluntarily scheduled resource</i> behaviour)	X
Receive and follow a direction or instruction issued by AEMO	4.8.9	✓	X (Only to the extent that the clause relates to a direction issued by AEMO)	X (Only to the extent that the clause relates to a direction issued by AEMO)
Receive and follow instructions from AEMO at any time	4.9.2	✓	X	X
Dispatch bid compliance	4.9.8	✓	X	X

6.4. Notice periods and information

6.4.1. Notice periods for switching between participation statuses

Under NER 3.10A.2(c) & (k), AEMO must specify the process for submitting notices relevant to inactive and hibernation mode. This section outlines the notice periods applicable to a deactivation notice, hibernation notice, reactivation notice, and resumption notice for a *voluntarily scheduled resource*.

Table 8 provides information on the notice periods for the different notice types that a *Voluntarily Scheduled Resource Provider* may submit to AEMO to change the status of a *voluntarily scheduled resource*. Figure 1 shows the process flows for these notice types and how they relate to changing a *voluntarily scheduled resource's* participation status.

Upon receiving a notice, AEMO will:

- Check the notice provides the information required and within the notice period required.
- Change the status of the *voluntarily scheduled resource* to the relevant status, commencing from the specified *trading day*.

AEMO may request further information or reject a notice from a *Voluntarily Scheduled Resource Provider* if it does not provide the required information in Table 11, comply with the

notice periods in Table 8 or, in the case of hibernation, if the *Voluntarily Scheduled Resource Provider* specifies an expected hibernation period that exceeds the maximum period.

Specifically for a reactivation notice for a *voluntarily scheduled resource* that has been inactive for more than 12 months or a resumption notice:

- (c) AEMO may within 5 business days of receiving the reactivation notice or resumption notice where a capability re-assessment is required, advise the applicant of any further information or clarification which is required in support of its notice.
- (d) If further information or clarification is requested by AEMO, the relevant reactivation or resumption of the *voluntarily scheduled resource* will take effect 5 business days later than the *trading day* specified in the original notice.

Table 8 Notice periods for the different notice types that a *Voluntarily Scheduled Resource Provider* may submit to AEMO change the status of a *voluntarily scheduled resource*

Notice period for	Notice type(s)	To be received/sent by
Deactivation notice by <i>Voluntarily Scheduled Resource Provider</i>	<ul style="list-style-type: none"> Notice for the deactivation of an active <i>voluntarily scheduled resource</i> 	<ul style="list-style-type: none"> Five trading days prior to start of deactivation period
Reactivation reminder/notification from AEMO to <i>Voluntarily Scheduled Resource Provider</i>	<ul style="list-style-type: none"> Reminder/notification to notify <i>Voluntarily Scheduled Resource Provider</i> that an <i>inactive voluntarily scheduled resource</i> is reaching the end of its deactivation period 	<ul style="list-style-type: none"> Seven trading days prior to end date of relevant deactivation period
Reactivation notice by <i>Voluntarily Scheduled Resource Provider</i>	<ul style="list-style-type: none"> Notice for the reactivation of an <i>inactive voluntarily scheduled resource</i>. Can be combined with a deactivation notice by specifying a date from which the inactive voluntarily scheduled resource will become active 	<ul style="list-style-type: none"> Must be submitted before 12:30pm on the business day prior to the trading day from which the status change will commence (<i>voluntarily scheduled resources</i> inactive < 12 months) Seven trading days prior to end of relevant deactivation period (<i>voluntarily scheduled resources</i> inactive > 12 months) Must be submitted before the intended reactivation date (if included in the original deactivation notice), if the <i>Voluntarily Scheduled Resource Provider</i> wishes to shorten the specified deactivation period
Hibernation notice by <i>Voluntarily Scheduled Resource Provider</i>	<ul style="list-style-type: none"> Notice for the temporary hibernation of an active <i>voluntarily scheduled resource</i> Notice for the temporary hibernation of an <i>inactive</i> 	<ul style="list-style-type: none"> Seven trading days prior to start of hibernation period

Notice period for	Notice type(s)	To be received/sent by
	<i>voluntarily scheduled resource</i>	
Resumption reminder/ notification from AEMO to Voluntarily Scheduled Resource Provider	<ul style="list-style-type: none"> Reminder/notification to notify <i>Voluntarily Scheduled Resource Provider</i> that a <i>hibernated voluntarily scheduled resource</i> is reaching the end of its hibernation period 	<ul style="list-style-type: none"> Seven trading days prior to end date of relevant hibernation period Seven trading days prior to end date of maximum hibernation period (if applicable)
Resumption notice by Voluntarily Scheduled Resource Provider	<ul style="list-style-type: none"> Notice for the resumption of a <i>hibernated voluntarily scheduled resource</i> as an active <i>voluntarily scheduled resource</i> Notice for the resumption of a <i>hibernated voluntarily scheduled resource</i> as an <i>inactive voluntarily scheduled resource</i> 	<ul style="list-style-type: none"> May be sent any time during the relevant hibernation period Must be submitted seven trading days prior to end of relevant hibernation period
Cessation notice by Voluntarily Scheduled Resource Provider	<ul style="list-style-type: none"> Notice by a <i>Voluntarily Scheduled Resource Provider</i> to withdraw the nomination of a <i>hibernated voluntarily scheduled resource</i> (and cease to be a <i>Voluntarily Scheduled Resource Provider</i>) 	<ul style="list-style-type: none"> May be submitted any time during the relevant hibernation period Seven trading days prior to cessation date

6.4.2. Notice information requirements

AEMO requires the minimum information outlined in Table 9 to be included in the relevant notice to change the participation status of a *voluntarily scheduled resource*.

AEMO requires *Voluntarily Scheduled Resource Providers* to select a detailed reason code to explain their reason for a deactivation or hibernation notice. These codes will include:

F – Financial/Commercial

P – Planned Outage

U – Unplanned Outage

H – Forced Hibernation

O – Other

As outlined in section 5.3, a capability re-assessment of a *voluntarily scheduled resource* will be required for resumption notices and for reactivation notices where the *voluntarily scheduled resource* has been inactive for a period of more than 12 months.

Under NER 3.10A.2(h) and (n)(2), depending on the outcomes of the capability re-assessment, AEMO may request for further information or rectification to ensure the *voluntarily scheduled resource* meets operational requirements. This may result in the need for the *Voluntarily Scheduled Resource Provider* to adjust the date for the change in participation status contained within the original resumption or reactivation notice to meet the notice periods requirement in Table 10.

Table 9 Minimum information requirements for notices to change a voluntarily scheduled resource's participation status

Notice sent by <i>Voluntarily Scheduled Resource Provider</i>	Minimum information
Deactivation notice	<ul style="list-style-type: none"> Dispatchable unit identifier Participant ID Reason code for deactivation Start date (trading day) for deactivation period Optional: end date (trading day) for deactivation period, taken to be the reactivation notice
Reactivation notice	<ul style="list-style-type: none"> Dispatchable unit identifier Participant ID Capability re-assessment (for voluntarily scheduled resource that have been inactive for 12 months or longer) End date (trading day) for relevant deactivation period
Hibernation notice	<ul style="list-style-type: none"> Dispatchable unit identifier Participant ID Reason code for hibernation Start date (trading day) for hibernation
Resumption notice	<ul style="list-style-type: none"> Dispatchable unit identifier Voluntarily scheduled resource status for resumption (active or inactive) Participant ID Capability re-assessment End date (trading day) for relevant hibernation period

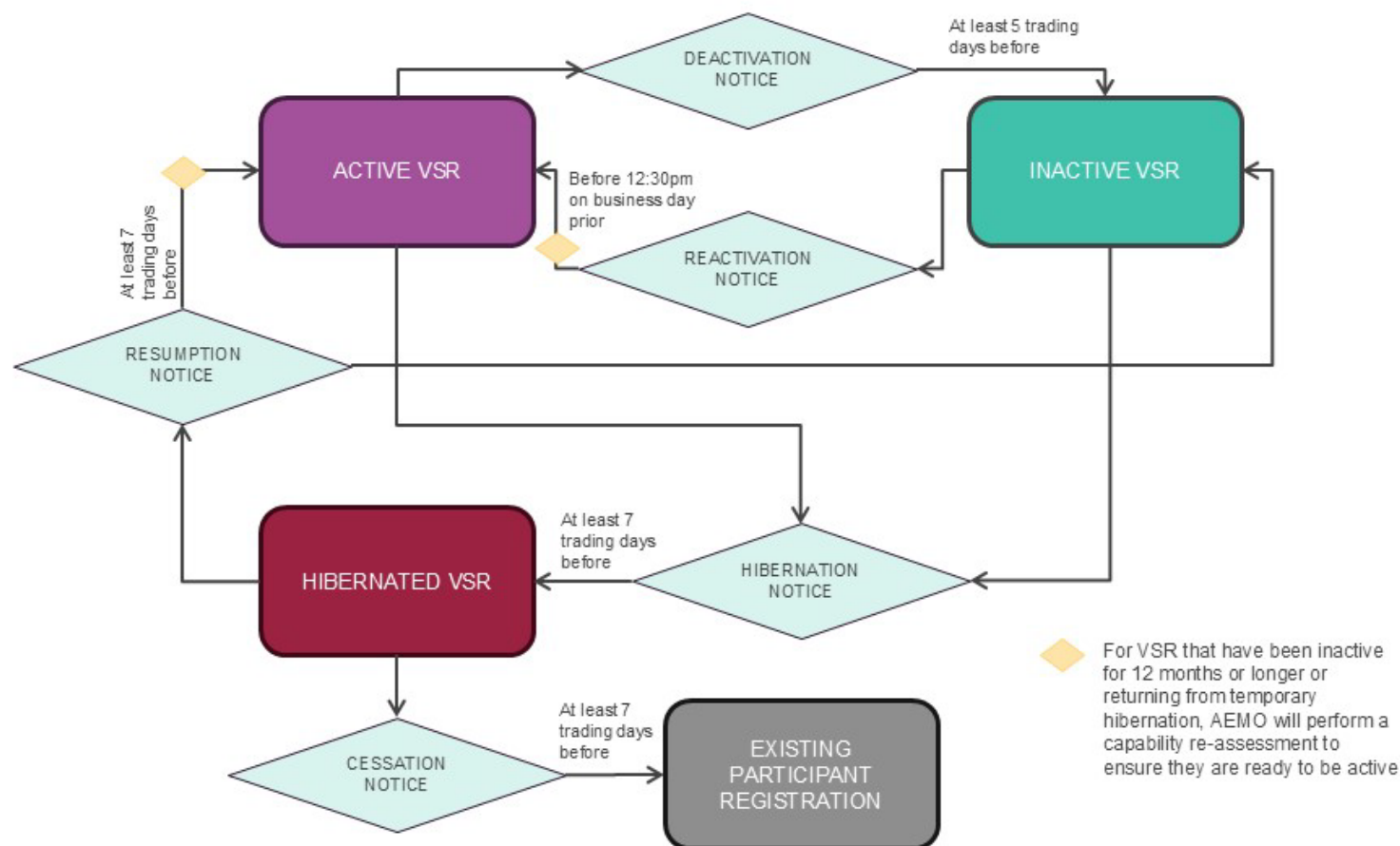


Figure 1 Process flows for changes to a *voluntarily scheduled resource's* participation status using the relevant notice types

7. Bidding

7.1. Bid submission format

- (a) A *Voluntarily Scheduled Resource Provider* must submit bids in respect of its active *voluntarily scheduled resource* and *inactive voluntarily scheduled resource* for each *trading day*.
- (b) In relation to *trading days* when a *Voluntary Scheduled Resource Provider* has not submitted bids, AEMO will use the latest submitted bids in dispatch.
- (c) When submitting re-bids, a *Voluntarily Scheduled Resource Provider* must comply with the AER's Rebidding and Technical Parameters Guidelines.³
- (d) A *Voluntarily Scheduled Resource Provider* will be able to submit bids for *energy* and FCAS for their *voluntarily scheduled resource* using the existing channel and processes for the five-minute bid format for a scheduled BDU bidding.
 - (i) The BDU classification enables storage units, or units with generation and load capacity, to submit a single bid and to receive a single *dispatch* instruction.
- (e) Bids submitted must correspond with aggregated net *production* or *consumption* across all *qualifying resources* included in a *voluntarily scheduled resource*.
- (f) Bids submitted in relation to *qualifying resources* that are *secondary settlement points* must reflect *production* or *consumption* at the *secondary settlement point* and not at the *primary connection point*.

7.2. Bidding for inactive or hibernated voluntarily scheduled resources

Under NER 3.10A.2(e)(2), AEMO must specify for the purposes of *central dispatch* how an *inactive voluntarily scheduled resource* is to be treated by AEMO.

- (a) In accordance with the NER, *Voluntary Scheduled Resource Providers* must submit bids to AEMO when a *voluntarily scheduled resource* is inactive, and expects that:
 - (i) Energy bids should ideally reflect expected MW *production/consumption* (to the extent feasible). This will be used to maintain operational visibility and regional demand forecasting for AEMO.
 - (ii) Contingency FCAS bids will reflect the *voluntarily scheduled resource's* availability to provide the service.
 - (iii) Regulation FCAS bids are bid unavailable to prevent *inactive voluntarily scheduled resource* from being enabled.

³ See: <https://www.aer.gov.au/industry/register/resources/Guidelines/rebidding-and-technical-parameters-Guidelines>

- (b) Energy and Regulation FCAS bids for *inactive voluntarily scheduled resource* are not used in *dispatch*.
- (c) In relation to their *hibernated voluntarily scheduled resources*, *Voluntary Scheduled Resource Providers* are not required to submit bids while the *voluntarily scheduled resources* are hibernated, as they do not participate in the *central dispatch*.
- (d) *Voluntarily Scheduled Resource Providers* are required to comply with any applicable static or Flexible Export Limit (FEL) or dynamic operating envelope (DOE) when submitting bids for *dispatch*.

7.3. Bid validation

Under NER 3.10A.2(e)(1), for the purposes of *central dispatch*, AEMO is not required to include *dispatch bids* submitted in respect of an *inactive voluntarily scheduled resource* in *central dispatch* or validate those *dispatch bids* in accordance with clause 3.8.8.

- (a) AEMO applies the same bid validation for both active *voluntarily scheduled resources* and *inactive voluntarily scheduled resources*.
- (b) NER schedule 3.1, which refers to the standard data requirements for verification and compilation of *dispatch bids*, is applicable to active *voluntarily scheduled resources* and *inactive voluntarily scheduled resources*.
- (c) AEMO undertakes bid price validations for a *voluntarily scheduled resource* as specified in the Bidirectional unit price band bid validation factsheet.⁴

8. NEMDE processes

The NEM dispatch engine (NEMDE) is the software used by AEMO to manage *central dispatch*. Under the NER, the *central dispatch* process aims to maximise the value of spot market trading by satisfying *energy* demand and all FCAS requirements using the least-cost combination of *energy* and FCAS bids, subject to technical limits on the provision of those services.

FCAS bids submitted by a *Voluntarily Scheduled Resource Provider* must be within the limits outlined in AEMO's FCAS model in NEMDE guide⁵, as determined by the values provided during the *voluntarily scheduled resource's* FCAS registration.

⁴ See: <https://aemo.com.au/-/media/files/initiatives/integrating-energy-storage-systems-project/fact-sheets/fact-sheet---bdu-bid-validation---may-2024.pdf?la=en>

⁵ See: https://aemo.com.au/-/media/files/electricity/nem/security_and_reliability/dispatch/policy_and_process/fcas-model-in-nemde.pdf?la=en

9. Dispatch

9.1. Dispatch bids

- (a) Two days ahead of each *trading day* a *voluntarily scheduled resource* must submit:
 - (i) For each of *production* and *consumption*, a MW capacity profile that specifies the MW available for each of the 288 *trading intervals* in the *trading day*.
 - (ii) Daily *energy* availability for *voluntarily scheduled resources* with *energy constraints*.
- (b) *Voluntarily Scheduled Resource Providers* must comply with the applicable requirements of NER 3.8.6 when submitting a *dispatch bid*. This includes a *dispatch bid* for a *voluntarily scheduled resource* meeting the same requirements as that for an existing scheduled BDU, which requires that:
 - (i) The bid may contain up to 10 *price bands* for *production* from, and up to 10 *price bands* for *consumption* by, the *voluntarily scheduled resource* for each of the 288 *trading intervals* in the *trading day*.
 - (ii) Prices in BDU bid bands are required to monotonically increase in each direction.
 - (iii) Prices specified in *dispatch bids* are to apply at the *market connection point* of the *voluntarily scheduled resource*, or each *market connection point* of the *voluntarily scheduled resource* aggregation.
- (c) For *voluntarily scheduled resources* comprised of one or more market bidirectional units, the actual SCADA state of charge (initial energy available) in each *trading interval* in respect of the *voluntarily scheduled resource dispatchable unit identifier* must also be provided.
- (d) Under clause 3.8.3A(b)(1)(iv), the minimum *ramp rate* is equal to the minimum *ramp rate* requirement for the aggregation of *qualifying resources* within the *voluntarily scheduled resource*.
 - (i) *Dispatch bids* for a *voluntarily scheduled resource* must meet the requirements of AEMO's Dispatch procedure under Section 2.8 Ramp rates in *energy dispatch instructions*.⁶
- (e) All *voluntarily scheduled resource* portfolios regardless of VSR zone will receive a *loss factor* of one for the purposes of *central dispatch* (see section 4.1)

⁶ See: https://aemo.com.au/-/media/files/electricity/nem/security_and_reliability/power_system_ops/procedures/so_op_3705-dispatch.pdf?la=en

9.2. Dispatch instructions

Voluntarily Scheduled Resource Providers will be required to build capability to receive and conform with *dispatch instructions* from AEMO for active *voluntarily scheduled resources* using the existing BDU *dispatch* instruction format.

- (a) A *Voluntarily Scheduled Resource Provider* must ensure that each of its *qualifying resources* in an active *voluntarily scheduled resource* can always comply with its latest *dispatch bid*.
- (b) AEMO may at any time give an instruction to a *Voluntarily Scheduled Resource Provider* in relation to any of its *voluntarily scheduled resources*, in accordance with clause 4.9.5(a), nominating the level or schedule of power.
- (c) Under NER 3.10A.2(f)(2):
 - (i) *Inactive voluntarily scheduled resources* are not required to follow *dispatch instructions*, but must conform with instructions received while participating in Contingency FCAS, in accordance with the MASS.

10. Conformance

NER 3.10A.3(b)(5)(iv) requires AEMO to specify the *dispatch* conformance criteria that will be applied to *voluntarily scheduled resources* to ensure they conform to AEMO's operational requirements. These criteria reflect NER 3.8.23B.

- (a) *Dispatch* conformance criteria are only applicable to active *voluntarily scheduled resources*. While *Voluntarily Scheduled Resource Providers* are still able to submit bids for its *inactive voluntarily scheduled resource* in accordance with clause 3.8.6, they are not required to follow *dispatch instructions*.
- (b) If an active *voluntarily scheduled resource* fails to respond to *dispatch instructions* within the time and accuracy prescribed in Section 3 and Appendix A of the Dispatch procedure:⁷
 - (i) it will be declared and identified as non-conforming, and
 - (ii) will not be used as the basis for setting spot prices.
 - (iii) If a *voluntarily scheduled resource* is declared non-conforming, then AEMO will publish a market notice with details of the non-conformance.

⁷ See: https://www.aemo.com.au/-/media/Files/Electricity/NEM/Security_and_Reliability/Power_System_Ops/Procedures/SO_OP_3705%20Dispatch.pdf

11. Metering

In accordance with NER 3.10A.3(b)(5)(v), AEMO must specify the acceptable types of *metering installations* for participating *voluntarily scheduled resource connection points* within the *voluntarily scheduled resource guidelines*. These are:

- (a) All *metering installations* at *voluntarily scheduled resource connection points* must comply with the requirements of NER Chapter 7, and AEMO's procedures.
- (b) The *metering installation* at a *voluntarily scheduled resource connection point* must have remote acquisition and must produce and store *bidirectional trading interval* energy data.
- (c) Where a *qualifying resource* is located at a *secondary settlement point*,⁸ the *financially responsible Market Participant* at that *secondary settlement point* will be the *Voluntarily Scheduled Resource Provider* in accordance with the following conditions:
 - (i) For a *secondary settlement point* with a type 8A *metering installation* (large customer), the *financially responsible Market Participant* (the *Voluntarily Scheduled Resource Provider*) may be a different *Market Participant* to that at the *premises connection point*.
 - (ii) For a *secondary settlement point* with a type 8B *metering installation* (small customer), the *financially responsible Market Participant* (the *Voluntarily Scheduled Resource Provider*) must be the same *Market Participant* as that at the *premises connection point*.
- (d) Where a *qualifying resource* is located at an on-market *child connection point* within an *embedded network*, the *financially responsible Market Participant* at that on-market *child connection point* will be the *Voluntarily Scheduled Resource Provider*.
- (e) Where a *qualifying resource* is located at a *secondary settlement point* related to an on-market *child connection point* within an *embedded network*, the *financially responsible Market Participant* at that *secondary settlement point* will be the *Voluntarily Scheduled Resource Provider* in accordance with the following conditions:
 - (i) For a *secondary settlement point* with a type 8A *metering installation* (large customer), the *financially responsible Market Participant* (the *Voluntarily Scheduled Resource Provider*) may be a different *Market Participant* to that at the on-market *child connection point*.
 - (ii) For a *secondary settlement point* with a type 8B *metering installation* (small customer), the *financially responsible Market Participant* (the *Voluntarily Scheduled Resource Provider*) must be the same *Market Participant* as that at the on-market *child connection point*.

⁸ Under the Unlocking CER Benefits rule change, consumers and agents will be able to identify and manage flexible, price-responsive CER from inflexible or passive energy use by establishing a *secondary settlement point*(s) for controllable resource(s) within the electrical installation. See <https://www.aemc.gov.au/rule-changes/unlocking-CER-benefits-through-flexible-trading>.

Scheduled Resource Provider) must be the same Market Participant as that at the on-market *child connection point*.

12. Data and information sharing

12.1. Data sharing between *Voluntarily Scheduled Resource Providers* and *Distribution Network Service Providers* and (where relevant) *Transmission Network Service Providers*

NER 3.10A.3(b)(6)(i) requires AEMO to specify the processes for *Voluntarily Scheduled Resource Providers* to share data with *Distribution Network Service Providers* or (where relevant) *Transmission Network Service Providers*.

The processes for data sharing between *Voluntarily Scheduled Resource Providers* and *Distribution Network Service Providers* and (where relevant) *Transmission Network Service Providers*, will be facilitated through the MITE program and the [CER Data Exchange](#), which will allow data and information sharing between multiple market participants.

12.2. Disclosure of data collected by AEMO from *Voluntarily Scheduled Resource Providers* to *Distribution Network Service Providers* and (where relevant) *Transmission Network Service Providers* and *Embedded Network Managers*

NER 3.10A.3(b)(6)(ii) requires AEMO to specify the processes for the disclosure of data collected by AEMO from *Voluntarily Scheduled Resource Providers* to *Distribution Network Service Providers* and *Transmission Network Service Providers* (as applicable), including obligations of confidentiality that will apply to any such disclosures.

Further to NER 3.10A.3(b)(6)(ii), AEMO also considers that *Embedded Network Managers* will require *voluntarily scheduled resource* standing data where a *qualifying resource* in a *voluntarily scheduled resource* is an on-market *child connection point* located within an *embedded network*.

Table 10 outlines AEMO's data and processes for sharing *voluntarily scheduled resource* data collected from *Voluntarily Scheduled Resource Providers* with *Distribution Network Service Providers* and where relevant *Transmission Network Service Providers* and *Embedded Network Managers*.

12.2.1. Arrangements for provision of *voluntarily scheduled resource* information

Further to the confidentiality obligations outlined in Table 10:

- An *Embedded Network Manager* is only entitled to receive data related to *qualifying resources* in a *voluntarily scheduled resource* that are located within their *embedded*

network and that is required for them to satisfy their requirements as an *Embedded Network Manager* under NER 7.5A.2.

- A *Distribution Network Service Provider* and where relevant *Transmission Network Service Provider* is only entitled to receive data related to *voluntarily scheduled resources* that contain *qualifying resources* connected to its distribution or transmission network.

Table 10 AEMO's processes for sharing voluntarily scheduled resource data collected from Voluntarily Scheduled Resource Providers with Distribution Network Service Providers and where relevant Transmission Network Service Providers and Embedded Network Managers

Data type	Source of data	VSR Status	Frequency	DNSP/TNSP access	Embedded Network Manager access	Confidentiality obligations relevant to disclosure
NMIs (including secondary settlement points) within voluntarily scheduled resource (excluding on-market child NMIs)	PMS MSATS (NMI standing data)	All statuses	As frequently as changes occur	Yes – can access via PMS for <i>voluntarily scheduled resources</i> containing <i>qualifying resources</i> connected to its distribution or transmission network. Existing MSATS access can be used to access standing data for NMIs.	No	Data to be treated as confidential information and not shared with third parties. Existing confidentiality obligations regarding NMI standing data in MSATS apply under the MSATS Procedures.
Embedded network on-market child NMIs within voluntarily scheduled resource	PMS MSATS (NMI standing data)	All statuses	As frequently as changes occur	No	Yes – can access via PMS for <i>voluntarily scheduled resources</i> containing <i>qualifying resources</i> connected to its embedded network. Existing MSATS access can be used to access standing data for child NMIs.	Data to be treated as confidential information and not shared with third parties. Existing confidentiality obligations regarding NMI standing data in MSATS apply under the MSATS Procedures.
Dispatchable unit identifier	Website publication of Registration and Exemption list	All statuses	As frequently as changes occur	Yes	Yes	This information is not confidential.
Voluntarily scheduled resource status – active, inactive, hibernated	PMS	All statuses	As frequently as changes occur	Yes - for <i>voluntarily scheduled resources</i> containing <i>qualifying resources</i> connected to its	Yes – for <i>voluntarily scheduled resources</i> containing <i>qualifying</i>	Data to be treated as confidential information

Data type	Source of data	VSR Status	Frequency	DNSP/TNSP access	Embedded Network Manager access	Confidentiality obligations relevant to disclosure
				distribution or transmission network.	<i>resources</i> connected to its embedded network.	and not shared with third parties.
Ramp rates	Markets Portal (<i>Voluntarily Scheduled Resource Provider to AEMO</i>)	Active	Daily	Yes - for <i>voluntarily scheduled resources</i> containing <i>qualifying resources</i> connected to its distribution or transmission network.	No	Data to be treated as confidential information and not shared with third parties.
Dispatch bids	Markets Portal (<i>Voluntarily Scheduled Resource Provider to AEMO</i>)	Active, Inactive	Daily – Post market	Yes	No	Existing confidentiality obligations under access to the Markets Portal, outlined in the Guide to User Rights Management.
Dispatch targets	Market Portal (<i>Voluntarily Scheduled Resource Provider to AEMO</i>)	Active	Daily – Post market	Yes	No	Existing confidentiality obligations under access to the Markets Portal, outlined in the Guide to User Rights Management.
Final <i>dispatch</i> quantity	Market summary report (public)	Active	Daily – Post market	Yes	Yes	This information is not confidential.
Final <i>dispatch</i> price	Market summary report (public)	Active	Daily – Post market	Yes	Yes	This information is not confidential.
Non-conforming <i>voluntarily scheduled resources</i>	Market summary report (public)	Active	Near real time	Yes	Yes	This information is not confidential.

Data type	Source of data	VSR Status	Frequency	DNSP/TNSP access	Embedded Network Manager access	Confidentiality obligations relevant to disclosure
Settlement quantities	EMMS	All statuses	N/A	No – confidential.	No – confidential.	This information is confidential information and as such AEMO will not share this with DNSPs, TNSPs or Embedded Network Managers.

Version release history

Version	Effective Date	Summary of Changes
1.0	23 May 2027	First draft guidelines