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| --- |
| Notification FORM |
| Schedule 3.1 Bid and Offer Validation Data |

Please complete this form to provide the data required under Schedule 3.1 of the National Electricity Rules (NER).

The information in this form is not to be altered without the prior written consent of Australian Energy Market Operator Ltd (AEMO).

Rules terms

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

Form submission

To submit this form to AEMO:

* Complete this notification form, please ensure all required sections are complete and any pre requisites are met.
* Sign the form, if using a digital signature please ensure the signatory is copied into the submission email.
* Ensure any required letter of authority is in place. For more information and a template letter of authority please see [AEMO’s website.](https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/participate-in-the-market/registration)
* Email a copy of the completed, signed form including all attachments to the AEMO Market Registration Team via email to [onboarding@aemo.com.au](mailto:onboarding@aemo.com.au).

**Note:** AEMO Market Registration team is unable to access external file share links, please attach all documentation you wish to submit to AEMO, if files are over 10MB please use a zip file. Multiple emails are acceptable, if sending multiple emails, please number.

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Overview

Complete this Notification Form (Form) to provide the data required by Schedule 3.1 of the NER.

This data is required for the verification and compilation of *dispatch bids* and *dispatch offers* on the *trading day* schedule.

Please read Schedule 3.1 of the NER to ensure the appropriate information is provided using this Form at least six weeks prior to commencement in the *market*.

Where a requirement for information is ‘Not Applicable’, please put “NA” in the field.

Please direct any questions regarding the completion of this form to the AEMO Registration Team email: [onboarding@aemo.com.au](mailto:onboarding@aemo.com.au).

# Form Details

## Registered Participant details

|  |  |  |  |
| --- | --- | --- | --- |
| Entity Name: |  | | |
| ABN: |  | ACN: |  |
| Participant ID: |  | | |

## Declaration

The Applicant is a *Registered Participant* in the NEM and is providing data required by Schedule 3.1 of the NER.

The Applicant declares that the Applicant authorises, approves and accepts that, in respect of this application and any related future application:

* AEMO may communicate with any person, as appropriate, including to verify information.
* AEMO may treat any communication on the Applicant’s behalf, whether physical, or electronic through a login to AEMO’s systems (including using access rights given by a Participant Administrator), as being by or to a person who is the Applicant’s:
  + authorised officer;
  + delegate, appointed by the Applicant’s authorised officer; or
  + agent, appointed by the Applicant’s authorised officer (including as registration contact in respect of the application), without AEMO requiring a separate letter of authority in this regard.
* AEMO may rely on any such communication, as being:
  + given by the Applicant, when given by the person;
  + given to the Applicant, when given to the person;
  + the Applicant’s in respect of any acts, omissions, statements, representations and notices;
  + instructed by the Applicant, regardless of whether any such instruction has been given, or its terms; and
  + complete, true and correct.

I, <Full Name>, <Position>, declare that I am authorised by the Applicant to submit this Application on the Applicant's behalf and certify that the contents of this Application and any further submissions are true and correct.

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: | 17/08/2023 |

## Form contact

Please provide contact details for all questions regarding data provided in this Form.

|  |  |  |  |
| --- | --- | --- | --- |
| Name: |  | | |
| Position: |  | Email: |  |
| Phone: |  | Mobile: |  |

# Scheduled and Semi-Scheduled Plant Data

Please complete this section for each of the following

* *Scheduled generating unit* / *semi-scheduled generating unit* (DUID),
* *scheduled load* (DUID), and
* *scheduled network service*.

Notes: If there is more than one DUID, please complete Section B of a new form (one for each additional DUID) and attach as an addition to ‘Section B’ in the main application.

If changes are required to the maximum *generation* or *maximum ramp rate*, please indicate the change by also including the original values below.

## Dispatchable plant identification

|  |  |  |
| --- | --- | --- |
| Item | | Value (Original Value) |
| Name[[1]](#footnote-2): |  | |
| Dispatchable Unit Identifier(DUID)[[2]](#footnote-3): | |  |
| Maximum *generation/load/*service[[3]](#footnote-4): | | (     ) |
| Maximum ramp rate[[4]](#footnote-5) (MW/Min): | | (     ) |

## Generating unit data

For all aggregated *Scheduled Generators* and *Semi-Scheduled Generators,* please indicate the maximum *generation* of each individual *generating unit* within the dispatchable plant identified in Section B.1.

Please indicate the maximum *generation* by grouping the individual g*enerating unit*s with the same maximum *generation* and specifying the number of individual *generating unit*s within each group.

| Group Label[[5]](#footnote-6) | Maximum generation Value (Original Value) | No. of individual units |
| --- | --- | --- |
|  | (     ) |  |
|  | (     ) |  |
|  | (     ) |  |
|  | (     ) |  |

## Scheduled load data

For all aggregated *scheduled loads,* please indicate the number of individual *loads* that have been aggregated within the dispatchable plant identified in Section B.1.

|  |  |
| --- | --- |
| No. of individual units: |  |

## Scheduled network service data

For all aggregated *scheduled network services,* please indicate the number of individual *scheduled network services* that have been aggregated within the dispatchable plant identified in Section B.1.

|  |  |
| --- | --- |
| No. of individual units: |  |

# Ancillary Service Generating Unit / Load Data

Please complete all fields in this section as required.

Note: If there is more than one *ancillary service generating unit* or *load*, or for each group of *generating units* or *loads* that have the same registration details other than *dispatchable unit identifier*, please complete Section C of a new form (one for each DUID) and attach as an addition to ‘Section C’ in the main application.

## Unit identification

|  |  |
| --- | --- |
| *Power Station/ load* installation name: |  |
| Generating unit/ load name: |  |
| Dispatchable unit identifier: |  |

## Unit/Load information

Please complete this table to reflect the current and proposed FCAS values. Indicate the original values in brackets. For example, “(5) 10” where 5 was the original value.

Note: This form can only be used to change the registered values for existing services. It cannot be used to classify an ASL or an ASGU for a new service types.

| Frequency Control Ancillary Services | Service provided (Y/N) | | Switching controller (Y/N) | | Max market ancillary service Capacity (MW) | | Min Enablement Level (MW) | Max Enablement Level (MW) | Max Lower Angle (Deg) | Max Upper Angle (Deg) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Very Fast Raise Service (RAISE1SEC) | |  | |  | |  |  |  |  |  |
| Very Fast Lower Service (LOWER1SEC) | |  | |  | |  |  |  |  |  |
| Fast Raise Service (RAISE6SEC) | |  | |  | |  |  |  |  |  |
| Fast Lower Service (LOWER6SEC) | |  | |  | |  |  |  |  |  |
| Slow Raise Service (RAISE60SEC) | |  | |  | |  |  |  |  |  |
| Slow Lower Service (LOWER60SEC) | |  | |  | |  |  |  |  |  |
| Delayed Raise Service (RAISE5MIN) | |  | |  | |  |  |  |  |  |
| Delayed Lower Service (LOWER5MIN) | |  | |  | |  |  |  |  |  |
| Regulating Raise Service (RAISEREG) | |  | |  | |  |  |  |  |  |
| Regulating Lower Service (LOWERREG) | |  | |  | |  |  |  |  |  |

## Determination of ancillary service information and control equipment information

Please indicate the basis on which the changes in the *ancillary services* information provided have been determined and provide further details if required:

Using *market load* or *generating unit* design parameters

Based on services previously provided under an *ancillary services* agreement

The results of tests

Mathematical modelling of the *plant*

Other (please describe):

## Controls, communications and telemetry information

### Facilities to receive enablement instructions

Please describe the facility installed to receive instructions from AEMO’s market systems for the enablement of each *ancillary service*.

For example: How will the *Market Customer* or *Market Generator* find out when the *ancillary services* are enabled for the Facility by AEMO’s market systems? Does the plant operator have access to AEMO’s market systems, or does the plant operator rely on an alternate system/person telling them when necessary?

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| Details: |  |

### Control facility

Please describe the control *facilities* installed for each *ancillary service* in accordance with the *Market Ancillary Service Specification* (MASS), including communications and telemetry where applicable. For example, are the fast and slow services to be provided by variable controllers or switching controllers?

Specify the switching controller settings if applicable. If the application is to aggregate additional *loads*, specify the switching controller settings for the additional *loads* only.

Please identify any *generating units* with switching controllers that share the same under or over frequency relay for initiating the *ancillary service* response?

Is the *plant* controlled from a location other than the *plant* to provide these services?

|  |  |
| --- | --- |
| Details: |  |

### Monitoring and recording facilities

Please describe the monitoring and recording facilities installed for each *ancillary service* in accordance with the MASS, including communications and telemetry, where applicable.

For example, what is the sampling interval of active power and frequency records?

|  |  |
| --- | --- |
| Details: |  |

### Test data

For each controller type (e.g. Battery system controller model, load control model, etc.), provide test data that demonstrates the provision of the services applied for.

* Test data must be provided for each category of service applied for (fast, slow and/or delayed, raise and/or lower as applicable)
* For each category of service applied for:
  + Test data must be provided showing the response to frequency deviations according to the standard frequency ramp defined in the MASS;
  + Test data and the frequency deviation data must be on a common time-scale;
  + The resolution of the data must conform to the MASS;
  + If the controller allows the reversal of power (e.g. battery systems), the above tests must be repeated to demonstrate performance under reversal of power.

|  |  |
| --- | --- |
| Details: |  |

1. For scheduled and semi-scheduled generation – power station ID.  
   For load – load installation name/ID.  
   For scheduled network services – name of installation/link. [↑](#footnote-ref-2)
2. DUID for scheduled network service includes the connection point identifier for each terminal node. [↑](#footnote-ref-3)
3. For scheduled and semi-scheduled generation – generated.  
   For load – the maximum load to which the scheduled load may be dispatched.  
   For scheduled network service - maximum power transfer capability at each terminal node. [↑](#footnote-ref-4)
4. For scheduled and semi-scheduled generation – The sum, where applicable, of the maximum ramp rate of each generating unit outlined in B.1.  
   For load – maximum ramp rate of the scheduled load.  
   For scheduled network service - maximum ramp rate of power transfer capability at each terminal node. [↑](#footnote-ref-5)
5. Where possible, the Group Label should align with the naming in the Generator Performance Standards. [↑](#footnote-ref-6)