



GUIDE TO ENERGY AND FCAS OFFERS

EXPLAINS HOW TO SUBMIT AND MAINTAIN WEB-BASED BIDS
USING ENERGY AND FCAS OFFERS IN THE EMMS WEB PORTAL

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IMPORTANT NOTICE

Purpose

This Guide to Energy and FCAS Offers, prepared by the Australian Energy Market Operator (AEMO), provides guidance for Energy and FCAS Offers under the National National Electricity Rules Rules (Rules).

Privacy and legal notices

The material in this publication may be used in accordance with the [privacy and legal notices on AEMO's website](#).

Trademark Notices

None

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Documents made obsolete

The release of this document changes any previous versions of Guide to Energy and FCAS Offers.

Further Information

For further information, please visit AEMO's website www.aemo.com.au or contact .

Feedback

Your feedback is important and helps us improve our services and products. To suggest improvements, please contact AEMO's Support Hub.



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INTRODUCTION

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Purpose

This guide explains how to submit and maintain **web-based** energy and frequency control ancillary service (FCAS) bids (not MNSP) in the EMMS web portal.

You can only submit MNSP bids using the FTP interface.

Other interfaces for submitting file-based bids

You can also submit file-based bids for Energy, FCAS, and MNSP Using FTP to the Participant File Server.

For help submitting file-based bids, see [Participant Input Interface - Energy, MNSP and FCAS Bid File Submission](#).

Audience

The primary audiences are:

- Implementers of applications or systems handling web-based energy and FCAS bids.
- AEMO participants who submit and maintain web-based energy and FCAS bids.

How to use this guide

- This document is written in plain language for easy reading. Where there is a discrepancy between the Rules, and information or a term in this document, the Rules take precedence.
- **Text in this format** indicates there is a resource on AEMO's website.
- For an explanation of the terms and abbreviations, see [Glossary on page 17](#)
- Glossary terms are capitalised and have the meanings listed against them.
- *Italicised terms* are defined in the National Electricity Rules. Any rules terms not in this format still have the same meaning.
- Actions to complete in the web portal interface are **bold and dark blue**.



What's in this guide

1. [About Energy and FCAS Offers on page 3](#) describes the Energy and FCAS Offers purpose and who can use it.
2. [Using Energy and FCAS Offers on page 4](#) explains how to access it in the EMMS web portal, how to view, create, and copy offers, and how to use the web portal grids.
3. [Needing Help on page 14](#) provides information about the web portal system requirements, user access rights, set participant, related resources, and contacting AEMO's Support Hub.
4. [Glossary on page 17](#) explains the abbreviations and terms used throughout this guide. Glossary terms are capitalised throughout this guide.
5. [Index on page 19](#) provides another way to find information in this guide.

The screenshots in this guide are taken from the EMMS web portal interface.



The screenshot shows the top navigation bar of the EMMS web portal. The navigation bar includes links for Administration, Market Info, Settlements, Offers & Submissions, SRA, Gas Supply Hub, Intermittent Generation, Data Interchange, System Security, and Sign Out. Below the navigation bar is a green header with the text "Participant (PARTICIPANT) of AEMO". The main content area features a welcome message: "Welcome to the Electricity Market Management System (EMMS) Web Portal". Below this, there is contact information for AEMO's Support Hub, including a telephone number (1300 236 600) and an email address (supporthub@aemo.com.au). A disclaimer states that downloading, copying, and using information from EMMS is subject to the Copyright and Disclaimer. The footer of the screenshot shows the copyright notice: "© 2011 Australian Energy Market Operator - All rights reserved." To the right of the text is a photograph of high-voltage power lines stretching across a field under a clear blue sky.



ABOUT ENERGY AND FCAS OFFERS

What Energy and FCAS Offers is for

The Energy and FCAS Offers web application allows participants to submit and maintain energy and frequency control ancillary service (FCAS) bids.

Who can use Energy and FCAS Offers

Participants having access to the Energy and FCAS Offers web application include registered *Trading Participants* and AEMO.



USING ENERGY AND FCAS OFFERS

In this chapter:

View an offer	4
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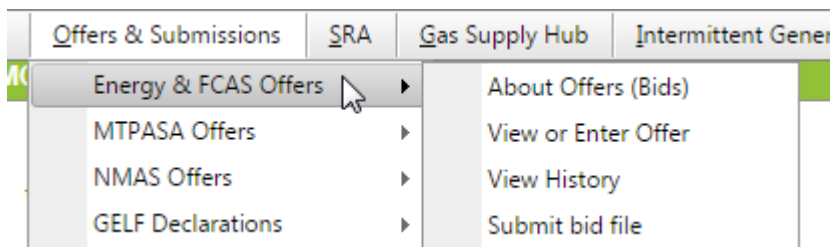
In the Energy and FCAS Offers web application Bid and Offer have the same meaning.

View an offer

- Using your web browser, access the energy market systems web portal, either:
 - Pre-production: <https://mms.preprod.nemnet.net.au>
 - Production: <https://mms.prod.nemnet.net.au>
- Sign in using the user ID and password provided by your company's PA.
- On the top menu, click Offers & Submissions, and then Energy and FCAS Offers.

The EMMS web portal provides you with a clear indication of the environment you are working in by providing a different background colour behind the participant identifier bar located beneath the menu bar. The production environment has a navy background and the pre-production environment has a green background (see).

- Click **View or Enter Offer**.



- The latest effective Energy offer displays. Use the Effective from date calendar to find existing effective offers.



View Offer for Participant (PARTICIPANTID)

Effective from date ¹ 14/03/2017 Duid ² Some Unit Service ³ Energy Action ⁴ Copy this... ⁵ Create new...

Trading date Mon 06/02/2017 Submitted on Mon 16/01/2017 10:24:42 ⁶

This section displays for Service type, Energy only

Daily Energy (MWh) ⁷ 0 MR Scaling Factor ⁸

FS Min Load ⁹ 0 T1 ¹⁰ 0 T2 ¹¹ 0 T3 ¹² 0 T4 ¹³ 0

Reason ¹⁴

Price Bands ¹⁵

PB 1	PB 2	PB 3	PB 4	PB 5	PB 6	PB 7	PB 8	PB 9	PB 10
-1000.00	27.11	30.29	34.98	48.28	60.08	70.74	94.59	290.77	14000.00

Band Availability ¹⁶

Period	Max Avail	PASA Avail	Fxd Load	R.Up	R.Down	Avail 1	Avail 2	Avail 3	Avail 4	Avail 5	Avail 6	Avail 7	Avail 8	Avail 9	Avail 10	MR Cap	PeriodId
0 ¹⁷	500 ¹⁸	500 ¹⁹	500 ²⁰	3 ²¹	5 ²²	390	190	0	0	100	0	0	30	0	50	24 ²⁴	1 ²⁵
05:00	500	500		3	5	390	190	0	0	100	0	0	30	0	50		2
05:30	500	500		3	5	390	190	0	50	0	50	0	30	0	50		3
06:00	500	500		3	5	390	190	0	50	0	50	0	30	0	50		4
06:30	500	500		3	5	390	190	0	51	0	50	0	30	0	50		5
07:00	500	500		3	5	390	190	0	50	0	50	0	30	0	50		6
07:30	500	500		3	5	390	190	0	50	0	50	0	30	0	50		7
08:00	500	500		3	5	390	190	0	50	0	50	0	30	0	50		8
08:30	500	500		3	5	390	190	0	50	0	50	0	30	0	50		9
09:00	500	500		3	5	390	190	0	50	0	50	0	30	0	50		10
09:30	500	500		3	5	390	190	0	50	0	50	0	30	0	50		11
10:00	500	500		3	5	390	190	0	50	0	50	0	30	0	50		12
10:30	500	500		3	5	390	190	0	50	0	50	0	30	0	50		13

View offer interface explained

#	Field	Explanation
1	Effective from date	The bid/offer effective date.
2	DUID	The identifier for a Dispatchable Unit.
3	Service	One of the following service types: Energy, Raise 6 seconds, Raise 60 seconds, Raise 5 minutes, Raise regulation, Lower 6 seconds, Lower 60 seconds, Lower 5 minutes, and Lower regulation.
4	Copy this...	Copy the displayed bid to create a new bid/offer.
5	Create new	Click to display the grid to create a new bid/offer.
6	Trading date	The trading and submission date for the displayed bid.
7	Daily Energy (MWh)	The amount of energy available from this unit in the <i>trading day</i> , expressed in MWh units. Only relevant to the service type, Energy.



#	Field	Explanation
8	MR Scaling Factor	Part of the MR offer, only relevant to service type Energy, where the unit is a generator. The initial MR offer for an MR event declared in a region for a <i>trading day</i> must be made before the defined MR Offer Cut-off time for that MR event, otherwise the offer is rejected. An MR offer for a trading day only applies for that day.
9	FS Min Load	Only relevant to the Service type Energy. Fast start minimum load (MW).
10	T1	Only relevant to the Service type Energy for the <i>dispatch inflexibility profile</i> . Fast Start Time at Zero in minutes, following the issue of a <i>dispatch instruction</i> to increase loading from 0 MW, required for the plant to begin to vary its dispatch level from 0 MW in accordance with the instruction.
11	T2	Only relevant to the Service type Energy for the <i>dispatch inflexibility profile</i> . Fast Start Time to Minimum Load in minutes, the plant requires after T1 to reach a specified minimum MW loading level.
12	T3	Only relevant to the Service type Energy for the <i>dispatch inflexibility profile</i> . Fast Start Time at Minimum Load in minutes, the plant requires to operate at or above its minimum loading level, before it can be reduced below that level.
13	T4	Only relevant to Service type Energy for the <i>dispatch inflexibility profile</i> . Fast Start Time to Zero in minutes following the issue of a <i>dispatch instruction</i> to reduce loading from the minimum loading level (T2) to zero, the plant requires to completely comply with the instruction.
14	Reason	Enter a reason, for example: Urgent spanner work.
15	Price Bands	The corresponding PB1 to PB10 from lowest to highest.
16	Band Availability	The band availability for the period corresponding to the Price Band for the matching Period.
17	Period	The 48 periods from 4:30 am to 4:00 am.
18	Max Avail	The maximum planned availability in MW for the matching period.
19	PASA Avail	MW required; not less than the Max Availability.
20	Fxd Load	Fixed load optional MW, not greater than the Max Availability.
21	R.Up	Ramp up minimum MW value.
22	R.Down	Ramp down maximum MW value.
23	Avail 1–10	The band availability entries under BP1 to BP10 for all 48 periods.



#	Field	Explanation
24	MR Cap	Optional field for the MR Capacity offer (comprising the MR Offer Price Scaling Factor line and MR Capacity for each <i>trading interval</i>). It is only relevant to service type, Energy where the unit is a generator. Loads cannot bid for mandatory restrictions capacity.
25	PeriodID	The 48 periods from the period ending at 4.30 am to the period ending at 4.00 am the next calendar day.

Create an offer

To enter an offer directly into the grid:

1. In the main menu, click **View or Enter Offer**.
2. Click **Create new**.
3. A new grid displays with a changed background colour, indicating you are in edit mode. Enter your bid details, for help, see:
 - [View an offer on page 4](#)
 - [Validation explained on the next page](#)
4. Click **Submit**.
5. If you see **Issues preventing successful submission**, instead of a successful acknowledgement, check the errors against [Validation explained on the next page](#) and resubmit your bid/offer.
6. When you receive a successful acknowledgement, you can check [View an offer on page 4](#) or [View offer history on page 12](#) to see your bid.





Create Offer for PARTICIPANT (PARTICIPANT)

Trading date ¹ 28/02/2017 Duid ² Some Unit Service ³ Energy Action Submit Cancel

To be submitted by PARTICIPANT

This section displays for Service type, Energy only

Daily Energy (MWh) ⁴ MR Scaling Factor ⁵

FS Min Load ⁶ T1 ⁷ T2 ⁸ T3 ⁹ T4 ¹⁰

Reason ¹¹

Price Bands ¹²

PB 1	PB 2	PB 3	PB 4	PB 5	PB 6	PB 7	PB 8	PB 9	PB 10
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Band Availability ¹⁸

Period	Max Avail	PASA Avail	Fxd Load	R.Up	R.Down	Avail 1	Avail 2	Avail 3	Avail 4	Avail 5	Avail 6	Avail 7	Avail 8	Avail 9	Avail 10	MR Cap	PeriodId
04:30	¹³ 0	¹⁴ 0	¹⁵ 0	¹⁶ 0	¹⁷ 0	0	0	0	0	0	0	0	0	0	0	¹⁹ 0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Validation explained

For help with the procedures governing the operation of the market relating to wholesale trading of electricity and the provision of ancillary services, see the [NER Chapter 3, Introduction to Market Rules](#).

#	Field	Required?	Validation
1	Effective from date	Yes	Select the trading date when the bid/offer becomes effective. You can create offers three weeks in advance.
2	DUID	Yes	Select the dispatchable unit name.
3	Service	Yes	Select the service type: <ul style="list-style-type: none"> Energy bid = Energy FCAS bid = Raise 6 seconds, Raise 60 seconds, Raise 5 minutes, Raise regulation, Lower 6 seconds, Lower 60 seconds, Lower 5 minutes, or Lower regulation.
4	Daily Energy (MWh)	No	Only relevant to the service type, Energy. Enter the amount of energy available from this unit in the trading day, expressed in MWh units. Cannot be negative. A blank value = 0.



#	Field	Required?	Validation
5	MR Scaling Factor	No	<p>Only relevant to the service type, Energy where the unit is a generator.</p> <p>The value must be blank or a number \geq zero with up to four decimal places.</p> <p>The value cannot change after the MR Offer cut-off time.</p> <p>If the value is not blank, all Periods in Band Availability must have a non-negative value for MR Capacity.</p> <p>If the value is blank, all MR Capacity entries in Band Availability must be blank.</p>
6	FS Min Load	Yes	<p>Only relevant to the service type, Energy for the <i>dispatch inflexibility profile</i>.</p> <p>Enter the Fast Start minimum load in MW.</p> <p>Either all T1–T4 minutes must be > 0 or all must be 0.</p> <p>When all T1–T4 minutes =0, the unit becomes a slow start unit for dispatch purposes.</p> <p>$0 < \text{FSML} \leq \text{Maximum Capacity of the unit}$.</p>
7	T1	Yes	<p>Only relevant to the Service type, Energy for the <i>dispatch inflexibility profile</i>.</p> <p>Enter the Fast Start Time at Zero: the minutes, following the issue of a <i>dispatch instruction</i> to increase loading from 0 MW, required for the plant to begin to vary its dispatch level from 0 MW in accordance with the instruction.</p> <p>Must be ≥ 0.</p> <p>The sum of T1 + T2 must be ≤ 30 minutes.</p> <p>The sum of T1 + T2 + T3 + T4 must be < 60 minutes.</p>
8	T2	Yes	<p>Only relevant to the Service type, Energy for the <i>dispatch inflexibility profile</i>.</p> <p>Enter the Fast Start time to minimum load: the minutes the plant requires after T1 to reach a specified minimum MW loading level.</p> <p>Must be ≥ 0.</p> <p>The sum of T1 + T2 must be ≤ 30 minutes.</p> <p>The sum of T1 + T2 + T3 + T4 must be < 60 minutes.</p>
9	T3	Yes	<p>Only relevant to the Service type, Energy for the <i>dispatch inflexibility profile</i>.</p> <p>Enter the Fast Start Time to Zero: the minutes following the issue of a <i>dispatch instruction</i> to reduce loading from the minimum loading level (T2) to zero, the plant requires to completely comply with the instruction.</p> <p>The sum of T1 + T2 + T3 + T4 must be < 60 minutes.</p>



#	Field	Required?	Validation
10	T4	Yes	<p>Only relevant to the Service type, Energy for the <i>dispatch inflexibility profile</i>.</p> <p>Enter the Fast Start Time to Zero: the minutes following the issue of a <i>dispatch instruction</i> to reduce loading from the minimum loading level (T2) to zero, the plant requires to completely comply with the instruction.</p> <p>The sum of T1 + T2 + T3 + T4 must be < 60 minutes.</p>
11	Reason	Yes, for fixed load inflexibility, ramp rate up/down below min, & rebids.	Enter a reason < 500 characters.
12	Price Bands	Yes	<p>Enter the price bands from lowest (PB1) to highest (PB10). Must be in whole cents with a maximum of 2 decimal places. Must increase for each price band, i.e. BandPrice1 < BandPrice2 < BandPrice3 etc.</p> <p>For energy bids, each price band must be:</p> <ul style="list-style-type: none"> • $\geq \text{MPF} * \text{TLF}$ or equivalently (given the increase rule for band prices), $\text{BandPrice1} > = \\$\text{MPF} * \text{TLF}$. • $\leq \text{MPC} * \text{TLF}$ or equivalently (given the increase rule for band prices), $\text{BandPrice10} \leq \text{MPC} * \text{TLF}$. <p>For rebids the price bands must be the same as the latest validly acknowledged bid, under PB1–PB10.</p> <p>For FCAS bids, must be:</p> <ul style="list-style-type: none"> • $\geq \\$0$. • $\leq \text{MPC}$ or equivalently (given the increase rule for band prices), $\text{BandPrice10} \leq \text{MPC}$
13	Max Avail	Yes	<p>Enter the maximum planned availability in MW for the matching period, must be:</p> <ul style="list-style-type: none"> • ≥ 0. • $\leq \text{Maximum Capacity}$.
14	PASA Avail	Yes	<p>Enter the maximum PASA availability in MW for the matching period; not less than the max availability, must be:</p> <ul style="list-style-type: none"> • $\leq \text{Maximum Capacity}$.
15	Fxd Load	No	<p>Enter the unit fixed load in MW, must be:</p> <ul style="list-style-type: none"> • ≥ 0. • $\leq \text{Maximum Capacity of the unit}$.



#	Field	Required?	Validation
16	R.Up	Yes	Enter the minimum MW value. For energy bids, each period must be: <ul style="list-style-type: none"> • ≥ 0. • < the registered maximum rate of change upwards of the unit.
17	R.Down	Yes	Enter the maximum MW value. For energy bids, each period must be: <ul style="list-style-type: none"> • ≥ 0. • < the registered maximum rate of change downwards of the unit.
18	Avail 1–10	Yes	Enter the band availability for BP1–BP10 for all 48 periods, must be: <ul style="list-style-type: none"> • ≥ 0. For energy bids, each band availability \leq Maximum Capacity.
19	MR Cap	No	Only relevant to the service type, Energy where the unit is a generator. Loads cannot bid for mandatory restrictions capacity.

Copy an existing offer

1. Follow one of these instructions to find an existing offer:
 - View an offer on page 4
 - View offer history on the next page

2. Under the **Action** heading, click **Copy this...**
3. The offer is copied to the fields and the background colour changes to indicate you are in edit mode.
4. If required, make changes to the bid. For help, [Create an offer on page 7](#) and [Using web portal grids on the next page](#).



5. Click **Submit**.
If you see **Issues preventing successful submission**, instead of a successful acknowledgement, check the errors against [Validation explained on page 8](#) and resubmit your bid/offer.



Using web portal grids

The grids are spreadsheet-like allowing you to use basic functionality such as:

- Move rows and cells up or down.
- Fill cells and rows across or down.
- Copy from a spreadsheet into the web portal grid and vice versa.

You cannot use spreadsheet formulas and conditional formatting in the grids.

View offer history

- To find previous offer history, in the main menu, click **View History**.

View Offer History for participant (PARTICIPANT)

Select effective date ¹ for Days from date ² ³ Duid ⁴ Service ⁵

01/02/2017 30 Include all offers Some Unit Energy

History ⁶

Trading Date	Offer Date	Version	Action	Reason
2017/02/06	2017/01/16 10:24:42	1	View	
2017/02/05	2017/01/16 10:15:06	1	View	
2017/01/20	2017/01/13 14:11:02	1	View	

View offer history fields explained

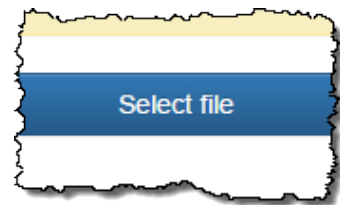
#	Field	Explanation
1	Select effective date	Select the trading date when the bid/offer became effective. You can view bidding/offer history for all successful bids/offers.
2	For days from date	Enter the number of days from the effective date to include in the search.
3	Include all offers	Select to show all successful offers for a day, not only the effective one.
4	DUID	Select the dispatchable unit name.
5	Service	Select the service type: <ul style="list-style-type: none"> • Energy bid = Energy • FCAS bid = Raise 6 seconds, Raise 60 seconds, Raise 5 minutes, Raise regulation, Lower 6 seconds, Lower 60 seconds, Lower 5 minutes, or Lower regulation.
6	History	To view a bid/offer, in the Action column, click View .



Submit a bid file

This menu item is for use if you are unable to submit a file-based bid/offer to the participant file server using FTP or Data Interchange.

1. Prepare your bid file, for help, see [Participant Input Interface - Energy, MNSP, and FCAS Bid File Submission](#).
2. In the main menu, click **Submit bid file**.
3. Read the **Take Care** message.
4. Click **Select file** and select the file location.
5. Check the file name and click **Submit**.
6. After a short time, the results display. You can check [View an offer on page 4](#) or [View offer history on the previous page](#) to see your bid. If you see errors, instead of a successful acknowledgement, check the errors against [Validation explained on page 8](#) and resubmit your bid file.



If the session is interrupted, or takes too long to display, check [View offer history on the previous page](#) to see if there is a problem.



NEEDING HELP

Web portal requirements

The Energy and FCAS Offers web portal is accessed using a web browser and requires:

- The website address where the application is located on AEMO's network.
- Either the current or previous versions of Microsoft Internet Explorer or Google Chrome.
- Access to MarketNet; if your company is a registered participant, you probably already have access because it is set up during the registration process, for more details, see [Guide to Information Systems](#).
- A user ID and password provided by your company's participant administrator (PA) who controls access to AEMO's web portals. For more details see [Guide to User Rights Management \(URM\)](#).
PAs are set up during the registration process, if you don't know who your company's PA is, contact AEMO's Support Hub Email: supporthub@aemo.com.au

Energy and FCAS Offers runs on both Windows and Unix-like operating systems.

For help changing your password, see [Introduction to MSATS](#).

User rights access

Your company's Participant Administrator (PA) provides access to Energy and FCAS Offers for participant users in the **MSATS>Administration>Maintain Entities** menu, using the following entity:

- EMMS - Offers and Submissions - Energy FCAS Offers - Enter Offer - modify physical plant
- EMMS - Offers and Submissions - Energy FCAS Offers - Enter Offer - bid prices, band availabilities
- EMMS - Offers and Submissions - Energy FCAS Offers - View Data

If you don't know who your company's PA is, contact [AEMO's Support Hub](#).

For more details about participant administration and user rights access, see [Guide to User Rights Management](#).

Using set participant

Where a participant user has rights assigned by more than one participant ID, they choose the participant they represent, using the **Set Participant** option in the web portal.



For help with user administration and the Set Participant option, see [Guide to User Rights Management](#).

Related resources

The resources listed in this section contain related information that may assist you. Related resources mentioned throughout this guide are You can find resources on AEMO's website: www.aemo.com.au.

Concise Guide to Data Interchange	Assists participants to understand AEMO's Data Interchange software, describing how to set up a standard Data Interchange environment to replicate data between AEMO's wholesale energy market systems and participants' local DBMS conforming to the electricity or gas Data Models.
Guide to Ancillary Services in the NEM	Provides a broad explanation of ancillary services, outlining the arrangements that apply for FCAS in the NEM. The explanation is non-technical and aimed at readers having little or no previous exposure to ancillary services.
Guide to Information Systems	Provides an overview of AEMO's participant market systems. It is relevant to IT decision making during the registration process and provides an understanding of the IT systems requiring set up.
Guide to User Rights Management	Assists participant administrators (PAs) to use the user rights management functions available in the MSATS web portal.
Introduction to MSATS	Explains the documents in the MSATS group, how to use the MSATS web portal, use Set Participant, and change your password.
NER Chapter 3 Introduction to Market Rules	Sets out the procedures governing the operation of the market relating to the wholesale trading of electricity and the provision of ancillary services.
Participant Input Interface - Energy, MNSP, and FCAS Bid File Submission	Details the interface to submit and maintain file-based energy, FCAS, and MNSP bids in the NEM.



AEMO's Support Hub

Contacting AEMO's Support Hub

IT assistance is requested through one of the following methods:

- Phone: 1300 AEMO 00 (1300 236 600)

For non-urgent issues, normal coverage is 8:00 AM to 6:00 PM on weekdays, Australian Eastern Standard Time (AEST).

- Email: supporthub@aemo.com.au
- The Customer Portal, <http://helpdesk.preprod.nemnet.net.au/nemhelplite/> allows you to log your own requests for assistance. For access credentials, see your organisation's IT security contact or participant administrator.

AEMO recommends participants call AEMO's Support Hub for all urgent issues, whether or not you have logged a call in the Customer Portal.

Information to provide

Please provide the following information when requesting IT assistance from AEMO:

- Your name
- Organisation name
- Participant ID
- System or application name
- Environment: production or pre-production
- Problem description
- Screenshots

For AEMO software-related issues please also provide:

- Version of software
- Properties or log files
- Replication Manager support dump and instance name (if Data Interchange problem)

Feedback

Your feedback is important and helps us improve our services and products. To suggest improvements, please contact Email: supporthub@aemo.com.au.



GLOSSARY

AEMC

Australian Energy Market Commission

AEST

Australian Eastern Standard Time

Avail 1--10

The band availability entries under BP1 to BP10 for all 48 periods.

Band Availability

The band availability for the period corresponding to the Price Band for the matching Period.

Daily energy

The amount of energy available from this unit in the trading day (so cannot be negative), expressed in MWh units. A blank value is equivalent to zero.

Data Interchange

Data interchange (DI) is a set of cooperating applications to replicate data between AEMO's Wholesale Market Systems and a participant's RDBMS conforming to the Electricity or Gas Data Models.

DUID

The identifier for a Dispatchable Unit

Effective date

The bid/offer effective date

Electricity Data Model

The Electricity Data Model is the definition of the interface to participants of data published by AEMO from National Electricity Market (NEM) systems.

EMMS (web portal)

Wholesale Electricity Market Management System; software, hardware, network and related processes to implement the energy market.

Energy

The unit must be a generator for the service type, Energy. Loads cannot bid for mandatory restrictions capacity.

Energy Market Systems web portal (web portal)

Single web portal interface to access AEMO's IT systems

FCAS

Frequency control ancillary services

FS Min Load

Fast start minimum load (MW). Only relevant to Service type, Energy.

FSML

Fast start minimum load

FTP

File transfer protocol

Fxd Load

Optional MW, not greater than the Max Availability.

MarketNet

AEMO's private network available to participants having a participant ID

Max Avail

The maximum planned availability in MW for the matching period.

MLF

Intra-regional marginal loss factor

MNSP

Market Network Service Provider

MPC

Market Price Cap

MPF

Market Price Floor

MR

Mandatory restrictions

MR Cap

Optional field for the MR Capacity offer (comprising the MR Offer Price Scaling Factor line and MR Capacity for each trading interval). It is only relevant to service type, Energy where the unit is a generator. Loads cannot bid for mandatory restrictions capacity.

MR Offer

Comprises the MR Offer Price Scaling Factor and MR Capacity for each trading interval for the



service type, Energy where the unit is a generator. Loads cannot bid for MR capacity. Submitting MR offers is optional. The initial MR offer for an MR event declared in a region for a trading day must be made before the defined MR Offer Cut-off time for that MR event, otherwise the offer is rejected. An MR offer for a trading day only applies for that day.

MR scaling factor

Part of the optional MR offer.

MSATS

Retail Market Settlement and Transfer Solution

MT PASA

Medium-term Projected Assessment of System Adequacy: two years of data.

MW

Megawatt

MyTerm**NEM**

National Electricity Market

NER

National Electricity Rules; also often just called the Rules

PA

participant administrator

Participant file server

AEMO's participant folders for batch file transfer between AEMO and participant IDs.

Participant ID

Registered participant identifier

PASA Avail

MW required; not less than the Max Availability

Period

The 48 periods from 4:30 am to 4:00 am.

PeriodID

Trading interval ID

Pre-production

AEMO's test system available to participants

Price Bands

The corresponding PB1 to PB10 from lowest to highest.

Production

AEMO's live system

R.Down

Maximum MW value

R.Up

Minimum MW value

Reason

A compulsory field that is less than 500 characters. For example: Urgent spanner work.

Rules

National Electricity or Gas Rules (NER or NGR)

Service

Energy, Raise 6 seconds, Raise 60 seconds, Raise 5 minutes, Raise regulation, Lower 6 seconds, Lower 60 seconds, Lower 5 minutes, and Lower regulation

T1

Fast Start Time at Zero in minutes. Only relevant to Service type, Energy.

T2

Fast Start Time to Minimum Load in minutes. Only relevant to Service type, Energy.

T3

Fast Start Time at Minimum Load in minutes. Only relevant to Service type, Energy.

T4

Only relevant to Service type, Energy. Fast Start Time to Zero in minutes.

TLF

Transmission Loss Factor

URM

User Rights Management; see the Guide to URM on AEMO's website



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