

EMMS - Technical Specification - August 2023

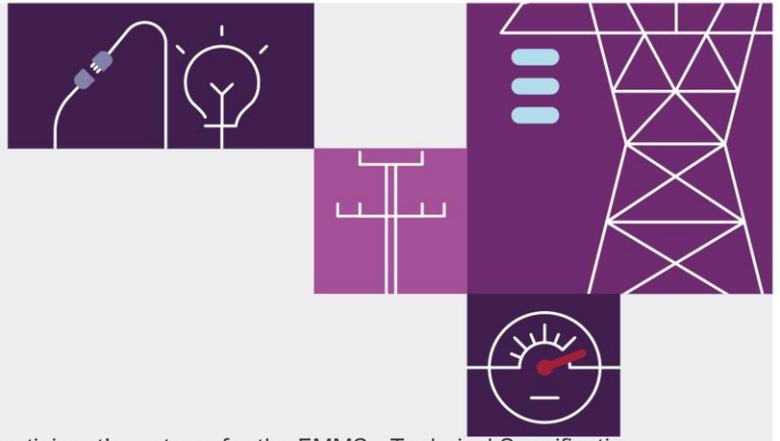
1.00 August 2023

Pre-production: Thursday 6 July 2023

Production: Wednesday 9 August 2023

Release series: EMMSNEM2025





Important notice

Purpose & audience

This document describes the technical changes required to participant's systems for the EMMS - Technical Specification - August 2023 (Release). The Australian Energy Market Operator (AEMO) provides this information as a service targeting business analysts and IT staff in participant organisations. It provides guidance about the changes to their market systems under the National Electricity Rules (Rules), as at the date of publication.

How to use this document

- If you have questions about the business aspects of these changes, please see Consultations on AEMO's website.
- The references listed throughout this document are primary resources and take precedence over this document.
- Unless otherwise stated, you can find resources mentioned in this guide on AEMO's website.
- **Text in this format** is a link to related information. Some links require access to MarketNet.
- **Text in this format**, indicates a reference to a document on AEMO's website.
- **Text in this format** is an action to perform in the Markets Portal.
- 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.
- Glossary Terms are capitalised and have the meanings listed against them in the Glossary.
- Rules Terms have the meaning listed against them in the **National Electricity Rules** (Rules).

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Distribution

Available to the public.

Document Identification

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Version History

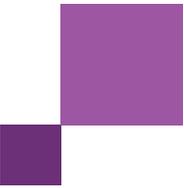
1.00 See Changes in this version.

Documents made obsolete

The release of this document changes only the version of EMMS - Technical Specification - August 2023.

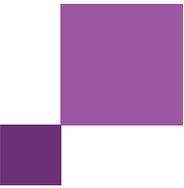
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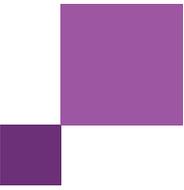


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1 Introduction

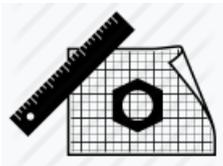
1.1 Audience

AEMO provides this information as a service targeting business analysts and IT staff in Registered Participant companies.

1.2 Objective

The EMMS - Technical Specification - August 2023 (Release) describes the projects planned by AEMO from a participant perspective and includes any system related changes for participants.

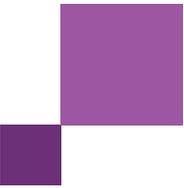
1.3 Status

Version	Status
1.00	The design is 100% and ready for participant builds.
0.02	 Initial Draft for review. The design is not ready for participants' builds Presents the EMMS - Technical Specification - August 2023 evolving design. Please send feedback to techwriters@aemo.com.au

1.4 Release dates

Scheduled for implementation in:

- Pre-production: Thursday 6 July 2023
- Production: Wednesday 9 August 2023



1.5 Projects and enhancements

Changes and enhancements for this Release include:

Project	Change	Affected interfaces
Fast Frequency Response (FFR)	Adds LOWER1SEC and RAISE1SEC fields to PMS web interface and Dispatch web interface, APIs, and FTP JSON files	<ul style="list-style-type: none"> - Existing Markets Portal > Portfolio Management System - Existing Markets Portal > EMMS > Offers & Submissions > Energy & FCAS 5min Bids

1.6 Rule and procedure changes

Project	Title	Version	Effective rule date
FFR	Fast frequency response market ancillary service	Schedule 1, clauses 3.11.2, 3.15.6A, 4.8.16 Chapter 10, new definitions	1 October 2023
		Schedule 2, clause 4, chapter 11	22 July 2021

1.7 Related technical specifications

Title	Description
EMMS Technical Specification - Data Model – May 2023	Explains the changes to the MMS Data Model v 5.2

1.8 Related documents

Once published, these resources take precedence over this technical specification

These guides and resources are updated according to this technical specification and published for the pre-production Release Date.

Title	Description	Publish date
Energy & FCAS Bids on Markets Portal Help	Help using the web interface	Thursday 6 July 2023
Guide to FTP Energy, FCAS, and MNSP Bids and Offers	Help using the file interface	Thursday 6 July 2023
NEM Dispatch Bidding Open API Specification Reference	Help building the Dispatch Bidding API	Thursday 6 July 2023

1.9 Approval to change

No approval or agreement to change required from participant change controllers as this is a rule change for [Fast frequency response market ancillary service rule change](#).

1.10 Market systems user group meetings

The Market Systems User Group (MSUG) is an industry user group established to discuss NEM wholesale and retail IT systems releases. Its purpose is to facilitate the continuing improvement of AEMO's IT systems by seeking feedback and collaboration from participants.

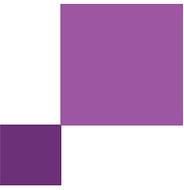
MSUG meetings are open to all interested parties, with invitations sent to all included on the distribution list. If you have a technical question for a project and want to attend the MSUG ask your company's support team to include your email address in their [AEMO Help Desk Bulletin \(CRM\)](#) distribution list.

1.11 Version numbers

AEMO releases new versions of this document as the technical requirements are streamlined.

Incremental version numbers such as 1.01, 2.01 and so on mean there is a minor change to the technical specification.

Major version numbers such as 1.00, 2.00 means there are substantial changes to the technical specification. Participants must carefully review these changes, detailed on page 4.



1.12 Changes in this version

- Updates **status** and document version number.

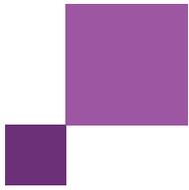
2 Proposed Timeline

The dates for the Market System User Group Meetings (MSUG) are tentative. We will provide an invitation one week prior to the meeting.

Milestone	Date	Description
Approval required	n/a	No approval required. For details, see Approval to change
MSUG meeting: draft technical specification review	Thursday, 4 May 2023	Market Systems User Group Meeting (MSUG) to review the technical specification and ask AEMO technical SMEs questions This date is tentative. The project manager will provide an invitation one week prior to the meeting
Revised Technical Specification	May 2023	AEMO releases new versions of this document as the technical requirements are streamlined. During the project this document is the source of truth. From the pre-production release, the technical specification is no longer updated, the related documents become the source of truth. Release schedules and technical specifications
Pre-production Data Model scripts release	Thursday, 20 April 2023	Participant Data Model scripts released for your pre-production environment Do not apply these scripts to your production environment
Pre-production refresh	June 19 (TBC)	Refresh of the pre-production system with data refreshed from the production system. An outage of up to five days can occur to the pre-production environment during this period. Participant access is not restricted, however, AEMO do not guarantee the pre-production data content or system availability. During the refresh, access to other AEMO systems such as AWEFS, EMMS, OPDMS, and STTM may be intermittently affected
Production Data Model auto subscription	Tuesday, 23 May 2023	For any existing files with modified or new tables, if participants are subscribed, AEMO moves them to the Legacy version For more details, see I need to receive the new data on page 8
Production Data Model scripts release	Tuesday, 23 May 2023	Participant Data Model scripts released for your Production environment

Proposed Timeline

Milestone	Date	Description
Pre-production implementation	29 June 2023 – Thursday 6 July 2023	AEMO implements components of the Release to pre-production for participant testing AEMO has full access to the system during this period Participant access is not restricted; however, the data content or system availability is not guaranteed
Pre-production available	Thursday, 6 July 2023 (TBC)	Pre-production testing period begins for participants
Related Documents publication	Thursday 6 July 2023	Release of guides and resources mentioned in Related on page 2
MSUG meeting: pre-production review	Thursday, 20 July 2023	Market systems user group meeting to review the technical specification before the pre-production release This date is tentative. The project manager will provide an invitation prior to the meeting
Production implementation	2 August 2023 – Wednesday 9 August 2023	AEMO implements the release to production
Production systems available	Wednesday 9 August 2023	Production systems available to participants
MSUG meeting: production review	Wednesday, 23 August 2023	Market systems user group meeting to review the implementation of the production release This date is tentative. The project manager will provide an invitation prior to the meeting
Data Model data and NEM reports release	9 October 2023	FFR Data Model data and NEM reports released to production
Rule effective date	Monday, 9 October 2023	Rule changes enforced



3 Participant Impact

3.1 Data model

For FFR, only the Data Model structure is released in Data Model v5.2.

The NEM reports and data to populate fields are released in:

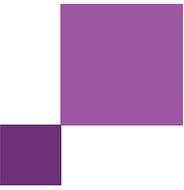
- Pre-production: Thursday 6 July 2023
- Production: Wednesday 9 August 2023

Package	Table	File ID
BILLING_RUN	BILLINGASPAYMENTS	BILLING
	BILLINGASRECOVERY	
DISPATCH	DISPATCHLOAD	DISPATCHIS
	DISPATCHPRICE	
FORCE_MAJEURE	APEVENTREGION	APEVENTREGION
	MARKET_SUSPEND_SCHEDULE	MARKET_SUSPEND_SCHEDULE
P5MIN	P5MIN_FCAS_REQUIREMENT	P5MIN
PRE_DISPATCH	PREDISPATCHPRICE	PREDISPATCHIS
SETTLEMENT_DATA	SET_FCAS_PAYMENT	SETTLEMENTS
	SET_FCAS_RECOVERY	
TRADING_DATA	TRADINGPRICE	TRADINGPRICE

For details, see [EMMS Technical Specification - Data Model – May 2023](#).

3.2 Upgrading your data model

You can upgrade your pre-production or production Data Model environments once you receive the Data Model scripts. Applying the scripts sets up the new Data Model structure on



your local database. You receive the same data until the new versions of fields, files, and reports are released into pre-production or production and you update your subscriptions.

For help, see:

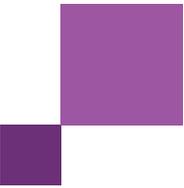
- [Upgrading your DI environments](#)
- [Updating your subscriptions](#)

3.2.1 I don't need to receive the new data model fields

There is no impact to you. You can ignore this Data Model release v5.2.

3.2.2 I need to receive the new data model fields

You need to upgrade to Data Model v5.2 and subscribe to the new files. Once you upgrade, unsubscribe from the Legacy files. For help, see [Subscription and legacy files](#).



4 Fast Frequency Response

4.1 About

The Australian Energy Market Commission (AEMC) has made a final rule to introduce two new Market Ancillary Services in the NEM under the existing Frequency Control Ancillary Services (FCAS) arrangements, accompanied by additional reporting requirements.

The introduction of these services helps keep the future power system secure and fosters innovation in faster responding technologies helping to lower costs for consumers.

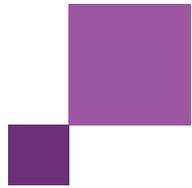
4.2 Goal

Fast Frequency Response (FFR) introduces two new Market Ancillary Services: Very Fast Lower Service and Very Fast Raise Service. Fast Frequency Response refers to the delivery of a rapid Active Power increase or decrease by Generation or Load in a time frame of 2 seconds or less, to correct a Supply demand imbalance and assist in managing Power System frequency. FFR is a relatively new service offered by inverter-based technologies such as wind, solar photovoltaics (PV), batteries, and demand-side resources.

For more information on FFR changes, see [Fast frequency response market ancillary service](#).

4.3 High-level changes

Function	Description	Reference
APIs	Adds new LOWER1SEC and RAISE1SEC values	NEM Dispatch Bidding Open API Specification Reference
Portfolio Management System	The web interface now includes the new LOWER1SEC and RAISE1SEC fields on the Portfolio and Applications screens	Portfolio Management System
Bidding and Dispatch	The Bidding web interface includes two new service types: LOWER1SEC and RAISE1SEC The FTP JSON files now include two new columns: LOWER1SEC and RAISE1SEC	Markets Portal > EMMS > Offers and Submissions > Energy & FCAS Bids
Settlements Reports	Updates SR reports to include line items and fields related to LOWER1SEC and RAISE1SEC.	



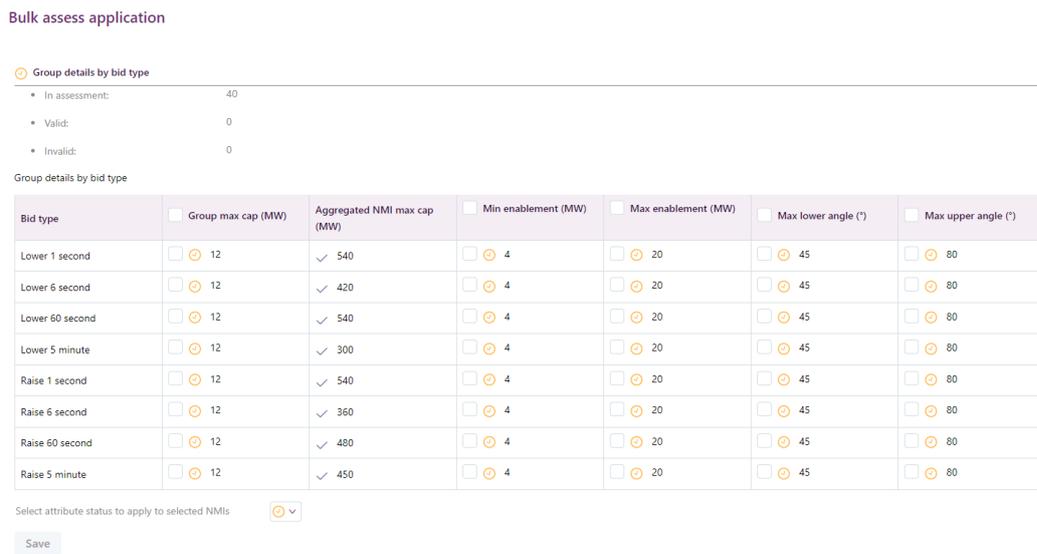
Function	Description	Reference
EMMS Data Model v5.2	New and updated tables in BILLING, DISPATCH, SETTELEMENT_DATA, P5MIN, PREDISPATCH, TRADING_DATA, FORCE_MAJEURE, packages	EMMS Technical Specification - Data Model – May 2023

4.4 Portfolio Management System

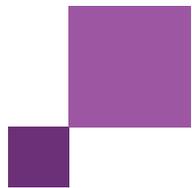
This Release updates the Markets Portal > Portfolio Management System web interface as follows:

- Bulk assessment application screen > Group details by bid type table: Adds new bid types Lower 1 sec and Raise 1 sec.

The web interface design is in progress. There may be differences between the images in this section and the actual web interface.



- Updates the aggregated metric at the NMI level to display FFR bid types
- Adds the Lower 1 sec and Raise 1 sec options to the following screens:



All Portfolios: portfolios tab, groups tab, WDR NMIs tab, FCAS NMIs tab

All portfolios

Create portfolio

Total aggregated WDR MRC 279 MW	Total aggregated Lower 1sec 177 MW	Total aggregated Lower 6sec 470 MW	Total aggregated Lower 60sec 442 MW	Total aggregated Lower 5min 449 MW	Total aggregated Raise 1sec 171 MW	Total aggregated Raise 6sec 1252 MW
Total aggregated Raise 60sec 1291 MW	Total aggregated Raise 5min 1117 MW					

Portfolios (50) Groups (252) WDR NMIs (35) FCAS NMIs (11157)

Search portfolios

Export to CSV

Portfolio name	Participant ID	Participant name	Services	Regions	Total WDR MRC (MW)	MRC by region (MW)
					0	
					0	

Portfolio: groups tab, WDR NMIs tab, FCAS NMIs tab, applications tab

[Portfolio Name]

Create application

Active
Information as at
12/05/2023

Portfolio summary

Groups 21	NMIs 128	WDR MRC 0 MW	Lower 1sec 165 MW	Lower 6sec 161 MW	Lower 60sec 153 MW	Lower 5min 153 MW	Raise 1sec 148 MW	Raise 6sec 339 MW	Raise 60sec 494 MW	Raise 5min 352 MW
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Details Groups (41) FCAS NMIs (128) Applications(88)

General details

Services by region (MW)

Export to CSV

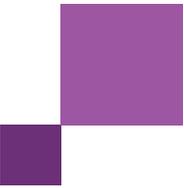
Region	WDR MRC (MW)	Lower 1sec (MW)	Lower 6sec (MW)	Lower 60sec (MW)	Lower 5min (MW)	Raise 1sec (MW)	Raise 6sec (MW)	Raise 60sec (MW)	Raise 5min (MW)
NSW1	-	-	3	3	3	-	107	206	139
QLD1	-	-	-	-	-	-	30	44	22
SA1	-	153	158	150	150	136	148	159	138
VIC1	-	12	-	-	-	12	54	85	53

Participant details

Participant ID
Participant type
Participant name
Participant ABN
Participant status (EMMS)

DRSP

Registered



Group: details tab, WDR NMIs tab, FCAS NMIs tab, applications tab

✓ **Group details**

Service	✓	FCAS	Client group reference	✓	[REDACTED]
Service co-optimisation	✓	No	Technology type	✓	COMBINED
Dispatch region	✓	SA1	Total no. application NMIs	✓	6
Aggregation (yes/no)	✓	Yes	Total no. group NMIs	✓	6
DUID	✓	[REDACTED]	VPP trial(yes/no)	✓	No
Group name	✓	[REDACTED]			

Group details by bid type

Export to CSV

Bid type	Group maximum capacity (MW)	Aggregated NMI maximum capacity (MW)	Minimum enablement (MW)	Maximum enablement (MW)	Maximum lower angle (°)	Maximum upper angle (°)
Lower 1 second	✓ 12	✓ 540	✓ 4	✓ 20	✓ 45	✓ 80
Lower 6 second	✓ 12	✓ 420	✓ 4	✓ 20	✓ 45	✓ 80
Lower 60 second	✓ 12	✓ 540	✓ 4	✓ 20	✓ 45	✓ 80
Lower 5 minute	✓ 12	✓ 300	✓ 4	✓ 20	✓ 45	✓ 80
Raise 1 second	✓ 12	✓ 540	✓ 4	✓ 20	✓ 45	✓ 80
Raise 6 second	✓ 12	✓ 360	✓ 4	✓ 20	✓ 45	✓ 80
Raise 60 second	✓ 12	✓ 480	✓ 4	✓ 20	✓ 45	✓ 80
Raise 5 minute	✓ 12	✓ 450	✓ 4	✓ 20	✓ 45	✓ 80

NMI: details tab, applications tab

Information as at: 12/05/2023

NMI summary

Services	WDR MRC	Lower 1sec	Lower 6sec	Lower 60sec	Lower 5min	Raise 1sec	Raise 6sec	Raise 60sec	Raise 5min
FCAS	0 MW	0 MW	1.2 MW	1.6 MW	0.8 MW	0 MW	0 MW	0 MW	800 MW

Details FCAS devices (1) Applications (1)

General details

Services	FCAS
No. groups	1
TNI region	QLD1
Site name	[REDACTED]
Site postcode	4170

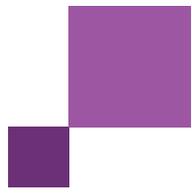
FCAS details

FCAS group name	[REDACTED]
FCAS DUID	[REDACTED]
Lower frequency setting	0
Raise frequency setting	49.75

Activity

Last updated on	02/08/2022 00:00
Last updated by	MIGRATION
Load classified on	02/08/2022

Applications: all applications tab, in progress tab, closed tab



Application Supporting evidence

Application details

Application reference	[Redacted]	Application version	1
Participant ID	[Redacted]	Portfolio name	[Redacted]
Last updated on	-	Last updated by	-
Created on	07/03/2023 10:09:02	Created by	-
Related applications	0		

Group details

Service	✓	FCAS	Client group reference	○	[Redacted]
Dispatch region	✓	SA1	Technology type	○	COMBINED
Aggregation (yes/no)	✓	Yes	Total no. application NMIs	✓	2
DUID	○	[Redacted]	Total no. group NMIs	✓	2
Group name	○	[Redacted]	VPP trial(yes/no)	✓	No

Group details by bid type Export to CSV

Bid type	Group maximum capacity (MW)	Aggregated NMI maximum capacity (MW)	Minimum enablement (MW)	Maximum enablement (MW)	Maximum lower angle (°)	Maximum upper angle (°)
Lower 1 second	○ 11	✓ 160	○ 5	○ 15	○ 50	○ 80
Lower 6 second	○ 11	✓ 60	○ 5	○ 15	○ 50	○ 80
Lower 60 second	○ 11	✓ 160	○ 4	○ 20	○ 45	○ 80
Lower 5 minute	○ 11	✓ 60	○ 5	○ 10	○ 55	○ 75
Raise 1 second	○ 11	✓ 160	○ 5	○ 15	○ 50	○ 80
Raise 6 second	○ 11	✓ 60	○ 5	○ 15	○ 50	○ 80
Raise 60 second	○ 11	✓ 160	○ 4	○ 20	○ 45	○ 80
Raise 5 minute	○ 11	✓ 60	○ 5	○ 10	○ 55	○ 75

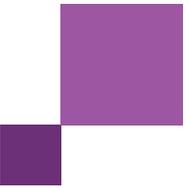
FCAS Application: group details section

✓ **Group details**

Service	✓	FCAS	Client group reference	✓	[Redacted]
Service co-optimisation	✓	No	Technology type	✓	COMBINED
Dispatch region	✓	SA1	Total no. application NMIs	✓	6
Aggregation (yes/no)	✓	Yes	Total no. group NMIs	✓	6
DUID	✓	[Redacted]	VPP trial(yes/no)	✓	No
Group name	✓	[Redacted]			

Group details by bid type Export to CSV

Bid type	Group maximum capacity (MW)	Aggregated NMI maximum capacity (MW)	Minimum enablement (MW)	Maximum enablement (MW)	Maximum lower angle (°)	Maximum upper angle (°)
Lower 1 second	✓ 12	✓ 540	✓ 4	✓ 20	✓ 45	✓ 80
Lower 6 second	✓ 12	✓ 420	✓ 4	✓ 20	✓ 45	✓ 80
Lower 60 second	✓ 12	✓ 540	✓ 4	✓ 20	✓ 45	✓ 80
Lower 5 minute	✓ 12	✓ 300	✓ 4	✓ 20	✓ 45	✓ 80
Raise 1 second	✓ 12	✓ 540	✓ 4	✓ 20	✓ 45	✓ 80
Raise 6 second	✓ 12	✓ 360	✓ 4	✓ 20	✓ 45	✓ 80
Raise 60 second	✓ 12	✓ 480	✓ 4	✓ 20	✓ 45	✓ 80
Raise 5 minute	✓ 12	✓ 450	✓ 4	✓ 20	✓ 45	✓ 80



4.5 Markets Portal > EMMS > Offers and Submissions > Energy & FCAS Bids

In the Energy & FCAS Bids web interface, the service type includes two new values:

- Raise 1 second
- Lower 1 second

Energy & FCAS Bids References to time are Australian Eastern Standard Time Upload Bid File Enter Bid

Trading Date: 24/02/2023 03/03/2023

DUID: Select DUIDs

Service Type: Select Services

Search:

- Select All
- Energy
- Raise 6 seconds
- Raise 1 seconds
- Raise 60 seconds
- Raise 5 minutes
- Raise Regulation
- Lower 1 seconds
- Lower 6 seconds
- Lower 60 seconds
- Lower 5 minutes
- Lower Regulation

Trading Date: 02/03/2023 Dispatchable: ANGASTON P Bid Date: 23/02/2023 10:57:05 Reference ID: 9c5f7748-6465-4485-83d5-5cd8913a34f6

Rebid Reason: 10:57:05

Bid Details

Availability Chart

Accumulate bandwidth CSS factors Expand duplicate periods

Period ID	Period	Max Avail	Ramp Down	Avail 1	Avail 2	Avail 3	Avail 4	Avail 5	Avail 6	Avail 7	Avail 8	Avail 9	Avail 10
04	1	04:05	45	14	0	5	0	0	23	0	0	2	50
05	2	04:10	45	14	0	0	0	0	23	0	0	0	50
06	19	05:35	45	14	0	0	0	0	25	0	0	0	50
08	25	06:05	49	14	0	0	0	0	27	0	0	0	50
09	37	07:05	49	14	0	0	0	0	23	0	0	0	50
10	43	07:35	49	14	0	0	0	0	12	0	0	0	50
11	49	08:05	49	14	0	0	0	0	0	0	0	0	50
12													

4.6 NEM Dispatch Bidding Open API Specification Reference

Adds new values - RAISE1SEC and LOWER1SEC as below. For more information, see [NEM Dispatch Bidding Open API Specification Reference \(getpostman.com\)](https://getpostman.com).

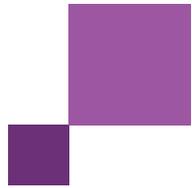
4.6.1 POST submitBids

Adds the following values to the **service** attribute:

- One of the FCAS service types. Required for fcasBid. Required properties: one of, RAISE1SEC, RAISE6SEC, RAISE60SEC, RAISE5MIN, RAISEREG, LOWER1SEC, LOWER6SEC, LOWER60SEC, LOWER5MIN, LOWERREG, type: string maximum 10, format: upper case

4.6.2 GET /getBid

For the **service** attribute, adds new values as below:



The Bid/Offer service type, one of, ENERGY, MNSP, RAISE1SEC, RAISE6SEC, RAISE60SEC, RAISE5MIN, RAISEREG, LOWER1SEC, LOWER6SEC, LOWER60SEC, LOWER5MIN, LOWERREG, type: string maximum 10, format: upper case

4.6.3 GET /getBids

For the **service** attribute, adds new values as below:

The Bid/Offer service type, one of, ENERGY, MNSP, RAISE1SEC, RAISE6SEC, RAISE60SEC, RAISE5MIN, RAISEREG, LOWER1SEC, LOWER6SEC, LOWER60SEC, LOWER5MIN, LOWERREG, type: string maximum 10, format: upper case

4.7 Settlements reports

4.7.1 SR report

The Ancillary Service Transactions section includes new line items for **Very fast raise** and **Very fast lower**.

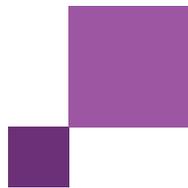
Ancillary Service Transactions

 Market Ancillary Service Transactions - Payments

Service Provided	Amount (\$)
Very Fast raise	
Very Fast lower	
Fast raise	
Fast lower	
Slow raise	
Slow lower	
Delayed raise	
Delayed lower	

Total Payments By AEMO	
=====	

The **Market Frequency Control Ancillary Services by Transmission Connection Point (Payments By AEMO)** section now includes columns for **Very fast raise** and **Very fast lower**.



BILLING	BILLING_AS_PAYMENTS_SUMMARY	AEMO	PUBLIC	26/04/2023	13:48:27	LOWER1SEC	LOWER6SEC	LOWER60SEC	LOWERSMIN	LOWERRG	RAISE1SEC	RAISE6SEC	RAISE60SEC	RAISESMIN	RAISEREG	RESTART	REACTIVE	LOADSHED	TOTAL_AS_PAYMENT
BILLING	ASPAYMENT_SUMMARY	1	BILLING_WEEK	STATUS	REGIONID														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk45	REVISE1	NSW1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk45	REVISE1	QLD1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk45	REVISE1	SA1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk45	REVISE1	TAS1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk45	REVISE1	VIC1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk46	REVISE1	NSW1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk46	REVISE1	QLD1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk46	REVISE1	SA1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk46	REVISE1	TAS1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk46	REVISE1	VIC1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk47	REVISE1	NSW1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk47	REVISE1	QLD1														
BILLING	ASPAYMENT_SUMMARY	1	2012Wk47	REVISE1	SA1														

4.8 Data model v5.2

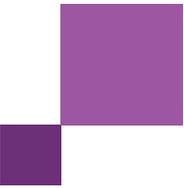
Only the Data Model structure is released for Data Model v5.2.

Package	Table	File ID
BILLING_RUN	BILLINGASPAYMENTS	BILLING
	BILLINGASRECOVERY	
DISPATCH	DISPATCHLOAD	DISPATCHIS
	DISPATCHPRICE	
FORCE_MAJEURE	APEVENTREGION	APEVENTREGION
	MARKET_SUSPEND_SCHEDULE	MARKET_SUSPEND_SCHEDULE
P5MIN	P5MIN_FCAS_REQUIREMENT	P5MIN
PRE_DISPATCH	PREDISPATCHPRICE	PREDISPATCHIS
SETTLEMENT_DATA	SET_FCAS_PAYMENT	SETTLEMENTS
	SET_FCAS_RECOVERY	
TRADING_DATA	TRADINGPRICE	TRADINGPRICE

For details, see EMMS Technical Specification - Data Model – May 2023.

The NEM reports and data to populate fields are released in:

- Pre-production: Thursday 6 July 2023
- Production: Wednesday 9 August 2023



5 FAQs

Released if relevant after each [MSUG meeting](#).

5.1 MSUG: May 18 2023

5.1.1 The data model is in preproduction now, but FFR does not go into preproduction until 6 July. Does this mean we'll have the preproduction data only after July?

Yes, the Data Model reports for the FFR project should populate once it goes into preproduction in July. There will be data coming through in the reports before the preproduction release, but they will be NULL because they are not in effect.

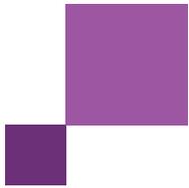
5.1.2 What is the process of having preproduction registrations for these new services? How do we register units ahead of time to do testing on the participant end?

Registrations are accepted from 9th August, after which a period of Industry testing commences. See the [AEMO | Fast Frequency Response](#) web page for the [Service Commencement Plan](#).

For more questions, contact ffrconsultation@aemo.com.au or Support Hub for technical questions.

5.1.3 Regarding FFR and STPASA at Go-live, will the new services roll-in into the STPASA period, or will STPASA submission start at go-live all at once.

Assuming this is regarding pre-dispatch, the current plan for service introduction and commencement accepts offers effective 9 Oct from 27 Sep, for inclusion in the 7-day dispatch from 2 Oct. AEMO will confirm the timings in the Industry Go-Live plan.



6 Implementation

6.1 Upgrading

You can upgrade your pre-production or production Data Model environments once you receive the Data Model scripts. Applying the scripts sets up the new Data Model structure on your local database. You receive the same data until the new versions of fields, files, and reports are released into pre-production or production and you update your subscriptions.

For help, see:

- [Upgrading your DI environments](#)
- [Updating your subscriptions:](#)

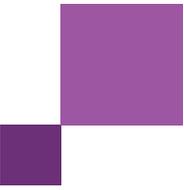
6.2 Implications

To maintain systems in-line with AEMO's market systems, participants need to:

- Review and assess the impact on their market systems with respect to the changes implemented as part of this Release.
- Change their systems prior to the implementation of this Release.
- Schedule staff and resources to upgrade their market systems for the production implementation of this Release.

6.3 Risks

- Participants will not receive the new Data Model fields in tables and files unless they upgrade to v5.2.

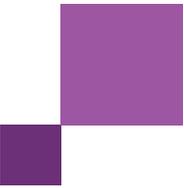


7 Terms

7.1 Rules Terms

You can find the following terms defined in the [National Electricity Rules \(NER\)](#).

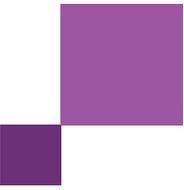
Term	Term	Term
AEMC	Generation	Power System
AEMO	Load	Registered Participant
Ancillary Services	Market Ancillary Services	Scheduled Generator
Active Power	Market Participant	Supply
Energy	NEM	Very Fast Lower Service
Frequency	Offers	Very Fast Raise Service



7.2 Glossary

You can find a full list of AEMO glossary terms in [Industry Terminology](#) on AEMO's website.

Abbreviation/Term	Explanation
AEST	Australian Eastern Standard Time
EMMS	Electricity Market Management System: software, hardware, network, and related processes to implement the wholesale energy market
FCAS	Frequency Control Ancillary Services
FFR	Fast Frequency Response
FTP	File transfer protocol
MSATS	Market Settlement and Transfer Solution for retail electricity
NER	National Electricity Rules
Release	EMMS - Technical Specification - August 2023
Release Dates	Pre-production: Thursday 6 July 2023 Production: Wednesday 9 August 2023
TBC	To be confirmed
Unit	Generating Unit



8 References

API Reference: Provides details about using AEMO's e-Hub as an interface to communicate information with AEMO. It assists Wholesale electricity and gas participants developing their own APIs.

Connecting to Market Systems: Explains the IT interfaces available to participants and how to access them.

Guide to Information Systems: Provides guidance for *Registered Participants* and interested parties about AEMO's participant electricity market systems.

Guide to User Rights Management: Assists participant administrators (PAs) to use the user rights management functions in the MSATS Web Portal.

8.1 Data interchange and data model resources

8.1.1 About

Information about setting up a Data Interchange environment: Data Interchange Help > [About Data Interchange](#).

8.1.2 Help

- [Data interchange online help](#)

8.1.3 Software

You can find Data Interchange software in the following locations:

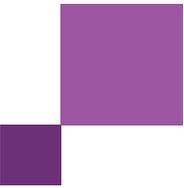
- Data Interchange Help > [Software Releases](#).
- Releases directory on the participant file share: FTP to 146.178.211.2 > Data Interchange, pdrBatcher, pdrLoader, or pdrMonitor.

8.1.4 Reports

- Data Interchange Help > [Data Model Reports](#).

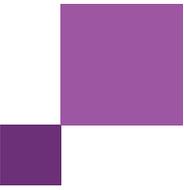
8.1.5 Releases

- Data Interchange Help > [Release Documents](#).



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A1. Version history

V0.02

- Adds mock up screens to the Portfolio Management System web interface section.
- Adds details about non-data model related Settlements reports.
- Updates the FAQs chapter based on the questions from the MSUG on 18 May.

V0.01

- Initial draft version.