

# **Guide to GSH Capacity Auction**

1.03 Final December 2019

Gas Supply Hub

# **Important Notice**

#### PURPOSE

This Guide to GSH Capacity Auction (guide), prepared by the Australian Energy Market Operator (AEMO), provides guidance for capacity auction under the National NGR, NGL, or Capacity Transfer and Auction Procedures (Rules).

#### **NO RELIANCE OR WARRANTY**

This document does not constitute legal or business advice, and should not be relied on as a substitute for obtaining detailed advice about the National Gas or Electricity Law, the Rules or any other applicable laws, procedures or policies. While AEMO has made every effort to ensure the quality of the information in this Guide, neither AEMO, nor any of its employees, agents and consultants make any representation or warranty as to the accuracy, reliability, completeness, currency or suitability for particular purposes of that information.

#### LIMITATION OF LIABILITY

To the maximum extent permitted by law, AEMO and its advisers, consultants and other contributors to this Guide (or their respective associated companies, businesses, partners, directors, officers or employees) are not liable (whether by reason of negligence or otherwise) for any errors, omissions, defects or misrepresentations in this document, or for any loss or damage suffered by persons who use or rely on the information in it.

#### TRADEMARK NOTICES

Microsoft is a trademark of Microsoft Corporation in the United States and/or other countries. Oracle and Java are registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

#### DISTRIBUTION

Available to the public.

#### DOCUMENT IDENTIFICATION

Business custodian: Manager, Market Design IT custodian: Manager - NEM Dispatch and Forecasting Systems Prepared by: Technology, Technical Writers and Operational Forecasting

#### **VERSION HISTORY**

Version 1.03. Change to specifying price when submitting bids manually in the Markets Portal: The price must be \$0.0001/GJ or higher. In the CSV file layout, the total bid quantity changes from 100,000 to 500,000.. Last update: Monday, 9 March 2020 11:29 AM

#### DOCUMENTS MADE OBSOLETE

The release of this document changes any previous versions of Guide to GSH Capacity Auction.

#### FEEDBACK

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

The material in this publication may be used in accordance with the copyright permissions on AEMO's website.

# Contents

Chapter 1 Introduction	1
Purpose	1
Audience	1
Assumed knowledge	1
What's in this guide	2
How to use this guide	2
Chapter 2 About capacity auction	4
Introduction	4
Sealed bid process	5
Rules and procedures	5
Facility operators	5
Auction participants	5
Auction results	6
Auction product pricing	6
Auction products	6
What capacity auction is for	9
Who can use capacity auction	10
How do you use capacity auction	10
capacity auction Timetable and process	11
Auction timetable	11
User rights access	12
Set participant	12
System requirements	12
Environment access	13
Supported web browsers	. 14
Chapter 3 Accessing capacity auction	15
Chapter 4 Submit Bids	. 17
About bids	17
Bid submission process	18
How to submit bids	18
Bid submission rules	19
Submit bids manually in the markets portal	20
Submit bids to the markets portal using a CSV file	23

Copy an existing bid profile	
Chapter 5 View Bid History	
About viewing bid history	
View bid history in the Markets Portal	
Download bid history in a CSV file	28
Chapter 6 Cancel a Bid	
Chapter 7 capacity auction Reports	
Needing Help	
Clearing your cache	
CSV file layout example	35
AEMO's Support Hub	40
Feedback	
References	41
Rules	41
AEMO's website	
Glossary	43
Index	

# **Chapter 1 Introduction**

Purpose	. 1
Audience	1
Assumed knowledge	. 1
What's in this guide	. 2
How to use this auide	2

# Purpose

Explains how auction participants submit bids and view bid history in the Gas Supply Hub (GSH) Capacity Auction.

# Audience

The primary audience for this guide is:

- Facility operators
- Trading Participants
- Shippers
- Nominated Agent Participants

A secondary audience is Participant Administrators wanting to know the user rights to assign to their Participant Users for access to the capacity auction.

# Assumed knowledge

This guide assumes you understand:

- The Australian gas market rules and procedures.
- Creating comma-separated value (CSV) files.

Please read this guide along with the Capacity Transfer and Auction Procedures and the CTP Interface Protocol.

# What's in this guide

- Chapter 2 About capacity auction on page 4 provides an overview of the capacity auction, who can use it, and the system requirements.
- Chapter 3 Accessing capacity auction on page 15 explains how to access the capacity auction.
- Chapter 4 Submit Bids on page 17 explains how to submit bids to the capacity auction.
- Chapter 5 View Bid History on page 27 explains how to view capacity auction bid history.
- Chapter 6 Cancel a Bid on page 29 explains how to cancel a previously submitted bid.
- Chapter 7 capacity auction Reports on page 30 explains how to obtain capacity auction reports.
- Needing Help on page 31 explains the CSV file output and how to contact AEMO's Support Hub.
- References on page 41 contains a list of references mentioned throughout this guide.
- Glossary on page 43 explains the capitalised terms used throughout this guide (italicised terms are defined in the NGR, NGL, or Capacity Transfer and Auction Procedures).

# How to use this guide

- This guide is written in plain language for easy reading.
- Read this guide along with the Capacity Transfer and Auction Procedures and the CTP Interface Protocol.
- Where there is a discrepancy between the Rules, and information or a term in this document, the Rules take precedence.
- Where there is a discrepancy between the Capacity Transfer and Auction Procedures, (Procedures) and information or a term in this document, the Procedures take precedence.
- Text in this format indicates there is a resource on AEMO's website.
- Text in this format indicates a link to related information.

- *Italicised terms* are defined in the NGR, NGL, or Capacity Transfer and Auction Procedures. Any terms not in this format still have the same meaning.
- Glossary terms are capitalised and have the meanings listed against them.
- Actions to complete in the web portal interface are **bold and dark grey**.
- References to time are references to Australian Eastern Standard Time (AEST).

# Chapter 2 About capacity auction

Introduction	
Sealed bid process	
Rules and procedures	
Facility operators	
Auction participants	
Auction results	6
Auction product pricing	6
Auction products	6
What capacity auction is for	
Who can use capacity auction	10
How do you use capacity auction	
capacity auction Timetable and process	11
Auction timetable	11
User rights access	
Set participant	
System requirements	
Environment access	13

# Introduction

The objective of the capacity auction is to facilitate the efficient allocation of transportation capacity and foster the development of a liquid secondary market for transportation capacity. It aims to reallocate unused contracted capacity to the *Shippers* that value it most.

The benefits are:

- It enables allocation of capacity on a non-discriminatory basis to those that value it most highly.
- Improves the efficient utilisation of transportation capacity.
- It aids the price discovery process by reducing information asymmetries.
- It enables more informed decision making.
- It provides capacity holders with a greater incentive to trade capacity.
- It reduces search and transaction costs.

# Sealed bid process

The capacity auction is conducted on a sealed bid basis, that is, bids submitted by an *auction participant* are not visible to other *auction participants* while the auction is conducted.

At auction completion, AEMO informs the *facility operator* of successful bids and the *facility operator* gives effect to these bids.

# **Rules and procedures**

The following rules and procedures (NGR, NGL, or Capacity Transfer and Auction Procedures) relate to the capacity auction:

- Capacity Transfer and Auction Procedures.
- Part 15A: Registered participants
- Part 15B: Procedures
- Part 18: Gas Bulletin Board
- Part 22: Gas Supply Hub
- Part 24: Facilitating capacity trades and capacity auction
- Part 25: capacity auction
- Part 26: Standard market timetable
- Schedule 5: Transitional rules

# **Facility operators**

*Facility operators* are responsible for all data exchanges with AEMO and are the entity that receives payments from AEMO for auctioned capacity. Their responsibilities include providing and updating AEMO with details of service points and contract details for *Shippers* and nominated *Agent Participants* who are registered to trade capacity or participate in an auction. AEMO updates the market systems with this information, enabling *trading participants* and *auction participants* to select which contracts are adjusted when entering an order or bid.

# Auction participants

• Submit bids for Forward Haul on page 7, Backhaul on page 8, or Compression on page 8 transportation products.

• View published information about the capacity auction to aid price discovery and bidding. For help, see capacity auction Reports on page 30.

# **Auction results**

# Solving the auction

AEMO runs the capacity auction once a day to determine clearing prices and allocation of auction products by maximising the total capacity auction revenues for the *gas day*. AEMO allocates capacity, subject to the auction quantity limits (AQLs) supplied by the *facility operators*, to the highest priced bids.

Winning bids are determined simultaneously so *auction participants* win none or all of the auction products linked as part of their bid. If there is more than one combination of winning bids, AEMO determines the winning allocation at random. The lowest accepted bid for an auction product may be partially filled if necessary.

# Auction product pricing

The capacity auction operates on a pay-as-cleared basis. All winners of a particular product component pay the same clearing price. Any product component for transportation capacity remaining partially unsold in the capacity auction for a *gas day* has a clearing price of \$0 per GJ for that *gas day*.

The lowest-priced accepted bid sets the clearing price for a product component; if that product component fully clears its auction quantity limit. Otherwise the price is zero. The price of an auction product is the sum of prices across its product components (*service points, zones, segments*).

AEMO reports the price and quantity of auction products purchased to each winning bidder. Each *facility operator* is notified of the price and quantity of each auction product allocated on their facility per auction participant. AEMO also publishes the price (and price sensitivity) of all product components following the completion of an auction run, see capacity auction Reports on page 30.

# Auction products

The products offered in the auction can include the following services. For more information about the offered services, see the market guide.

### **Forward Haul**

*Forward haul services* with separate products offered in both directions on bidirectional pipelines.

Each *Forward haul service* consists of every product component needed to transport commodity between the *receipt* and *delivery points*):

- Receipt zone (can have multiple receipt and delivery points).
- Pipeline segment(s)
- Delivery zone
- Delivery point

Below is an example of the structure of components needed to form a *forward haul service*:



An auction service can only have a maximum of one *receipt zone* and one *delivery zone*. In the example below, the auction service is passing through the interior zones.



# Backhaul

Backhaul services on single direction pipelines (or parts of pipelines), consisting of:

- Backhaul receipt point
- Backhaul pipeline segment(s)
- Backhaul delivery point

Each *backhaul service* consists of every product component needed to transport commodity between the *backhaul receipt point* and the *backhaul delivery point*.

Below is an example of the structure of components needed to form a *backhaul service*. Note the *backhaul delivery point* is upstream from the *backhaul receipt point*.



# Compression

*Compression services* are available on non-exempt stand-alone compression facilities and consist of:

- Compression receipt point
- Compression receipt zone
- Compression service facility
- Compression delivery zone
- Compression delivery point

*Compression services* can have multiple *compression receipt points* per *compression receipt zone*.

Below is an example of the structure of components needed to form a *compression service*.



# What capacity auction is for

The capacity auction is for contracted but un-nominated capacity, conducted shortly after nomination cut-off time and subject to a reserve price of zero (with compressor fuel provided in-kind by *Shippers* or procured from the *facility operator*).

The auction has the following features:

- Single-round, sealed-bid process with a zero reserve price.
- Capacity is paid for on a pay-as-cleared basis, determined by the lowest accepted bids in the auction.
- It maximises the revenue of bids, and the auction proceeds are allocated to *facility operators* based on the revenues of the products they provide.
- It is integrated with *facility operators*' systems to automate transfers of capacity.
- It has *forward haul*, *backhaul* (where specified) and stand-alone *compression services*.
- Settlements and prudentials centrally managed by AEMO and shared with the Gas Supply Hub (GSH).

# Who can use capacity auction

# Auction registration

To participate in the capacity auction, *Trading Participants* must register as an *auction participant* by entering into an *Auction Agreement* with AEMO.

All registered *auction participants* can use the capacity auction.

Auction participants are predominantly:

• Shippers (Trading Participants) registered to participate in the capacity auction.

For registration information and application forms, see Capacity Transfer and Auction Procedures.

 Nominated Agent Participants appointed jointly (such as an unincorporated joint venture) or individually (such as under a corporate group). Appointing members are jointly and severally liable for the acts of the agent. AEMO manages the relationship between appointing and agent participants.

# How do you use capacity auction

To participate in the capacity auction, *Trading Participants* must register as an *auction participant* by entering into an *Auction Agreement* with AEMO, see the **Capacity Transfer and Auction Procedures**.

You can submit bids by:

- 1. Entering them manually in the EMMS Markets Portal interface.
- 2. By uploading a CSV file to the interface.

You can view bid history:

- 1. In the EMMS Markets Portal.
- 2. By downloading a CSV file.

# capacity auction Timetable and process

# Auction timetable

The capacity auction runs daily for day-ahead contracted but unnominated (CBU) capacity on non-exempt pipelines and compression facilities. It is conducted by AEMO shortly after the *nomination cut-off time* on *gas day* D-1.

The **Gas Day Harmonised** market timetable takes effect on 1 October 2019, establishing a common gas day start time of 0600 hours Australian Eastern Standard Time (AEST) across the east coast and the Northern Territory. A common *nomination cut-off time* of 1500 hours, and a common *auction service nomination cut-off time* of 1845 hours.

For more details see the Capacity Transfer and Auction Timetable in the **Capacity Transfer and Auction Procedures**.

# Auction process

Below are the generic auction steps with the harmonised *gas day* times commencing 1 October 2019. For more details see the Capacity Transfer and Auction Timetable in the **Capacity Transfer and Auction Procedures**.

Step	Who	Activity	Approx. day/time
1	AEMO	Nomination cut-off time for Gas Day (depends on contract)	D-1 15:00
2	FO	Provide AEMO with AQLs	D-1 16:30
3	AEMO	Publishes AQLs	D-1 16:45
4	Shippers	Submit bids before close	D-1 17:00
5	AEMO	Determines and publishes auction results	D-1 17:30
6	FO	Validate auction results and send auction MDQ notice	D-1 18:30

For details about Gas Day Harmonisation, see https://www.aemc.go v.au/rulechanges/gas-dayharmonisation

Step	Who	Activity	Approx. day/time
7	AEMO	Makes any adjustments to DWGM quantities	D-1 18:30
8	AEMO	Nomination cut-off time for auction quantities	D-1 18:45
9	AEMO	Settlement cut-off time for capacity purchased at auction	14 <sup>th</sup> business day after the end of the billing period where D falls at 09:00

# User rights access

To access capacity auction, Participant Users must have the appropriate user rights access. The access right determines the functionalities and transactions you can use to access the web portal, batch interfaces, FTP, and API services.

Your company's Participant Administrator (PA) provides access to capacity auction for Participant Users in the MSATS>Administration>Maintain Entities menu, using the following entity:

GSH - capacity auction

The initial PA is set up by the AEMO system administrator as part of the registration process. If you don't know who your company's PA is, contact AEMO's Support Hub.

# Set participant

Where a Participant User has user rights assigned by more than one Participant ID, the Participant User selects the Participant ID they want to represent using the **Set Participant** option. For help, see Setting a Participant in the **Markets Portal Help**. For more details about participant administration and user rights access, see Guide to User Rights Management.

# System requirements

You access the capacity auction web application using a web browser, requiring:

- The website address where the application is located on AEMO's network:
  - Pre-production: https://portal.preprod.nemnet.net.au
  - Production: https://portal.prod.nemnet.net.au

- Markets Portal help: https://portal.preprod.nemnet.net.au/help
- 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 monitor capable of 1024 x 768 screen resolution.

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**.

PAs are set up during the registration process, if you don't know who your company's PA is, contact AEMO's Support Hub.

For the best experience, AEMO recommends using the current or previous version of Google Chrome.

capacity auction runs on both Windows and Unixlike operating systems.

# Environment access

The Markets Portal gives you a clear indication of the environment you are working in by providing a different background colour for the menu:

- The pre-production environment has a green menu background
- The production environment has a blue menu background.

AEMO Markets Portal (pre- production)	N	Aarkets Portal application Australian Energy Market Operator Limited (NEMMCO) Participant User V	0
MMS	-	Data Model Files Subscription for Australian Energy Market Operator Limited	^
Market Info	+	NOTE:	
Settlements	+	The latest version of the MMS Data Model is v4.27. The previous or legacy version is v4.26 You should subscribe to the new version of any legacy files you are currently subscribed to. Please ensure new files are processing	
Offers a prissions		successfully before unsubscribing from legacy files.	

# Supported web browsers

capacity auction runs on both Windows and Unix-like operating systems. To access the MSATS web portal, AEMO recommends the following web browsers:

Browser	Platform	Current	More information
Microsoft Internet Explorer	Windows	IE11	https://www.whatismybrowser.com/guides/the- latest-version/internet-explorer
Microsoft Edge (Microsoft recommended)	Windows 10	Edge	https://www.microsoft.com/en- au/windows/microsoft-edge
Google Chrome	All platforms	72 (Feb 2019)	https://www.whatismybrowser.com/guides/the- latest-version/chrome

# Chapter 3 Accessing capacity auction

- 1. Using your web browser, access the EMMS Markets Portal, either:
  - Pre-production: https://mms.preprod.nemnet.net.au
  - Production: https://mms.prod.nemnet.net.au
- 2. Sign in using the user ID and password provided by your company's PA.
- Select Gas Supply Hub > Capacity Auction > Capacity Auction Bidding.
- The Bid Profile interface displays any active bids, see Figure 2.
   Otherwise you see a message advising you have no bid profile, see Figure 1.
   For help with the fields, see Submit bids manually in the markets portal on page 20.

Figure 1 No bid profile

No Bid Profile for Sat 05 January 2019

MMS	+
Gas Supply Hub	_
Prudential Dashboard	+
Delivered Quantity	+
Reallocations	+
Publishing Direct	+
Delivery Netting Preferences	+
Capacity Auction	_
Capacity Auction Bidding	

#### Figure 2 Active bid profile

Bid Profi	le			UPLOAD .CSV NEW BID
Active	History			
FRI 1 JULY 2018	$\sim$ $\leftarrow$ $\rightarrow$ Dpm on THU 30 JUNE 2018		Z Expo	t .CSV 🛛 Copy bid profile
1 TYPE ~	FACILITY ~	FROM (RECEIPT) ~	TO (DELIVERY) $\vee$	CONTRACT ~ DWGM ~
A Forward	Roma to Brisbane Pipeline $\ensuremath{RBP}$	Scotia RBP-RZ-03	Tingalpa RBP-DZ-06	AGL133822 AGL133822
B Forward	Roma to Brisbane Pipeline RBP	Wallumbilla Run 3 RBP-RZ-01	Kogan North RBP-DZ-04	AGL182377 AGL133822
C Backward	Roma to Brisbane Pipeline RBP	Agyle RBP-RZ-04	Redbank RBP-DZ-04	AGL173373 AGL133822
D Forward	Roma to Brisbane Pipeline RBP	Scotia RBP-RZ-03	Tingalpa RBP-DZ-06	AGL133822 AGL133822
E Forward	Roma to Brisbane Pipeline RBP	Wallumbilla Run 3 RBP-RZ-01	Kogan North RBP-DZ-04	AGL182377 AGL133822
F Backward	Roma to Brisbane Pipeline RBP	Agyle RBP-RZ-04	Redbank RBP-DZ-04	AGL173373 AGL133822
		Cumulative quantity	: 100 GJ Price: \$4.50	Step value: <b>\$28,000.0</b>
				Total value: <b>\$28,000.0</b>
2				
TYPE $\vee$	FACILITY ~	FROM (RECEIPT) ~	TO (DELIVERY) $^{\smallsetminus}$	CONTRACT ~ DWGM ~
A Forward	Roma to Brisbane Pipeline RBP	Scotia RBP-RZ-03	Tingalpa RBP-DZ-06	AGL133822 AGL133822
		Cumulative quantity	: 10 GJ Price: \$2.80	Step value: <b>\$2,800.0</b>
		Cumulative quantity	: 100 GJ Price: \$2.70	Step value: <b>\$27,000.0</b>
		Cumulative quantity	: 200 GJ Price: \$2.60	Step value: <b>\$26,000.0</b>
				Total value: \$55,800.0

# **Chapter 4 Submit Bids**

About bids	17
Bid submission process	
How to submit bids	
Bid submission rules	
Submit bids manually in the markets portal	
Submit bids to the markets portal using a CSV file	
Copy an existing bid profile	24

# About bids

Auction participants can submit:

- Bids up to 15 days ahead of the gas day.
- Bids for a combination of one or more products.
- Multiple bids for single products on a single facility.
- A single submission (bid profile) that includes all bids for each gas day.

When a new submission is made for a *gas day*, the previous submission for the *gas day* is overridden. When making amendments to any bids included in a bid profile, you must resubmit the entire bid profile.

Before submitting a bid, read the Capacity Transfer and Auction Procedures.::

# **Bid submission process**



# How to submit bids

There are three ways to submit bids:

- 1. Submit bids manually in the markets portal on page 20.
- 2. Submit bids to the markets portal using a CSV file on page 23.
- 3. Submit bids using an API. For help creating and submitting APIs, see **Guide to Capacity Trading and Day Ahead Auction Transactions**.

# **Bid submission rules**

# **Product rules**

#### Auction participants:

- 1. Can include multiple Products on the same facility in a single bid, for example, a *forward haul service* combined with a *backhaul service*.
- 2. Must have the *receipt point* and the *delivery point* on the same facility.
- 3. Can submit multiple Products per bid (a Combinatorial Bid). For each additional product, they must specify:
  - Receipt point
  - Delivery point
  - Facility
  - Product type
  - Contract Reference
  - DWGM Reference (only if a DWGM *delivery point*)
- 4. Must have a valid path between the nominated receipt point and delivery point.
- 5. Cannot add a single bid more than once. If this occurs, the Markets Portal displays an error, for example: A linked bid cannot contain multiple instances of any product.
- 6. Must specify a DWGM Reference applicable to the *receipt* or *delivery point*, if either point is a DWGM point.

# Date range rules

Auction participants:

- 1. Can include a single gas day or multiple *gas days* in a bid.
- 2. Can submit bids for *gas days* where they have already submitted a bid. The new bid overrides the previous bid.
- Cannot submit bids that include gas day D more than 15 gas days in advance of gas day D.

For an explanation of gas day terms, see Capacity Transfer and Auction Procedures.

4. Must submit bids that include gas day D before the cut-off time on D-1.

The bidding cut-off times are:

- Before Gas Day Harmonisation:
  18:00 hours.
- After Gas Day Harmonisation: 17:00 hours.

# Service Reference rules

Auction participants:

- Must supply a Service Reference for each selected facility.
- Must ensure the Service Reference meets the following criteria:
  - Applies to the Auction Participant's Participant ID.
  - Applies to the facility the Auction Participant has selected.
  - Is effective for the duration of the Date Range.

# Submit bids manually in the markets portal

1. Access the capacity auction. For help, see Accessing capacity auction on page 15.

If you have existing bids, the easiest way to create a new bid is to copy the existing bid. For help, see Copy an existing bid profile on page 24.

For details about Gas Day Harmonisation, see https://www.aemc.go v.au/rulechanges/gas-dayharmonisation 2. In the **Bid Profile** interface, click **New Bid**. Follow the steps below to create your new bid, for help, see Figure 3.

For help with the contract details, see the **Contract Details** report in **Guide to Capacity Trading and Day-Ahead Auction Reports**.



- 3. Select the bid Date range:
  - Start and end date (can be single day).
  - Bids can cover multiple gas days.
  - You can submit bids up to 15 days into the future.
  - For more help, see Submit bids manually in the markets portal on the previous page.
- Fri 04 January 2019 to Fri 11 January 2019 **Januarv** 2019 Tue Wed Thu Sun Mon Fri Sat Drag the cursor from the start 3 4 5 to end date to select the date 6 7 8 9 10 12 18 13 14 15 16 17
- 4. Select Product details:
  - Facility: To assist in the selection of the *receipt* and *delivery points* or *zones*.
  - Product: forward haul, backhaul, or compression service. For help, see Product rules on page 19.
  - Service Reference: For help, see Service Reference rules on the previous page.
  - The latest bid for a *gas day* and auction product (specific receipt point and delivery point combination) is used in the auction.
- 5. Select Receipt and Delivery Points:
  - Single point-to-point bid on a facility.
  - Linked Bid for multiple point-to-point combinations on the same or different facilities.
  - A DWGM Reference: If it is a DWGM Receipt or Delivery Point.

- For more help, see Submit bids manually in the markets portal on page 20.
- 6. link a product to the bid, if required, and follow the steps above.
- 7. Specify Cumulative quantity:
  - Up to 10 steps per bid.
  - Each step Quantity represents an increasing cumulative value.
  - Gigajoules (GJ)
  - Must be at least 1 GJ
  - A maximum quantity of 500,000 GJ
  - Must be a whole number.
- 8. Specify Price:
  - Up to 10 steps per bid.
  - In \$/GJ expressed up to four decimal places.
    - Australian dollars (\$)
    - Must be \$0.0001/GJ or higher.
    - Not more than \$50/GJ
- 9. Review and click Submit bids.
- The Bid Profile interface displays the confirmation or rejection message. If you receive a rejection message, fix the error and resubmit your bid. A successful bid also triggers sending of the Auction Bid Confirmation report to your Participant File Server inbox. For details, see Guide to Capacity Trading and Day-Ahead Auction Reports.

You successfully submitted your new bid profile for 1 July 2018 - 14 July 2018

Figure 3 Create bid

**Create Bid** Gas Day  $\sim$ Fri 1 July 2018 Your Bid Summary Please confirm that you'd like to submit the following bids. Facility 📅 Fri 1 July 2018  $\sim$ 5 Your bid Product Type Contract Reference SUBMIT BIDS 9  $\sim$ 6 C Link a product to this bid 7 Price per GJ Cumulative quantity 8 Add a bid step ŵ 2 Add a new bid

# Submit bids to the markets portal using a CSV file

#### Before you start

You must create your CSV file and save it before you can upload it.

If you have any existing bids, the easiest way to create your CSV file is to Download bid history in a CSV file on page 28and modify it.

For help with the CSV file layout, see CSV file layout example on page 35.

#### Notes about CSV format

- The data is case sensitive and must be included exactly as explained in CSV file layout example on page 35.
- Uploading data from a file overwrites any existing interface data.

This topic assumes you understand and know how to create comma-separated value (CSV) files. For help, see AEMO's CSV Data Format Standard. • Only CSV formatted files are accepted for upload.

#### Upload the CSV file

- Access the capacity auction. For help, see Accessing capacity auction on page 15.
- 3. In the Bid Profile interface, click Upload CSV.



- 4. In the pop-up window, locate your CSV file and click **Open**.
- The Create Bid interface displays with the fields completed from your CSV file and the confirmation message.
   A successful bid also triggers sending of the Auction Bid Confirmation report to your Participant File Server inbox. For details, see Guide to Capacity Trading and Day-Ahead Auction Reports.



 If your file contains errors, they are displayed on the interface in the Errors grid. Correct the errors and retry the upload.
 For help with the fields, see Submit bids manually in the markets portal on page 20 and the Contract Details report in Guide to Capacity Trading and Day-Ahead Auction Reports.

# Copy an existing bid profile

 Access the capacity auction. For help, see Accessing capacity auction on page 15. 2. In the Bid Profile interface, click Copy bid profile.

Bid Profile	UPLOAD .CSV NEW BID
Active History	
FRI 1 JULY 2018 $\checkmark$ $\leftarrow$ $\rightarrow$	Export .CSV Copy bid profile
Auction closes at 5.00pm on THU 30 JUNE 2018	
	And water and the second

- 3. The Create Bid interface displays with the fields completed from the existing bid.
- 4. If required, make changes to any fields. For help, see Submit bids manually in the markets portal on page 20.
- 5. Review and click Submit bids.
- The Bid Profile interface displays the confirmation or rejection message. A successful bid also triggers sending of the Auction Bid Confirmation report to your Participant File Server inbox. For details, see Guide to Capacity Trading and Day-Ahead Auction Reports.

Figure 4 Create bid

**Create Bid** 



# Chapter 5 View Bid History

About viewing bid history	27
View bid history in the Markets Portal	27
Download bid history in a CSV file	

# About viewing bid history

There are three ways to view bid history:

- 1. View bid history in the Markets Portal below.
- 2. Download bid history in a CSV file on the next page.
- 3. View bid history using an API. For help creating and submitting APIs, see Guide to Capacity Trading and Day Ahead Auction Transactions.

# View bid history in the Markets Portal

- Access the capacity auction. For help, see Accessing capacity auction on page 15.
- 2. In the Bid Profile interface, click History.

Active	History			
FRI 1 JULY 201	8 ~	$\leftarrow \rightarrow$	Copy Export .CSV 다 Copy	bid pro
Auction closes at 5	5.00pm on THU 30 JU	NE 2018		

- 3. In the **Bid Profile History** interface, click the date field and scroll backwards through the calendar to find the bid profile date.
- 4. To display the bid profile history in the interface, click the date.

Active History

5. The **Bid Profile** interface displays any active bids, see .

Otherwise you see a message advising there is no bid profile for the selected day, see .

For help with the fields, see Submit bids manually in the markets portal on page 20.

 If required, you can Download bid history in a CSV file below.

# Download bid history in a CSV file

- 1. Access the capacity auction. For help, see Accessing capacity auction on page 15.
- 2. In the Bid Profile interface, click Export CSV.

Fri 28 I	Decemb	oer 201	8			
•		C	)ec 201	8		►
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28 	29
30	31					



3. In the pop-up window, locate where you want to save the CSV file and click **Save**.

⊢ → ∽ ↑ 📙 « DAr > Pij	pelin	e C	apacity v さ	Search Pipeline Capacity Tradi	Q
Organize 👻 New folder				8== -	?
Participant Communications	1	^	Name	^	
Participant Documentation	1		bid profile.csv		
	1				
E Desktop	1				
Pipeline Capacity Trading					
Resumes					
i OneDrive			4	_	>
-					
File name: bid profile,csv		_			~
Save as type: Microsoft Excel	Con	nma	Separated Values File		$\sim$

# **Chapter 6 Cancel a Bid**

You can cancel a previously submitted bid by submitting an bid profile that contains no bids for the same gas day.

- 1. Access the capacity auction. For help, see Accessing capacity auction on page 15.
- 2. In the Bid Profile interface, .

Bid Profile	UFLOAD .CSV NEW BID
Active History	
FRI 1 JULY 2018 $\checkmark$ $\leftarrow$ $\rightarrow$	Z Export .CSV D Copy bid profile
Auction closes at 5.00pm on THU 30 JUNE 2018	

# Chapter 7 capacity auction Reports

Participants can obtain capacity auction reports from the following locations:

 Participant File Server: Participants can directly access reports from their own private folder: ...<PARTICIPANTFOLDER>\Import\REPORTS\GSH. To automatically replicate data between AEMO's energy market systems and your local DBMS conforming to the MMS Data Model, set up a standard Data Interchange environment.

This chapter provides a brief overview of capacity auction. For more details and help setting up an environment, see Concise Guide to Data Interchange.

- 2. **GSH Publishing Direct**: A Markets Portal web application where participants can download files directly or set up a delivery subscription so when a new version of the report is published, either an email or SMS or both is automatically delivered. For help, see **Guide to GSH Publishing Direct**.
- 3. Gas Bulletin Board: https://www.aemo.com.au/Gas/Gas-Bulletin-Board/Reports.

# **Needing Help**

Clearing your cache	
CSV file layout example	
AEMO's Support Hub	40
Feedback	40

# **Clearing your cache**

When you use AEMO's web applications, your browser stores information (for example, images) to avoid downloading it every time you open the web page. While this increases the speed, it could mean you are getting an older version of the web page and not the latest updates. To avoid this, AEMO recommends you clear the cache regularly.

The following sections explain the steps to clear the cache in your web browser.

# Google chrome

- 1. Click <sup>i</sup> on your browser.
- 2. Click Settings. You can also open this window using the Ctrl + Shift + Delete keyboard shortcut.
- 3. Scroll to the bottom of the page and click Advanced.

4. Under Privacy and security, click the arrow next to Clear browsing data. A new window opens.

Privacy and security Advanced *	
Google Chrome may use web services to improve your browsing experience. You may optionally d services. Learn more	lisable these
Allow Chrome sign-in By turning this off, you can sign in to Google sites like Gmail without signing in to Chrome	-
Use a prediction service to help complete searches and URLs typed in the address bar	-
Use a prediction service to load pages more quickly	-
Use a web service to help resolve navigation errors	-
Safe Browsing Protects you and your device from dangerous sites	曲 💶
Help improve Safe Browsing Sends some system information and page content to Google	
Automatically send usage statistics and crash reports to Google	
Use a web service to help resolve spelling errors Smarter spell-checking by sending what you type in the browser to Google	
Send a "Do Not Track" request with your browsing traffic	
Allow sites to check if you have payment methods saved	-
Manage certificates Manage HTTPS/SSL certificates and settings	
Content settings Control what information websites can use and what content they can show you	•
Clear browsing data Clear history, cookies, cache, and more	٢

- 5. Select the Cookies and other site data, and Cached images and files options.
- 6. From the **Time range** drop-down menu, choose **All time** option.
- 7. To clear all cache information, click Clear data.

# **Microsoft edge**

- 1. Click ... on your browser.
- Click Settings > Clear browsing data > Choose what to clear option from the dropdown menu. You can also open this window using the Ctrl + Shift + Delete keyboard shortcut.



Frees up 96.6 MB. Some sites may load more slowly on your next visit.

Cookies and other site data

Signs you out of most sites.

Cached images and files

 $\checkmark$ 

 $\checkmark$ 

Select the Cookies and saved website data, and Cached data and files options.

Clear data

Cancel

4. To delete all cached information, click Clear.



# Internet explorer (IE)

- On your web browser, click Setting > Internet Options > General tab > Browsing history, click Delete... You can also open this window using the Ctrl + Shift + Delete keyboard shortcut.
- 2. In the Delete Browsing History window, select Cookies and website data option.
- 3. To remove all cache information, click **Delete**.

Delete Browsing History							
Preserve Favorites website data Keep cookies and temporary Internet files that enable your favorite websites to retain preferences and display faster.							
<u>Temporary</u> Internet files an	d website files						
Copies of webpages, images, ar viewing.	nd media that are sa	ved for faster					
Cookies and website data Files or databases stored on you preferences or improve website	ur computer by webs performance.	ites to save					
History List of websites you have visited	ł.						
Do <u>w</u> nload History List of files you have downloade	d.						
<b>Form data</b> Saved information that you have	e typed into forms.						
Passwords Saved passwords that are autor to a website you've previously v	matically filled in whe visited.	n you sign in					
Tracking Protection, ActiveX Filtering and Do Not Track A list of websites excluded from filtering, data used by Tracking Protection to detect where sites might automatically be sharing details about your visit, and exceptions to Do Not Track requests.							
Some <u>settings</u> are managed by	y your system admin	istrator.					
About deleting browsing history	<u>D</u> elete	Cancel					

# CSV file layout example

Column	Description	Mandatory	Data type	Example	Brackets
A	Start of 1 or more products in the bid Must specify at least one product per bid.	Yes	Integer	[{"BidId":1	[ start of bid { start of bid profile list
В	The unique AEMO defined facility ID. Must be a valid value in the <b>Transportation Service Point</b> <b>Register</b> .	Yes	String	Products:[{"FacilityId":530071	[ start of product list { start of facility details
С	Facility Name	Yes	String (100)	FacilityName:"ICF"	none
D	Facility description	Yes	String (400)	FacilityDescription:"COMPRESSION"	none
E	The product type, for example: Forward haul, Backhaul, or Compression Must be a value from the defined list of valid values.	Yes	String (20)	AuctionProductTypeId:"COMPRESSION"	none

Column	Description	Mandatory	Data type	Example	Brackets
F	The unique AEMO defined Receipt Point ID. This is the point where gas is injected into the pipeline Must be a valid value in the <b>Transportation Service Point</b> <b>Register</b> . Must belong to the facility specified in the submission.	Yes	Integer	ReceiptPointId:1303132	none
G	The descriptive name of the receipt point.	Yes	String (100)	ReceiptPointName:"SWP Withdrawal"	none
Н	The unique AEMO defined Delivery Point ID. This is the point where gas is withdrawn from the pipeline. Must be a valid value in the <b>Transportation Service Point</b> <b>Register.</b> Must belong to the same facility as the ReceiptPointId. Must be a valid matching value for the ReceiptPointId specified.	Yes	Integer	DeliveryPointId:1303133	none
I	The descriptive name of the delivery point.	Yes	Integer	DeliveryPointName:"SEA Gas Injection"	none
J	The service reference issued by the facility operator for the facility that the Receipt and Delivery Points are related to. Must be valid for the gas date specified. Must be valid for the submitter. Must be valid for the facility associated with the receipt or delivery point pair.	Yes	String (255)	ServiceReference:"SR0000001"	none
К	The DWGM MP Company ID associated with the accreditation for a DWGM integrated Receipt Point.	No	Integer	ReceiptPointDWGMCompanyIdReference:"3"	none

Column	Description	Mandatory	Data type	Example	Brackets
	Must match the DWGM Company ID of the submitting participant or appointing DWGM MP.	Mandatory when Delivery Point is a DWGM interface point.			
L	The DWGM MP Company name associated with the accreditation for a DWGM integrated Receipt Point.	No	String (40)	ReceiptPointDWGMCompanyNameReference:"Origin Energy (VIC) Pty Limited"	none
Μ	The DWGM MIRN associated with the accreditation for a DWGM integrated Delivery Point. Must match the MIRN associated with the Receipt Point. A DWGM accreditation must exist for the ReceiptPointDWGMCompanyIdReference and ReceiptPointDWGMMIRNReference combination, for the gas date range specified.	No Mandatory when Receipt Point is a DWGM interface point.	String (50)	ReceiptPointDWGMMIRNReference:"30000156PC"	none
Ν	The DWGM MP Company name associated with the accreditation for a DWGM integrated Delivery Point.	No	String (40)	DeliveryPointDWGMCompanyNameReference:"ABC Trading Pty Ltd"	none
0	The DWGM MP Company ID associated with the accreditation for a DWGM integrated Delivery Point. Must match the DWGM Company ID of the submitting participant or appointing DWGM MP.	No Mandatory when Delivery Point is a DWGM interface point.	Integer	DeliveryPointDWGMCompanyIdReference:"123"	none
Ρ	The DWGM MIRN associated with the accreditation for a DWGM integrated Receipt Point. Must match the MIRN associated with the Delivery Point.	No	String (20)	DeliveryPointDWGMMIRNReference:"200001PC"	none

Column	Description	Mandatory	Data type	Example	Brackets
	A DWGM accreditation must exist for the deliveryPointDWGMCompanyIdReference and DeliveryPointDWGMMIRNReference combination, for the gas date range specified.	Mandatory when Delivery Point is a DWGM interface point.			
Q	ProductLetter	Yes	String	ProductLetter:"A"}]	} end of facility details ] end of product list
R	The cumulative bid step quantity. Must specify at least one price/quantity step. The first step must be greater than 0. Can only specify a maximum of 10 steps. Cumulative quantity must increase with each step. Total bid quantity must be equal to or less than 500,000 GJ. Cumulative quantity must be equal to or less than the maximum bid quantity.	Yes	Integer	Steps:[{"CumulativeStepQuantity":"100"	[ start of bid steps { start of 1st bid step
S	The bid price. Must be equal to or greater than the minimum step price. Must be equal to or less than maximum step price. Must decrease with each step. Must be no more than 4 decimal places.	Yes	Number	StepPrice:"\$10.00"	none

Column	Description	Mandatory	Data type	Example	Brackets
Т	Total step price value	Yes	Number	Value:"\$100.00}]	} end of 1st bid steps ] end of steps
U	Cumulative step price value	Yes	Number	TotalValue:"\$100.00"	
V	DWGM Reference (Receipt)	Yes	String	IsDgwmReceipt:true	
W	DWGM Delivery Point	Yes	String	IsDgwmDelivery:false}]	} end of bid profile

# **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).

• The Contact Us form on AEMO's website.

### Information to provide

Please provide the following information when requesting assistance from AEMO:

- Your contact details
- Company name
- Company ID
- System or application name
- Environment: production or pre-production
- Problem description
- Screenshots

For AEMO software-related issues please also provide:

- Participant ID (if Data Interchange (DI) problem)
- Version of software
- · Properties or log files
- PDR Monitor support dump and DI instance name (if DI problem)

# Feedback

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

AEMO recommends participants call AEMO's Support Hub for all urgent issues, whether or not you have logged a call using the contact us form.

# References

# Rules

Part 24 and 25 of the National Gas Rules (NGR).

Gas Day Harmonisation: https://www.aemc.gov.au/rule-changes/gas-dayharmonisation.

# **AEMO's website**

- Capacity Transfer and Auction Procedures, made under section 91BRP of the National Gas Law (NGL) for the regulation of the capacity auction and transaction support arrangements.
- **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.
- **CTP Interface Protocol**.sets out the procedures and minimum requirements for the *capacity auction*.
- Guide to AEMO's CSV Data Format Standard, describes the CSV data format standard used within flat files provided to participants from AEMO's systems. Its primary function is to provide sufficient information to allow participants to understand the CSV data format used for exchanging data with AEMO.
- Guide to AEMO's e-Hub APIs, 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.
- Guide to Capacity Trading and Day Ahead Auction Reports, provides details about the capacity transfer and day-ahead auction market CSV reports.
- Guide to Capacity Trading and Day Ahead Auction Transactions, provides details about preparing and submitting data to and from the capacity transfer and day-ahead auction market systems.
- **Guide to GSH Contract References**, explains how to set up Contract References in the GSH Capacity Trading Platform.

- Guide to GSH Publishing Direct, explains how to use the Publishing Direct web application in AEMO's Markets Portal.
- Guide to User Rights Management, assists Participant Administrators to manage their Participant User's access to AEMO's systems. It also explains how to set up single user IDs for use with the Set Participant function in AEMO's web portals.
- Markets Portal Help, online searchable help for the Markets Portal web applications. Only available over a MarketNet connection: https://portal.preprod.nemnet.net.au/help.
- Pipeline Capacity Trading web page, provides an overview of the Pipeline Capacity Trading project, including links to key documents: http://www.aemo.com.au/Gas/Pipeline-Capacity-Trading
- **Transportation Service Point Register**, a register of the *service points*, *pipeline segments*, and *zones* on each of the transportation facilities covered by the capacity trading reform package, including facilities that are commissioned after the reforms take effect or later become subject to the reforms.

# Glossary

#### AEMC

Australian Energy Market Commission

**AEMO** Australian Energy Market Operator

# AER

The Australian Energy Regulator, established by section 44AE of the Trade Practices Act 1974.

### AEST

Australian Eastern Standard Time

### API

Application Programming Interface; a set of clearly defined methods of communication between various software components.

#### **Bid profile**

A single bid submission that includes all bids for each gas day.

#### CBU

Contracted but un-nominated capacity

**Combinatorial Bid** A bid with multiple Products.

# **Contract Preferences**

Shippers preferences for contracts or agreements they want to trade against.

#### **Contract Reference**

A reference number to a contract or agreement held by the Shipper and the

Facility Operator to trade capacity on a facility. This is a collective term that includes the Service Provider Reference, DWGM Reference, and STTM Customer Registration Number.

# CSV

Comma-separated values; a file format for exchanging data.

### СТР

Capacity Trading Platform

**DWGM** Declared Wholesale Gas Market

# **DWGM Reference**

AEMO's reference number to the agreement between a Shipper and Facility Operator for capacity trading on the DWGM.

#### EMMS

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

#### Facility

The facility to assist in the selection of the Receipt and/or Delivery Point.

#### FO

Facility operator

#### FTP

File transfer protocol; a standard network protocol used for the transfer of computer files between a client and server on a computer network.

#### Gas day

For an explanation of gas days, see Formulae, calculations and values in the Capacity Transfer and Auction Procedures.

**GSH** Gas Supply Hub

#### Linked Bid

Multiple point-to-point combinations on the same or different facilities.

#### MarketNet

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

#### **Markets Portal**

Web portal for access to AEMO's wholesale web-based applications.

**MDQ** Maximum Daily Quantity

**MSATS** Retail Market Settlement and Transfer Solution

**MSATS Web Portal** MSATS web-based interactive interface

**MW** Megawatt **NEM** National Electricity Market

NER National Electricity Rules

NGR National Gas Rules

**OTSA** Operational Transportation Service Agreement

#### PA

Participant Administrator; manages participant organisations user access and security.

**Participant ID** Registered participant identifier

#### Pre-production

AEMO's test system available to participants

#### Procedures

Capacity Transfer and Auction Procedures

**Product** Forward Haul, Back Haul, or Compression transportation products.

**Production** AEMO's live system

**Rules** The National Gas Rules.

#### **Service Reference**

The Facility Operator's reference number for the agreement between themselves and Shippers for capacity trading.

#### STTM

Short Term Trading Platform

#### URM

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

#### ZIP

The file compression format used for exchanging data with AEMO.

# Index

# A

About 4 About bids 17 Assumed Knowledge 1 Auction Agreement 10 Auction participants 5 Auction process 11 Auction product pricing 6 Auction products 6 Auction registration 10 Auction results 6 Auction timetable 11

# B

Backhaul Products 8 bid profile 17 Bid submission process 18 Bid submission rules 19 bidding cut-off times 20

# С

cancel a previously submitted bid 29 Clearing your cache 31 Compression Products 8 Copy an existing bid profile 24 Create bid 23, 26 create your CSV file 23 CSV file layout 35

# D

Date range rules 19 Download bid history 28

# E

Environment access 13

#### F

Facility operators 5

Feedback 40 Forward Haul Transportation Products 7

### G

Glossary 43

#### Η

How to submit bids 18

#### Μ

Markets Portal Help 42

### Ν

Notes about CSV format 23

#### Ρ

Product type rules 19

#### R

registration information and application form 10 Rules and procedures 5

# S

Sealed bid process 5 Service reference rules 20 Set participant 12 Solving the auction 6 Submit bids manually 20 Supported Web Browsers 14

# Т

three ways to submit bids 18

# U

Upload the CSV file 24

User rights access 12

#### V

View bid history 27

#### W

Web portal requirements 12