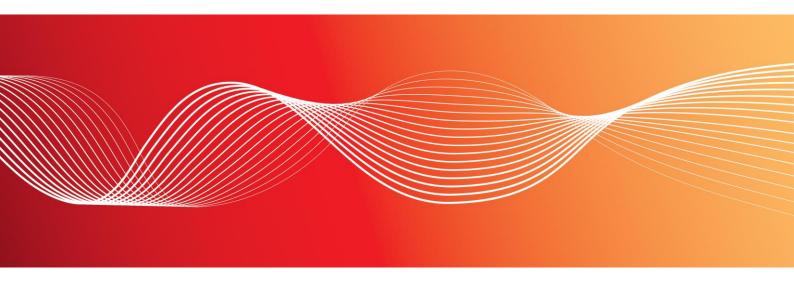
GUIDE TO AEMO MARKET CLEARING

APRIL 2014





Version: 2

Reference: AEMO Market Clearing

Important Notice

AEMO has prepared this Guide to AEMO Market Clearing (Guide) to provide guidance on the AEMO credit support management under the National Gas or Electricity Rules (Rules), as at the date of publication.

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Prepared by

 $Operations-Settlements\ and\ Prudentials-Clearing\ and\ Prudentials\ (C\&P)$

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Notes

No notes

Documents made obsolete

The release of this document changes only the version of Guide to AEMO Market Clearing.

Further Information

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

AEMO Information and Support Phone: 1300 AEMO 00 (1300 236 600) and follow the prompts.

Hub Email: supporthub@aemo.com.au

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Abbreviations and Symbols

These abbreviations, symbols, and special terms assist the reader's understanding of the terms used in this document. For definitions of these terms, the reader should always refer to the applicable market Rules.

Abbreviation	Abbreviation explanation
AEMO	Australian Energy Market Operator
AEST	Australian Eastern Standard Time
ASX	Australian Securities Exchange
DWGM	Declared Wholesale Gas Market in Victoria
EA	Exchange Agreement
EFT	Electronic Funds Transfer
FRC	Full Retail Contestability
GSH	Gas Supply Hub
NER	National Electricity Rules
NEM	National Electricity Market
NGR	National Gas Rules
QldGas	Queensland Retail Gas Market
SRA	Settlement Residue Auction
SSI	Standard Settlement Instruction
STTM	Short Term Trading Market
TUoS	Transmission Use of System in Victoria

Special terms

Term	Definition	
Operator	AEMO	
Rules	National Electricity Rules or National Gas Rules	

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1 Introduction

1.1 Purpose

This procedure details the processes and mechanisms used to facilitate the transfer of money between AEMO and participants for each of the markets that AEMO operates. The procedure has been provided for the following purposes:

- Specify the Electronic Funds Transfer (EFT) facility determined by AEMO for each market.
- Assist participants in establishing operational access to the EFT facility.
- · Assist participants in the routine operation of payments.
- Provide additional information and references.

1.2 Summary

AEMO acts as a clearing house for a number of energy markets, and facilitates the transfer of money between AEMO and participants. This market settlement function typically involves participants who receive goods and services making payment to AEMO, and AEMO subsequently making payment to participants who provide goods and services.

To ensure the timely, irrevocable and transparent management of high value payments, AEMO currently utilises the Austraclear service, provided by the Australian Securities Exchange (ASX). Participants intending to operate in any of the energy markets are required to apply to the ASX for registration to Austraclear.

The payment to AEMO must always be made in cleared funds, and the responsibility for ensuring the funds have cleared is with the participant.

The table below lists the markets to which this procedure applies, and summarises the payment timing of each market.

Market	Timing of Payment from Participant to AEMO	Timing of Payment from AEMO to Participant
National Electricity Market	10:30am Sydney Time Period + 20 business days	2:00pm Sydney Time Period + 20 business days
Declared Victorian Wholesale Gas Market	12:00pm AEST Period + 20 business days	2:00pm AEST Period + 20 business days
Queensland Retail Gas Market	12:00pm AEST Period + 22 business days	2:00pm AEST Period + 22 business days
Short Term Trading Market	12:00pm AEST Period + 20 business days	2:00pm AEST Period + 20 business days

Market	Timing of Payment from Participant to AEMO	Timing of Payment from AEMO to Participant
Gas Supply Hub	12:00pm AEST Period + 17 business days	2:00pm AEST Period + 17 business days
Transmission Use of System in Victoria	12:00pm Melbourne Time Period + 10 business days	2:00pm Melbourne Time Period + 11 business days
Settlements Residue Auction	12:00pm Sydney Time Period + 14 business days	2:00pm Sydney Time Period + 14 business days

Table 1 Summary of market clearing payments

1.3 How to use this guide

Use this guide to assist your understanding of the AEMO market clearing.

<u>Text in this format</u> indicates a direct hyperlink with details of the resource listed in "**Error! Reference** source not found." section **Error! Bookmark not defined.**.

2 Market Rules

2.1 National Electricity Market

Payments in the National Electricity Market (NEM) are governed by the National Electricity Rules (NER), with payment timing specified in the NEM Spot Market Operations Timetable. Below is an extract of the relevant clauses.

3.15.2 Electronic funds transfer

- (a) AEMO must ensure that an electronic funds transfer (EFT) facility is provided and made available for all Market Participants for the purposes of settlements and the collection and payment of all market fees.
- (b) Unless otherwise authorised by AEMO, all Market Participants must use the EFT facility provided by AEMO under clause 3.15.2(a) for the payment and receipt of amounts due in respect of transactions and the payment of market fees.
- (c) In establishing the EFT facility in accordance with clause 3.15.2(a) AEMO must use its reasonable endeavours to ensure that the use of that facility does not impose unnecessary restrictions on the normal banking arrangements of Market Participants.

. . .

3.15.16 Payment by market participants

On the 20th business day after the end of a billing period, or 2 business days after receiving a statement under clause 3.15.15, whichever is the later, and in accordance with the timetable each Market Participant must pay to AEMO in cleared funds the net amount stated to be payable by that Market Participant in that statement whether or not the Market Participant continues to dispute the net amount payable.

3.15.17 Payment to market participants

Subject to clause 3.15.22 on the day on which AEMO is to be paid under clause 3.15.16, AEMO must pay to each Market Participant in cleared funds the net amount stated to be payable to that Market Participant in the relevant statement given to it under clause 3.15.15.

. . .

Spot Market Operations Timetable

4.5 Settlements

Day	Time of Day (EST)	Event
End of billing period +20 business days	By 10:30 Sydney Time.	Participants pay to AEMO in cleared funds the amount stated to be payable on the relevant final statement.
End of billing period +20 business days	By 14:00 Sydney Time.	AEMO pays to Participants in cleared funds the amount stated to be payable on the relevant final statement.
End of billing period +20 business days	By 16:00 Sydney Time.	AEMO pays to Participants in cleared funds to the value of the maximum total payment.

2.2 Declared Victorian Wholesale Gas Market

Payments in the Declared Victorian Wholesale Gas Market (DWGM) are governed by the National Gas Rules (NGR). Below is an extract of the relevant clauses.

233 Electronic funds transfer

- (1) AEMO must ensure that an EFT facility is provided and made available to all Market Participants for the purpose of facilitating settlement.
- (2) Unless otherwise authorised by AEMO, all Market Participants must use the EFT facility for the settlement of transactions.
- (3) In this rule:

EFT facility means the Reserve Bank of Australia real time gross settlement facility or, where such a facility is not available, an electronic funds transfer facility to be arranged by AEMO.

. . .

243 Payment of settlement amount

- (1) Where the settlement amount for a Market Participant is a positive amount, the Market Participant must pay that amount to AEMO in accordance with rule 246.
- (2) Where the settlement amount for a Market Participant is a negative amount, AEMO must pay that amount to the Market Participant in accordance with rule 247.

. . .

246 Payment by Market Participants

- (1) No later than 12 noon on the twentieth business day after the end of a billing period or 12 noon on the second business day after receiving a final statement under rule 245, whichever is the later, each Market Participant must pay to AEMO in cleared funds the settlement amount stated to be payable to AEMO by that Market Participant in that Market Participant's final statement.
- (2) Payments made in accordance with subrule (1) must be made using bank clearing house arrangements determined by AEMO after consulting with Market Participants and published by AEMO.

247 Payment to Market Participants

- (1) By no later than 2:00 p.m. on the day on which AEMO is to be paid under rule 246, AEMO must pay to each Market Participant in cleared funds the settlement amount stated to be payable to that Market Participant in that Market Participant's final statement.
- (2) Payments made in accordance with subrule (1) must be made using bank clearing house arrangements determined by AEMO after consulting with Market Participants and published by AEMO.

2.3 Queensland Retail Gas Market

Payments in the Queensland Retail Gas Market (QldGas) are governed by the Retail Market Procedures (Queensland). Below is an extract of the relevant sections.

7.1 Electronic funds transfer

(a) AEMO must ensure that an EFT facility is provided and made available for all Retailers for the purposes of facilitating settlements and the collection and payment of all FRC fees.

(b) Unless otherwise authorised by AEMO, all Retailers must use the EFT facility provided by AEMO under clause 7.1(a) for the settlement of transactions and the payment of FRC fees.

. . .

7.3 Payment of settlement amount

- (a) Where the settlement amount for a Retailer is a positive amount, the Retailer must pay that amount to AEMO in accordance with clause 7.5.
- (b) Where the settlement amount for a Retailer is a negative amount, the Retailer must be paid that amount by AEMO in accordance with clause 7.6.

. . .

7.5 Payment by Retailers

- (a) No later than 12 noon on the 22nd business day after the end of a billing period or 12 noon on the second business day after receiving a final statement under clause 7.4, whichever is the later, each Retailer must pay to AEMO in cleared funds the settlement amount stated to be payable to AEMO by that Retailer in that Retailer's final statement, whether or not the Retailer disputes, or continues to dispute, the amount payable.
- (b) Payments made in accordance with clause 7.5(a) must be made using the EFT facility.

7.6 Payment to Retailers

- (a) By no later than 2.00 p.m. on the day on which AEMO is to be paid under clause 7.5, AEMO must pay to each Retailer in cleared funds the settlement amount stated to be payable to that Retailer in that Retailer's final statement (subject to clause 7.11).
- (b) Payments made in accordance with clause 7.6(a) must be made using the EFT facility.

2.4 Short Term Trading Market

Payments in the Short Term Trading Market (STTM) are governed by the NGR. Below is an extract of the relevant clauses.

460 Electronic funds transfer

- (1) AEMO must ensure that an EFT facility is provided and made available to all Trading Participants for the purpose of facilitating settlement.
- (2) Unless otherwise authorised by AEMO, AEMO and all Trading Participants must use the EFT facility for the payment of amounts under this Division.
- (3) In this rule:

EFT facility means the Reserve Bank of Australia real time gross settlement facility or, where such a facility is not available, an electronic funds transfer facility to be arranged by AEMO.

. . .

470 Payment by Trading Participants

No later than 12 noon on the 20th business day after the end of a billing period or 12 noon on the 2nd business day after receiving a final statement under rule 469, whichever is the later, each Trading Participant must pay to AEMO in cleared funds the settlement amount stated to be payable to AEMO by that Trading Participant in that Trading Participant's final statement.

471 Payment to Trading Participants

(1) No later than 2:00pm on the payment date under rule 470, AEMO must pay to each Trading Participant in cleared funds the settlement amount stated to be payable to that Trading Participant in that Trading Participant's final statement, if at that time the maximum total

payment determined under rule 487(1) is not less than the aggregate of those settlement amounts.

- (2) If the maximum total payment determined under rule 475(1) as at 2:00pm on the payment date under rule 470 is less than the aggregate of those settlement amounts, AEMO must pay to each Trading Participant the reduced amount determined under rule 475(3) by 4:00pm on the same date.
- (3) If AEMO receives payments in respect of settlement amounts due from Trading Participants in the period between 2:00pm on the payment date under rule 470 and 2:00pm on the second business day after that date, AEMO must, promptly after the end of that period, pay the sum of those payments received to those Trading Participants whose settlement amounts were reduced under subrule (2), in the proportions in which those amounts were reduced.

2.5 Gas Supply Hub

Payments in the Gas Supply Hub (GSH) are governed by the Exchange Agreement (EA). Below is an extract of the relevant clauses.

17.2 Settlement Facilities

- (a) Subject to paragraph (b), the Operator and all Market Participants must use Austraclear electronic cash transfer system for the payment of amounts specified in Final Statements.
- (b) The Operator must ensure that an electronic funds transfer facility is made available to all Members and the Operator to use:
- (i) If the Austraclear system is not available for Settlement
- (ii) Where agreed or determined by the Operator for the payment of ad hoc amounts under this agreement between the Operator and a Trading Participant; or
- (iii) For the payment by Viewing Participants of amounts invoiced under clause 18.8.

18.2 Payment obligations

- (a) By 12 noon on the 17th Business Day after the end of a Billing Period or 12 noon on the 2nd Business Day after a Final Statement is made available under cluse 18.1, whichever is the later, each Market Participant must pay to the Operator in cleared funds the net amount stated to be payable to the Operator by that participant in its Final Statement, whether or not the Market Participant disputes the amount payable.
- (b) By 2:00pm on the payment date under paragraph (a), the Operator must pay to each Market Participant in cleared funds the net amount stated to be payable to that participant in its Final Statement, if at that time the maximum total payment determined under clause 18.7(1) is not less than the aggregate of the net amounts payable to all Market Participants.
- (c) If the maximum total payment determined under clause 18.7(a) as at 2:00pm on the payment date under clause 18.2 is less than the aggregate of those net amounts, the Operator must pay to each Market Participant the reduced amount determined under clause 18.7(c) by 4:00pm on the same date.
- (d) If the Operator receives payments in respect of Final Statements from Market Participants after 2:00pm on the payment date under clause 18.2, the Operator must pay the sum of those payments received (including amounts received in respect of interest) as soon as reasonably practicable to those Market participants whose net payment amounts were reduced under clause 18.7©, in the proportions in which those amounts were reduced.
- (e) The Operator and each Market Participant must submit any matching receipt details required to enable another party to make a payment under this clause through the Austraclear system.

2.6 Other Payments

2.6.1 Transmission Use of System in Victoria (TUoS)

Payments for TUoS are facilitated by AEMO issuing an invoice to network users who are required to pay in accordance with the NER. Below is an extract of the relevant clauses.

6A.27.3 Obligation to pay charges for prescribed transmission services

A Transmission Network User must pay charges for prescribed transmission services properly charged to it and billed in accordance with the pricing methodology of the relevant Transmission Network Service Provider by the date specified in the bill.

2.6.2 Settlements Residue Auction (SRA)

Payments associated with the SRA are governed by the Auction Rules and Auction Participation Agreement. Below is an extract of the relevant sections.

Auction Rules:

10.3 Purchase Statement

AEMO will issue a confirmation (called the Purchase Statement) to each successful Auction Participant via NEMNET two business days prior to the settlement date for each Relevant Quarter settling out:

- (a) the total cost for the purchase of the Units which have been allocated to the Auction Participant for that Relevant Quarter;
- (b) the Units purchased, the purchase price per Unit and the amount payable for each tranche of each Unit category for that Relevant Quarter;
- (c) the date on which payment is due (which is the 14th business day of the Relevant Quarter; and
- (d) the time on the payment date at which payment is due

Auction Participation Agreement:

1.1 Definitions and Interpretations

AEMO Clearing Account means Austraclear account NEMM30 or such other Austraclear account as is notified to the Auction Participant by AEMO.

. . .

5.1 Separate Agreements

For each SRDA, the Auction Participant must pay the Purchase Price by the payment date and time specified in the Purchase Statement by authorising the transfer of funds in dollars to the AEMO Clearing Account.

. . .

6.6 Payment Procedure

All Distribution Instalment payments and adjustments must be effected through the Austraclear system as follows:

(a) payments by AEMO must be made by authorising the transfer of funds in dollars to the Austraclear Account specified in the Details or such other Austraclear account notified to AEMO by the Auction Participant; and

(b) payments by the Auction Participant must be made by authorising the transfer of funds in dollars to the AEMO Clearing Account.

3 EFT Facility

AEMO has obligations as the operator of each market to provide an Electronic Funds Transfer (EFT) facility to participants for the purposes of clearing the market.

The following table specifies the EFT facility that AEMO has designated for each market and other payment process:

Market	Rules Clause	EFT facility [†]
National Electricity Market	NER Rule 3.15.2	Austraclear
Declared Victorian Wholesale Gas Market	NGR Rule 233	Austraclear
Queensland Retail Gas Market	RMP(Q) Section 7.1	Austraclear
Short Term Trading Market	NGR Rule 460	Austraclear
Gas Supply Hub	EA 17.2 (a)	Austraclear
Transmission Use of System in Victoria	-	Austraclear
Settlements Residue Auction	APA Section 6.6	Austraclear

Table 2 Designation of EFT facilities

[†] AEMO may authorise a specific participant to utilise an EFT facility other than the designated facility on a case-by-case basis.

4 Clearing Registration

4.1 Establishing Access

Prior to being able to operate in any of the energy markets, participants must register with AEMO. As part of this registration, participants are required to become an Austraclear member by applying to the ASX.

Austraclear provides 4 classes of membership, with the following classes being applicable to AEMO clearing:

Full Participant

Participants registered as a Full Participant are able to conduct cash transfers with AEMO.

Special Purpose Participant

ASX provides a class of registration specific to participants of electricity and gas markets, who are registered to buy and/or sell energy. This membership enables the participant to conduct cash transfers with AEMO.

Associate Participant

For participants that do need meet the requirements of the Special Purpose Participant (e.g. SRA) and do not wish to register as a Full Participant, ASX provides a class of registration that still enables cash transfers with AEMO (as AEMO is currently registered as a Full Participant)

Note that the requirement of gas market participants to register as a Full Participant is no longer applicable, and the Special Purpose Participant may be used.

The process of registering with AEMO and applying for membership to Austraclear involves the following steps:

- 1. Application for membership to Austraclear submitted to ASX.
- 2. ASX assigns an Austraclear code (4 characters and 2 numbers).
- 3. Application for registration submitted to AEMO, including the assigned Austraclear code.
- 4. AEMO assesses registration, and if successful, notifies the participant in writing.
- 5. A copy of the letter from AEMO is provided by the participant to the ASX.
- 6. ASX configures and activates the Austraclear account.

Once the Austraclear account is active, the participant can then establish access to the Exigo system.

Further information regarding the Austraclear system and membership is available on the ASX website: www.asx.com.au

4.2 Dollar Test

After a participant's Austraclear membership has been approved and the system application installed and active, participants are required to conduct a test of cash transfers. This simple test, referred to as a "dollar test", assists participants by highlighting any issues that may have occurred during system installation, bank account setup or any faulty operation of the Austraclear security devices.

The participant enters two cash trades, one to receive \$1, and one to pay \$1 with AEMO selected as the counterparty.

The dollar test is also recommended to participants that make changes to their current Austraclear setup (including changes to associated bank accounts).

Participants should contact AEMO to discuss the details and timing of Austraclear testing.

5 Clearing Process

5.1 Invoice/Statement Issue

AEMO issues invoices and statements to each participant for the NEM, DWGM, QldGas, STTM, GSH, SRA and TUoS. The invoice or statement will specify whether payment is required to AEMO or from AEMO, the amount of the payment, and the date on which payment must occur.

5.2 Entering and Authorising Transactions

AEMO enters and authorises their side of each cash transaction in Austraclear approximately the same time as the invoices and statements are issued. Participants are encouraged to enter and authorise (if required) their side of the cash transaction in advance, to reduce the risk of delays in payment.

Participants must enter and authorise (if required) their side of the cash transaction based on the information in the invoice or statement. The Austraclear Settlement Date is specified as the date the payment is to be made, as shown on the invoice or statement. Once entered, the transaction should have a status of "Matched", indicating that the AEMO and participant side of the transaction are aligned. If the transaction does not match, the details of the transaction should be checked, and any issues discussed with AEMO.

5.3 Monitoring Transactions

The payment to AEMO must always be made in cleared funds, and the participant is required to monitor and follow up the transaction. Even though a transaction is matched and the date of settlement has been reached, the transaction may not settle (i.e. become cleared funds) if any one or more of the following conditions has occurred:

- The participant has not specified a Standard Settlement Instruction (SSI) in Exigo and has not manually associated a cash record with the transaction (this will result in the transaction being held in the DVP Instructions)
- The participant has insufficient available funds in the related bank account
- The participant's bank has not prioritised and/or released the transaction (as part of RTGS settlement)

Participants are strongly advised to closely monitor the payment transaction, and escalate any delays with their bank.

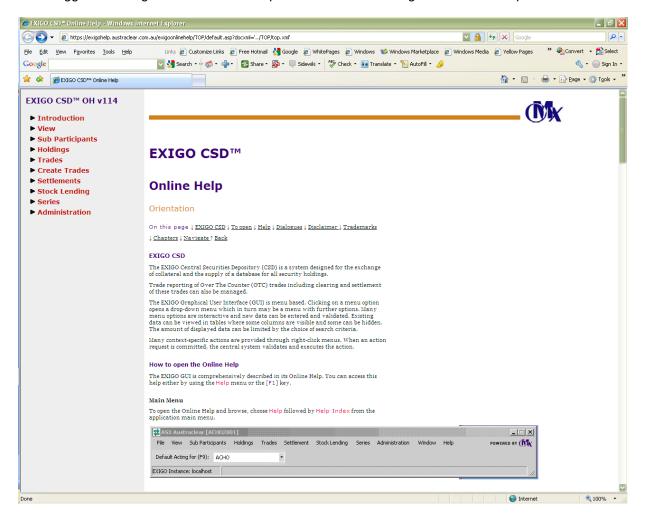
6 Clearing Procedure

6.1 Austraclear Education

Before using Austraclear for the first time, it is recommended that the free online Austraclear education courses are completed. The online training program is comprised of various units that you may select from including useful introductory courses such as System Access and Cash Trades. Austraclear education is located at: https://acleareducation.sfe.com.au/aclear/

6.2 Exigo Online Help

Once logged into Exigo there is Online Help available from the Exigo main menu Help>>



6.3 Payment Priority

Participants must inform their bank relationship/account manager of their Austraclear timing requirements. If a bank is unaware that a transaction must be settled by a certain time, the transaction may remain in a queue and cause the participant to breach the market rules. Management of the Austraclear payments is typically a manual process for each bank so prearrangement is critical for meeting the payment deadlines.

7 Contacts

The following contacts should be used for issues relating to settlement:

Type of issue	Who to contact	Contact Details
Unable to access Austraclear, or problem using Austraclear	Austraclear Service Desk	Phone: 1300 362 257 Email: Exigo@asx.com.au
Problem with amount or timing of settlement	AEMO	Phone: (02) 8884 5015 Email: Clearing@aemo.com.au
Transaction is matched but not settled in Austraclear	Participant's bank representative	

Table 3 Market Clearing Contacts

8 References

The resources listed in this section contain additional related information that may assist you.

- AEMO Information and Support Hub: phone: 1300 AEMO 00 (1300 236 600), and follow the prompts; email: supporthub@aemo.com.au.
- National Gas Rules (NGR) and National Electricity Rules (NER): see the Australian Energy Market Commission (AEMC) website http://www.aemc.gov.au.

8.1 AEMO's website

You can find the following documents on AEMO's website:

"Exchange Agreement", http://www.aemo.com.au/Gas/Market-Operations/Gas-Supply-Hub/Legal (Home > Gas > Market Operations > Gas Supply Hub > Legal).

It is important to ensure that you are reading the current version of any document.