

GUIDE TO MARKET SYSTEMS - NEM CHANGE OF OWNERSHIP



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Documents made obsolete The release of this document makes obsolete any version of "The Guide to Market Systems – Transfer of Control" and changes only the version of Guide to Market Systems - NEM Change of Ownership.

Further Information

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

AEMO Help Desk

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

E-mail: helpdesk@aemo.com.au

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Abbreviations and Symbols

These abbreviations, symbols, and special terms are provided to 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
EST	Australian Eastern Standard Time (also market time)
FCAS	frequency control ancillary services
FTP	File transfer protocol
EMMS	[wholesale] Electricity Market Management System; software, hardware, network and related processes to implement the National Electricity Market (NEM)
MSATS	[retail electricity] Market Settlement and Transfer Solution
MW	Megawatt
NEM	National Electricity Market
NER	National Electricity Rules; also often just called the Rules
NMI	[electricity] National Metering Identifier

Special terms

Term	Definition
Effective registration date	The date of ownership is the effective date of the registration, beginning from midnight. A new registration is effective in the first dispatch interval after 0000 hrs of the effective registration date (that is, for the 5-minute dispatch interval ending at 00:05 AM).
Implementation date	Usually one business day before the effective registration change—between 7:00 AM and 11:00 AM. Upon special request, AEMO may agree to implementation three business days before the effective registration date, given sufficient notice time to comply with the Rules, the Registration Desk, and IT Change Management.
Market time	Australian Eastern Standard Time
Participant ID	Registered participant identifier
Rules	National Electricity Rules
Transferee	The participant taking over control of the biddable unit, or change of ownership of a participant ID.
Transferor	The participant relinquishing control of the biddable unit, or participant ID.

1 Introduction

1.1 Purpose

This document provides:

- Details regarding transfer of control of electricity assets registered with AEMO.
- Basic information on some key issues that may arise from corporate actions, such as a merger or acquisition. Transition can have significant ramifications regarding network and logical secured access. In addition, many of AEMO's NEM systems have defined cut-off times for particular transactions and reports.

1.2 Audience

This document is relevant to those parties involved in a transfer of control of a corporate entity, participant ID, or NEM unit.

1.3 What's in this guide

- Chapter 2 provides a brief overview of AEMO's NEM systems with a summary of key cut-off times, and an explanation of pre-production and production systems, see "NEM Systems" on page 2.
- Chapter 3 explains relevant considerations for the ownership change of a company participant ID, generating unit, or bulk customers. The chapter includes an example plan of a company taking over an existing participant ID and their IT. See "Company participant ID" on page 5
- Chapter 4 is a list of related information mentioned throughout this guide, see "References" on page 11.

[Text in this format](#), indicates the details of a document, help desk, or web page are listed in the "References" section on page 11.

2 NEM Systems

2.1 Pre-production versus production

AEMO maintains separate pre-production and production systems with new features added to pre-production ahead of production. Participants use the pre-production systems for testing and training purposes. Testing in pre-production allows identification and working through of specific details for each particular situation.

Change notices e-mailed to participants announce the changes to pre-production and production systems.

For further information regarding AEMO's IT systems, see [Understanding Energy Market Information Systems](#).

2.2 System and business timing

Dates for settlements and trading purposes are separate, and different definitions in the NER. The following derive from the NER definitions:

- Trading days (such as relevant to dispatch offers and bids) are effective from 04:00 AM until 04:00 AM the next day, with period 1 being at 04:30 AM (that is 0400 hrs – 0430 hrs) and period 48 being 04:00 AM (that is, 0330 hrs – 0400 hrs the next calendar day).
- Settlements processes (such as for settlements statements) are calendar based, with period 1 at 00:30 AM (that is 00:00 midnight at start of day– 00:30 AM) and Period 48 at 00:00 midnight (that is 23:30 PM – 00:00 midnight at the end of the same calendar day).
- Times butt up, without any overlap, so periods include the starting time and exclude the ending time.

Each AEMO NEM system has a cycle time, which may or may not align with such corporate activity as transfer of ownership or control of a registration of a participant ID. For the benefit of both existing and prospective participants, the following are key cut-off times for major AEMO NEM systems and processes (times are in EST—commonly also called “market time” within the electricity industry):

- The implementation date is usually one business day before the effective registration date of a registration change, between 7:00 AM and 11:00 AM. Upon special request, AEMO may agree to implementation three business days before the effective registration date, given sufficient notice time to comply with the Rules, the Registration Desk, and IT Change Management.
- 4:00 AM is the beginning of the trading day for the wholesale electricity markets (that is, for energy and FCAS).

AEMO NEM systems are designed such that only the owner on a trading date can submit offers for the unit for that trading date. The relevant date for ownership is the effective registration date,

beginning from midnight at the start of the day. The relevant date for being able to submit an offer for a unit is the date (and time) of implementing registration into AEMO's systems.

- 12:30 PM is the latest time for changing the next day's prices, although other bid details such as quantities at each price and total availability can be rebid at any time. For example, when transferring control of a biddable asset (such as, a market generator), a registration change made effective on a given day means the transferee can be bound by the prices for that day made by the transferor.
- Accepted bids for a unit remain active regardless of subsequent ownership and control changes.

In addition, any changes of prices for the following day need to be accepted by AEMO NEM systems before 12:30 PM.

- Midnight is the boundary for financial reporting, and deadlines in retail systems. A calendar day typically includes that day. For example, the date for objecting to a NMI transfer is based on the calendar date, so ends at 2400 hrs (12:00 midnight ending) on that date.

Changes of standing data for electricity grid assets (for example, generating units, and interconnectors) become effective on a calendar day (so start at 0000 hrs or 12:00 midnight starting on the effective registration date), although bids already accepted remain in place. A new registration is effective in the first dispatch interval after 0000 hrs of the effective registration date (that is, for the 5-minute dispatch interval ending at 00:05 AM).

This diagram displays the key cut-off times, assuming consecutive business days, with all times being EST.

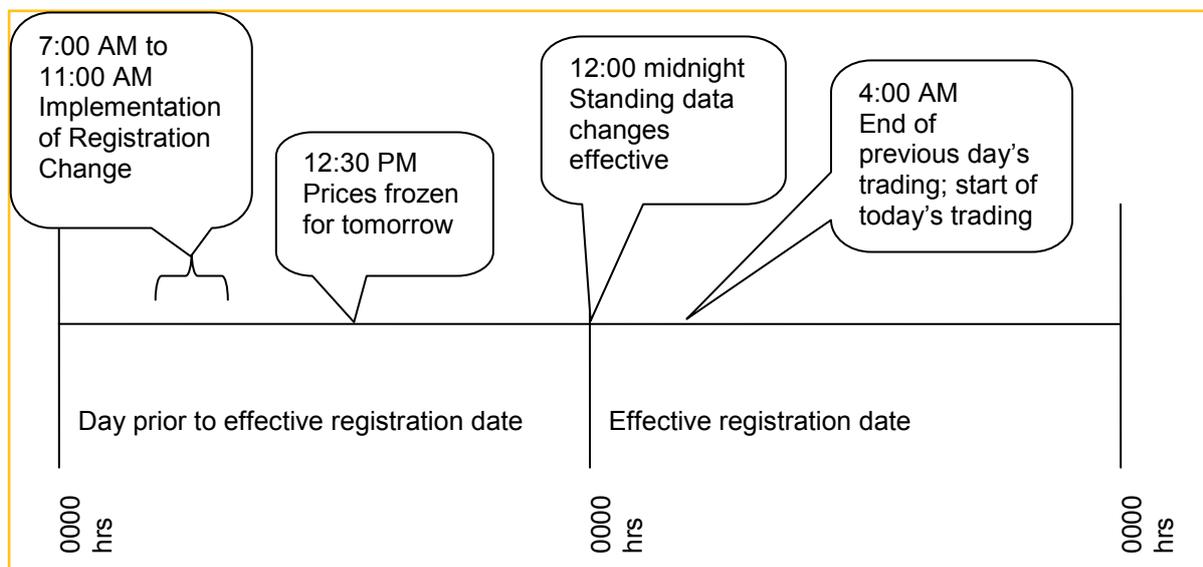


Figure 1: key cut-off times

Some particular ramifications of these cut-off times, in conjunction with control transition, include:

- When transferring control of a biddable asset (such as a market generator), a registration change made effective on a given day means the period from midnight to 4:00 AM is still under the bidding responsibility of the registration effective on the previous day, but the financial responsibility changes at midnight.

- For a new unit, bids are not accepted between midnight and 4am on the effective registration date. New units are registered in the NEM before they are commissioned with a zero MW availability.
- The transferee can offer for future dates where the trading date is greater than or equal to the effective registration date, after AEMO implements registration into AEMO's systems.
- A user can only log in to the EMMS web portal if their participant ID is active according to the current market time. The NEM standing data includes participant status, so just after 12:00 midnight on the first day of being active is when the EMMS web portal can be accessed to see current details of a new or transferred unit for that participant ID.
- The list of units a given participant can offer in the EMMS web portal is determined by the current market time, so a participant cannot use the EMMS web portal to manage offers for units it owns from a future effective registration date. To manage offers for units a participant owns from a future effective registration date, use the file interface.
- Transferor and transferee only receive acknowledgements for each of their own submissions.
- Subscribed data reports containing information for the biddable unit are only sent to the transferee from the effective registration date—not before.

3 Ownership Change

Change of ownership (excluding customers) requires consideration of the following:

New participants

- Consider the need to submit a registration application. See [Registering in Energy Markets](#) to obtain an application.
- Consider the need to acquire a MarketNet connection, see [Understanding Energy Market Information Systems](#) to obtain the form.

Contacts

- Ensure the key IT contacts are accurately recorded at AEMO, so all parties can be included for resolving unforeseen situations promptly.
- Review e-mail address for IT communications from AEMO (Change Notices and Daily Bulletins).

Data Sharing

- Review agreements with other parties, such as data sharing. Advise [AEMO's Help Desk](#) if, and when, changes are required—referring to “data sharing”.

If you are a registered participant, the EMMS web portal displays any data sharing agreements you may have. Select Data Interchange->Data Delivery->Data Sharing

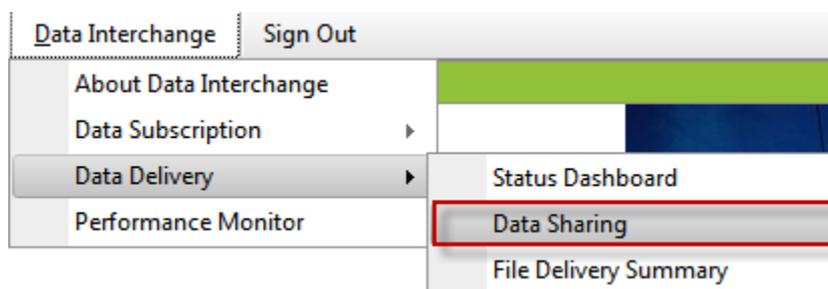


Figure 2: EMMS data sharing access

3.1 Company participant ID

An ownership change of participant ID means considering the following:

- Transferor and transferee are reminded of the confidentiality obligations in section 8.6 of the NER and compliance with AEMO's published procedure in item 3.19 (c) of NER, see [Systems Access Policy](#).
- At an agreed time, transferor provides access credentials to transferee. Specifically:
 - Transferor participant administrator (PA) adds a transferee user with PA rights, and advises credentials. The transferee PA can inactivate transferor PAs and users after ownership transfer is effective. For assistance with participant administration, see [Participant Rights Administration User Interface Guide](#).

- Transferor data manager or security contact provides the credentials for FTP access to transferee security contact or delegate. The transferee person changes the password after ownership is effective.

3.2 Generating unit

On unit ownership change, the following considerations are relevant:

- For a smooth transition, having processes and agreements in place between the parties allows the communication of data reports and bids. Examples of overlaps in control and data access include:
 - 00:00 to 04:00 AM period of the date the registration is effective.
 - Settlements are in arrears, and the transferee can receive statements for times when the transferor was in control.
 - Forward projections received by the transferor may not be visible to the transferee, and new projections are generated by AEMO only when the next runs are scheduled.
- Acknowledgements of bids are always back to the sender (for both positive and negative acknowledgements).

The following timeline summarises key events and the status for the transferee and transferor regarding a biddable unit in the NEM. All events are fixed in time, except the time of the manual implementation of the registration (assumed to be completed by 11:00 AM on the day before the effective registration date).

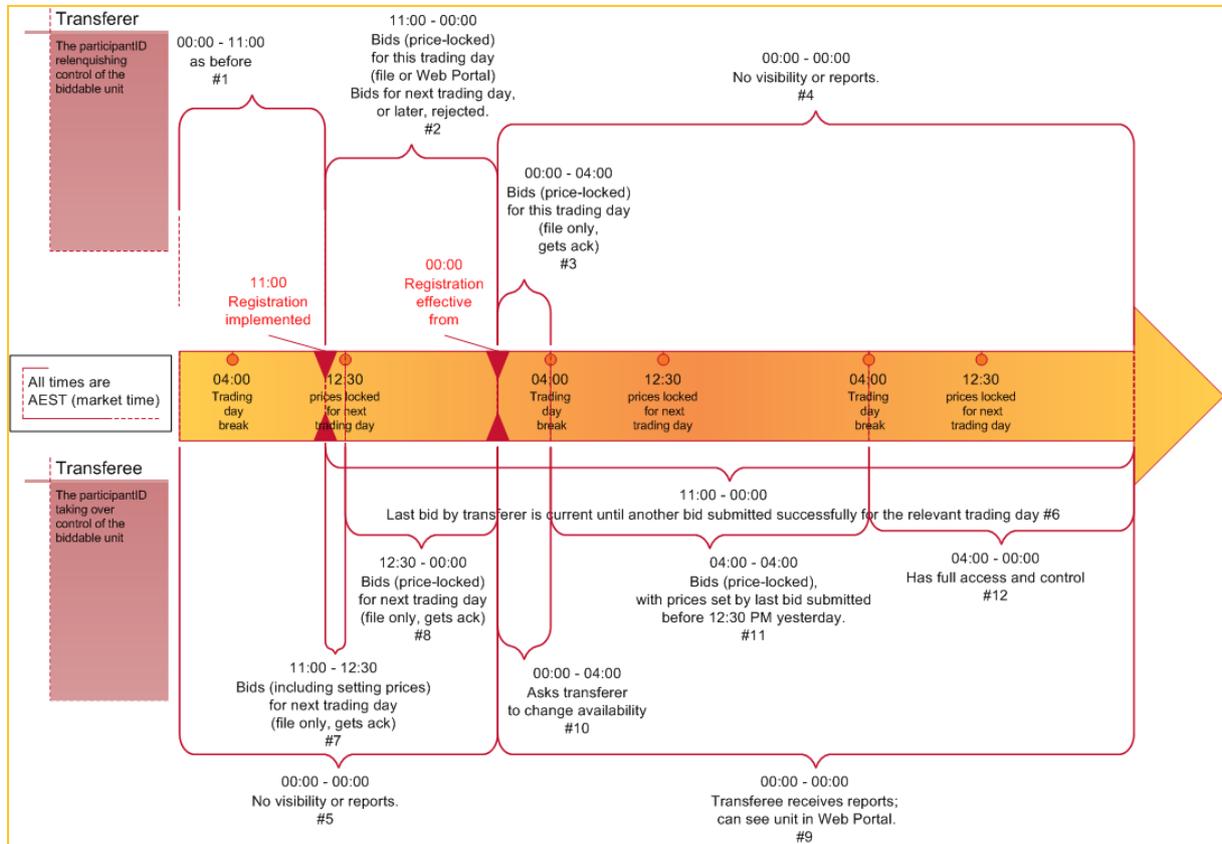


Figure 3: timeline for transfer of control

Diagram notes - transferor:

1. Prior to the implementation date, transferor:
 - Can submit bids (including setting prices) for future trading days.
 - Can submit bids (with prices locked) for current trading days, using files or EMMS web portal.

It is business as usual for the transferor until the implementation of the registration into AEMO's systems, so the transferor has exclusive access and control.
2. From the implementation date to midnight, transferor:
 - Cannot submit a bid for any trading day on or after the registration date—doing so results in rejection.
 - Can submit a bid for any day before the registration date.
 - Can submit bids for current trading day (with prices locked) using the EMMS web portal and files.
3. From midnight to 04:00 AM, transferor:
 - Can submit bids for current trading day (with prices locked) using files.

4. From effective registration date midnight onwards, transferor:
 - Has no further access to information regarding the biddable unit, except as made public.

Diagram notes - transferee:

5. Prior to effective registration date midnight, transferee:
 - Has no access to biddable unit in the EMMS web portal.
 - Cannot receive any files or data reports, regarding the biddable unit.
6. From the implementation date onwards:
 - A bid for a trading day is effective for each future trading day, until another bid with a later submission date becomes effective for that trading day. This means that the transferor's bids remain valid until another bid is received (from the transferee) for a trading day.
7. From the implementation date to 12:30 PM, transferee:
 - Can submit bids (including setting prices), with effect for the next trading day, using files.
 - Receive acknowledgements, but the transferor still receives the data reports containing information for the biddable unit, according to the file subscriptions for their participant ID.
 - Prices for the next trading day are set by last submitted bid before 12:30 PM on the day before the registration change (either by transferor or transferee).
8. From the implementation date 12:30 PM to midnight, transferee:
 - Can submit bids (with prices locked), with effect for the next trading day, using files.
 - Receives acknowledgements, but the transferor receives the data reports containing information for the biddable unit, according to file subscriptions for their Participant ID.
9. From effective registration date midnight onwards, transferee:
 - Receives data reports containing information for the biddable unit, according to file subscriptions for their Participant ID.
 - Can see the biddable unit in the EMMS web portal.
 - Can submit bids (including setting prices), using the EMMS web portal or using files, for future trading days, using the EMMS web portal or using files.
10. From effective registration date midnight to 4:00 AM, transferee:
 - Cannot bid for period 00:00–04:00 AM; can ask transferor to submit a bid (with prices locked), such as for a change of availability.
 - Can bid (with prices locked), using files, for trading day after 04:00 AM.
 - Can bid (including setting prices), using files, for the trading day after 04:00 AM on the next day, or for any following trading day.
11. From effective registration date 04:00 AM to the day after effective registration date 04:00 AM, transferee:
 - Can bid (with prices locked), using the EMMS web portal or using files, for current trading day; that is, with the prices the same as set by the last submitted bid before 12:30 PM on the day before the registration change (either by transferor or transferee).

- Can bid (including setting prices), using the EMMS web portal or using files, for the trading day after 04:00 AM on the next day, or for any following trading day.
12. Day after effective registration date—onwards, transferee:
- The transferee has full access and control of the biddable unit—it is business as usual for the transferee.

3.3 Customers

On bulk customer ownership change, the following considerations are relevant:

- Transferring a large number of existing customer's NMI to a new owner impacts the load on both, participant and AEMO's IT systems. For minimal impact, participants contact [AEMO's Help Desk](#) and request the metering team to transfer their NMIs using the "MSATS Bulk Change Tool (BCT)".

For further information regarding the use of the MSATS Bulk Change Tool, see MSATS [CATS and WIGS Procedures](#).

3.4 Example of a company taking over a participant ID

This example is about a company planning to take over another organisation with an existing registration as a generator. The takeover includes all the IT functions. In this example, the resulting organisation is identified as JKLM—a small participant. JKLM and the current owner begin the planning for registration and IT in May (of an arbitrary year) for effective date of 1 July, including:

- JKLM considers their choice of interfaces to perform their functions, see [Understanding Energy Market Information Systems](#).
- JKLM considers choices for their MarketNet connection, to obtain the form, see [Understanding Energy Market Information Systems](#).
- JKLM seeks advice regarding registration requirements because they are acquiring an existing registered participant company, see [Energy Market Registration](#).
- Current owner and JKLM review existing data sharing arrangements (see Data Sharing on page 5) and decide the data sharing to apply from takeover. Changes might include revoking current owner rights to leave only JKLM to use the participant ID, and might include adding or revoking any third party data being directed to the participant ID. The current owner advises AEMO of all access to be revoked as of a given date, and JKLM requests any additions to apply from a given date, and confirms the access by any other party, including the current owner.
- JKLM sets up their MarketNet connection, tests the connection, and confirms with AEMO.

Pre-production setup and test

- In pre-production (not production), the current owner adds another participant administrator (PA) for use by JKLM, and provides JKLM with participant ID, the PA credentials, MarketNet access

credentials, and relevant IP addresses. For further information regarding NEM systems—pre-production and production, see § 2.1.

- JKLM accesses pre-production (not production) EMMS and MSATS web portals, confirming the ability of the JKLM PA to establish and manage access rights for other JKLM staff, and full access to all functionality required for JKLM operations. JKLM does testing and training in the pre-production environment. JKLM PA inactivates the current owner's PA and users, to test that the current owner can no longer access pre-production. JKLM changes the pre-production file access password, tests access and confirms current owner can no longer access AEMO's pre-production file server.

Production setup

- In production this time, the current owner repeats the steps done in pre-production (that is, adds another participant administrator (PA) for use by JKLM, and provides JKLM with participant ID, the PA credentials, MarketNet access credentials, and relevant IP addresses).
- AEMO implements the data sharing changes as advised by JKLM.
- JKLM has full control of the participant ID. JKLM PA inactivates all the previous owner's users—including PAs and changes the production file access password.

For assistance managing a web portal account—participant administrators create accounts in MSATS, see [Participant Rights Administration User Interface Guide](#).

4 References

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

- AEMO Help Desk – phone: 1300 236 600 (1300 AEMO 00), and follow the prompts, or e-mail: helpdesk@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>.

4.1 AEMO's website

The following are available on AEMO's website:

- “CATS and WIGS Procedures”, http://www.aemo.com.au/electricityops/cats_wigs.html (Home >Electricity Retail & Metering>MSATS>CATS and WIGS Procedures). Viewed 1 February 2012.
- “Energy Market Registration”, links to registration applications and related information: <http://www.aemo.com.au/registration/registration.html> (Home>Energy Market Registration) Viewed 1 February 2012.
- *Participant Rights Administration User Interface Guide*, for information about managing a web portal account (accounts are created in MSATS), <http://www.aemo.com.au/electricityops/userguide.html> (Home>Electricity Retail & Metering>MSATS>MSATS Participant User Interface Guides). Viewed 1 February 2012.
- “Systems Access Policy”: <http://www.aemo.com.au/registration/infosystems.html#policy> (Home>Energy Market Registration>Understanding Energy Market Information Systems). Viewed 1 February 2012.
- “Understanding Energy Market Information Systems”, Information systems information, related documents, and access forms: <http://www.aemo.com.au/registration/infosystems.html>. (Home>Energy Market Registration>Understanding Energy Market Information Systems). Viewed 1 February 2012.