

# SPOT MARKET OPERATIONS TIMETABLE

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## Version Control

VERSION NUMBER	DATE	AUTHOR	COMMENTS
Version 1.0	5/9/97	NEMMCO	First draft. Handed out at Queensland MIF
Version 1.1	10/9/97	NEMMCO	Minor amendments and corrections
Version 2.0	28/10/97	NEMMCO	Amendments to Settlements timetable
Version 2.1	4/12/97	NEMMCO	Minor editing to correct discrepancies.
Version 2.2	5/1/98	NEMMCO	Predispatch target half-hourly and PASA 3 hourly added
Version 2.3	20/1/98	NEMMCO	Reference to Schedule 3.1 added
Version 3.0	12/6/01	NEMMCO	Minor editing to reflect Code Reference Ver 1 (Amend. 5.3)
Version 3.1	12/9/01	NEMMCO	Minor editing to reflect Code Reference Ver 1 (Amend. 5.8)
Version 4.0	1/11/01	NEMMCO	Amendment to publication time of MT PASA, and amendments to reflect requirements under the new ancillary service market arrangements in accordance with Code Reference Ver 1 (Amend. 5.9)
Version 4.1	6/5/05	NEMMCO	Obligation to authorise settlement transactions amended to pay in cleared funds, treatment of late settlement payments revised, repayment of late settlements amended plus other minor edits.
Version 4.2	September 2007	NEMMCO	To move the obligations for Market Participants to pay NEMMCO in cleared funds by 10:00am Sydney time to 10:30 am Sydney time. To tighten standard times for publication of dispatch and trading interval prices consistent with (better) cycle times that have been routinely achieved. To replace references to the National Electricity code with references with the rules and to make other minor changes to the wording for clarification.
Version 5.0	11/11/08  (Changes to be effective on 31 March 2009)	NEMMCO	Added requirement for semi-scheduled generating units.  Added publication time of semi-scheduled generating units and semi-dispatch data.  Added defaulting bids and offers to last valid bids and offers.

VERSION NUMBER	DATE	AUTHOR	COMMENTS
			<p>Clarifications to frequency and period covered.</p> <p>Clarified Exigo transaction status for payment by NEMMCO in Settlements.</p> <p>Corrected Rule clause and publication time for operational irregularities.</p> <p>Added publication of regional aggregation of non-scheduled generation.</p> <p>Minor amendments and corrections.</p>
Version 5.1	07/01/09	NEMMCO	<p>Corrected a typo in section 4.1 Offers and Bids.</p> <p>Added clarifications to the publication of regional aggregation of non-scheduled generation.</p>
Version 6.0	25/02/10	AEMO	<p>Added timing requirement for information related to Energy Adequacy Assessment Projection (EAAP) and interim Congestion Information Resource (CIR).</p> <p>Changed NEMMCO to AEMO</p>
Version 7.0	03/12/10	AEMO	<p>Amendment of the Timetable in accordance with National Electricity Amendment (Transparency of Operating Data) Rule 2010 No.4</p>
Version 8.0	16/12/10	AEMO	<p>Amendment of the Timetable in accordance with National Electricity Amendment (Amendment to PASA-related Rules) Rule 2010 No.13</p>
Version 9.0	01/07/11	AEMO	<p>Amendment of the Timetable in accordance with National Electricity Amendment (Publication of a Carbon Dioxide Equivalent Intensity Index for the National Electricity market) Rule 2010 No.8</p>

## Disclaimer

- (a) **Purpose** – This document has been prepared by the Australian Energy Market Operator Limited (**AEMO**) for the purpose of complying with clause 3.4.3 of the National Electricity Rules (**Rules**).
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## **1. Introduction**

### **1.1 Introduction**

- a) This Spot Market Operations Timetable (“**Timetable**”) is made in accordance with clause 3.4.3 of the National Electricity Rules (“**Rules**”).
- b) The commencement date of this Timetable is 16 December 2010.
- c) This Timetable may only be amended in accordance with 3.4.3(b) of the Rules.
- d) If there is any inconsistency between this Timetable and the Rules, the Rules will prevail to the extent of that inconsistency.

## **2. Purpose**

The purpose of this document is to outline the timetable for the performance of spot market operations.

## **3. Application of this Timetable**

This Timetable applies to all Registered Participants and AEMO.

## 4. Spot Market Operations Timetable

### 4.1 Offers and Bids

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
Anniversary of market start		Standing Data in accordance with Schedule 3.1 of the Rules	Participants	AEMO	Next financial year	Annually	Provide details of any changes. May include tolerance levels.	Schedule 3.1
Day -2	12:30	Capacity notification for Day 0: <ul style="list-style-type: none"> <li>Self commitment / de-commitment times</li> <li>Capacity profile</li> <li>Energy availability</li> <li>Rates of change</li> </ul>	Participants	AEMO	Day 0	Daily	Capacity profile & rates of change are subject to Rule change proposals.	3.8.4 3.8.17, 3.8.18
Day -1	12:30	Bidding closes for Day 0. Bids contain quantities specified under clauses 3.8.6, 3.8.6A & 3.8.7 of the Rules, including: <ul style="list-style-type: none"> <li>MW quantities for each band</li> <li>prices for each band</li> </ul>	Participants	AEMO	Day 0	Daily	Band prices in bids for Day 0 cannot be changed after 12:30.	3.8.5, 3.8.6, 3.8.6A, 3.8.7, 3.8.7A
Day 0	Up to when rebid is	Rebidding closes. Rebids contain quantities specified under clause	Participants	AEMO	From acceptance of	Ongoing	Band prices cannot	3.8.22

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
	captured for dispatch	3.8.22 of the Rules, including <ul style="list-style-type: none"> <li>MW quantities for each band</li> </ul>			bid to end of Day 0		be rebid.  Reason for rebid must be included.	
Day 0	ASAP, on receipt of valid <i>bid</i>	Acknowledgement of receipt of valid dispatch offer, dispatch bid or market ancillary service offer, and data contained in these offers as they will be used in the <i>dispatch</i> process	AEMO	Participants	Day 0	Ongoing		3.8.8
Ongoing		Defaulting dispatch bid, dispatch offer or market ancillary service offer to the last valid bids and offers	Participants	AEMO	Covers days where no daily bids or offers are submitted for.	Ongoing	If no valid daily bid or offer is received for a particular day, the last valid bid or offer is used.	3.8.9
Ongoing	ASAP	Submit each semi-scheduled generating unit plant availability if it differs more than 6MW from the nameplate rating. Subsequent notification to advise its return to within 6MW from the nameplate rating.	Participants	AEMO	Day 0 to period covered by Medium Term PASA	As frequently as changes occur.	Submit data as soon as aware of changes in dispatch, pre-dispatch and PASA timeframes.	3.7B(b)

## 4.2 PASA

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
Ongoing		Submit data for Short Term PASA, including: <ul style="list-style-type: none"> <li>Scheduled generating units, scheduled load and scheduled network service availability;</li> <li>Network outages.</li> </ul>	Participants & AEMO	AEMO	6 trading days from end of trading day covered by most recent pre-dispatch schedule.	As frequently as changes occur.	Half hourly resolution. AEMO converts network outage information into constraints.	3.7.3(e), (f), (g)
Daily	14:00	Publish Short Term PASA, including load forecast for each region.	AEMO	Participants	6 trading days from end of trading day covered by most recent pre-dispatch schedule.	Daily as a minimum Rule requirement. Current system target is 2 hourly.	Short Term PASA is provided in half-hourly resolution.	3.7.3(a), (b), (h), 4.9.1(a)
Ongoing		Submit data for Medium Term PASA, including: <ul style="list-style-type: none"> <li>Scheduled generating units, scheduled load and scheduled network service availability;</li> <li>Network outages.</li> </ul>	Participants & AEMO	AEMO	24 months from the Sunday after the day of publication.	As frequently as changes occur.	Daily resolution. AEMO converts network outage information into constraints.	3.7.2(d), (e) 11.30.2(c)

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
							Also refer to the requirements under the interim CIR in this document.	
Each Tuesday	16:00	Publish Medium Term PASA, including load forecast for each region.	AEMO	Participants	24 months from the Sunday after the day of publication.	Weekly as a minimum.  More frequently if a materially significant change exists.	Medium Term PASA is provided in daily resolution.	3.7.2(a), (f), 4.9.1(a)

### 4.3 Pre-Dispatch and Dispatch

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
Day -1	As soon as possible (ASAP) after 12:30, no later than 16:00.	Publish first pre-dispatch for Day 0, including load forecast for each region.	AEMO	Participants	Day 0	Each 3 hours as a minimum Rule requirement. Current system target is half hourly.	Pre-dispatch schedule is provided in half hourly resolution.	3.8.20, 4.9.1(a)
Day 0	Every 5 min. (approx.)	Dispatch.	AEMO	Participants	Next dispatch interval	Every 5 minutes.	Dispatch is according to current bids, offers and rebids.	3.8.21

#### 4.4 Market Information

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
Each Tuesday	16:00	Publish outcome of Medium Term PASA.	AEMO	Participants	24 months from the Sunday after the day of publication.	Weekly as a minimum	Medium Term PASA is provided in daily resolution.	3.13.4 (a)
Day 0	14:00	Publish outcome of Short Term PASA.	AEMO	Participants	6 trading days from end of trading day covered by most recent pre-dispatch schedule.	Daily as a minimum Rule requirement. Current system target is every 2 hours.	Short Term PASA is provided in half hourly resolution.	3.13.4 (c)
Day -1	ASAP after 12:30, no later than 16:00.	Publish pre-dispatch schedule.	AEMO	Participants	Day 0	Every 3 hours as a minimum Rule requirement. Current system target is half hourly.	Pre-dispatch schedule is provided in half-hourly resolution.	3.13.4 (e), (i)
Day -1	ASAP after 12:30, no	Publish forecast of spot prices and ancillary service prices at	AEMO	Participants	Day 0	Every 3 hours as a minimum Rule	Forecast of spot prices is provided	3.13.4 (g), (i)

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
	later than 16:00.	each regional reference node.				requirement. Current system target is half hourly.	in half hourly resolution. Based on pre-dispatch schedule.	
Day -1	ASAP after 12:30, no later than 16:00.	Publish expected sensitivity of the forecast spot prices to changes in the forecast load or generating unit availability.	AEMO	Participants	Day 0	Every 3 hours as a minimum Rule requirement. Current system target is half hourly.	Sensitivity forecast of spot prices is provided in half hourly resolution. Based on pre-dispatch schedule.	3.13.4 (h), (i)
Day 0	ASAP after start of dispatch interval.	Publish dispatch energy prices and ancillary service prices for each regional reference node.	AEMO	Participants	Current dispatch interval	Every 5 min.		3.13.4 (l)
Day 0	ASAP after start of last dispatch interval in the trading interval.	Publish regional reference node prices.	AEMO	Participants	Current trading interval	Every half hour.		3.13.4(m)

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
Day +1	ASAP after start of trading day.	Publish for Day 0: <ul style="list-style-type: none"> <li>• Regional reference prices;</li> <li>• Ancillary service prices;</li> <li>• Regional and total interconnected system loads and energies;</li> <li>• Inter-regional loss factors;</li> <li>• Network constraints.</li> </ul>	AEMO	Participants	Day 0	Daily	Half hourly resolution.	3.13.4(n)
Day +1	ASAP after start of trading day	Publish for Day 0, inter-regional flows	AEMO	Participants	Day 0	Daily	Half hourly resolution.	3.13.4(n1)
Day 0	ASAP after start of dispatch interval.	Advise constrained-on or -off scheduled generating units or scheduled network service provider of impact of network constraint within its own region.	AEMO	Participants	Current dispatch interval	Every 5 min.		3.13.4 (o)
Day +1	ASAP after start of trading day.	Publish final dispatch offers, dispatch bids and market ancillary services offers received, as well as actual availabilities of generating units, scheduled network services, scheduled loads and market	AEMO	Participants	Day 0	Daily		3.13.4 (p)

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
		ancillary services.						
Day +1	ASAP after start of trading day.	Publish dispatched generation, dispatched network service, dispatched load for each scheduled generating unit, semi-scheduled generating unit, scheduled network service and scheduled load respectively. Publish application of semi-dispatch cap to each semi-scheduled generating unit.	AEMO	Participants	Day 0	Daily	5minute resolution for dispatch interval and half-hourly resolution for trading interval.	3.13.4 (q)
Day 0	ASAP after start of dispatch interval	Publish actual generation of scheduled generating unit, semi-scheduled generating unit and non-scheduled generating unit or non-scheduled generating systems.  Publish actual network service for scheduled network service.  Publish actual load for scheduled load.	AEMO	Public	Current dispatch interval	Every 5 minutes	The actual generation is measured at the beginning of each dispatch interval.	3.13.4(r)

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
Day +1		Publish operational irregularities.	AEMO	Participants	Day 0	Daily		3.13.4 (w)
Day 0	ASAP after start of last dispatch interval in the trading interval.	Publish regional aggregation of actual non-scheduled generation for each trading interval	AEMO	Participants	Current trading interval	Every half hour	Currently, the actual values are measured at the beginning of each dispatch interval and published (Not a Rule requirement). The trading interval data (as required by the Rule) is the average of these dispatch interval values in the trading interval.	3.13.4 (x)
Day -1	ASAP after 12:30, no later than 16:00.	Publish unconstrained intermittent generation forecast for semi-scheduled generating units.	AEMO	Participants	Day 0	Every 3 hours as a minimum Rule requirement. Current system target is half hourly.	Half-hourly resolution.	3.13.4 (y)

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
Each Tuesday	16:00	Publish a forecast of the requirements for each type of market ancillary service for each region for the following week.	AEMO	Participants	Next 7 days	Weekly as a minimum. Target daily.  More frequently if there are significant changes to forecast requirements.	Half hourly resolution.	3.13.4A
July of each year		Publish costs of all of its operations associated with the acquisition of market ancillary services and non market ancillary services.	AEMO	Participants	Last financial year	Annually	Monthly resolution.	3.13.5(a)
Ongoing		Publish the historical data used in determining the 'causer pays' factors for each Participant at least 8 business days prior to the application of these factors.	AEMO	Participants	'Causer pays' sample period	Every 4 weeks from commencement of market ancillary services date.	4 weekly resolution.	3.15.6A(n)
Ongoing		Publish the 'causer pays' factors at least 10 business days prior to the application of these factors.	AEMO	Participants	'Causer pays' sample period	Every 4 weeks from commencement of market ancillary services date.	4 weekly resolution.	3.15.6A(na)



## 4.5 Settlements

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
End of billing period + 5 business days	No later than 18:00	Publish the Carbon Dioxide Equivalent Intensity Index for the days of the Billing Period	AEMO	Publically available via the AEMO web site	Billing period	Weekly	The data published will include a Carbon Dioxide Equivalent Intensity Index for each day of the billing period	3.13.14
End of billing period + 5 business days	Approximately 12:00 Sydney Time, no later than 18:00	Issue Preliminary Settlement Statement to Participant.	AEMO	Market Participants	Billing period containing Day 0	Weekly		3.15.14
End of billing period + 18 business days	Approximately 12:00 Sydney Time, no later than 18:00	Issue Final Settlement Statement to Participant.	AEMO	Market Participants	Billing period containing Day 0	Weekly		3.15.15
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.	Participants	EFT Provider	Billing Period containing Day 0	Weekly	Times must align with EFT Provider and RTGS System deadlines.	3.15.16

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
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.	AEMO	EFT Provider	Billing Period containing Day 0	Weekly	Subject to all payments to AEMO being cleared by 10:30 Sydney Time and Participant's Exigo Transactions entered and matched by 13:00 Sydney Time	3.15.17
End of billing period +20 weeks	Approximately 12:00 Sydney Time, no later than 18:00	Issue Routine Revised Statement.	AEMO	Market Participants	Billing Period containing Day 0	Weekly	Based on amended metering data, trading amounts, Participant fees or other amounts payable or receivable by the Participant.	3.15.19(b)
End of billing period +30 weeks	Approximately 12:00 Sydney Time, no later than 18:00	Issue Routine Revised Statement.	AEMO	Market Participants	Billing Period containing Day 0	Weekly	Based on amended metering data, trading amounts, Participant fees or other amounts payable or receivable by the Participant.	3.15.19(b)

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
End of billing period +20 business days	By 16:00 Sydney Time.	AEMO pays to Participants in cleared funds to the value of the <i>maximum total payment</i> .	AEMO	EFT Provider	Billing Period containing Day 0	Weekly, if required.	Not required if all payments to AEMO are cleared by 10:30. Maximum total payment includes late payments and credit support drawings received prior to 14:00.	3.15.22
End of financial year +1 business day	Approximately 12:00 Sydney Time, no later than 18:00	AEMO determines payment adjustments to Participants.	AEMO	Market Participants	Financial year containing Day 0	Once per year.	Not required unless part payment occurred during the financial year.	3.15.23 to 3.15.25

## 4.6 EAAP

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
By the fifth business day in February and by the fifth business day every three months hence	By 16:00 hr	Submission of variable GELF parameters	Scheduled Generators	AEMO	Information to cover the next eight quarters	Quarterly	Information must be provided consistent with the EAAP guidelines	3.7C(b)(6)(D), (e), (f)
Before the end of March and every three months hence		Publish EAAP	AEMO	Participants	Information to cover the next 24 months	Quarterly		3.7C(d)

## 4.7 Interim CIR

DAY	TIME OF DAY (EST)	EVENT	PROVIDED BY	PROVIDED TO	PERIOD COVERED	FREQUENCY	COMMENTS	RULES REQUIREMENT
Each day	Every 4 hours commencing midnight	Publish Network Outage Schedule.	AEMO	Participants	Up to two years in advance	Every 4 hours		11.30.2(b)(1) , (d), (f)
By the fifth business day of each month	By 16:00 hr	Provide planned network outage information	TNSP	AEMO	Up to 13 months in advance	Monthly as a minimum as well as material changes		11.30.2(c), (h)
By the fifteenth business day of each month	By 16:00 hr	Publish planned network outage information	AEMO	Participants	Up to 13 months in advance	Monthly as a minimum		11.30.2(b)(3) & (4) , (d), (f)
By the second Friday of every third month commencing	By 16:00 hr	Publish mis-pricing information	AEMO	Participants	The previous 3 months	Quarterly as a minimum		11.30.2(b)(2) , (d), (f)

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**Definition of Terms:**

“Day 0” refers to a nominal trading day. All events are shown relative to Day 0.

“Day ± x” refers to the calendar day relative to the Trading Day or to the calendar day that forms the major part of the Trading Day. The relativity is indicated by a plus or minus (after or before Day 0, respectively).