

# SPOT MARKET OPERATIONS TIMETABLE

PREPARED BY: AEMO Electricity Market Monitoring  
VERSION: 1.5  
EFFECTIVE DATE: 7 September 2020  
STATUS: Final

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DATE: 7/9/2019

## VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	13 December 1998	Original version.
1.1	2 June 2016	Updated in accordance with Schedule 2 of the National Electricity Amendment (Energy Adequacy Assessment Projection timeframes) Rule 2016 No. 3.
1.2	9 September 2016	Accepted all changes made to V1.1.
1.3	28 October 2016	Accepted all changes made to V1.2.
1.4	16 August 2019	Added 5MPD in accordance with National Electricity Amendment (Five Minute Settlement) Rule 2017 No. 15. Removed references to interim nature of CIR. Corrected minor errors. Added GELF to glossary.
1.5	7 September 2020	Changes in relation to the Improving transparency and extending duration of MT PASA rule change, and incorporating changes from consultation.

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## 1. INTRODUCTION

### 1.1. Purpose and scope

This is the *spot market operations timetable* (**Timetable**) made under clause 3.4.3 of the National Electricity Rules (NER).

The Timetable specifies who must do what by when in the *spot market*. The Timetable applies to AEMO and all *Registered Participants*.

This Timetable has effect for only the purposes set out in the NER. The NER and the National Electricity Law prevail over this Timetable to the extent of any inconsistency.

### 1.2. Definitions and interpretation

#### 1.2.1. Glossary

Terms defined in the National Electricity Law and the NER have the same meanings in this Timetable.

Terms defined in the NER are intended to be identified in this Timetable by italicising them, but failure to italicise a defined term does not affect its meaning.

The words, phrases and abbreviations in the table below have the meanings set out opposite them when used in this Timetable.

Term	Definition
AEST	Australian Eastern Standard Time
CIR	Congestion information resource
EAAP	Energy Adequacy Assessment Projection
GELF	Generator Energy Limitation Framework
NER / Rules	National Electricity Rules
PASA	Projected assessment of system adequacy
Timetable	Spot market operations timetable
<i>trading day</i>	The 24-hour period from 0400 hrs to 0400 hrs the following day
TI	<i>Trading interval</i>

#### 1.2.2. Interpretation

The following principles of interpretation apply to this Timetable unless otherwise expressly indicated:

- (a) This Timetable is subject to the principles of interpretation set out in Schedule 2 of the National Electricity Law.
- (b) References to time are references to Australian Eastern Standard Time (AEST) in 24-hour format.
- (c) References to days are references based on *trading days*. "Day 0" refers to an arbitrary *trading day*. "Day  $\pm x$ " refers to the *trading day*, or the calendar day that forms the major part of the *trading day*, which is x days after (+) or before (-) Day 0.
- (d) "Bid" may refer to a bid or an offer.

## 2. SPOT MARKET OPERATIONS TIMETABLE

### 2.1. Offers and bids

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
June		<i>Bid and offer validation data</i> in accordance with Schedule 3.1 of the Rules.	Participants	AEMO	Next financial year	Annually	Provide details of any changes. This data is used to validate <i>dispatch bids</i> and offers. Note changes occurring at any time of year require notification to AEMO at least 6 weeks in advance.	Schedule 3.1
Day -2	12:30	Capacity notification for Day 0: Capacity profile <i>Self-commitment / de-commitment</i> times Energy availability Rates of change.	Participants	AEMO	Day 0	Daily	Capacity profiles have a <i>trading interval</i> (TI) resolution. Only energy-constrained <i>generating units</i> and <i>scheduled loads</i> are required to provide daily energy limits. Only slow start <i>scheduled generating units</i> are required to provide estimated <i>commitment / decommitment</i> times.	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 and 3.8.7A of the Rules, including: MW quantities for each band prices for each band.	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	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
Day 0	Up to when rebid is captured for dispatch	Rebidding closes. <i>Rebids</i> contain quantities specified under clause 3.8.22 of the Rules, including MW quantities for each band.	Participants	AEMO	From 12:30 Day -1 to the end of Day 0.	Ongoing	Rebids must include a brief, verifiable and specific reason for the rebid and the time of the event cited as the cause of the rebid.	3.8.22
Ongoing	ASAP, on receipt of a bid	Acknowledgement of receipt of valid <i>dispatch offer</i> , <i>dispatch bid</i> or <i>market ancillary service offer</i> , and data contained in these offers as they will be used in <i>dispatch</i> if the bid is valid. The reason(s) for rejection if the bid is invalid.	AEMO	Participants	Day 0	Ongoing		3.8.8
Ongoing		Defaulting <i>dispatch bid</i> , <i>dispatch offer</i> or <i>market ancillary service offer</i> to the last valid bids and offers.	Participants	AEMO	Covers days where no daily bids or offers have been submitted.	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 <i>semi-scheduled generating unit</i> plant availability if it differs more than 6 MW from the <i>nameplate rating</i> . Subsequent notification to advise its return to within 6 MW of the nameplate rating.	Participants	AEMO	Day 0 to period covered by <i>medium term PASA</i> .	As frequently as changes occur.	Submit data as soon as aware of changes in dispatch, pre-dispatch and PASA timeframes.	3.7B(b)

## 2.2. PASA

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
Ongoing		Submit data for <i>short term PASA</i> , including: <i>Scheduled generating units, scheduled load and scheduled network service availability;</i> <i>Network outages.</i>	Participants & AEMO	AEMO	6 <i>trading days</i> from end of <i>trading day</i> covered by most recent 30-minute 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 <i>short term PASA</i> , including <i>load</i> forecast for each <i>region</i> .	AEMO	Participants	6 <i>trading days</i> from end of <i>trading day</i> covered by most recent 30-minute pre-dispatch schedule.	Daily as a minimum Rule requirement. Current system target is 2 hourly.	<i>Short term PASA</i> is provided in half-hourly resolution.	3.7.3(a), (b), (h), 4.9.1(a)
Ongoing		Submit data for <i>medium term PASA</i> , including: <i>Scheduled generating units, scheduled load and scheduled network service availability;</i> <i>Network outages.</i>	Participants & AEMO	AEMO	Up to 36 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),
Each Tuesday	16:00	Publish <i>medium term PASA</i> outputs, including <i>load</i> forecast for each <i>region</i> .	AEMO	Participants	24 months from the Sunday after the day of publication.	Weekly as a minimum. More frequently if a materially significant change exists.	<i>Medium term PASA</i> is provided in daily resolution.	3.7.2(a), (b), (f)(1)-(4) and (6), 4.9.1(a)
Monday to Saturday	Generally 9:00, 12:00, 15:00, 18:00	Publish aggregate <i>generating unit PASA availability</i> for each <i>region</i> and individual <i>scheduled generating unit PASA availability</i> .	AEMO	Participants	36 months from the Sunday after the day of publication.	Weekly as a rules requirement, but currently system target is four times each day from Monday to Saturday	<i>Medium term PASA</i> is provided in daily resolution.	3.7.2(f)(5)

### 2.3. Dispatch and pre-dispatch

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
Day -1	As soon as possible (ASAP) after 12:30, no later than 16:00.	Publish the 30-minute pre-dispatch schedule for Day 0, including <i>regional load</i> forecasts and available generation <i>region</i> .	AEMO	Participants	Day 0	Each 3 hours as a minimum Rule requirement. Current system target is half hourly.	30-minute <i>pre-dispatch</i> schedule is provided in half hourly resolution.	3.8.20, 3.13.4(i), 4.9.1(a)
Day 0	Every 5 min. (approx.)	<i>Dispatch</i> .	AEMO	Participants	Next <i>dispatch interval</i> ( <i>trading interval</i> from 1 July 2021)	Every 5 minutes.	Dispatch is according to current bids, offers and rebids.	3.8.21
Day 0	Every 5 minutes	Five-minute <i>pre-dispatch</i> .	AEMO	Participants	At least the next hour	Every 5 minutes from 1 July 2021.	This will not be a Rules requirement until 1 July 2021.	3.8.20



## 2.4. Market information

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
Each Tuesday	16:00	Publish outcome of <i>Medium term PASA</i> .	AEMO	Participants	24 months from the Sunday after the day of publication.	Weekly as a minimum	<i>Medium term PASA</i> is provided in daily resolution.	3.13.4 (a)
Day 0	14:00	Publish outcome of <i>short term PASA</i> .	AEMO	Participants	6 <i>trading days</i> from end of <i>trading day</i> covered by most recent 30-minute pre-dispatch schedule.	Daily as a minimum Rule requirement. Current system target is every 2 hours.	<i>Short term PASA</i> is provided in half hourly resolution.	3.13.4 (c)
Day -1	ASAP after 12:30, no later than 16:00.	Publish 30-minute <i>pre-dispatch</i> schedule.	AEMO	Participants	Day 0	Every 3 hours as a minimum Rule requirement. Current system target is half hourly.	30-minute <i>pre-dispatch</i> schedule is provided in half-hourly resolution.	3.13.4 (e), (i)
Day -1	ASAP after 12:30, no later than 16:00.	Publish forecast energy and <i>ancillary service prices</i> at each <i>regional reference node</i> .	AEMO	Participants	Day 0	Every 3 hours as a minimum Rule requirement. Current system target is half hourly.	Forecast prices are provided in half hourly resolution. Based on 30-minute <i>pre-dispatch</i> schedule.	3.13.4 (g), (i)
Day -1	ASAP after 12:30, no later than 16:00.	Publish expected sensitivity of the forecast <i>energy prices</i> to changes in the forecast <i>load</i> or <i>generating unit</i> availability.	AEMO	Participants	Day 0	Every 3 hours as a minimum Rule requirement. Current system target is half hourly.	Sensitivity forecast of energy prices is provided in half hourly resolution. Based on 30-minute <i>pre-dispatch</i> schedule.	3.13.4 (h), (i)

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
Day 0	Every 5 minutes.	Publish 5-minute pre-dispatch schedule.	AEMO	Participants	At least the next hour	Minimum Rule requirement is every 3 hours. The system target will be every 5 minutes from 1 July 2021.	This will not be a Rules requirement until 1 July 2021	3.13.4 (f)
Day 0	Every 5 minutes	Publish forecast <i>spot prices</i> and <i>ancillary service prices</i> at each <i>regional reference node</i> .	AEMO	Participants	At least the next hour	The minimum Rule requirement is every 3 hours. The system target will be every 5 minutes from 1 July 2021.	This will not be a Rules requirement until 1 July 2021	3.13.4 (g)
Day 0	ASAP after start of <i>dispatch interval</i> (trading interval from 1 July 2021).	Publish <i>dispatch prices</i> ( <i>spot prices</i> from 1 July 2021) and <i>ancillary service prices</i> for each <i>regional reference node</i> .	AEMO	Participants	Current <i>dispatch interval</i> (trading interval from 1 July 2021)	Every 5 min.		3.13.4 (l)
Day 0	ASAP after start of last <i>dispatch interval</i> in the <i>trading interval</i> (last <i>trading interval</i> in a <i>30-minute period</i> from 1 July 2021).	Publish <i>regional reference prices</i> ( <i>30-minute prices</i> from 1 July 2021).	AEMO	Participants	Current <i>trading interval</i> ( <i>30-minute period</i> from 1 July 2021)	Every half hour.		3.13.4(m) (or, after 1 July 2021, 3.13.4(l1))

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
Day +1	ASAP after start of trading day.	Publish for Day 0: <i>Regional reference prices;</i> <i>Ancillary service prices;</i> <i>Regional and total interconnected system loads and energies;</i> <i>Inter-regional loss factors;</i> <i>Network constraints.</i>	AEMO	Participants	Day 0	Daily	Half hourly resolution (5-minute resolution from 1 July 2021).	3.13.4(n)
Day +1	ASAP after start of trading day	Publish for Day 0, <i>inter-regional flows</i>	AEMO	Participants	Day 0	Daily	Half hourly resolution (5-minute resolution from 1 July 2021).	3.13.4(n1)
Day +1	ASAP after start of trading day.	Publish final <i>dispatch offers, dispatch bids and market ancillary services offers</i> received, as well as actual availabilities of <i>generating units, scheduled network services, scheduled loads and market ancillary services.</i>	AEMO	Participants	Day 0	Daily		3.13.4 (p)

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
Day +1	ASAP after start of trading day.	Publish <i>dispatched generation, dispatched network service, dispatched load</i> for each <i>scheduled generating unit, semi-scheduled generating unit, scheduled network service</i> and <i>scheduled load</i> respectively. Publish application of <i>semi-dispatch cap</i> to each <i>semi-scheduled generating unit</i> .	AEMO	Participants	Day 0	Daily	5minute resolution for <i>dispatch interval</i> and half-hourly resolution for <i>trading interval</i> (or, after 1 July 2021, 5-minute resolution for <i>trading intervals</i> and half-hourly resolution for <i>30-minute periods</i> ).	3.13.4 (q)
Day 0	ASAP after start of <i>dispatch interval</i> ( <i>trading interval</i> from 1 July 2021).	Publish actual <i>generation of scheduled generating unit, semi-scheduled generating unit and non-scheduled generating unit or non-scheduled generating systems</i> . Publish actual <i>network service for scheduled network service</i> . Publish actual <i>load for scheduled load</i> .	AEMO	Public	Current <i>dispatch interval</i> (current <i>trading interval</i> from 1 July 2021).	Every 5 minutes	The actual <i>generation</i> is measured at the beginning of each <i>dispatch interval</i> ( <i>trading interval</i> from 1 July 2021).	3.13.4(r)
Day +1		Publish operational irregularities.	AEMO	Participants	Day 0	Daily		3.13.4 (w)
Day -1	ASAP after 12:30, no later than 16:00.	Publish <i>unconstrained intermittent generation forecast</i> for <i>semi-scheduled generating units</i> .	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	NER Requirement
Each Tuesday	16:00	Publish a forecast of the requirements for each type of <i>market ancillary service</i> for each <i>region</i> 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
September of each year		Publish costs of all of its operations associated with the acquisition of <i>market ancillary services</i> and <i>non market ancillary services</i> .	AEMO	Participants	Last financial year	Annually for <i>non-market ancillary services</i> . Weekly updates for <i>market ancillary services</i> .		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 <i>market ancillary services</i> 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 <i>market ancillary services</i> date.	4 weekly resolution.	3.15.6A(na)

## 2.5. Settlements

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER 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	Publicly 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
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

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
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)
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
After end of financial year		AEMO determines payment adjustments to Participants.	AEMO	Market Participants	Financial year containing Day 0	As required, when additional funds are received after shortfall.	Only required if AEMO receives late payment for a payment default that occurred in the financial year.	3.15.23 to 3.15.25

## 2.6. EAAP

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
Within 3 weeks from the time AEMO issues an AEMO Communication for annual EAAP reporting	By 16:00 hr	Submission of variable GELF parameters for annual EAAP reporting.	Scheduled Generators	AEMO	Information to cover the next eight quarters	Annually	Information must be provided consistent with the EAAP guidelines	3.7C(b)(6)(D), (e), (f)
One month after receipt of the GELF parameters for annual EAAP reporting. The publication date will fall on the last day of that month.		Publish EAAP	AEMO	Participants	Information to cover the next eight quarters.	Annually		3.7C(d)
Within 3 weeks from the time AEMO issues an AEMO Communication informing <i>Scheduled Generators</i> that a <i>GELF</i> update is required for additional EAAP reporting.	By 16:00 hr	Submission of variable GELF parameters for additional EAAP reporting.	Scheduled Generators	AEMO	Information to cover the next eight quarters.	Driven by the 'Factors' (as defined in the RSIG) that necessitate review of the previously published EAAP.	Information provided must be consistent with the EAAP guidelines and RSIG.	3.7C(h)2
One month after receipt of the <i>GELF</i> parameters for additional EAAP reporting, or one month after acknowledging the need for additional EAAP reporting if a <i>GELF</i> update is not required.		Publish EAAP	AEMO	Participants	Information to cover the next eight quarters.	Driven by the 'Factors' (as defined in the RSIG) that necessitate review of the previously published EAAP.		3.7C(d)2



## 2.7. CIR

Day	Time of Day (EST)	Event	Provided By	Provided To	Period Covered	Frequency	Comments	NER Requirement
Each day	Every 4 hours commencing midnight	Publish Network Outage Schedule.	AEMO	Participants	Up to two years in advance	Every 4 hours		3.7A(b)(1), (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		3.7A(b), (f)
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		3.7A(b), (f)