

Report into market ancillary service prices above \$5000/MW

South Australia, 18 April 2017

1 September 2017



Station of the second

© Commonwealth of Australia 2017

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications, Australian Competition and Consumer Commission, GPO Box 4141, Canberra ACT 2601 or publishing.unit@accc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator GPO Box 520 Melbourne Vic 3001

Tel: (03) 9290 1444 Fax: (03) 9290 1457

Email: <u>AERInquiry@aer.gov.au</u> AER Reference: 62292 - D17/113243

Amendment Record

Version	Date	Pages	
1 version for publication	01/09/2017	57	

Contents

1	Obligation	
2	Summary	5
3	Analysis	6
	3.1. Unplan	ned network outage6
	3.2. Regula	tion FCAS availability, offer prices and price outcomes7
	3.2.1	Registered capacity7
	3.2.2	Effective offers, rebidding and prices8
Ap	pendix A:	Explanation of FCAS12
		Frequency Control Ancillary Service Settlement
Ap	pendix B: Lo	ocal Frequency Control Ancillary Services14
Ap	pendix C:	Significant Rebids15
Ap	pendix D:	Closing bids16
Ap	pendix E:	Relevant Market Notices23
Ap	pendix F:	Price setter

1 Obligation

The Australian Energy Regulator regulates energy markets and networks under national legislation and rules in eastern and southern Australia, as well as networks in the Northern Territory. Its functions include:

- monitoring wholesale electricity and gas markets to ensure energy businesses comply with the legislation and rules, and taking enforcement action where necessary;
- setting the amount of revenue that network businesses can recover from customers for using networks (electricity poles and wires and gas pipelines) that transport energy;
- regulating retail energy markets in Queensland, New South Wales, South Australia, Tasmania (electricity only), and the ACT;
- operating the Energy Made Easy website, which provides a retail price comparator and other information for energy consumers;
- publishing information on energy markets, including the annual State of the energy market report, to assist participants and the wider community.

The AER is required to monitor significant variations between forecast and actual prices and publish a report where:

- prices for a market ancillary service over a period significantly exceed the relevant spot price for energy; and
- prices for a market ancillary service exceed \$5000/MW for a number of trading intervals within that period.

In accordance with the clause 3.13.7(e) of the National Electricity Rules, the report must:

- describe the significant factors that contributed to the ancillary service prices exceeding \$5000/MW;
- identify any linkages between spot prices in the energy market and ancillary service prices contributing to the occurrence; and
- assess whether rebidding pursuant to clause 3.8.22 contributed to prices exceeding \$5000/MW.

These reports examine the reasons for the high price outcomes—they are not compliance reports. We deal separately with compliance issues that come to our attention during the preparation of these reports.

2 Summary

Lower and raise regulation frequency control ancillary services (regulation services) are used to manage small fluctuations in supply or demand.

On 18 April the local price for lower and raise regulation frequency control ancillary services (FCAS) in South Australia exceeded \$10 900/MW for 80 and 105 consecutive dispatch intervals respectively from 11.55 am to 8.35 pm. This was much higher than the wholesale (or spot) price for electricity in South Australia, which ranged from around \$90/MWh to \$150/MWh over the same period.

An unplanned network outage in Victoria on the Heywood interconnector on 18 April began at 11.10 am and ended at around 11.00 pm. This outage put South Australia on a single contingency, which created the risk of South Australia becoming electrically isolated from the National Electricity Market (NEM). To manage this risk, and in line with its procedures, the market operator (AEMO) notified the market that South Australia would be required to source 35 MW of raise and lower regulation services from within the region for the duration of the outage.

Leading up to the unplanned outage and the imposition of the 35 MW requirement, participants had offered less than 35 MW of low-priced capacity. As soon as the requirement was introduced at 11.25 am prices for both services went above \$13 000/MW for four dispatch intervals. Prices then reduced as Origin Energy made Osborne power station available to provide regulation services, increasing the amount of low priced capacity high enough to satisfy the 35 MW requirement.

AGL then reduced the volume of low-priced capacity at its Torrens Island power station, reducing the amount of low priced capacity in South Australia below the 35 MW requirement. Prices increased to above \$10 900/MW at 11.55 am, until the Cumulative Price Threshold (CPT) was breached at 8.35 pm. As required under the Rules, AEMO applied the \$300/MW administered price cap from 8.40 pm.

3 Analysis

The following sections explain the reasons for the high regulation services prices. To summarise, in response to an unplanned network outage in Victoria, AEMO imposed the requirement that 35 MW of regulation services be sourced locally in South Australia. Participants rebid from low to high prices which resulted in sustained high prices and ultimately the breach of the CPT for regulation services.

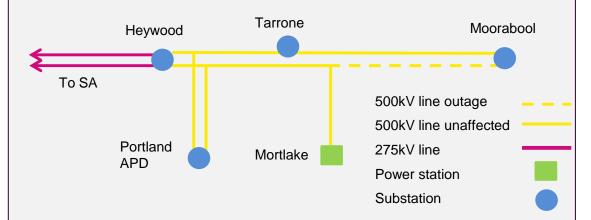
3.1 Unplanned network outage

At 11.10 am there was an unplanned outage on the Moorabool - Mortlake 500 kV line (see Market Notice 58394, replicated in Appendix E). This meant that South Australia was on a single contingency and at risk of being electrically isolated from the rest of the NEM. As a result of the increased risk, AEMO invoked a requirement that 35 MW of regulation services be sourced in South Australia. See Box 1 for further details.

As shown in Market Notice 58401 (Appendix E), the line was returned to service at 10.51 pm, and AEMO removed the 35 MW requirement at 11.05 pm (effective from 11.10 pm). Market notices relating to the outage are contained in Appendix E.



South Australia is electrically connected to Victoria by the Heywood and Murraylink interconnectors. Murraylink is a direct current interconnector that cannot provide FCAS. The Heywood Interconnector is an alternating current high voltage transmission link which can transfer FCAS from the rest of the NEM. The figure below is a simplified representation of the network around the interconnector.



When any one of the four lines going through the Heywood substation is on an outage, the South Australian region is on a single contingency. This means that South Australia is at risk of being electrically isolated from the rest of the NEM as only one line is connecting South Australia to Victoria. When this occurs AEMO invokes constraints requiring 35 MW of local regulation services. This ensures adequate regulation services are immediately available to manage the frequency (around 50Hz) within South Australia if the remaining line trips.

Further details on the 35 MW requirement can be found in Appendix B.

3.2 Regulation FCAS availability, offer prices and price outcomes

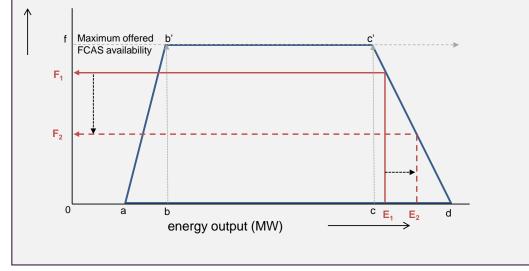
This section discusses participants' offers, rebidding and the resultant prices.

Box 2: Trade-off between generator FCAS and energy offers

Generators must register with AEMO to provide FCAS and offer FCAS capacity in a similar manner to energy into the market.

Participants offer the maximum amount of FCAS (f in the diagram below) and energy, in mega-watts (MW), they are willing to supply across ten price bands, ranging between - 1000 and 14000 for a trading day. A trading day starts at 4 am each day. A participant also offers the limits by which they can be dispatched in FCAS (a, b, c, d in the diagram below). There can be a trade-off between a participant's provision of FCAS and energy, impacting the effective availability of FCAS. For example in the diagram below, if a generator's energy output is at E₁ then its FCAS effective availability is F₁, if its output in energy increases to E₂ then its effective FCAS availability drops to F₂.

For every dispatch interval the National Electricity Market Dispatch Engine (NEMDE) cooptimises market participants FCAS and energy offers to arrive at the least cost outcome while maintaining system security.



3.2.1 Registered capacity

Of the 26 power stations (including wind farms) in South Australia only four are registered to provide FCAS. Table 1 shows the power stations registered to provide raise and lower regulation FCAS in South Australia on the day and their maximum registered capacity. Table 1 shows each power station, if fully operational, was individually capable of providing the local requirement.

Table 1: Registered maximum regulation FCAS capacity in MW by station

Power Station	Registered Capacity (MW)			
	Lower regulation	Raise regulation		
Osborne (Origin Energy)	36	36		
Quarantine (Origin Energy)	50	50		
Pelican Point (Engie)	100	100		
Torrens Island (AGL)	200	260		
Total	386	446		

At the time of high prices four units at Torrens Island power station, half of Pelican Point power station and Quarantine power station were unavailable. So, although the registered capacity is as shown in Table 1, only around 145 MW of lower regulation and around 150 MW of raise regulation was offered by participants.

3.2.2 Effective offers, rebidding and prices

Figure 1 and Figure 2 show actual prices (purple lines)¹ and effective available capacity over the high price period. Box 2 explains the concept of "effective" availability. The (constant) 35 MW requirement is shown as a red line. The blue shaded areas indicate effective available capacity below \$5000/MW, while effective available capacity above \$5000/MW is shaded light orange.

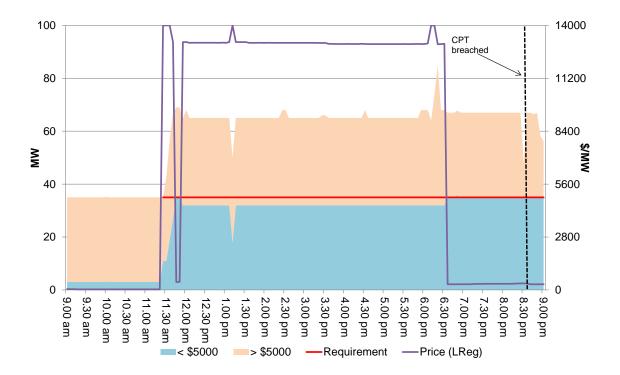


Figure 1 Lower regulation effective offers, requirement and price

1

Individual prices are contained in the Price Setter at Appendix F

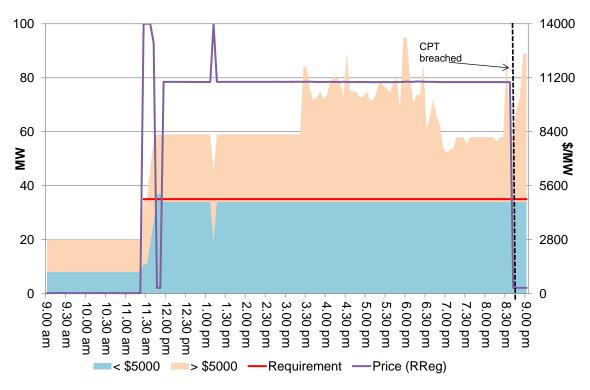


Figure 2 Raise regulation effective offers, requirement and price

3.2.2.1 High prices from 11.25 am to 11.35 am

Figures 1 and 2 show that prices for lower and raise regulation services spiked above \$13 000/MW for 4 dispatch intervals from 11.25 am, when the 35 MW requirement was first introduced. With less than 35 MW of low price capacity (indicated by the blue shaded area) available, some high price capacity (orange shaded area) was needed to meet the requirement, thus resulting in prices for both services at the price cap.

3.2.2.2 Rebidding and sustained high prices

As shown in Figure 1 and Figure 2, the price for both services fell from 11.45 am. The reason for this was participant rebidding. Over two rebids Origin made 10 MW of raise and lower regulation services priced at \$0/MW available at its Osborne plant. This capacity became accessible to the market from 11.45 am, when the plant's energy output was at a level where they could provide regulation services. This is reflected by the increase in the blue shaded regions up to (in lower) and above (in raise) the 35 MW requirement in Figure 1 and Figure 2. This increase in low priced regulation services led to the price dropping to \$300/MW in raise services and around \$420/MW in lower services for two dispatch intervals.

Figure 1 and Figure 2 show that prices for both services rose sharply again at 11.55 am, again caused by participant rebidding. At 11.47 am, effective from 11.55 am, AGL rebid 3 MW of raise and lower regulation services at Torrens Island power station from \$300/MW to \$13 000/MW and above. The reason related to the unplanned network outage. The effect of this rebid can be seen in Figure 1 and Figure 2. The figures show that as a result of the rebid, only 32 MW of low-priced effective lower regulation services and 34 MW of low-priced effective raise regulation services remained.

The price for raise regulation services increased to just under \$11 000/MW at 11.55 am and (with the exception of the 1.10 pm dispatch interval, when the price reached \$14 000/MW) remained around that price until 8.35 pm, when the CPT was breached and administered prices were invoked.

The price for lower regulation services increased to over \$13 000/MW at 11.55 am and (with the exception of the 1.10 pm, 6.10 pm and 6.15 pm dispatch intervals, when the price reached \$14 000/MW) remained around that price until 6.30 pm. At 3.34 pm, for the 7 pm trading interval onwards, AGL rebid 20 MW of lower regulation services at Torrens from \$14 000/MW to \$300/MW. The reason related to the unplanned network outage. As a result, the dispatch price for lower regulation services fell to around \$300/MW from 6.35 pm onwards.

3.2.2.3 Administered pricing

The administered price cap of \$300/MW took effect from 8.40 pm as the cumulative prices of raise regulation services exceeded six times the CPT (\$210 100) at 8.35 pm. Administered pricing remained in place until 25 April when the cumulative price fell below the threshold and AEMO cancelled the administered pricing period.

Under the National Electricity Rules, if the sum of the preceding 2016 dispatch interval prices exceeds six times the CPT for any FCAS, then an administered price cap of \$300/MW is applied to all services.²

Figure 3 shows the cumulative prices of both regulation services (dashed red and blue lines for lower and raise services respectively), the dispatch price for raise regulation (solid blue line³) and six times the CPT value (solid green line at \$1 260 600, or six times \$210 100).

² Clause 3.14.2

³ Prices of both raise and lower regulation services were similar, although the lower price did fall before the CPT was breached

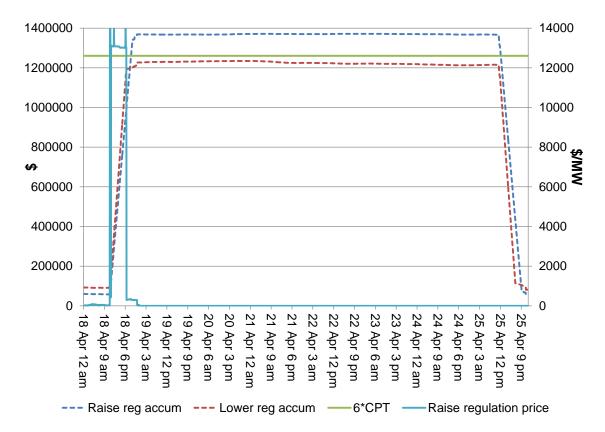


Figure 3: South Australian local regulation services price, cumulative price and CPT

During administered price periods the cumulative price is calculated using uncapped prices based on generator offers. In other words, the cumulative price is calculated according to what the price would have been, had the administered price cap not been applied. The dashed blue line continued above the green line because prices based on generator offers remained high beyond 8.40 pm, the time the administered price cap (of \$300/MW) was imposed.

Australian Energy Regulator

September 2017

Appendix A: Explanation of FCAS

Frequency control ancillary services (FCAS) are required to maintain the frequency of the power system within the frequency operating standards. The two general categories of FCAS are:

- Regulation services, which continuously adjust to small changes in demand or supply (changes that cause the frequency to move by only a small amount away from 50 Hz). There are regulation services to increase the frequency (raise regulation or RREG) and services to decrease the frequency (lower regulation or LREG).
- Contingency services, which manage large changes in demand or supply that occur relatively rarely and move the frequency by a large amount. There are three contingency services to increase the frequency and three contingency services to decrease the frequency. Raise contingency FCAS are required to be available to correct frequency excursions that have arisen from a credible contingency event that leads to a decrease in frequency. As these contingency events usually involve step reductions in supply side, the Electricity Rules stipulate that generators pay for these services. Lower contingency FCAS are the services required to be available to correct the frequency excursions that arise from a credible contingency event that leads to an increase in frequency. As these contingency events usually involve step reductions in customer demand, the Electricity Rules stipulate that customers pay for these services.

Participants providing regulation services receive adjusted dispatch targets every 5 minutes via their automatic generation control (AGC) signals from AEMO. Participants are paid through the FCAS markets in accordance with their offered volumes. Their energy production, which may be higher or lower depending on the AGC signals they receive, are settled in accordance with energy market prices.

There are three lower and three raise contingency services:

- fast services, which arrest a frequency deviation within the first six seconds of a contingent event (L6 and R6);
- slow services, which stabilise frequency deviations within sixty seconds of the event (L60/R60); and
- delayed services, which stabilise frequency deviations within five minutes of the event (L5/R5).

Participants offering to provide contingency services are enabled in accordance with the "trapezium" supplied in their offers. While participants will not necessarily be supplying these services until a contingency occurs they are paid in accordance with their enablement.

Frequency Control Ancillary Service Settlement

AEMO settles the FCAS markets on a weekly basis, as follows⁴.

- Regulation FCAS: Cost recovery on a "causer pays" basis using the Causer Pays Procedure⁵ developed by AEMO in accordance with the appropriate NER procedures.
- Contingency FCAS: Generators pay for Raise Services and customers pay for Lower Services.

The 'Causer Pays' Procedure allocates regulation FCAS costs to those market generators, customers and small generation aggregators with facilities that have the metering capable of determining their contribution to frequency deviations at any time.

Every four weeks based on historical data AEMO calculates a causer pays contribution factor for each generator. Broadly, the contribution factor is determined from historical 4 second generator output and frequency information and is a measure of how each generator contributed to managing changes in the system frequency. If a generators' output changes such that it supports maintaining the system frequency its contribution factor is positive. Conversely, if a generators' output changes such that it exacerbates a frequency deviation, its contribution factor will be negative. The causer pays contribution factors for a portfolio of generators effectively represent the aggregation of the individual performance of the generators in that portfolio.

Settlement is determined by allocating the FCAS costs incurred in the current period in accordance with the causer pays contribution factor for that portfolio from the preceding period. Thus cost allocation to a participant is not dependent on the amount of energy purchased or consumed in that period but by the performance of that participant in managing system frequency in the previous period.

Consequently a portfolio of generators with a negative factor in a particular period will still pay a share of FCAS costs irrespective of how much it generates in the current period.

Since not all of the costs will be recovered from generators, the residual costs are recovered from market customers (including retailers) in the relevant region, based on the amount of energy each market customer is purchasing.

For a full description go to <u>https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Data/Ancillary-Services/Ancillary-Services-Payments-and-Recovery</u>

⁵ For a full description go to <u>https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Security-and-</u> reliability/Ancillary-services/Ancillary-services-causer-pays-contribution-factors

Appendix B: Local Frequency Control Ancillary Services

AEMO sets the requirement for FCAS to ensure that the frequency standard (as set by the Reliability Panel) is maintained in the event of step changes in supply or demand that results from credible contingencies. Where a credible contingency results in the loss of an interconnector it is termed a "separation event".

The standard states that in the event of a "separation event" the frequency must be contained within 49 to 51 Hz or a wider band notified to AEMO by a relevant JSSC. In the case of South Australia the JSSC notified AEMO that the frequency band for separation of the South Australian power system is 47 to 52 Hz and that under frequency relays will operate at frequency levels in the low end of this range.

When there is a potential separation event caused by the loss of an interconnector "local frequency control ancillary services" are usually required.

If the region was exporting at the time the interconnector fails, then as a consequence of the immediate over supply situation local contingency "lower" services are required in the islanded region to lower the frequency (typically generators offer to quickly reduce output to lower frequency). In other words, the loss of the Heywood interconnector when power is flowing from South Australia, results in an oversupply of generation, increasing the frequency in South Australia. Contingency lower services are sourced from registered suppliers in South Australia (typically generators) in proportion to the flow across the interconnector from South Australia to Victoria to quickly reduce that over frequency.

A similar situation exists for contingency "raise" services for all other regions except South Australia where, in accordance with the advice from the JSSC, the raise requirement is covered by under frequency load shedding. In other words, the loss of the Heywood interconnector when power is flowing into South Australia, results in an undersupply of generation decreasing the frequency in South Australia. Under frequency load shedding reduces demand in blocks to arrest the falling frequency until supply matches demand and the frequency is restored.

In either event, in the past, in the period immediately following the separation event AEMO would invoke local regulation services and establish a local regulation reference source to manage frequency until the region can be reconnected to the rest of the NEM. It is this aspect that has been recently changed by AEMO. AEMO will now impose a requirement for local lower and raise regulation services in South Australia prior to the failure of the interconnector so that frequency after an island is formed, and after the contingency services have operated, can be smoothly maintained.

Appendix C: Significant Rebids

The rebidding tables highlight the relevant rebids submitted by generators that impacted on market outcomes during the time of high prices. It details the time the rebid was submitted and used by the dispatch process, the capacity involved, the change in the price of the capacity was being offered and the rebid reason.

Submit time	Time effective	Participant	Station	Capacity rebid (MW)	Price from (\$/MW)	Price to (\$/MW)	Rebid reason
11.26 am	11.35 am	Origin	Osborne	9	N/A	0	1123A ENERGY/FCAS TRADEOFF SL
11.35 am	11.45 am	Origin	Osborne	1	N/A	0	1132A ENERGY/FCAS TRADEOFF SL
11.47 am	11.55 am	AGL	Torrens	3	≤300	>13 000	1132~A~060 UNFCAST NETWORK CONSTRAINT~F- V-MLMO
3.34 pm	6.35 pm	AGL	Torrens	20	14 000	300	1525~A~060 UNFCAST NETWORK CONSTRAINT~F- V-MLMO

Table C 1: Significant rebids for 18 April – lower regulation

Table C 2: Significant rebids for 18 April – raise regulation

Submit time	Time effective	Participant	Station	Capacity rebid (MW)	Price from (\$/MW)	Price to (\$/MW)	Rebid reason
11.26 am	11.35 am	Origin	Osborne	9	N/A	0	1123A ENERGY/FCAS TRADEOFF SL
11.35 am	11.45 am	Origin	Osborne	1	N/A	0	1132A ENERGY/FCAS TRADEOFF SL
11.47 am	11.55 am	AGL	Torrens	3	≤300	>13 000	1132~A~060 UNFCAST NETWORK CONSTRAINT~ F-V-MLMO

Appendix D: Closing bids

Figures D1a to D6b highlight for each dispatch interval the lower and raise regulation services closing bids for Origin, AGL and Engie (the participants in South Australia with ancillary service capability). It also shows the dispatch level of the respective services at each station and the dispatch price.

FCAS services are co-optimised with energy offers. For example a generator that is operating at its maximum capacity cannot provide raise services so their effective available capacity for raise services would be zero. Figures denoted with an "a" refer to the quantities offered while those with a "b" refer to the *effective* quantities available to the market after accounting for the interaction between energy and FCAS ("effective available capacity").

Figure D1a: Torrens (AGL) lower regulation service closing bid prices, dispatch and dispatch price - maximum offers



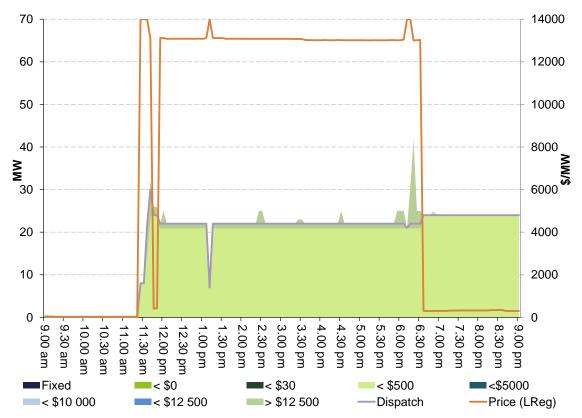
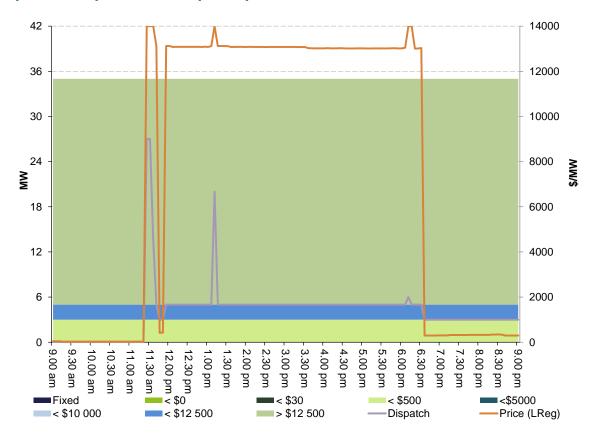
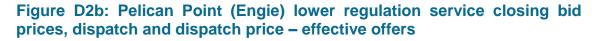


Figure D1b: Torrens Island (AGL) lower regulation service closing bid prices, dispatch and dispatch price – effective offers

Figure D2a: Pelican Point (Engie) lower regulation service closing bid prices, dispatch and dispatch price – maximum offers





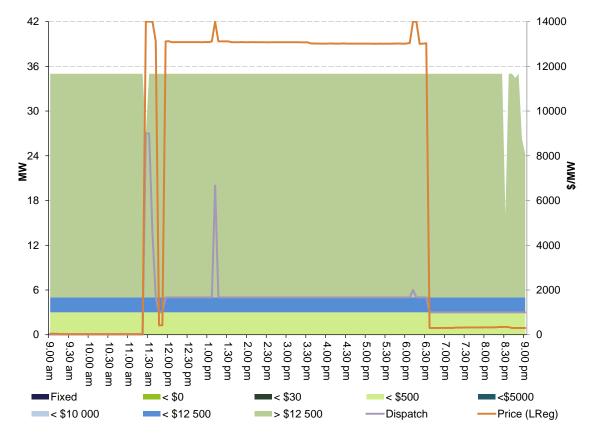
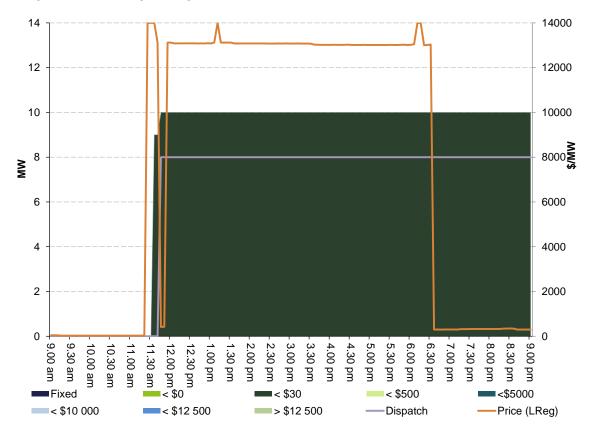


Figure D3a: Osborne (Origin) lower regulation service closing bid prices, dispatch and dispatch price – maximum offers



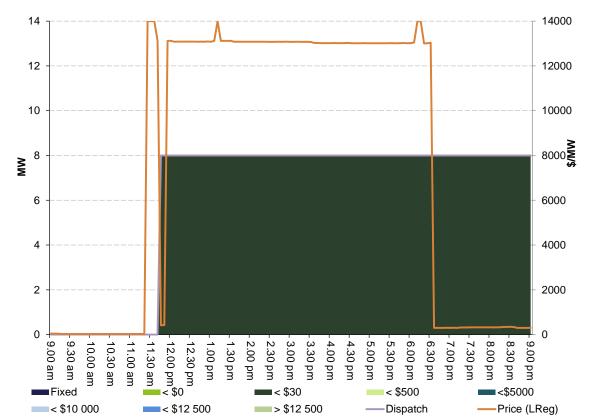


Figure D3b: Osborne (Origin) lower regulation service closing bid prices, dispatch and dispatch price – effective offers

Raise Regulation

Figure D4a: Torrens Island (AGL) raise regulation service closing bid prices, dispatch and dispatch price - maximum offers

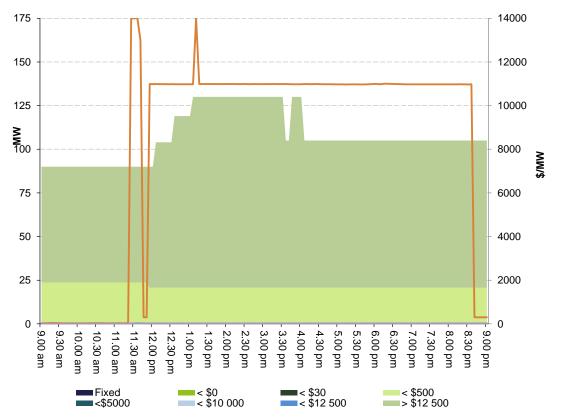
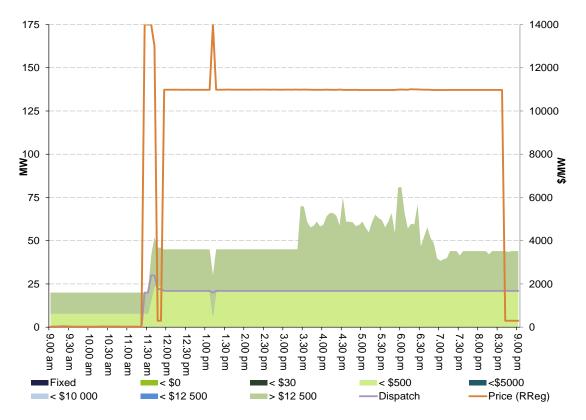
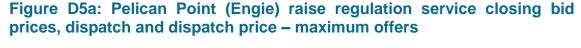


Figure D4b: Torrens Island (AGL) raise regulation service closing bid prices, dispatch and dispatch price - effective offers





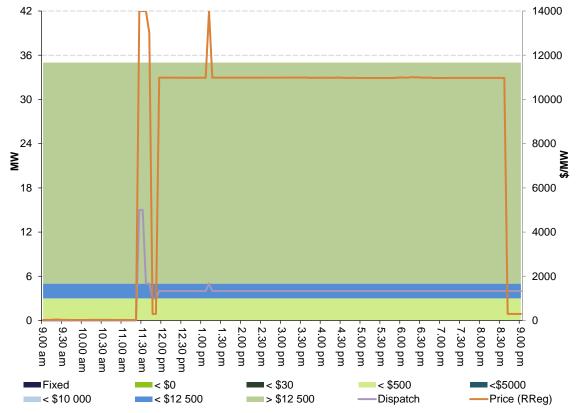
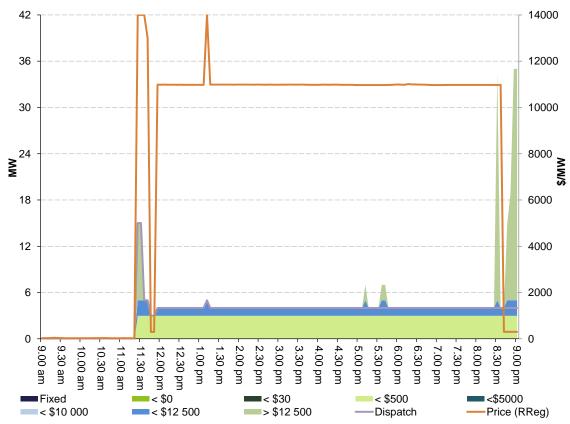


Figure D5b: Pelican Point (Engie) raise regulation service closing bid prices, dispatch and dispatch price – effective offers



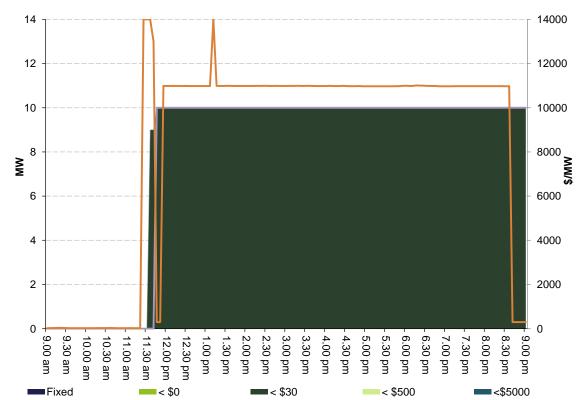


Figure D6a: Osborne (Origin) raise regulation service closing bid prices, dispatch and dispatch price – maximum offers

Figure D6b: Osborne (Origin) raise regulation service closing bid prices, dispatch and dispatch price – effective offers

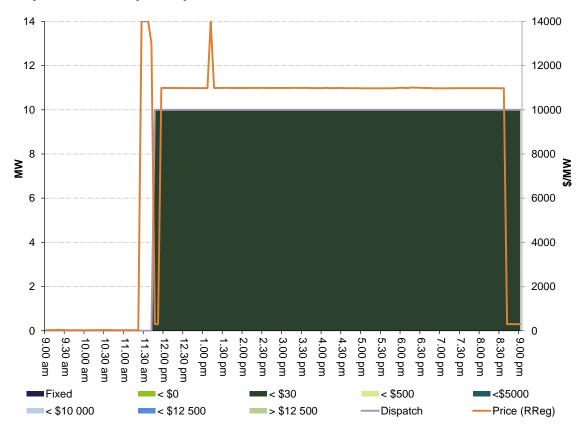
-Dispatch

Price (RReg)

> \$12 500

Fixed

----<\$12 500



Appendix E: Relevant Market Notices

AEMO issued the following market notices relating to events on the day.

Market Notice	Туре	Date of issue	Last Changed
58394	INTER-REGIONAL TRANSFER	18/04/2017 11:24:48	18/04/2017 11:24:48
Reason			

AEMO ELECTRICITY MARKET NOTICE

Inter-regional transfer limit variation - Moorabool - Mortlake 500 kV Line - Vic Region - 18/04/17

At 1110 hrs there was an unplanned outage of the Moorabool - Mortlake 500 kV Line in the Vic region.

The following constraint sets were invoked at 1120 hrs 18/04/17.

F-V-MLMO S-X_BC_CP V-MLMO

The constraint sets contain equations the following interconnectors on the LHS

T-V-MNSP1 V-SA V-S-MNSP1 VIC1-NSW1

Refer to AEMO Network Outage Scheduler (NOS) for further details.

Manager NEM Real Time Operations

Market Notice	Туре	Date of issue	Last Changed
58395	POWER SYSTEM EVENTS	18/04/2017 12:43:07	18/04/2017 12:43:07
Reason			

AEMO ELECTRICITY MARKET NOTICE

Non-credible contingency event - Vic region - 18/04/17

Update to AEMO Electricity Market Notice 58394

At 1107 hrs the Moorabool - Mortlake 500 kV Line tripped at the Moorabool end only. At 1110 hrs the Moorabool - Mortlake 500 kV Line was manually de-energised by opening at the Mortlake end.

AEMO did not instruct load shedding. AEMO has not been advised of any disconnection of bulk electrical load.

The cause of this non credible contingency event is not known at this stage.

Manager NEM Real Time Operations

Market Notice	Туре	Date of issue	Last Changed
58400	ADMINISTERED PRICE CAP	18/04/2017 20:30:15	18/04/2017 20:30:15

Reason

AEMO ELECTRICITY MARKET NOTICE

Issued by Australian Energy Market Operator Ltd at 2030 hrs on 18 April 2017

ADMINISTERED PRICE PERIOD DECLARED in SA region.

AEMO has determined that the rolling sum of the uncapped market ancillary Raise Reg services(s) prices for the SA region over the previous 2016 dispatch intervals has exceeded 6 times the cumulative price threshold (CPT) of \$210,100.00.

In accordance with Clause 3.14 of the National Electricity Rules, AEMO has determined that an administered price period will commence at the dispatch interval starting 2035 hrs on 18 Apr 2017 and will continue through to the end of that trading day.

An administered price cap (APC) of 300 \$/MWh will apply to all dispatch intervals during this administered price period. This APC will apply to all market ancillary service prices in the SA region.

An administered floor price (AFP) of 0 \$/MWh AFP will apply to all market ancillary service prices.

AEMO will continue to monitor the rolling sum of the uncapped market ancillary service prices and issue further market notices as required.

This is an AEMO autogenerated Market Notice.

Market Notice	Туре	Date of issue	Last Changed
58401	INTER-REGIONAL TRANSFER	18/04/2017 23:04:13	18/04/2017 23:04:13

Reason

AEMO ELECTRICITY MARKET NOTICE

Cancellation - Inter-regional transfer limit variation - Moorabool - Mortlake 500 kV Line - Vic Region - 18/04/17

Refer to MN 58394

At 2251 hrs the Moorabool - Mortlake 500 kV Line in the Vic region was returned to service. The following constraint sets were revoked at 2305 hrs 18/04/17.

F-V-MLMO S-X_BC_CP V-MLMO

The constraint sets contain equations the following interconnectors on the LHS

T-V-MNSP1 V-SA V-S-MNSP1 VIC1-NSW1

Refer to AEMO Network Outage Scheduler (NOS) for further details.

Manager NEM Real Time Operations

Appendix F: Price setter

The following tables identify for each five-minute dispatch interval where regulation dispatch prices were above \$5000/MW, the price and the generating units involved in setting the price for each of the lower and raise regulation services in South Australia. This information is published by AEMO.⁶ Also shown are the offer prices involved in determining the dispatch price, together with the quantity of that service and the contribution to the total price. AEMO reports an increase as a negative marginal change in FCAS price setter. Generator offers which contributed zero to the price have been removed for clarity.

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
11:25	\$14 000.70	Engie	PPCCGT	Lower reg	\$14 000.00	-1.00	-\$14 000.00
		Origin Energy	OSB-AG	Energy	\$80.00	1.00	\$80.00
		Engie	PPCCGT	Energy	\$78.69	-1.00	-\$78.69
		Delta Electricity	VP5	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
11:30	\$14 000.00	Engie	PPCCGT	Lower reg	\$14 000.00	-1.00	-\$14 000.00
11:35	\$14 000.00	Engie	PPCCGT	Lower reg	\$14 000.00	-1.00	-\$14 000.00
11:40	\$13 118.16	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Raise reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Raise reg	\$13 000.99	0.50	\$6500.50
		AGL (SA)	TORRA2	Energy	\$212.99	-0.50	-\$106.50
		AGL (SA)	TORRA4	Energy	\$212.99	-0.50	-\$106.50
		Hydro Tasmania	POAT110	Energy	\$123.29	0.01	\$1.23
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
11:45	\$416.77	AGL (SA)	TORRA2	Lower reg	\$299.00	-1.00	-\$299.00
		AGL (SA)	TORRA2	Energy	\$212.99	-1.00	-\$212.99
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
11:50	\$427.11	Stanwell	STAN-1	Energy	\$94.94	0.30	\$28.48

Lower regulation 18 April

⁶ Details on how the price is determined can be found at <u>www.aemo.com.au</u>

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Stanwell	STAN-3	Energy	\$94.94	0.30	\$28.48
		AGL (SA)	TORRA2	Lower reg	\$299.00	-0.50	-\$149.50
		AGL (SA)	TORRA4	Lower reg	\$299.00	-0.50	-\$149.50
		AGL (SA)	TORRA2	Energy	\$212.99	-0.50	-\$106.50
		AGL (SA)	TORRA4	Energy	\$212.99	-0.50	-\$106.50
		Stanwell	STAN-4	Energy	\$94.94	0.30	\$28.48
11:55	\$13 118.76	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$212.99	-0.50	-\$106.50
		AGL (SA)	TORRA4	Energy	\$212.99	-0.50	-\$106.50
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
12:00	\$13 119.67	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$212.99	-0.50	-\$106.50
		AGL (SA)	TORRA4	Energy	\$212.99	-0.50	-\$106.50
		Origin Energy	ER01	Energy	\$106.04	0.30	\$31.81
		Origin Energy	ER03	Energy	\$106.04	0.30	\$31.81
		Origin Energy	ER04	Energy	\$106.04	0.30	\$31.81
12:05	\$13 080.09	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
12:10	\$13 083.44	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	ER01	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER03	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER04	Energy	\$106.04	0.29	\$30.75

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
12:15	\$13 083.41	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	ER01	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER03	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER04	Energy	\$106.04	0.29	\$30.75
12:20	\$13 082.41	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		CS Energy	GSTONE3	Energy	\$98.66	0.95	\$93.73
12:25	\$13 084.21	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	ER04	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER01	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER03	Energy	\$106.04	0.29	\$30.75
12:30	\$13 083.42	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	ER01	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER03	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER04	Energy	\$106.04	0.29	\$30.75
12:35	\$13 084.25	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	ER01	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER03	Energy	\$106.04	0.29	\$30.75

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Origin Energy	ER04	Energy	\$106.04	0.29	\$30.75
12:40	\$13 080.84	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
12:45	\$13 084.23	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	ER01	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER03	Energy	\$106.04	0.29	\$30.75
		Origin Energy	ER04	Energy	\$106.04	0.29	\$30.75
12:50	\$13 080.22	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
12:55	\$13 087.97	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Hydro Tasmania	POAT220	Energy	\$123.32	1.67	\$205.94
		Hydro Tasmania	POAT110	Energy	\$123.29	-0.84	-\$103.56
		CS Energy	GSTONE3	Lower reg	\$47.00	-0.83	-\$39.01
		Hydro Tasmania	POAT220	Lower reg	\$30.00	0.83	\$24.90
		Engie	LOYYB1	Lower 60 sec	\$0.06	-0.83	-\$0.05
		Engie	LOYYB1	Lower 6 sec	\$0.02	-0.83	-\$0.02
13:00	\$13 079.63	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		AGL Energy	BW02	Energy	\$105.96	0.01	\$1.06
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
13:05	\$13 117.02	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA2	Energy	\$212.99	-1.00	-\$212.99
		AGL Energy	BW02	Energy	\$105.96	0.01	\$1.06
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
13:10	\$14 000.00	Engie	PPCCGT	Lower reg	\$14 000.00	-1.00	-\$14 000.00
13:15	\$13 118.36	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA2	Energy	\$212.99	-1.00	-\$212.99
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
13:20	\$13 118.89	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA2	Energy	\$212.99	-1.00	-\$212.99
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
13:25	\$13 118.21	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA2	Energy	\$212.99	-1.00	-\$212.99
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
13:30	\$13 117.11	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA2	Energy	\$212.99	-1.00	-\$212.99
		AGL Energy	BW01	Energy	\$105.96	0.44	\$46.62
		AGL Energy	BW02	Energy	\$105.96	0.26	\$27.55
		AGL Energy	BW04	Energy	\$105.96	0.22	\$23.31
13:35	\$13 079.50	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		AGL Energy	BW02	Energy	\$105.96	0.01	\$1.06
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
13:40	\$13 080.15	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
13:45	\$13 080.17	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
13:50	\$13 081.71	AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL Energy	BW01	Energy	\$105.96	0.42	\$44.50
		AGL Energy	BW02	Energy	\$105.96	0.25	\$26.49
		AGL Energy	BW04	Energy	\$105.96	0.21	\$22.25
		AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
13:55	\$13 080.17	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
14:00	\$13 080.11	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
14:05	\$13 080.74	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
14:10	\$13 080.14	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
14:15	\$13 078.22	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		AGL Energy	BW01	Energy	\$105.96	0.44	\$46.62
		AGL Energy	BW02	Energy	\$105.96	0.26	\$27.55
		AGL Energy	BW04	Energy	\$105.96	0.22	\$23.31
14:20	\$13 077.59	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Stanwell	TARONG#1	Energy	\$98.93	0.01	\$0.99
		Stanwell	TARONG#2	Energy	\$98.93	0.01	\$0.99
		Stanwell	TARONG#3	Energy	\$98.93	0.01	\$0.99
		Stanwell	TARONG#4	Energy	\$98.93	0.01	\$0.99
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
14:25	\$13 075.72	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Stanwell	TARONG#1	Energy	\$98.93	0.25	\$24.73
		Stanwell	TARONG#2	Energy	\$98.93	0.25	\$24.73
		Stanwell	TARONG#3	Energy	\$98.93	0.25	\$24.73
		Stanwell	TARONG#4	Energy	\$98.93	0.25	\$24.73
14:30	\$13 075.41	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Braemar Power	BRAEMAR2	Energy	\$99.01	0.02	\$1.98
		Braemar Power	BRAEMAR3	Energy	\$99.01	0.02	\$1.98
		Origin Energy	MORTLK11	Energy	\$95.00	0.51	\$48.45
		Origin Energy	MORTLK12	Energy	\$95.00	0.51	\$48.45
14:35	\$13 075.77	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Stanwell	TARONG#1	Energy	\$98.93	0.25	\$24.73
		Stanwell	TARONG#2	Energy	\$98.93	0.25	\$24.73
		Stanwell	TARONG#3	Energy	\$98.93	0.25	\$24.73
		Stanwell	TARONG#4	Energy	\$98.93	0.25	\$24.73
14:40	\$13 077.59	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Stanwell	TARONG#1	Energy	\$98.93	0.01	\$0.99
		Stanwell	TARONG#2	Energy	\$98.93	0.01	\$0.99
		Stanwell	TARONG#3	Energy	\$98.93	0.01	\$0.99
		Stanwell	TARONG#4	Energy	\$98.93	0.01	\$0.99
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
14:45	\$13 076.91	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		AGL Energy	BW01	Energy	\$105.96	0.02	\$2.12
		AGL Energy	BW04	Energy	\$105.96	0.01	\$1.06
		Origin Energy	MORTLK11	Energy	\$95.00	0.51	\$48.45
		Origin Energy	MORTLK12	Energy	\$95.00	0.51	\$48.45
14:50	\$13 077.55	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		AGL Energy	BW01	Energy	\$105.96	0.02	\$2.12
		AGL Energy	BW04	Energy	\$105.96	0.01	\$1.06
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
14:55	\$13 077.54	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		AGL Energy	BW01	Energy	\$105.96	0.02	\$2.12
		AGL Energy	BW04	Energy	\$105.96	0.01	\$1.06
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
15:00	\$13 076.15	AGL (SA)	TORRA2	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA4	Lower reg	\$13 000.99	-0.50	-\$6500.50
		AGL (SA)	TORRA2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRA4	Energy	\$174.99	-0.50	-\$87.50
		Braemar Power	BRAEMAR2	Energy	\$99.01	0.02	\$1.98
		Braemar Power	BRAEMAR3	Energy	\$99.01	0.02	\$1.98
		Origin Energy	MORTLK11	Energy	\$95.00	0.51	\$48.45

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Origin Energy	MORTLK12	Energy	\$95.00	0.51	\$48.45
15:05	\$13 076.80	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		Hydro Tasmania	POAT110	Energy	\$123.29	0.03	\$3.70
		Origin Energy	MORTLK11	Energy	\$95.00	0.51	\$48.45
		Origin Energy	MORTLK12	Energy	\$95.00	0.51	\$48.45
		Engie	LOYYB1	Lower 5 min	\$0.19	-0.03	-\$0.01
		Hydro Tasmania	TUNGATIN	Lower 5 min	\$0.17	0.03	\$0.01
15:10	\$13 077.45	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		Hydro Tasmania	POAT220	Energy	\$123.32	0.02	\$2.47
		Origin Energy	MORTLK11	Energy	\$95.00	0.50	\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	0.50	\$47.50
15:15	\$13 075.74	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		Origin Energy	MORTLK11	Energy	\$95.00	0.53	\$50.35
		Origin Energy	MORTLK12	Energy	\$95.00	0.53	\$50.35
15:20	\$13 074.11	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		CS Energy	GSTONE3	Energy	\$98.66	0.05	\$4.93
		Origin Energy	MORTLK11	Energy	\$95.00	0.51	\$48.45
		Origin Energy	MORTLK12	Energy	\$95.00	0.51	\$48.45
		EnergyAustralia	YWPS1	Raise 6 sec	\$20.70	0.05	\$1.04
		CS Energy	GSTONE3	Raise 6 sec	\$4.96	-0.05	-\$0.25
15:25	\$13 073.40	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		Hydro Tasmania	POAT220	Energy	\$123.32	0.83	\$102.36
		CS Energy	GSTONE5	Raise 60 sec	\$4.96	0.18	\$0.89
		Hydro Tasmania	POAT220	Raise 60 sec	\$2.39	-0.18	-\$0.43
15:30	\$13 070.77	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		Hydro Tasmania	GORDON	Energy	\$160.83	0.05	\$8.04

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Origin Energy	MORTLK11	Energy	\$95.00	0.51	\$48.45
		Origin Energy	MORTLK12	Energy	\$95.00	0.51	\$48.45
		CS Energy	GSTONE3	Lower reg	\$27.66	-0.06	-\$1.66
		EnergyAustralia	YWPS1	Raise 6 sec	\$20.70	0.04	\$0.83
		Hydro Tasmania	GORDON	Lower reg	\$10.00	0.06	\$0.60
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	-0.08	-\$0.19
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-0.04	-\$0.20
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	0.08	\$0.40
15:35	\$13 026.15	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		EnergyAustralia	YWPS4	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Delta Electricity	VP5	Raise 60 sec	\$5.00	-1.00	-\$5.00
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
15:40	\$13 019.86	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99
		Hydro Tasmania	POAT220	Energy	\$123.32	0.23	\$28.36
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		CS Energy	GSTONE5	Raise 60 sec	\$4.96	-1.33	-\$6.60
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
15:45	\$13 017.30	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99
		Hydro Tasmania	POAT220	Energy	\$123.32	0.23	\$28.36
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	-1.33	-\$4.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
15:50	\$13 016.70	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		CS Energy	GSTONE6	Raise 6 sec	\$13.49	-1.00	-\$13.49
		CS Energy	GSTONE5	Raise 60 sec	\$2.76	-1.00	-\$2.76

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
15:55	\$13 016.70	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		CS Energy	GSTONE6	Raise 6 sec	\$13.49	-1.00	-\$13.49
		CS Energy	GSTONE6	Raise 60 sec	\$2.76	-1.00	-\$2.76
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
16:00	\$13 016.93	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99
		Hydro Tasmania	POAT220	Energy	\$123.32	0.23	\$28.36
		CS Energy	GSTONE5	Raise 60 sec	\$2.76	-1.33	-\$3.67
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
16:05	\$13 022.78	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	POAT220	Energy	\$123.32	0.05	\$6.17
		AGL (SA)	TORRA4	Energy	\$124.99	-1.00	-\$124.99
		Origin Energy	MORTLK11	Energy	\$95.00	0.51	\$48.45
		Origin Energy	MORTLK12	Energy	\$95.00	0.51	\$48.45
16:10	\$13 016.85	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL Energy	LD04	Raise 6 sec	\$14.80	-1.00	-\$14.80
		AGL Energy	BW02	Raise 60 sec	\$3.04	-1.00	-\$3.04
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	1.00	\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
16:15	\$13 016.85	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL Energy	LD02	Raise 6 sec	\$14.80	-1.00	-\$14.80
		AGL (SA)	TORRB4	Raise 60 sec	\$3.04	-1.00	-\$3.04
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	1.00	\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
16:20	\$13 016.85	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL Energy	LD04	Raise 6 sec	\$14.80	-1.00	-\$14.80

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		AGL (SA)	TORRB4	Raise 60 sec	\$3.04	-1.00	-\$3.04
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	1.00	\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
16:25	\$13 024.71	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		EnergyAustralia	YWPS1	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Delta Electricity	VP5	Raise 60 sec	\$5.00	-1.00	-\$5.00
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	1.00	\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
16:30	\$13 017.05	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Delta Electricity	VP5	Raise 6 sec	\$15.00	-1.00	-\$15.00
		AGL Energy	BW01	Raise 60 sec	\$3.04	-1.00	-\$3.04
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	1.00	\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
16:35	\$13 013.06	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$124.99	-1.00	-\$124.99
		Stanwell	TARONG#1	Energy	\$98.93	0.29	\$28.69
		Stanwell	TARONG#2	Energy	\$98.93	0.29	\$28.69
		Stanwell	TARONG#3	Energy	\$98.93	0.29	\$28.69
		Stanwell	TARONG#4	Energy	\$98.93	0.29	\$28.69
16:40	\$13 012.84	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Hydro Tasmania	POAT110	Raise 60 sec	\$2.39	-1.00	-\$2.39
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
16:45	\$13 012.84	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	-1.00	-\$2.39
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
16:50	\$13 014.50	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$124.99	-1.00	-\$124.99
		Snowy Hydro	TUMUT3	Energy	\$124.02	0.90	\$111.62

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
16:55	\$13 013.49	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		AGL Energy	BW04	Raise 60 sec	\$3.04	-1.00	-\$3.04
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
17:00	\$13 013.49	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		AGL Energy	BW01	Raise 60 sec	\$3.04	-1.00	-\$3.04
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
17:05	\$13 012.84	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Delta Electricity	VP5	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	-1.00	-\$2.39
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
17:10	\$13 009.84	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13000.99
		Origin Energy	ER01	Energy	\$106.04	0.50	\$53.02
		Origin Energy	ER04	Energy	\$106.04	0.50	\$53.02
		CS Energy	GSTONE3	Energy	\$98.66	-1.08	-\$106.55
		Hydro Tasmania	GORDON	Raise reg	\$20.00	-1.08	-\$21.60
		CS Energy	GSTONE3	Raise reg	\$14.76	1.08	\$15.94
		Hydro Tasmania	GORDON	Raise 5 min	\$2.10	1.08	\$2.27
		CS Energy	W/HOE#2	Raise 5 min	\$2.09	-1.08	-\$2.26
		Origin Energy	ER01	Raise 60 sec	\$1.99	-0.50	-\$1.00
		Origin Energy	ER04	Raise 60 sec	\$1.99	-0.50	-\$1.00
		Origin Energy	ER01	Raise 6 sec	\$1.74	-0.50	-\$0.87
		Origin Energy	ER04	Raise 6 sec	\$1.74	-0.50	-\$0.87
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
17:15	\$13 011.36	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99
		Hydro Tasmania	POAT220	Energy	\$147.62	0.23	\$33.95

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		CS Energy	GSTONE5	Raise 60 sec	\$2.76	-1.33	-\$3.67
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
17:20	\$13 014.01	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Delta Electricity	VP5	Raise 60 sec	\$5.00	-1.00	-\$5.00
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	1.00	\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
17:25	\$13 011.85	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		CS Energy	GSTONE5	Raise 6 sec	\$9.80	-1.00	-\$9.80
		AGL Energy	BW01	Raise 60 sec	\$3.04	-1.00	-\$3.04
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	1.00	\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
17:30	\$13 016.17	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$124.99	-1.00	-\$124.99
		Snowy Hydro	UPPTUMUT	Energy	\$124.01	0.89	\$110.37
		Hydro Tasmania	CETHANA	Lower 5 min	\$0.17	-0.89	-\$0.15
17:35	\$13 009.64	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL Energy	LD03	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	-1.00	-\$2.39
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
17:40	\$13 014.05	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL Energy	LD02	Raise 6 sec	\$6.80	-1.00	-\$6.80
		AGL Energy	LD04	Raise 60 sec	\$6.80	-1.00	-\$6.80
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	1.00	\$0.04
17:45	\$13 018.09	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRB2	Energy	\$124.99	-0.54	-\$67.49
		Hydro Tasmania	POAT220	Energy	\$123.32	0.45	\$55.49

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Delta Electricity	VP5	Raise 6 sec	\$10.00	-0.22	-\$2.20
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-0.45	-\$2.25
		AGL (SA)	TORRB2	Raise 60 sec	\$3.04	-0.55	-\$1.67
		AGL (SA)	TORRB2	Raise 6 sec	\$2.60	-0.34	-\$0.88
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	1.00	\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
17:50	\$13 020.60	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		CS Energy	GSTONE6	Raise 6 sec	\$14.79	-1.00	-\$14.79
		AGL Energy	LD01	Raise 60 sec	\$6.80	-1.00	-\$6.80
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	1.00	\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	1.00	\$0.50
17:55	\$13 011.51	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-0.63	-\$110.24
		AGL Energy	BW01	Energy	\$150.96	0.30	\$45.29
		AGL Energy	BW02	Energy	\$150.96	0.30	\$45.29
		EnergyAustralia	YWPS4	Raise 6 sec	\$20.70	0.37	\$7.66
		AGL Energy	BW01	Raise 60 sec	\$0.80	-0.18	-\$0.14
		AGL Energy	BW01	Raise 6 sec	\$0.80	-0.18	-\$0.14
		AGL Energy	BW02	Raise 60 sec	\$0.80	-0.18	-\$0.14
		AGL Energy	BW02	Raise 6 sec	\$0.80	-0.18	-\$0.14
		AGL (SA)	TORRA4	Raise 60 sec	\$3.04	0.37	\$1.12
18:00	\$13 017.66	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		Hydro Tasmania	POAT220	Energy	\$147.62	0.84	\$124.00
		AGL Energy	BW04	Raise 60 sec	\$20.80	0.84	\$17.47
		EnergyAustralia	YWPS3	Raise 6 sec	\$20.70	0.84	\$17.39
18:05	\$13 045.60	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		Snowy Hydro	TUMUT3	Energy	\$124.02	1.05	\$130.22
18:10	\$14 000.00	Engie	PPCCGT	Lower reg	\$14 000.00	-1.00	-\$14 000.00
18:15	\$14 000.00	AGL (SA)	TORRB4	Lower reg	\$14 000.00	-1.00	-\$14 000.00
18:20	\$13 000.99	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		AGL (SA)	TORRB2	Energy	\$174.99	0.50	\$87.50
		AGL (SA)	TORRB4	Energy	\$174.99	0.50	\$87.50
18:25	\$13 013.04	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		Hydro Tasmania	POAT110	Energy	\$147.60	0.93	\$137.27
		EnergyAustralia	YWPS4	Raise 6 sec	\$20.70	0.93	\$19.25
		Delta Electricity	VP5	Raise 60 sec	\$15.00	0.93	\$13.95
		Hydro Tasmania	REECE2	Raise 6 sec	\$5.00	-0.93	-\$4.65
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	-0.93	-\$2.22
18:30	\$13 029.02	AGL (SA)	TORRA4	Lower reg	\$13 000.99	-1.00	-\$13 000.99
		AGL (SA)	TORRA4	Energy	\$174.99	-1.00	-\$174.99
		Snowy Hydro	TUMUT3	Energy	\$124.02	1.18	\$146.34

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
11:25	\$14 002.01	Engie	PPCCGT	Raise reg	\$14 000.00	-1.00	-\$14 000.00
		Delta Electricity	VP5	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
11:30	\$14 019.87	Engie	PPCCGT	Raise reg	\$14 000.00	-1.00	-\$14 000.00
		Hydro Tasmania	POAT220	Energy	\$123.32	-0.02	-\$2.47
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
11:35	\$14 000.00	AGL (SA)	TORRB4	Raise reg	\$14 000.00	-1.00	-\$14 000.00
11:40	\$13 000.99	AGL (SA)	TORRA4	Raise reg	\$13 000.99	-1.00	-\$13 000.99
11:45	\$299.00	AGL (SA)	TORRA4	Raise reg	\$299.00	-1.00	-\$299.00
11:50	\$299.00	AGL (SA)	TORRA4	Raise reg	\$299.00	-1.00	-\$299.00
11:55	\$10 986.22	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
12:00	\$10 985.31	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	ER01	Energy	\$106.04	-0.30	-\$31.81
		Origin Energy	ER03	Energy	\$106.04	-0.30	-\$31.81
		Origin Energy	ER04	Energy	\$106.04	-0.30	-\$31.81
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
12:05	\$10 986.89	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
12:10	\$10 983.54	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	ER01	Energy	\$106.04	-0.29	-\$30.75
		Origin Energy	ER03	Energy	\$106.04	-0.29	-\$30.75
		Origin Energy	ER04	Energy	\$106.04	-0.29	-\$30.75
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
12:15	\$10 983.57	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	ER01	Energy	\$106.04	-0.29	-\$30.75
		Origin Energy	ER03	Energy	\$106.04	-0.29	-\$30.75
		Origin Energy	ER04	Energy	\$106.04	-0.29	-\$30.75
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
12:20	\$10 984.57	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69

Raise regulation 18 April

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		CS Energy	GSTONE3	Energy	\$98.66	-0.95	-\$93.73
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
12:25	\$10 978.61	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
12:30	\$10 983.40	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		CS Energy	GSTONE3	Raise 6 sec	\$14.79	-1.00	-\$14.79
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
12:35	\$10 978.61	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Hydro Tasmania	FISHER	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
12:40	\$10 978.61	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Hydro Tasmania	LI_WY_CA	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
12:45	\$10 978.61	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
12:50	\$10 978.61	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Delta Electricity	VP5	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
12:55	\$10 979.01	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	POAT220	Energy	\$123.32	-1.67	-\$205.94
		Hydro Tasmania	POAT110	Energy	\$123.29	0.84	\$103.56
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
		CS Energy	GSTONE3	Lower reg	\$47.00	0.83	\$39.01
		Hydro Tasmania	POAT220	Lower reg	\$30.00	-0.83	-\$24.90

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Engie	LOYYB1	Lower 60 sec	\$0.06	0.83	\$0.05
		Engie	LOYYB1	Lower 6 sec	\$0.02	0.83	\$0.02
13:00	\$10 978.61	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
13:05	\$10 978.61	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Hydro Tasmania	FISHER	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
13:10	\$14 000.00	AGL (SA)	TORRB4	Raise reg	\$14 000.00	-1.00	-\$14 000.00
13:15	\$10 986.62	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
13:20	\$10 986.09	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
13:25	\$10 986.77	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
13:30	\$10 987.87	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	BW01	Energy	\$105.96	-0.44	-\$46.62
		AGL Energy	BW02	Energy	\$105.96	-0.26	-\$27.55
		AGL Energy	BW04	Energy	\$105.96	-0.22	-\$23.31
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
13:35	\$10 987.48	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	BW02	Energy	\$105.96	-0.01	-\$1.06
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
13:40	\$10 986.83	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
13:45	\$10 986.81	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
13:50	\$10 985.27	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	BW01	Energy	\$105.96	-0.42	-\$44.50
		AGL Energy	BW02	Energy	\$105.96	-0.25	-\$26.49
		AGL Energy	BW04	Energy	\$105.96	-0.21	-\$22.25
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
13:55	\$10 986.81	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
14:00	\$10 986.87	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
14:05	\$10 986.24	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
14:10	\$10 986.84	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	MORTLK11	Energy	\$95.00	-0.50	-\$47.50
		Origin Energy	MORTLK12	Energy	\$95.00	-0.50	-\$47.50
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
14:15	\$10 987.46	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Raise reg	\$20.00	-1.00	-\$20.00
		CS Energy	GSTONE3	Raise reg	\$14.76	1.00	\$14.76
		CS Energy	GSTONE3	Raise 6 sec	\$9.80	-1.00	-\$9.80
		Hydro Tasmania	TUNGATIN	Raise 60 sec	\$5.00	-2.46	-\$12.30
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	1.46	\$3.49
14:20	\$10 984.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Raise reg	\$20.00	-1.00	-\$20.00
		CS Energy	GSTONE3	Raise reg	\$14.76	1.00	\$14.76
		CS Energy	GSTONE3	Raise 6 sec	\$6.79	-1.00	-\$6.79

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	-2.46	-\$12.30
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	1.46	\$3.49
14:25	\$10 987.35	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		EnergyAustralia	YWPS4	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
14:30	\$10 987.35	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		EnergyAustralia	YWPS1	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
14:35	\$10 983.69	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99
		Stanwell	TARONG#1	Energy	\$98.93	0.07	\$6.93
		Stanwell	TARONG#2	Energy	\$98.93	0.07	\$6.93
		Stanwell	TARONG#3	Energy	\$98.93	0.07	\$6.93
		Stanwell	TARONG#4	Energy	\$98.93	0.07	\$6.93
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		CS Energy	GSTONE5	Raise 60 sec	\$4.96	-1.33	-\$6.60
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
		AGL (SA)	TORRB4	Lower 60 sec	\$0.03	0.23	\$0.01
14:40	\$10 983.87	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99
		Stanwell	TARONG#1	Energy	\$98.93	0.07	\$6.93
		Stanwell	TARONG#2	Energy	\$98.93	0.07	\$6.93
		Stanwell	TARONG#3	Energy	\$98.93	0.07	\$6.93
		Stanwell	TARONG#4	Energy	\$98.93	0.07	\$6.93
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		CS Energy	GSTONE3	Raise 60 sec	\$4.96	-1.33	-\$6.60
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
		AGL (SA)	TORRB4	Lower 60 sec	\$0.03	0.23	\$0.01
14:45	\$10 989.31	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		EnergyAustralia	YWPS4	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04

DI	Dispatch Price _(\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
14:50	\$10 984.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Raise reg	\$20.00	-1.00	-\$20.00
		CS Energy	GSTONE3	Raise reg	\$14.76	1.00	\$14.76
		CS Energy	GSTONE3	Raise 6 sec	\$6.79	-1.00	-\$6.79
		Hydro Tasmania	TUNGATIN	Raise 60 sec	\$5.00	-2.46	-\$12.30
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	1.46	\$3.49
14:55	\$10 984.35	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Raise reg	\$20.00	-1.00	-\$20.00
		CS Energy	GSTONE3	Raise reg	\$14.76	1.00	\$14.76
		CS Energy	GSTONE3	Raise 6 sec	\$6.79	-1.00	-\$6.79
		CS Energy	GSTONE6	Raise 60 sec	\$4.96	-2.46	-\$12.20
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	1.46	\$3.49
15:00	\$10 983.57	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Delta Electricity	VP5	Raise 6 sec	\$15.00	-1.00	-\$15.00
		CS Energy	GSTONE6	Raise 60 sec	\$4.96	-1.00	-\$4.96
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
15:05	\$10 989.31	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		EnergyAustralia	YWPS3	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
15:10	\$10 984.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Raise reg	\$20.00	-1.00	-\$20.00
		CS Energy	GSTONE3	Raise reg	\$14.76	1.00	\$14.76
		CS Energy	GSTONE3	Raise 6 sec	\$6.79	-1.00	-\$6.79
		Hydro Tasmania	TUNGATIN	Raise 60 sec	\$5.00	-2.46	-\$12.30
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	1.46	\$3.49
15:15	\$10 988.43	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		CS Energy	GSTONE3	Energy	\$98.66	0.60	\$59.20
		CS Energy	GSTONE5	Energy	\$98.66	0.40	\$39.46

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Origin Energy	MORTLK11	Energy	\$95.00	-0.59	-\$56.05
		Origin Energy	MORTLK12	Energy	\$95.00	-0.59	-\$56.05
		CS Energy	GSTONE3	Raise reg	\$14.76	-0.60	-\$8.86
		CS Energy	GSTONE5	Raise reg	\$14.76	0.60	\$8.86
		CS Energy	GSTONE5	Raise 6 sec	\$6.79	-1.00	-\$6.79
		CS Energy	GSTONE5	Raise 60 sec	\$4.96	-1.00	-\$4.96
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
15:20	\$10 989.31	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		EnergyAustralia	YWPS1	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
15:25	\$10 983.57	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Delta Electricity	VP5	Raise 6 sec	\$15.00	-1.00	-\$15.00
		CS Energy	GSTONE5	Raise 60 sec	\$4.96	-1.00	-\$4.96
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
15:30	\$10 989.31	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		EnergyAustralia	YWPS1	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Hydro Tasmania	MEADOWBK	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
15:35	\$10 989.31	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		EnergyAustralia	YWPS4	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Delta Electricity	VP5	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
15:40	\$10 983.02	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99
		Hydro Tasmania	POAT220	Energy	\$123.32	0.23	\$28.36
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		CS Energy	GSTONE5	Raise 60 sec	\$4.96	-1.33	-\$6.60
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
15:45	\$10 980.46	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Hydro Tasmania	POAT220	Energy	\$123.32	0.23	\$28.36
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	-0.33	-\$1.00
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
15:50	\$10 980.14	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		CS Energy	GSTONE6	Raise 6 sec	\$13.49	-1.00	-\$13.49
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
15:55	\$10 980.14	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		CS Energy	GSTONE6	Raise 6 sec	\$13.49	-1.00	-\$13.49
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
16:00	\$10 980.37	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99
		Hydro Tasmania	POAT220	Energy	\$123.32	0.23	\$28.36
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		CS Energy	GSTONE5	Raise 60 sec	\$2.76	-0.33	-\$0.91
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
16:05	\$10 987.38	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL (SA)	TORRA4	Energy	\$124.99	-1.00	-\$124.99
		Hydro Tasmania	POAT220	Energy	\$123.32	0.05	\$6.17
		Origin Energy	MORTLK11	Energy	\$95.00	0.51	\$48.45
		Origin Energy	MORTLK12	Energy	\$95.00	0.51	\$48.45
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	-1.00	-\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	-1.00	-\$0.50
16:10	\$10 981.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD04	Raise 6 sec	\$14.80	-1.00	-\$14.80
		AGL Energy	BW02	Raise 60 sec	\$3.04	-1.00	-\$3.04
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
16:15	\$10 981.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD02	Raise 6 sec	\$14.80	-1.00	-\$14.80
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		AGL (SA)	TORRB4	Raise 60 sec	\$3.04	-1.00	-\$3.04
16:20	\$10 981.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		AGL Energy	LD04	Raise 6 sec	\$14.80	-1.00	-\$14.80
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		AGL (SA)	TORRB4	Raise 60 sec	\$3.04	-1.00	-\$3.04
16:25	\$10 989.31	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		EnergyAustralia	YWPS1	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Delta Electricity	VP5	Raise 60 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
16:30	\$10 981.65	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Delta Electricity	VP5	Raise 6 sec	\$15.00	-1.00	-\$15.00
		AGL Energy	BW01	Raise 60 sec	\$3.04	-1.00	-\$3.04
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
16:35	\$10 976.87	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL (SA)	TORRA4	Energy	\$124.99	-1.00	-\$124.99
		Stanwell	TARONG#1	Energy	\$98.93	0.29	\$28.69
		Stanwell	TARONG#2	Energy	\$98.93	0.29	\$28.69
		Stanwell	TARONG#3	Energy	\$98.93	0.29	\$28.69
		Stanwell	TARONG#4	Energy	\$98.93	0.29	\$28.69
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	1.00	\$2.39
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	-1.00	-\$0.50
		AGL (SA)	TORRA4	Raise 60 sec	\$0.04	-1.00	-\$0.04
16:40	\$10 976.65	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
16:45	\$10 976.65	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
16:50	\$10 979.10	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL (SA)	TORRA4	Energy	\$124.99	-1.00	-\$124.99
		Snowy Hydro	TUMUT3	Energy	\$124.02	0.90	\$111.62
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		AGL (SA)	TORRA4	Raise 60 sec	\$1.48	-1.00	-\$1.48
		AGL (SA)	TORRA4	Raise 6 sec	\$0.50	-1.00	-\$0.50
16:55	\$10 971.70	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
17:00	\$10 971.70	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
17:05	\$10 971.70	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Delta Electricity	VP5	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
17:10	\$10 969.69	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
17:15	\$10 969.85	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Energy	\$160.83	-0.23	-\$36.99
		Hydro Tasmania	POAT220	Energy	\$147.62	0.23	\$33.95
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		CS Energy	GSTONE5	Raise 60 sec	\$2.76	-0.33	-\$0.91
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.33	\$0.79
17:20	\$10 971.70	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
17:25	\$10 971.50	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		CS Energy	GSTONE5	Raise 6 sec	\$9.80	-1.00	-\$9.80
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
17:30	\$10 971.70	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	MEADOWBK	Raise 6 sec	\$10.00	-1.00	-\$10.00
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
17:35	\$10 969.69	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
17:40	\$10 969.69	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
17:45	\$10 972.79	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL (SA)	TORRB2	Energy	\$124.99	-0.54	-\$67.49
		Hydro Tasmania	POAT220	Energy	\$123.32	0.45	\$55.49
		Delta Electricity	VP5	Raise 6 sec	\$10.00	-0.22	-\$2.20
		Engie	PPCCGT	Raise 60 sec	\$7.99	1.00	\$7.99
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-0.45	-\$2.25
		AGL (SA)	TORRB2	Raise 60 sec	\$3.04	-0.55	-\$1.67
		AGL (SA)	TORRB2	Raise 6 sec	\$2.60	-0.34	-\$0.88
17:50	\$10 976.49	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		CS Energy	GSTONE6	Raise 6 sec	\$14.79	-1.00	-\$14.79
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
17:55	\$10 987.97	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL (SA)	TORRA4	Energy	\$174.99	-0.63	-\$110.24
		AGL Energy	BW01	Energy	\$150.96	0.30	\$45.29
		AGL Energy	BW02	Energy	\$150.96	0.30	\$45.29
		EnergyAustralia	YWPS4	Raise 6 sec	\$20.70	-0.63	-\$13.04
		Engie	PPCCGT	Raise 60 sec	\$7.99	1.00	\$7.99
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
		AGL (SA)	TORRA4	Raise 60 sec	\$3.04	-0.63	-\$1.92
		AGL Energy	BW01	Raise 60 sec	\$0.80	-0.18	-\$0.14
		AGL Energy	BW01	Raise 6 sec	\$0.80	-0.18	-\$0.14
		AGL Energy	BW02	Raise 60 sec	\$0.80	-0.18	-\$0.14
		AGL Energy	BW02	Raise 6 sec	\$0.80	-0.18	-\$0.14
18:00	\$10 995.21	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	BW04	Raise 60 sec	\$20.80	-1.00	-\$20.80
		EnergyAustralia	YWPS3	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Engie	PPCCGT	Raise 60 sec	\$7.99	1.00	\$7.99
		Engie	PPCCGT	Raise 6 sec	\$7.99	1.00	\$7.99
18:05	\$10 985.32	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Snowy Hydro	TUMUT3	Energy	\$124.02	-1.00	-\$124.02
		Origin Energy	ER01	Energy	\$106.04	0.50	\$53.02
		Origin Energy	ER04	Energy	\$106.04	0.50	\$53.02
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Origin Energy	ER01	Raise 60 sec	\$1.99	-0.50	-\$1.00
		Origin Energy	ER04	Raise 60 sec	\$1.99	-0.50	-\$1.00
		Origin Energy	ER01	Raise 6 sec	\$1.74	-0.50	-\$0.87
		Origin Energy	ER04	Raise 6 sec	\$1.74	-0.50	-\$0.87
18:10	\$10 985.32	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Snowy Hydro	TUMUT3	Energy	\$124.02	-1.00	-\$124.02
		Origin Energy	ER01	Energy	\$106.04	0.50	\$53.02
		Origin Energy	ER04	Energy	\$106.04	0.50	\$53.02
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Origin Energy	ER01	Raise 60 sec	\$1.99	-0.50	-\$1.00
		Origin Energy	ER04	Raise 60 sec	\$1.99	-0.50	-\$1.00
		Origin Energy	ER01	Raise 6 sec	\$1.74	-0.50	-\$0.87

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Origin Energy	ER04	Raise 6 sec	\$1.74	-0.50	-\$0.87
18:15	\$11 009.52	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL (SA)	TORRA4	Energy	\$174.99	-0.25	-\$43.75
		AGL (SA)	TORRB2	Energy	\$174.99	-0.43	-\$75.25
		AGL (SA)	TORRB4	Energy	\$174.99	-0.43	-\$75.25
		Hydro Tasmania	POAT110	Energy	\$147.60	1.00	\$147.60
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	0.14	\$0.33
		Hydro Tasmania	POAT110	Raise 60 sec	\$2.39	-0.14	-\$0.33
18:20	\$10 998.27	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL (SA)	TORRB2	Energy	\$174.99	-0.50	-\$87.50
		AGL (SA)	TORRB4	Energy	\$174.99	-0.50	-\$87.50
		Hydro Tasmania	POAT110	Energy	\$147.60	1.00	\$147.60
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	-1.00	-\$2.39
18:25	\$10 999.31	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		EnergyAustralia	YWPS4	Raise 6 sec	\$20.70	-1.00	-\$20.70
		Delta Electricity	VP5	Raise 60 sec	\$15.00	-1.00	-\$15.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
18:30	\$10 987.78	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Snowy Hydro	TUMUT3	Energy	\$124.02	-1.13	-\$140.14
		Hydro Tasmania	POAT220	Energy	\$123.32	1.00	\$123.32
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	-1.00	-\$2.39
18:35	\$10 986.60	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Snowy Hydro	UPPTUMUT	Energy	\$124.01	-1.12	-\$138.89
		Hydro Tasmania	POAT220	Energy	\$123.32	1.00	\$123.32
		Hydro Tasmania	REECE2	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Hydro Tasmania	GORDON	Raise 60 sec	\$2.39	-1.00	-\$2.39
18:40	\$10 985.31	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
		Snowy Hydro	UPPTUMUT	Energy	\$124.01	-1.00	-\$124.01
		Origin Energy	ER01	Energy	\$106.04	0.50	\$53.02
		Origin Energy	ER04	Energy	\$106.04	0.50	\$53.02
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		Origin Energy	ER01	Raise 60 sec	\$1.99	-0.50	-\$1.00
		Origin Energy	ER04	Raise 60 sec	\$1.99	-0.50	-\$1.00
		Origin Energy	ER01	Raise 6 sec	\$1.74	-0.50	-\$0.87
		Origin Energy	ER04	Raise 6 sec	\$1.74	-0.50	-\$0.87
18:45	\$10 978.50	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Snowy Hydro	UPPTUMUT	Energy	\$124.01	-1.65	-\$204.62
		AGL Energy	BW01	Energy	\$105.96	1.65	\$174.83
		Hydro Tasmania	CETHANA	Lower reg	\$10.00	1.65	\$16.50
		Engie	PPCCGT	Raise 60 sec	\$3.04	1.00	\$3.04
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
		AGL Energy	BW01	Raise 60 sec	\$0.80	-1.00	-\$0.80
		AGL Energy	BW01	Raise 6 sec	\$0.80	-1.00	-\$0.80
18:50	\$10 971.65	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Delta Electricity	VP5	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
18:55	\$10 971.65	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Delta Electricity	VP5	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:00	\$10 971.65	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	CETHANA	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:05	\$10 971.65	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:10	\$10 971.65	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Hydro Tasmania	GORDON	Raise 6 sec	\$5.00	-1.00	-\$5.00
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:15	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD04	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:20	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD03	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
19:25	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD03	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:30	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD01	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:35	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD01	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:40	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD04	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:45	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD03	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:50	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD03	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
19:55	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD03	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
20:00	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD01	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
20:05	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD01	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
20:10	\$10 973.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		AGL Energy	LD02	Raise 6 sec	\$6.80	-1.00	-\$6.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
20:15	\$10 976.45	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		CS Energy	GSTONE6	Raise 6 sec	\$9.80	-1.00	-\$9.80
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04
20:20	\$10 974.54	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	ER01	Energy	\$106.04	-0.26	-\$27.57
		Origin Energy	ER03	Energy	\$106.04	-0.27	-\$28.63
		Origin Energy	ER04	Energy	\$106.04	-0.26	-\$27.57
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69

DI	Dispatch Price (\$/MW)	Participant	Unit	Service	Offer price (\$/MW)	Marginal change	Contribution
20:25	\$10 973.81	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		CS Energy	GSTONE3	Energy	\$98.66	-0.42	-\$41.44
		CS Energy	GSTONE5	Energy	\$98.66	-0.42	-\$41.44
		Engie	PPCCGT	Energy	\$78.69	1.00	\$78.69
20:30	\$10 969.69	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
20:35	\$10 976.64	Engie	PPCCGT	Raise reg	\$10 969.69	-1.00	-\$10 969.69
		Origin Energy	ER01	Raise 6 sec	\$9.99	-1.00	-\$9.99
		Engie	PPCCGT	Raise 6 sec	\$3.04	1.00	\$3.04