

# Electricity spot prices above \$5000/MWh

# South Australia, Victoria and New South Wales 31 January 2020

27 March 2020



#### © Commonwealth of Australia 2020

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: 10,891,207

#### Amendment Record

Version	Date	Pages
Final report	27/3/2020	70

# **Contents**

1	Obligation		4
2	Summary		5
3	Analysis		6
	3.1. The He	eywood interconnector outage	6
	3.2. South	Australia 2 pm trading interval	7
	3.2.1	Overview of actual and expected conditions	7
	3.2.2	Constrained capacity following Heywood outage	7
	3.2.3	Local FCAS requirements	9
	3.2.4	Generator availability	9
	3.3. Victori	ia and New South Wales – 3 pm to 7 pm	11
	3.3.1	Overview of actual and expected conditions	11
	3.3.2	Demand	12
	3.3.3	Network Availability	13
	3.3.4	Generator availability	14
	3.3.5	Rebidding	15
	3.3.6	Lack of Reserve	16
	3.3.7	Reliability Emergency Reserve Trader Activated	17
Ap	pendix A: S	Significant rebids	18
Ap	pendix B: C	Closing bids	45
Ap	pendix C: P	Price setter	52
Ap	pendix D: R	Relevant market notices	69

# 1 Obligation

The Australian Energy Regulator (AER) 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 the performance of energy markets, including the annual State of the energy market report and biennial effective competition report, to assist stakeholders and the wider community.

The AER is required to publish a report whenever the electricity spot price exceeds \$5000 per megawatt hour (\$/MWh) in accordance with clause 3.13.7 (d) of the National Electricity Rules.

#### The report:

- describes the significant factors contributing to the spot price exceeding \$5000/MWh, including withdrawal of generation capacity and network availability;
- assesses whether rebidding contributed to the spot price exceeding \$5000/MWh;
- identifies the marginal scheduled generating units; and
- identifies all units with offers for the trading interval equal to or greater than \$5000/MWh and compares these dispatch offers to relevant dispatch offers in previous trading intervals.

These reports are designed to examine market events and circumstances that contributed to wholesale market price outcomes and are not an indicator of potential compliance issues or enforcement action.

# 2 Summary

On 31 January 2020 the wholesale spot price for electricity exceeded \$5000/MWh for the 2 pm trading interval in South Australia and multiple times in Victoria and New South Wales from 3 pm to 7 pm.

At 1.24 pm, due to extreme localised storm conditions, the Heywood interconnector which links Victoria and South Australia failed. Six high voltage transmission towers in between Lismore and Moorabool in Victoria collapsed resulting in South Australia being electrically isolated from the rest of the market. To manage this, the market operator (AEMO) invoked constraints which limited the output of several generators and resulted in the price reaching \$9832/MWh for the 2 pm trading interval in South Australia.

In New South Wales and Victoria high prices and tight supply and demand conditions were forecast for the majority of the afternoon as hot weather drove high demand. There was at least 500 megawatts (MW) of generation capacity rebid from high to low prices for each high priced trading interval. This was offset by the failure of the Heywood interconnector, reducing imports from South Australia, and a further decrease in available generation, due to technical plant issues. While prices exceed \$5000/MWh for multiple trading intervals across the afternoon in both regions, price conditions were still lower than forecast earlier in the day.

Rebidding of capacity from low to high prices did not contribute to the price exceeding \$5000/MWh in any of the high priced trading intervals on the day.

After the failure of the interconnector and the plant issues in New South Wales AEMO declared a possible supply shortfall in Victoria and New South Wales. Later in the afternoon AEMO invoked the Reliability and Emergency Reserve Trader (RERT) mechanism to ensure there was enough supply to meet demand.

# 3 Analysis

The following sections provide analysis of the factors that led to the spot price exceeding \$5000/MWh in South Australia, Victoria and New South Wales.

### 3.1 The Heywood interconnector outage

South Australia is electrically connected to Victoria by the Heywood and MurrayLink interconnectors. The Heywood interconnector is an alternating current high voltage transmission link which can transfer frequency control ancillary services (FCAS) from the rest of the NEM, while MurrayLink is a direct current interconnector that does not transfer FCAS.

At 1.24 pm the Moorabool to Mortlake 500 kV line (a line which makes up part of the Heywood interconnector) and the Moorabool to Haunted Gully 500 kV line failed, shown in Figure 1. Later in the afternoon it was discovered six multiple transmission towers had fallen over due to extreme weather conditions and AEMO advised the market that the line outage would be in place for a number of weeks.

The line outages meant that South Australia was electrically isolated from the rest of the network. Supply was also interrupted to the Portland aluminium smelter in Victoria until AEMO reconfigured the available transmission network to enable supply from South Australia.

Figure 1: Reduced capacity priced less than \$5000/MWh and dispatch price

On Monday 17 February, a temporary 500 kV line (the Moorabool to Haunted Gully line) was energised which reconnected the interconnector, then on 3 March the second 500 kV line (the Moorabool to Mortlake line) was energised which restored the interconnector to its full capacity.

A report explaining the operational impacts of the event including the restoration will be published by AEMO in the near future.

### 3.2 South Australia 2 pm trading interval

At 1.24 pm the Heywood interconnector failed. Constraints to manage the line outage came into effect for the 1.40 pm dispatch interval. This saw a decrease of 35 MW of imports from Victoria across the Heywood interconnector, however this was more than offset by an increase of 84 MW of imports across the MurrayLink interconnector.

The spot price for the 2 pm trading interval in South Australia reached \$9832/MWh.

The actual price for the trading interval was significantly higher than forecast because cheaper priced generation was limited by the constraints used to manage the Heywood interconnector outage and a large increase in FCAS requirements. This resulted in high priced generation in South Australia being needed to meet demand.

#### 3.2.1 Overview of actual and expected conditions

The table below show the actual and forecast spot prices in South Australia along with generator availability and demand, for the high priced trading interval.

Table 1: Actual and forecast price, availability and demand - South Australia

Trading interval	Price (\$/MWh)				Demand (M	W)	Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
2 pm	9832	277	284	2687	2584	2542	3819	3876	3928

#### Table 1 shows:

- That prior to the event, prices were forecast to be around \$300/MWh but went significantly higher following the loss of the interconnector.
- Demand was up slightly on earlier forecasts and generator availability slightly lower.

### 3.2.2 Constrained capacity following Heywood outage

The Heywood interconnector outage left the South Australian region electrically isolated from the rest of the network. When this occurs the market operator uses constraints to manage the network in South Australia to maintain the power system in a secure operating state. This saw up to 900 MW of generation capacity priced below \$5000/MWh unable to be dispatched in the market.

The constraints used by AEMO limited output from a number of generators in the state while requiring other generators to increase their output. This occurs because the technical ability of some generators means they can provide a number of other services besides energy which can assist in maintaining the frequency of the power system once islanded, such as inertia.

Constraints invoked to maintain the system in a secure state:

- limited cheaper priced generation at Lake Bonney wind farms 2 and 3
- limited cheaper priced generation at the Snowtown north and south wind farms.

 limited the amount of generation unable to provide other services, such as solar and wind, in the region to less than 1300 MW

Constraints were also invoked that require local generators to provide FCAS, which can reduce the amount of energy they can provide, explained in section 3.2.3 below.

Other technical factors can also constrain a generators output such as their ramp rates (the amount of MW's the market operator is able to increase/decrease their target by in a 5 minute dispatch interval) and their start-up profile, as it takes generators different amounts of time to come on and start providing electricity.

As shown in Figure 2, when the constraints managing the outage came in to effect for the 1.40 pm dispatch interval, around 900 MW of generation capacity priced less than \$5000/MWh was limited and unable to make it to market and the dispatch price increased to the cap. The amount of constrained capacity stayed at or above 600 MW until the 2 pm dispatch interval when the price decreased to \$82/MWh.

1.35 pm 1.40 pm 1.45 pm 1.50 pm 1.55 pm 2.00 pm

Dispatch price

Capacity constrained <\$5000/MWh

Figure 2: Reduced capacity priced less than \$5000/MWh and dispatch price

#### 3.2.3 Local FCAS requirements

Due to the separation event, South Australia needed to source FCAS locally. This ensures adequate regulation services are immediately available to manage the frequency (around 50Hz) within South Australia in case of another contingency event occurring. The local requirement for FCAS for the region is based on the size of the largest credible contingency. Table 2 shows the local FCAS requirements for all services for the 2 pm trading interval.

Table 2: Local FCAS requirements (MW)

Dispatch interval	Lower 5 Minute	Lower 60 Second	Lower 6 Second	Lower Regulation	Raise 5 Minute	Raise 60 Second	Raise 6 Second	Raise Regulation
1.35 pm								
1.40 pm	2			44	81	143		67
1.45 pm	102			57	160		152	35
1.50 pm	102	90		60	124		110	35
1.55 pm	90	89		70	130		109	35
2.00 pm	90	89		70	134		115	35

From the 1.40 pm dispatch interval local FCAS requirements in South Australia were invoked to maintain the islanded region's frequency.

When there is an increase in local FCAS requirements, there will be a trade-off between the amount of energy and FCAS that some generation units can provide. For example the amount of energy a generator can provide is limited by having to provide raise services.

The trade-off between energy and FCAS meant that not all cheaply priced generation in the region could be used to meet the demand for energy. This contributed to the amount of energy constrained as shown in Figure 2.

Over the afternoon there was a number of high prices for multiple services that breached the \$5000/MW threshold. A separate report will be published that covers the factors that led to the high FCAS prices on this day.

### 3.2.4 Generator availability

As shown in Table 1 generator availability was 57 MW lower than forecast four hours prior. Within the 2 pm trading interval a small number of generation units experienced technical issues with their plant and adjusted the amount of generation available to the market.

Figure 3 shows actual generation availability in South Australia, also known as closing bids for the 2 pm trading interval. The figure shows the actual capacity offered by generators including amendments to their offers to match changes to their own economic and/or physical positions. Capacity offered below \$5000/MWh is shown in light green and capacity offered above \$5000/MWh is in dark green. The red, black and blue lines show the local dispatch (MW), demand (MW) and spot price (\$/MWh) for electricity in South Australia respectively.

At the start of the trading interval around 85 per cent of all capacity in South Australia was priced below \$5000/MWh, and this did not change significantly when the high prices occurred. However as Figure 3 shows, there was a decrease in capacity priced less than \$5000/MWh

within the trading interval which was a result of the technical issues experienced by some generation plant.

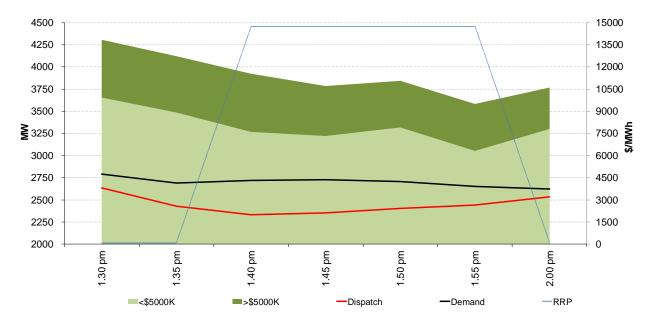


Figure 3: Closing bids - South Australia

When the generators removed capacity during the 2 pm trading interval it reduced the amount of cheaply priced generation available to meet demand. This can be seen in Figure 3 by the decreases in the light green area at certain times during the trading interval. Overall while the amount of MW removed was only small (around 150 MW), it was a factor that contributed to the high price outcomes.

The rebids which removed capacity during the trading interval can be found in Appendix A. Overall rebidding from low to high prices did not contribute to the high priced trading interval in South Australia.

## 3.3 Victoria and New South Wales – 3 pm to 7 pm

The spot price for the multiple trading intervals between 3 pm to 7 pm exceeded \$5000/MWh. The following sections provide an overview of the conditions that led to the high prices occurring.

#### 3.3.1 Overview of actual and expected conditions

The tables below show the actual and forecast spot prices in New South Wales and Victoria along with generator availability and demand, for the high priced trading interval.

Table 3: Actual and forecast price, availability and demand - Victoria

Trading interval	Price (\$/MWh)			Demand (MW)			Availability (MW)			
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	
3 pm	10 034	110	122	8885	9322	9151	9127	9440	9422	
3.30 pm	14 700	105	13 099	9096	9462	9317	9122	9493	9471	
4 pm	7322	13 099	14 450	9134	9577	9550	9413	9475	9473	
4.30 pm	10 111	14 700	14 700	9303	9639	9555	9541	9439	9408	
5 pm	14 700	14 700	14 700	9507	9619	9566	9454	9384	9333	
5.30 pm	7431	14 450	13 326	9305	9558	9375	9367	9332	9260	
6 pm	14 658	14 700	13 304	9238	9453	9277	9124	9103	9163	
6.30 pm	12 492	14 700	13 099	9180	9368	9114	9036	9084	9094	
7 pm	9822	14 700	434	9024	9218	8888	8920	9076	9084	

Table 4: Actual and forecast price, availability and demand - New South Wales

Trading interval	Price (\$/MWh)				Demand (MW)			Availability (MW)			
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast		
3 pm	7263	97	109	12 785	12 402	12 410	12 429	12 797	13 147		
3.30 pm	13 064	94	11 935	13 144	12 652	12 649	12 439	12 789	13 097		
4 pm	2167	12 159	13 422	12 967	12 895	12 887	12 821	12 817	13 048		
4.30 pm	6958	13 753	13 896	13 063	13 041	13 042	12 722	12 758	13 054		
5 pm	12 563	13 753	13 552	13 053	13 023	13 028	12 805	12 691	13 084		
5.30 pm	4368	13 139	11 672	12 718	12 612	12 607	12 805	12 725	13 130		
6 pm	12 822	14 700	11 157	13 049	12 223	12 252	12 702	12 734	12 998		
6.30 pm	6886	14 700	112	12 793	11 962	11 879	12 631	12 529	12 979		
7 pm	1759	14 700	95	12 467	11 676	11 613	12 609	12 483	12 827		

Table 3 and Table 4 show:

- The high prices for the 3 pm and 3.30 pm trading intervals were not forecast. four hours prior.
  - Availability in these trading intervals was around 700 MW lower than forecast four hour prior, mainly due to plant issues in New South Wales and lower than forecast wind generation in Victoria.
  - Demand in New South Wales was between 380 MW to 495 MW higher than forecast, however this was offset by demand in Victoria being between 370 MW to 435 MW lower than forecast.
- From 4 pm to 7 pm prices ended up lower than that forecast four hours prior as generation capacity was rebid from high to low prices.

#### 3.3.2 Demand

High temperatures in Victoria and New South Wales led to high demand in both regions. In Melbourne, the temperature reached 43 degrees at around 3 pm and in Sydney it reached 31 degrees at 7 pm. <sup>12</sup> Demand reached 13 144 MW in New South Wales for the 3.30 pm trading interval, this was around 500 MW less than the highest demand recorded for the 2019/20 summer. While in Victoria, demand reached 9507 MW for the 5 pm trading interval which was the highest demand recorded for the 2019/20 summer.

While high temperatures caused demand to increase over the afternoon, other factors such as industrial load managing their demand and AEMO enacting Reliability and Emergency Reserve Trader (RERT) contracts caused demand to stabilise or decrease at certain times. As shown in Figure 4 in New South Wales from 3.30 pm to 4 pm there is around a 175 MW decrease in demand which is due to the Tomago smelter switching off part of its load. At 4 pm, AEMO enacted RERT contracts which caused demand to stabilise then decrease at 5.30 pm. The increase from 5.30 pm is when the industrial load came back on. Similarly we can see in Victoria demand stabilise at 3.30 pm when the RERT was enacted.

While New South Wales demand was consistently higher than forecast, until industrial load was turned down and RERT was enacted, Victorian demand was below what was forecast which effectively cancelled each other out. So while the high demand in both regions was a factor in the high forecast and actual prices, the forecasting errors which can be seen in Figure 4 were not a significant factor in the high prices across the afternoon.

http://www.bom.gov.au/climate/dwo/202001/html/IDCJDW3050.202001.shtml

http://www.bom.gov.au/climate/dwo/202001/html/IDCJDW2124.202001.shtml

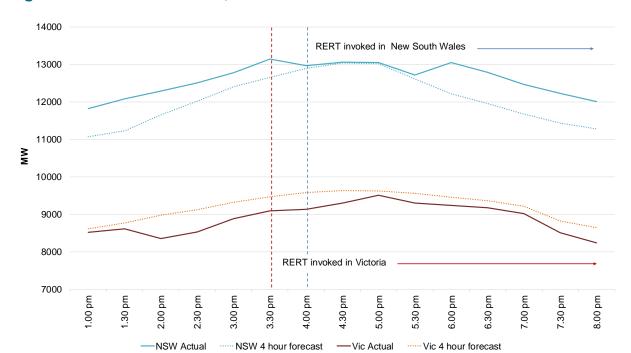


Figure 4: Four hour forecast, actual demand and RERT

#### 3.3.3 Network Availability

As highlighted in section 3.1, there was an unplanned outage of the Heywood interconnector. The outage resulted in no imports being available to Victoria from South Australia across Heywood during the high price periods. While Victoria and New South Wales were still able to import from neighbouring regions (Tasmania and Queensland), these were already forecast to be at their maximum limit for the afternoon and actual flows were not impacted by the Heywood interconnector outage.

Table 5 shows the actual and four hour forecast flows on both the Heywood and Vic-NSW interconnectors. The table highlights that from 3 pm to 5.30 pm Victoria was forecast to be importing around 350 MW to 450 MW from South Australia while at the same time exporting into New South Wales between 49 MW to 405 MW (a negative number indicates an import while a positive number indicates an export). However due to the unplanned outage of the Heywood interconnector Victoria was not able to import any generation from South Australia and it required imports from New South Wales to meet demand, opposite from what was forecast four hours prior. This meant that the loss of cheaply priced imports from South Australia resulted in higher priced local generation from Victoria and New South Wales being dispatched to meet demand.

Table 5: Actual vs forecast flows – Heywood and Vic-NSW interconnectors

Trading interval		ss Heywood in ic (MW)	Vic-NSW flows (MW)			
	Actual	4hr forecast	Actual	4hr forecast		
3 pm	0	-355	-72	49		
3.30 pm	0	-326	-117	183		
4 pm	0	-439	-26	336		
4.30 pm	0	-467	-90	388		
5 pm	0	-446	-132	405		
5.30 pm	0	-433	-163	244		
6 pm	0	0	-153	-274		
6.30 pm	0	0	-77	-301		
7 pm	0	0	-3	-299		

#### 3.3.4 Generator availability

In New South Wales, there were two large generators shut down. Of the 14 400 MW of thermal capacity registered to be available during summer, 1100 MW was not. AGL's Liddell unit 1 (450 MW) had been offline since the previous day due to a tube leak while EnergyAustralia's Mount Piper unit 2 (650 MW) had been offline since 23 January for a planned outage. Around 2250 MW of solar and wind generation is installed in New South Wales, combined they generated at most around 700 MW during the high priced period. Technical issues throughout the day saw a further 500 MW reduction in the amount of generation available at times.

In Victoria there is around 1700 MW of installed semi-scheduled wind generation. For the 3 pm and 3.30 pm trading intervals around 285 MW of wind generation was dispatched, 350 MW lower than earlier forecast.

Figure 5 shows the cumulative offers for New South Wales generators, also known as closing bids. It shows the actual capacity offered by generators including amendments to their offers to match changes in economic and/or physical circumstances. Capacity offered below \$5000/MWh is shown in light green and capacity offered above \$5000/MWh is in dark green. The red, black and blue lines represent the local dispatch (MW), local demand (MW) and dispatch price (\$/MWh) for New South Wales respectively.

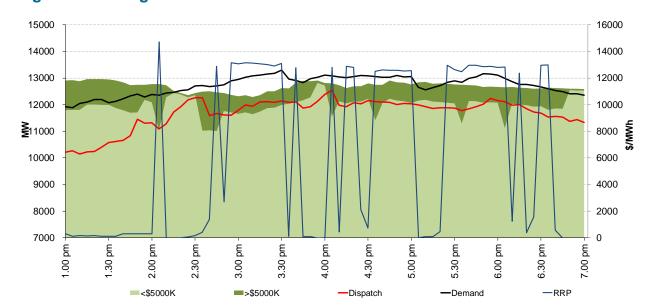


Figure 5: Closing bids - New South Wales

The graph highlights that around 95 per cent of all capacity (around 12 000 MW) in New South Wales was offered at prices less than \$5000/MWh, the majority of which was priced less than \$500/MWh. In Victoria there was also around 95 per cent of all capacity (around 8800 MW) offered in at prices less than \$5000/MWh, the majority of which was priced less than \$50/MWh.

On the day a number of generating units experienced technical issues which saw a decrease in available capacity, especially for the 3 pm and 3.30 pm trading intervals. In New South Wales Snowy Hydro's Colongra power station experienced technical issues which saw its unit 2 (169 MW) fail to start after receiving a target to generate. This occurred at 2.08 pm with the rebid which reflected the decrease in capacity becoming effective at 2.15 pm. The unit remained offline until 3.40 pm. AGL's Liddell unit 2 and Bayswater unit 4 plants also reduced their availability due to a plant failure and milling limits respectively. These outages saw a combined 330 MW of generation capacity unavailable during the 3 pm and 3.30 pm trading intervals. This coupled with the lower than forecast wind generation led to the 3 pm and 3.30 pm high priced trading intervals.

For the remaining high priced trading intervals from 4 pm until 7 pm, generators in both regions regularly rebid capacity from high to low prices in the lead up to the start of, and during, trading intervals. However, as shown in Figure 5, at certain times across the afternoon high priced capacity above \$5000/MWh was still required to meet demand and resulted in the spot price exceeding \$5000/MWh a number of times.

### 3.3.5 Rebidding

Over the course of the afternoon multiple participants across both regions rebid capacity from high prices (above \$5000/MWh) to low prices (below \$0/MWh) in response to forecast and actual high prices.

Figure 6 shows the amount of MWs of capacity rebid in the four hours leading up and during the high priced trading intervals, by participants in New South Wales and Victoria. The blue column shows capacity rebid in to lower prices while the orange column shows capacity rebid

into or out of the market. As discussed in section 3.3.4 above the decrease in capacity for the 3 pm and 3.30 pm trading intervals is due to the plant issues in New South Wales.

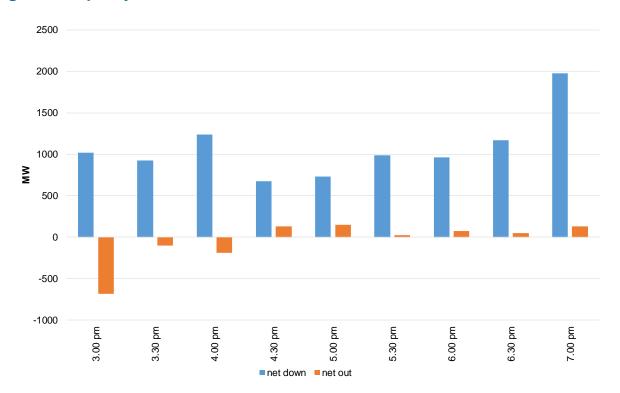


Figure 6: Capacity rebid - New South Wales and Victoria combined

As Figure 6 shows at least 500 MW of capacity was rebid across both regions for each trading interval in to lower prices. The majority of these rebids were from capacity priced above \$10 000/MWh to prices less than \$0/MWh.

These rebids resulted in the prices being consistently lower than that forecast four hours prior. Significant rebids can be found in Appendix A.

#### 3.3.6 Lack of Reserve

When demand and supply conditions are tight AEMO notifies the market, through Lack of Reserve (LOR) notices, to elicit a market response to increase generation or reduce demand. LORs have three levels – LOR 1, 2 and 3 with LOR 1 being the least severe and LOR 3 meaning there is not enough supply to meet demand. LOR 3 requires AEMO to shed load (commercial and industrial first then residential customers if required) in order to maintain power system security.

On 30 January, AEMO was forecasting a LOR1 and LOR2 in Victoria, and a LOR1 in New South Wales, for 31 January. AEMO continued to update its LOR forecasts leading up to the afternoon of 31 January, then after the Heywood interconnector failure along with the plant issues in New South Wales, it declared an actual LOR2 at 2.16 pm in Victoria and at 3.01 pm in New South Wales.

The actual LOR 2's resulted in AEMO activating RERT contracts in both regions.

Appendix D lists all the relevant market notices for 31 January.

#### 3.3.7 Reliability Emergency Reserve Trader Activated

RERT is contracted outside of the market and effectively lowers actual demand through contracts that either increase the supply of, or lower the demand for electricity.<sup>3</sup>

Following the declaration of actual LOR2 conditions in Victoria and New South Wales, AEMO activated the RERT contracts for both regions. RERT was activated from 3.30 pm to 9.30 pm with contracted reserves of 185 MW in Victoria and 134 MW in New South Wales. The total cost of RERT on 31 January was estimated to be around \$15 million.<sup>4</sup>

**Australian Energy Regulator** 

March 2020

<sup>&</sup>lt;sup>3</sup> Under the National Electricity Rules, AEMO is required to publish (on its website) reports detailing the circumstances that gave rise to the need for the activation of RERT contracts, their processes and the costs that occurred (cl. 3.20).

<sup>4 &</sup>lt;a href="https://aemo.com.au/-/media/files/electricity/nem/emergency\_management/rert/2020/rert-activation-estimates-31-jan-2020.pdf?la=en">https://aemo.com.au/-/media/files/electricity/nem/emergency\_management/rert/2020/rert-activation-estimates-31-jan-2020.pdf?la=en</a>

# **Appendix A: 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 being offered, and the rebid reason.

#### **South Australia**

Table 6: Significant rebids for the 2 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
time	effective			(MW)	(\$/MWh)	(\$/MWh)	
10.59 am		Origin Energy	Quarantine	19	14700	-1000	1059A Material change in nsw dem sl
12.44 pm		Snowy Hydro	Angaston	44	14538	376	12:44:26 F Portfolio position adjustment sl
12.44 pm		Snowy Hydro	Lonsdale	21	14774	382	12:44:26 F Portfolio position adjustment sl
12.44 pm		Snowy Hydro	Pt Stanvac	61	14744	381	12:44:26 F Portfolio position adjustment sl
1.31 pm	1.40 pm	AGL	Torrens Island	-120	<87	N/A	1330~p~020 Reduction in avail cap~203 plant failure
1.31 pm	1.40 pm	Engie	Pelican Point	-132	82	N/A	1320~P~Update avail: unit at risk of tripping due to freq fluct~
1.34 pm	1.45 pm	EnergyAustralia	Hallett	20	14699	-1000	1330~A~Band adj due to material change in ic limits heywood trip sl~
1.35 pm	1.45 pm	Engie	Pelican Point	-40	-1000	N/A	1330~P~Update avail: sa seperated high sys freq~
1.36 pm	1.45 pm	Infigen	Lake Bonney BESS1	15	10000	405	1336~A~Change in forecast prices~
1.36 pm	1.45 pm	AGL Energy	The Bluff WF	-48	-1000	N/A	1335~P~020 reduction in avail cap~203 plant failure
1.37 pm	1.45 pm	Engie	Dry Creek	35	13100	-1000	1335~P~Sa vic trip~
1.40 pm	1.50 pm	Engie	Pelican Point	40	N/A	-1000	1335~P~Vic sa trip ~

Submitted	Time effective	Participant	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
1.41 pm	1.50 pm	Greentricity Pty Ltd	Dalrymple North Battery Energy Storage System	-34	<14700	N/A	1340~P~020 reduction in avail cap~204 unit trip
1.43 pm	1.50 pm	Snowy Hydro	Pt Stanvac	-61	-1003	N/A	13:43:30 P Update capability parameters for change to outage plan/plant conditions
1.43 pm	1.50 pm	Engie	Pelican Point	132	N/A	82	1340~P~Vic sa trip freq issue ~
1.46 pm	1.55 pm	Infigen	Lake Bonney BESS	-21	-1000	N/A	1346~P~Updated soc close to limit~
1.47 pm	1.55 pm	Engie	Pelican Point	-152	<82	N/A	1345~P~System freq high~
1.51 pm	2.00 pm	Infigen	Lake Bonney BESS1	25	50	10000	1351~P~Updated soc close to limit~
1.51 pm	2.00 pm	Engie	Pelican Point	152	N/A	<85	1345~P~Freq issue ~
1.53 pm	2.00 pm	Engie	Dry Creek	37	13100	-1000	1350~P~Vic sa trip
1.53 pm	2.00 pm	Engie	Dry Creek	37	13100	-1000	1340~A~Respond to5 min predispatch. >\$14700 ~
1.53 pm	2.00 pm	Snowy Hydro	Pt Stanvac	32	N/A	-1003	13:53:30 P Update capability parameters for change to outage plan/plant conditions

#### **New South Wales**

Table 7: Significant rebids for the 3 pm trading interval

Submitted	Time	Destinional	Oletien	Capacity rebid	Price from	Price to	Rebid reason
time	effective	Participant	Station	(MW)	(\$/MWh)	(\$/MWh)	
11.37 am 12.12 pm		Origin Energy  AGL Energy	Eraring  Bayswater	60 80	14700 N/A	-1000	1129P Plant conditions - cw management sl 1210~P~010 unexpected/plant limits~108 load/ramp variation during rts
12.15 pm		AGL Energy	Bayswater	-40	-1000	N/A	1215~P~010 unexpected/plant limits~108 load/ramp variation during rts
12.44 pm		Snowy Hydro	Colongra	338	14700	-1000	12:44:26 F Portfolio position adjustment sl
12.44 pm		Snowy Hydro	Tumut	416	-1000	14700	12:44:26 F Portfolio position adjustment sl
12.44 pm		Snowy Hydro	Upper Tumut	18	-1000	14700	12:44:26 F Portfolio position adjustment sl
1.45 pm		AGL Energy	Bayswater	-110	-1000	N/A	1344~P~010 unexpected/plant limits~101 milling limits
1.45 pm		Delta Electricity	Vales Point	40	N/A	71	1344P CW outlet temp limitation
1.52 pm		Delta Electricity	Vales Point	-100	71	N/A	1351P CW outlet temp limitation
1.53 pm		EnergyAustralia	Mt Piper	80	N/A	-1000	1350~P~Adj avail due to mill issue resolved sl~
2.08 pm		Snowy Hydro	Colongra	-169	-1000	N/A	14:08:30 P Update capability parameters for change to outage plan/plant conditions
2.14 pm		AGL Energy	Liddell	-120	0	N/A	1410~P~020 reduction in avail cap~203 plant failure 120mw (sl)
2.21 pm		Delta Electricity	Vales Point	60	N/A	71	1419P Load adjusted to cw outlet temp limitation

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
time	effective	, amorpani		(MW)	(\$/MWh)	(\$/MWh)	
2.21 pm		Snowy Hydro	Tumut	171	14700	-1000	14:21:28 P Plant outage colongra 2 trip on start
2.23 pm		AGL Energy	Bayswater	30	N/A	-1000	1420~P~010 unexpected/plant limits~101 milling limits
2.27 pm	2.35 pm	Snowy Hydro	Tumut	20	14700	-1000	14:26:00 A NSW 5min pd price \$13,641.99 higher than 5min pd 14:35@14:21 (\$13,703.25)
2.31 pm	2.40 pm	AGL Energy	Bayswater	20	N/A	-1000	1430~P~010 unexpected/plant limits~108 load/ramp variation during rts
2.38 pm	2.45 pm	Delta Electricity	Vales Point	40	N/A	-1000	1437P Load adjusted to cw outlet temp limitation
2.41 pm	2.50 pm	Origin Energy	Eraring	760	14700	-1000	1440A Constraint management - q>nil_mute_757 sl
2.43 pm	2.50 pm	AGL Energy	Bayswater	-50	-1000	N/A	1440~P~010 unexpected/plant limits~108 load/ramp variation during rts
2.43 pm	2.50 pm	Origin Energy	Shoalhave n	40	14700	-1000	1443A Material change in nsw dem sl

Table 8: Significant rebids for the 3.30 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
time	effective	rantopant	Otation	(MW)	(\$/MWh)	(\$/MWh)	
11.37 am		Origin Energy	Eraring	40	14700	38	1129P Plant conditions - cw management sl
12.12 pm		AGL Energy	Bayswater	40	N/A	-1000	1210~P~010 unexpected/plant limits~108 load/ramp variation during rts
12.44 pm		Snowy Hydro	Tumut	80	-1000	14700	12:44:26 F Portfolio position adjustment sl

Submitted	Time	Dortisinant	Stotion	Capacity rebid	Price from	Price to	Rebid reason
time	effective	Participant	Station	(MW)	(\$/MWh)	(\$/MWh)	
12.44 pm		Snowy Hydro	Upper Tumut	20	-1000	14700	12:44:26 F Portfolio position adjustment sl
1.45 pm		AGL Energy	Bayswater	-110	-1000	N/A	1344~P~010 Unexpected/plan t limits~101 milling limits
1.45 pm		Delta Electricity	Vales Point	20	N/A	71	1343P CW outlet temp limitation
1.52 pm		Delta Electricity	Vales Point	-80	71	N/A	1351P CW outlet temp limitation
1.53 pm		EnergyAustralia	Mt Piper	80	N/A	-1000	1350~P~Adj avail due to mill issue resolved sl~
2.08 pm		Snowy Hydro	Colongra	-169	-1000	N/A	14:08:30 P Update capability parameters for change to outage plan/plant conditions
2.14 pm		AGL Energy	Liddell	-120	0	N/A	1410~P~020 reduction in avail cap~203 plant failure 120mw (sl)
2.21 pm		Delta Electricity	Vales Point	60	N/A	71	1419P Load adjusted to cw outlet temp limitation
2.21 pm		Snowy Hydro	Tumut	171	14700	-1000	14:21:28 P Plant outage colongra 2 trip on start
2.38 pm		Delta Electricity	Vales Point	40	N/A	-1000	1437P Load adjusted to cw outlet temp limitation
2.43 pm		AGL Energy	Bayswater	-50	-1000	N/A	1440~P~010 unexpected/plant limits~108 load/ramp variation during rts
2.43 pm		Origin Energy	Shoalhave n	40	14700	-1000	1443A Material change in nsw dem sl
2.48 pm		Snowy Hydro	Tumut	58	14700	-1000	14:45:04 A NSW 5min actual price \$12,009.06 lower than 5min pd 14:50@14:41 (\$2,690.94)

Submitted time	Time effective	Participant	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to	Rebid reason
2.58 pm	3.05 pm	Origin Energy	Eraring	700	14700	-1000	1457A Material change in nsw dem sl
3.02 pm	3.10 pm	Delta Electricity	Vales Point	-40	-1000	N/A	1501P Load adjusted to cw outlet temp limitation
3.08 pm	3.15 pm	AGL Energy	Bayswater	60	N/A	-1000	1505~P~030 increase in avail cap~301 plant limit lifted
3.14 pm	3.25 pm	AGL Energy	Bayswater	50	N/A	-1000	1510~P~010 unexpected/plant limits~108 load/ramp variation during rts
3.20 pm	3.30 pm	Delta Electricity	Vales Point	160	N/A	-1000	1519P EPA cw limit change due to nsw lor2 condition

Table 9: Significant rebids for the 4.30 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
time	effective	, c.morponii		(MW)	(\$/MWh)	(\$/MWh)	
12.44 pm		Snowy Hydro	Tumut	90	-1000	14700	12:44:26 F Portfolio position adjustment sl
12.44 pm		Snowy Hydro	Upper Tumut	20	-1000	14700	12:44:26 F Portfolio position adjustment sl
1.45 pm		AGL Energy	Bayswater	-40	-1000	N/A	1344~P~010 unexpected/plant limits~101 milling limits
1.52 pm		Delta Electricity	Vales Point	-60	71	N/A	1351P CW outlet temp limitation
1.53 pm		EnergyAustralia	Mt Piper	50	N/A	-1000	1350~P~Adj avail due to mill issue resolved sl~
2.08 pm		Snowy Hydro	Colongra	-170	-1000	N/A	14:08:30 P Update capability parameters for change to outage plan/plant conditions
2.14 pm		AGL Energy	Liddell	-120	0	N/A	1410~P~020 reduction in avail cap~203 plant

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
time	effective	raniopani	Station	(MW)	(\$/MWh)	(\$/MWh)	
							failure 120mw (sl)
2.21 pm		Delta Electricity	Vales Point	60	N/A	71	1419P Load adjusted to cw outlet temp limitation
2.21 pm		Snowy Hydro	Tumut	909	-1000	14700	14:21:28 P Plant outage colongra 2 trip on start
2.38 pm		Delta Electricity	Vales Point	40	N/A	-1000	1437P Load adjusted to cw outlet temp limitation
2.43 pm		AGL Energy	Bayswater	-60	-1000	N/A	1440~P~010 unexpected/plant limits~108 load/ramp variation during rts
2.48 pm		Snowy Hydro	Tumut	1090	14700	-1000	14:45:04 A NSW 5min actual price \$12,009.06 lower than 5min pd 14:50@14:41 (\$2,690.94)
3.02 pm		Delta Electricity	Vales Point	-40	-1000	N/A	1501P Load adjusted to cw outlet temp limitation
3.08 pm		AGL Energy	Bayswater	60	N/A	-1000	1505~P~030 increase in avail cap~301 plant limit lifted
3.14 pm		AGL Energy	Bayswater	60	N/A	-1000	1510~P~010 unexpected/plant limits~108 load/ramp variation during rts
3.20 pm		Delta Electricity	Vales Point	160	N/A	-1000	1519P EPA cw limit change due to nsw lor2 condition
3.31 pm		EnergyAustralia	Mt Piper	20	N/A	-1000	1525~P~Adj avail due to fan limit relieving sl~
3.31 pm		Snowy Hydro	Colongra	170	N/A	-1000	15:31:22 P Plant outage complete sl
3.48 pm		EnergyAustralia	Mt Piper	40	-1000	>12001	1545~A~Band adj due to mat decrease in nsw 5min pd price \$105 vs \$14,700 @ 1605 sl~

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
time	effective	ranopani	Glation	(MW)	(\$/MWh)	(\$/MWh)	
3.55 pm	4.05 pm	AGL Energy	Bayswater	-60	-1000	N/A	1555~P~010 unexpected/plant limits~fd fan
4.02 pm	4.10 pm	Origin Energy	Eraring	655	14700	-1000	1600A Material change in nsw dem sl
4.09 pm	4.15 pm	Snowy Hydro	Guthega	21	14700	-1000	16:05:05 A NSW 5min actual price \$12,447.89 lower than 5min pd 16:10@16:01 (\$426.00)

Table 10: Significant rebids for the 5 pm trading interval

Submitted Time	Time effective	Participant	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
Time	ellective			(IVIVV)	(φ/Ινίννιι)	(Φ/Ινίννιι)	
1.52 pm		Delta Electricity	Vales Point	-60	71	N/A	1351P CW outlet temp limitation
1.53 pm		EnergyAustralia	Mt Piper	50	N/A	-1000	1350~P~Adj avail due to mill issue resolved sl~
2.08 pm		Snowy Hydro	Colongra	-170	-1000	N/A	14:08:30 P Update capability parameters for change to outage plan/plant conditions
2.14 pm		AGL Energy	Liddell	-120	0	N/A	1410~P~020 reduction in avail cap~203 plant failure 120mw (sl)
2.21 pm		Delta Electricity	Vales Point	60	N/A	71	1419P Load adjusted to cw outlet temp limitation
2.21 pm		Snowy Hydro	Tumut	171	14700	-1000	14:21:28 P Plant outage colongra 2 trip on start
2.43 pm		AGL Energy	Bayswater	-80	-1000	N/A	1440~P~010 unexpected/plant limits~108 load/ramp variation during rts
3.03 pm		AGL Energy	Hunter Valley GT	-15	-1000	N/A	1500~P~020 reduction in avail cap~203 plant failure 15mw

Submitted	Time			Capacity rebid	Price from	Price to	Rebid reason
Time	effective	Participant	Station	(MW)	(\$/MWh)	(\$/MWh)	
3.08 pm		AGL Energy	Bayswater	60	N/A	-1000	1505~P~030 increase in avail cap~301 plant limit lifted
3.13 pm		Snowy Hydro	Tumut	42	14700	-1000	14:32:00 A NSW 30min pd price \$7,386.79 higher than 30min pd 19:30@14:02 (\$8,087.36)
3.14 pm		AGL Energy	Bayswater	80	N/A	-1000	1510~P~010 unexpected/plant limits~108 load/ramp variation during rts
3.20 pm		Delta Electricity	Vales Point	100	N/A	71	1519P EPA cw limit change due to nsw lor2 condition
3.31 pm		EnergyAustralia	Mt Piper	20	N/A	-1000	1525~P~Adj avail due to fan limit relieving sl~
3.31 pm		Snowy Hydro	Colongra	170	N/A	-1000	15:31:22 P Plant outage complete sl
3.39 pm		Snowy Hydro	Tumut	181	-1000	14700	15:35:05 A NSW 5min actual price \$12,276.13 higher than 5min pd 15:40@15:31 (\$12,769.61)
3.48 pm		Delta Electricity	Vales Point	60	14300	300	1547A Load adjusted to predispatch changes pd1500 vs pd1530
3.48 pm		EnergyAustralia	Mt Piper	40	-1000	>12001	1545~A~Band adj due to mat decrease in nsw 5min pd price \$105 vs \$14,700 @ 1605 sl~
4.09 pm		Snowy Hydro	Guthega	21	14700	-1000	16:05:05 A NSW 5min actual price \$12,447.89 lower than 5min pd 16:10@16:01 (\$426.00)
4.26 pm	4.35 pm	AGL Energy	Bayswater	-60	-1000	N/A	1625~P~020 reduction in avail cap~203 plant failure 10mw

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	r articipant	Otation	(MW)	(\$/MWh)	(\$/MWh)	
4.28 pm	4.35 pm	AGL Energy	Bayswater	-50	-1000	N/A	1625~P~010 unexpected/plant limits~108 load/ramp variation during rts
4.32 pm	4.40 pm	Origin Energy	Eraring	640	14700	-1000	1631A Constraint management - v>>v_nil_3 sl
4.36 pm	4.45 pm	AGL Energy	Liddell	120	N/A	0	1630~P~030 increase in avail cap~301 plant limit lifted 120mw

Table 11: Significant rebids for the 6 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective			(MW)	(\$/MWh)	(\$/MWh)	
2.21 pm		Delta Electricity	Vales Point	60	N/A	71	1419P Load adjusted to cw outlet temp limitation
3.08 pm		AGL Energy	Bayswater	60	N/A	-1000	1505~P~030 increase in avail cap~301 plant limit lifted
3.13 pm		Snowy Hydro	Tumut	214	14700	-1000	14:32:00 A NSW 30min pd price \$7,386.79 higher than 30min pd 19:30@14:02 (\$8,087.36)
3.20 pm		Delta Electricity	Vales Point	100	N/A	71	1519P EPA cw limit change due to nsw lor2 condition
3.31 pm		EnergyAustralia	Mt Piper	20	N/A	-1000	1525~P~Adj avail due to fan limit relieving sl~
3.39 pm		Snowy Hydro	Tumut	178	-1000	14700	15:35:05 A NSW 5min actual price \$12,276.13 higher than 5min pd 15:40@15:31 (\$12,769.61)
3.48 pm		Delta Electricity	Vales Point	60	14300	300	1547A Load adjusted to predispatch changes pd1500 vs pd1530

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	. a.u.e.pa	S to the state of	(MW)	(\$/MWh)	(\$/MWh)	
3.48 pm		EnergyAustralia	Mt Piper	40	-1000	>12001	1545~A~Band adj due to mat decrease in nsw 5min pd price \$105 vs \$14,700 @ 1605 sl~
4.09 pm		Snowy Hydro	Guthega	21	14700	-1000	16:05:05 A NSW 5min actual price \$12,447.89 lower than 5min pd 16:10@16:01 (\$426.00)
4.28 pm		AGL Energy	Bayswater	-50	-1000	N/A	1625~P~010 unexpected/plant limits~108 load/ramp variation during rts
5.00 pm		AGL Energy	Bayswater	-60	-1000	N/A	1700~P~010 unexpected/plant limits~101 milling limits
5.31 pm	5.40 pm	Origin Energy	Eraring	775	14700	-1000	1730A Material change in nsw dem sl
5.31 pm	5.40 pm	Origin Energy	Uranquinty	93	14700	-1000	1730A Material change in nsw dem sl

Table 12: Significant rebids for the 6.30 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective			(MW)	(\$/MWh)	(\$/MWh)	
3.08 pm		AGL Energy	Bayswater	60	N/A	-1000	1505~P~030 increase in avail cap~301 plant limit lifted
3.13 pm		Snowy Hydro	Tumut	218	14700	-1000	14:32:00 A NSW 30min pd price \$7,386.79 higher than 30min pd 19:30@14:02 (\$8,087.36)
3.20 pm		Delta Electricity	Vales Point	100	N/A	71	1519P EPA cw limit change due to nsw lor2 condition
3.31 pm		EnergyAustralia	Mt Piper	20	N/A	-1000	1525~P~Adj avail due to fan limit relieving sl~

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	ганииран	Station	(MW)	(\$/MWh)	(\$/MWh)	
3.39 pm		Snowy Hydro	Tumut	178	-1000	14700	15:35:05 A NSW 5min actual price \$12,276.13 higher than 5min pd 15:40@15:31 (\$12,769.61)
3.48 pm		Delta Electricity	Vales Point	60	14300	300	1547A Load adjusted to predispatch changes pd1500 vs pd1530
3.48 pm		EnergyAustralia	Mt Piper	40	-1000	>12001	1545~A~Band adj due to mat decrease in nsw 5min pd price \$105 vs \$14,700 @ 1605 sl~
4.28 pm		AGL Energy	Bayswater	-50	-1000	N/A	1625~P~010 unexpected/plant limits~108 load/ramp variation during rts
5.00 pm		AGL Energy	Bayswater	-60	-1000	N/A	1700~P~010 unexpected/plant limits~101 milling limits
5.27 pm		Snowy Hydro	Upper Tumut	30	-1000	14700	17:25:05 A NSW 5min actual fcas raise 5m \$7,468.28 higher than 5min pd 17:30@17:21 (\$11,386.04)
5.27 pm		Snowy Hydro	Tumut	30	14700	-1000	17:25:05 A NSW 5min actual fcas raise 5m \$7,468.28 higher than 5min pd 17:30@17:21 (\$11,386.04)
5.31 pm		Origin Energy	Shoalhaven	40	14700	-1000	1730A Material change in nsw dem sl
5.40 pm		Snowy Hydro	Guthega	31	14700	-1000	17:36:00 A NSW 5min pd price \$14,566.28 higher than 30min pd 18:25@17:32 (\$14,700.00)
5.59 pm	6.10 pm	Origin Energy	Uranquinty	133	14700	-1000	1758A Material change in nsw dem sl

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	raniopani		(MVV)	(\$/MWh)	(\$/MWh)	
5.59 pm	6.10 pm	Origin Energy	Eraring	775	14700	-1000	1758A Material change in nsw dem sl
6.16 pm	6.25 pm	Snowy Hydro	Tumut	25	-1000	14700	18:16:00 A Vic- nsw 5min pd price separation \$1,122.29 higher than 5min pd 18:20@18:11 (\$14,314.90)

#### Victoria

Table 13: Significant rebids for the 3 pm trading interval

	•			•			
Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	r artio.parit	Otation	(MW)	(\$/MWh)	(\$/MWh)	
12.44 pm		Snowy Hydro	Murray	25	-1000	14700	12:44:26 F Portfolio position adjustment sl
1.03 pm		Alinta Energy	Loy Yang B	50	N/A	-1000	1300~P~Update avail: current ambient temperature sl~
1.19 pm		EnergyAustralia	Jeeralang A	132	14299	<111	1315~A~Band adj due to change in 5min pd price 155 vs 134 @ 1400 vic sl~
1.43 pm		Snowy Hydro	Valley Power	-44	-1000	N/A	13:43:30 P Update capability parameters for change to outage plan/plant conditions
1.43 pm		AGL Energy	Eildon	40	14700	0	1340~A~040 chg in aemo disp~45 price increase vs pd vic \$342.26 vs \$324.07 (sl)
1.50 pm		EnergyAustralia	Jeeralang A	42	14299	<111	1345~A~Band adj due to material change in ic limits heywood trip sl~
1.55 pm		AGL Energy	Loy Yang A	-95	-1000	N/A	1350~P~020 reduction in avail cap~avr fault
2.20 pm		EnergyAustralia	Jeeralang A	36	111	14299	1410~A~Band adj due to material change in ic limits

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective			(MW)	(\$/MWh)	(\$/MWh)	
							heywood trip, newe vic flows, demand reforecast sl~
2.20 pm		EnergyAustralia	Jeeralang B	87	105	13099	1410~A~Band adj due to material change in ic limits heywood trip, newe vic flows, demand reforecast sl~
2.31 pm	2.40 pm	AGL Energy	Loy Yang A	60	N/A	-1000	1430~P~030 increase in avail cap~301 plant limit lifted 60mw
2.46 pm	2.55 pm	AGL Energy	West Kiewa	33	14700	0	1445~A~050 chg in aemo pd~55 pd price increase vic \$14700 (sl)
2.49 pm	3 pm	EnergyAustralia	Jeeralang B	24	13099	-1000	1445~P~Adj avail due to peak mode operation, nox limits sl~
2.53 pm	3.00 pm	AGL Energy	Loy Yang A	20	N/A	-1000	1450~P~030 increase in avail cap~301 plant limit lifted

Table 14: Significant rebids for the 3.30 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective		Otalion.	(MW)	(\$/MVVh)	(\$/MWh)	
12.44 pm		Snowy Hydro	Murray	25	-1000	14700	12:44:26 F Portfolio position adjustment sl
1.19 pm		EnergyAustralia	Jeeralang A	30	14299	-1000	1315~A~Band adj due to change in 5min pd price 155 vs 134 @ 1400 vic sl~
1.41 pm		Alinta Energy	Loy Yang B	50	N/A	-1000	1335~P~Update avail: current ambient temperature sl ~
1.43 pm		Snowy Hydro	Valley Power	-44	-1000	N/A	13:43:30 P Update capability parameters for change to outage plan/plant conditions

Submitted	Time		21	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	Participant	Station	(MW)	(\$/MWh)	(\$/MWh)	
1.50 pm		EnergyAustralia	Jeeralang A	30	14299	-1000	1345~A~Band adj due to material change in ic limits heywood trip sl~
1.55 pm		AGL Energy	Loy Yang A	-95	-1000	N/A	1350~P~020 reduction in avail cap~avr fault
2.20 pm		EnergyAustralia	Jeeralang B	60	105	13099	1410~A~Band adj due to material change in ic limits heywood trip, newe vic flows, demand reforecast sl~
2.31 pm		AGL Energy	Loy Yang A	60	N/A	-1000	1430~P~030 increase in avail cap~301 plant limit lifted 60mw
2.46 pm		AGL Energy	West Kiewa	36	14700	-1000	1445~A~050 chg in aemo pd~55 pd price increase vic \$14700 (sl)
2.49 pm		EnergyAustralia	Jeeralang B	24	13099	-1000	1445~P~Adj avail due to peak mode operation, nox limits sl~
2.53 pm		AGL Energy	Loy Yang A	20	N/A	-1000	1450~P~030 increase in avail cap~301 plant limit lifted
3.12 pm	3.20 pm	EnergyAustralia	Yallourn	40	N/A	-1000	1505~A~Adj avail due to lor2 conditons sl~
3.22 pm	3.30 pm	EnergyAustralia	Jeeralang A	12	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm	3.30 pm	EnergyAustralia	Jeeralang A	48	14299	-1000	1515~a~band adj due to lor2 condition, high fogging available sl~
3.22 pm	3.30 pm	EnergyAustralia	Jeeralang B	18	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm	3.30 pm	EnergyAustralia	Jeeralang B	63	13099	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~

Table 15: Significant rebids for the 4 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	20.00		(MW)	(\$/MWh)	(\$/MWh)	
12.44 pm		Snowy Hydro	Murray	25	-1000	14700	12:44:26 F Portfolio position adjustment sl
12.44 pm		Snowy Hydro	Valley Power	24	N/A	-1000	12:44:26 F Portfolio position adjustment sl
1.41 pm		Alinta Energy	Loy Yang B	50	N/A	<-1000	1335~P~Update avail: current ambient temperature sl ~
1.43 pm		Snowy Hydro	Valley Power	-48	-1000	N/A	13:43:30 P Update capability parameters for change to outage plan/plant conditions
1.55 pm		AGL Energy	Loy Yang A	-95	-1000	N/A	1350~P~020 Reduction in avail cap~avr fault
2.20 pm		EnergyAustralia	Jeeralang B	45	105	13099	1410~A~Band adj due to material change in ic limits heywood trip, newe vic flows, demand reforecast sl~
2.31 pm		AGL Energy	Loy Yang A	60	N/A	-1000	1430~P~030 increase in avail cap~301 plant limit lifted 60mw
2.49 pm		EnergyAustralia	Jeeralang B	24	13099	-1000	1445~P~adj avail due to peak mode operation, nox limits sl~
2.53 pm		AGL Energy	Loy Yang A	20	N/A	-1000	1450~P~030 increase in avail cap~301 plant limit lifted
3.12 pm		EnergyAustralia	Yallourn	40	N/A	-1000	1505~a~adj avail due to lor2 conditons sl~
3.22 pm		EnergyAustralia	Jeeralang A	48	14299	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~

Submitted Time	Time effective	Participant	Station	Capacity rebid	Price from (\$/MWh)	Price to	Rebid reason
3.22 pm		EnergyAustralia	Jeeralang B	18	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	63	13099	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.24 pm	3.35 pm	EnergyAustralia	Newport	180	-1000	14450	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~
3.33 pm	3.40 pm	EnergyAustralia	Newport	20	14450	-1000	1530~P~Adj avail due to burner issue/ plant stabililty sl~
3.53 pm	4.00 pm	Snowy Hydro	Valley Power	44	N/A	-1000	15:53:30 P Update capability parameters for change to outage plan/plant conditions

Table 16: Significant rebids for the 4.30 pm trading interval

Submitted Time	Time effective	Participant	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
12.44 pm		Snowy Hydro	Murray	25	-1000	14700	12:44:26 F Portfolio position adjustment sl
12.44 pm		Snowy Hydro	Valley Power	24	N/A	-1000	12:44:26 F Portfolio position adjustment sl
1.20 pm		Alinta Energy	Loy Yang B	15	14700	-1000	1315~A~Change in demand 5pd sl~
1.41 pm		Alinta Energy	Loy Yang B	50	N/A	<-1000	1335~P~Update avail: current ambient temperature sl ~
2.31 pm		AGL Energy	Loy Yang A	-35	-1000	N/A	1430~P~030 increase in avail cap~301 plant limit lifted 60mw

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	. Grinospani	S to more	(MW)	(\$/MWh)	(\$/MWh)	
2.49 pm		EnergyAustralia	Jeeralang B	54	>13099	-1000	1445~p~adj avail due to peak mode operation, nox limits sl~
2.53 pm		AGL Energy	Loy Yang A	20	N/A	-1000	1450~P~030 increase in avail cap~301 plant limit lifted
3.12 pm		EnergyAustralia	Yallourn	40	N/A	-1000	1505~A~Adj avail due to lor2 conditons sl~
3.17 pm		EnergyAustralia	Gannawarr a Energy Storage System	25	<447	14628	1510~F~Optimise between energy/fcas markets soc mgmt sl~
3.22 pm		EnergyAustralia	Jeeralang A	48	14299	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	18	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	63	13099	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.26 pm		EnergyAustralia	Newport	180	-1000	14450	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~
3.33 pm		EnergyAustralia	Newport	20	14450	-1000	1530~P~Adj avail due to burner issue/ plant stabililty sl~
3.55 pm	4.05 pm	Snowy Hydro	Murray	30	-1000	14700	15:54:42 P VPGS6 rts - rebalance portfolio

Table 17: Significant rebids for the 5 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective			(MW)	(\$/MWh)	(\$/MWh)	
1.41 pm		Alinta Energy	Loy Yang B	50	N/A	-1000	1335~P~Update avail: current ambient temperature sl ~

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	ганыран	Station	(MW)	(\$/MWh)	(\$/MWh)	
2.31 pm		AGL Energy	Loy Yang A	-35	-1000	N/A	1430~P~030 increase in avail cap~301 plant limit lifted 60mw
2.49 pm		EnergyAustralia	Jeeralang B	54	>13099	-1000	1445~P~Adj avail due to peak mode operation, nox limits sl~
2.53 pm		AGL Energy	Loy Yang A	20	N/A	-1000	1450~P~030 increase in avail cap~301 plant limit lifted
3.12 pm		EnergyAustralia	Yallourn	40	N/A	-1000	1505~A~Adj avail due to lor2 conditons sl~
3.17 pm		EnergyAustralia	Gannawarr a Energy Storage System	25	<447	14628	1510~F~Optimise between energy/fcas markets soc mgmt sl~
3.22 pm		EnergyAustralia	Jeeralang A	48	14299	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	18	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	63	13099	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.26 pm		EnergyAustralia	Newport	180	-1000	14450	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~
3.33 pm		EnergyAustralia	Newport	20	14450	-1000	1530~p~adj avail due to burner issue/ plant stabililty sl~
4.30 pm	4.40 pm	Alinta Energy	Loy Yang B	-20	-1000	N/A	1625~P~Update avail: current ambient temperature sl~

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	rantopant		(MW)	(\$/MWh)	(\$/MWh)	
4.40 pm	4.50 pm	EnergyAustralia	Newport	80	14450	-1000	1630~A~Band adj due to change in vic 5min pd demand incr 178mw to 9,871mw @ 1710 sl~

Table 18: Significant rebids for the 5.30 pm trading interval

Submitted Time	Time effective	Participant	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
1.41 pm		Alinta Energy	Loy Yang B	60	N/A	-1000	1335~P~Update avail: current ambient temperature sl ~
2.31 pm		AGL Energy	Loy Yang A	-35	-1000	N/A	1430~P~030 increase in avail cap~301 plant limit lifted 60mw
2.49 pm		EnergyAustralia	Jeeralang B	54	>13099	-1000	1445~P~Adj avail due to peak mode operation, nox limits sl~
2.53 pm		AGL Energy	Loy Yang A	20	N/A	-1000	1450~P~030 increase in avail cap~301 plant limit lifted
3.12 pm		EnergyAustralia	Yallourn	40	N/A	-1000	1505~A~Adj avail due to lor2 conditons sl~
3.17 pm		EnergyAustralia	Gannawarr a Energy Storage System	25	<447	14628	1510~F~Optimise between energy/fcas markets soc mgmt sl~
3.22 pm		EnergyAustralia	Jeeralang A	48	14299	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	18	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	63	13099	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	, and pain	<b>O</b> 13.11 <b>0</b> 11	(MW)	(\$/MWh)	(\$/MWh)	
3.26 pm		EnergyAustralia	Newport	180	-1000	14450	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~
3.33 pm		EnergyAustralia	Newport	20	14450	-1000	1530~P~Adj avail due to burner issue/ plant stabililty sl~
4.12 pm		AGL Energy	Macarthur WF	339	N/A	-1000	1605~P~030 increase in avail cap~301 plant limit lifted as per ops
4.26 pm		AGL Energy	West Kiewa	15	-1000	14700	1620~P~010 unexpected/plant limits~111 pondage limitations
4.30 pm		Alinta Energy	Loy Yang B	-20	-1000	N/A	1625~P~Update avail: current ambient temperature sl~
4.39 pm		Meridian Energy	Mt Mercer WF	-60	-1000	N/A	1636P - Loss of turbines due to extreme heat
4.40 pm		EnergyAustralia	Newport	80	14450	-1000	1630~A~Band adj due to change in vic 5min pd demand, incr 178mw to 9,871mw @ 1710 sl~
5.06 pm	5.15 pm	Snowy Hydro	Murray	25	14700	-1000	17:02:00 A Vic 30min pd price \$14,224.15 lower than 30min pd 17:05@16:32 (\$475.85)
5.11 pm	5.20 pm	EnergyAustralia	Yallourn	-20	-1000	N/A	1710~P~Adj avail due to id fan issue sl~
5.16 pm	5.25 pm	EnergyAustralia	Newport	50	14450	-1000	1710~A~Band adj due to mat decrease in vic 5min pd price \$218 vs \$14,700 @ 1715 sl~

Table 19: Significant rebids for the 6 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	ι αποραπ	Otation	(MW)	(\$/MWh)	(\$/MWh)	
2.31 pm		AGL Energy	Loy Yang A	-35	-1000	N/A	1430~P~030 increase in avail cap~301 plant limit lifted 60mw
2.49 pm		EnergyAustralia	Jeeralang B	54	>13099	-1000	1445~P~Adj avail due to peak mode operation, nox limits sl~
2.53 pm		AGL Energy	Loy Yang A	20	N/A	-1000	1450~P~030 increase in avail cap~301 plant limit lifted
3.12 pm		EnergyAustralia	Yallourn	40	N/A	-1000	1505~A~Adj avail due to lor2 conditons sl~
3.17 pm		EnergyAustralia	Gannawarr a Energy Storage System	25	<447	14628	1510~F~Optimise between energy/fcas markets soc mgmt sl~
3.22 pm		EnergyAustralia	Jeeralang A	12	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang A	48	14299	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	18	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	63	13099	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.24 pm		EnergyAustralia	Newport	30	14450	-1000	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~
3.26 pm		EnergyAustralia	Newport	180	-1000	14450	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~

Submitted Time	Time effective	Participant	Station	Capacity rebid	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
3.33 pm		EnergyAustralia	Newport	20	14450	-1000	1530~P~Adj avail due to burner issue/ plant stabililty sl~
4.30 pm		Alinta Energy	Loy Yang B	-25	-1000	N/A	1625~P~Update avail: current ambient
4.39 pm		Meridian Energy	Mt Mercer WF	-60	-1000	N/A	temperature sl~ 1636P - Loss of turbines due to extreme heat
4.40 pm		EnergyAustralia	Newport	80	14450	-1000	1630~A~Band adj due to change in vic 5min pd demand, incr 178mw to 9,871mw @ 1710 sl~
5.11 pm		EnergyAustralia	Yallourn	-20	-1000	N/A	1710~P~Adj avail due to id fan issue sl~
5.16 pm		EnergyAustralia	Newport	50	14450	-1000	1710~A~Band adj due to mat decrease in vic 5min pd price \$218 vs \$14,700 @ 1715 sl~
5.17 pm		Snowy Hydro	Murray	25	14700	-1000	17:16:00 A Vic 5min pd price \$13,157.76 higher than 30min pd 17:35@17:02 (\$14,700.00)
5.44 pm	5.55 pm	EnergyAustralia	Newport	125	14450	-1000	1740~F~Adj avail due to change in financial position sl~
5.52 pm	6.00 pm	AGL Energy	Loy Yang A	-20	-1000	N/A	1750~P~020 reduction in avail cap~206 unexp ambient temp effects

Table 20: Significant rebids for the 6.30 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	raniopani	Station	(MVV)	(\$/MWh)	(\$/MWh)	

Submitted	Time			Capacity rebid	Price from	Price to	Rebid reason
Time	effective	Participant	Station	(MW)	(\$/MWh)	(\$/MWh)	
2.31 pm		AGL Energy	Loy Yang A	-35	-1000	N/A	1430~P~030 increase in avail cap~301 plant limit lifted 60mw
2.49 pm		EnergyAustralia	Jeeralang B	54	>13099	-1000	1445~P~Adj avail due to peak mode operation, nox limits sl~
2.53 pm		AGL Energy	Loy Yang A	20	N/A	-1000	1450~P~030 increase in avail cap~301 plant limit lifted
3.12 pm		EnergyAustralia	Yallourn	40	N/A	-1000	1505~A~Adj avail due to lor2 conditons sl~
3.17 pm		EnergyAustralia	Gannawarr a Energy Storage System	25	<447	14628	1510~F~Optimise between energy/fcas markets soc mgmt sl~
3.22 pm		EnergyAustralia	Jeeralang A	48	>14299	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	18	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	63	>13099	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.24 pm		EnergyAustralia	Newport	80	14450	-1000	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~
3.26 pm		EnergyAustralia	Newport	180	-1000	14450	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~
3.33 pm		EnergyAustralia	Newport	20	14450	-1000	1530~P~Adj avail due to burner issue/ plant stabililty sl~

Submitted Time	Time effective	Participant	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
4.40 pm		EnergyAustralia	Newport	80	14450	-1000	1630~A~Band adj due to change in vic 5min pd demand, incr 178mw to 9,871mw @ 1710 sl~
5.11 pm		EnergyAustralia	Yallourn	-20	-1000	N/A	1710~P~Adj avail due to id fan issue sl~
5.44 pm		EnergyAustralia	Newport	100	14450	-1000	1740~F~Adj avail due to change in financial position sl~
5.52 pm		AGL Energy	Loy Yang A	-20	-1000	N/A	1750~P~020 reduction in avail cap~206 unexp ambient temp effects
5.58 pm	6.05 pm	EnergyAustralia	Newport	75	14450	-1000	1755~A~Band adj due to vic dispatch pricer vs~intervention \$14,700 @ 1800 sl~
5.59 pm	6.10 pm	AGL Energy	Loy Yang A	-20	-1000	N/A	1755~P~010 unexpected/plant limits~excitation issues
6.16 pm	6.25 pm	Snowy Hydro	Murray	25	14700	-1000	18:16:00 A Vic- nsw 5min pd price separation \$1,122.29 higher than 5min pd 18:20@18:11 (\$14,314.90)
6.21 pm	6.30 pm	AGL Energy	Eildon	-40	-1000	N/A	1815~P~010 unexpected/plant limits~111 pondage limitations

Table 21: Significant rebids for the 7 pm trading interval

Submitted	Time	Participant	Station	Capacity rebid			Rebid reason
Time	effective			(MW)	(\$/MWh)	(\$/MWh)	
3.12 pm		EnergyAustralia	Yallourn	40	N/A	-1000	1505~A~Adj avail due to lor2 conditons sl~

Submitted	Time	Participant	Station	Capacity rebid	Price from	Price to	Rebid reason
Time	effective	i artioipant	Otation	(MW)	(\$/MWh)	(\$/MWh)	
3.17 pm		EnergyAustralia	Gannawarr a Energy Storage System	25	<447	14628	1510~F~Optimise between energy/fcas markets soc mgmt sl~
3.22 pm		EnergyAustralia	Jeeralang A	48	14299	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	18	N/A	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.22 pm		EnergyAustralia	Jeeralang B	63	13099	-1000	1515~A~Band adj due to lor2 condition, high fogging available sl~
3.24 pm		EnergyAustralia	Newport	80	14450	-1000	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~
3.26 pm		EnergyAustralia	Newport	180	-1000	14450	1520~A~Redistibut e mw nps to jerralang, jl high fogging avaialble sl~
3.33 pm		EnergyAustralia	Newport	20	14450	-1000	1530~P~Adj avail due to burner issue/ plant stabililty sl~ 1630~A~Band adj
4.40 pm		EnergyAustralia	Newport	80	14450	-1000	due to change in vic 5min pd demand, incr 178mw to 9,871mw @ 1710 sl~
5.11 pm		EnergyAustralia	Yallourn	-20	-1000	N/A	1710~P~Adj avail due to id fan issue sl~
5.44 pm		EnergyAustralia	Newport	100	14450	-1000	1740~F~Adj avail due to change in financial position sl~
5.52 pm		AGL Energy	Loy Yang A	-20	-1000	N/A	1750~P~020 reduction in avail cap~206 unexp ambient temp effects

Submitted Time	Time effective	Participant	Station	Capacity rebid	Price from (\$/MWh)	Price to	Rebid reason
5.58 pm	enective	EnergyAustralia	Newport	50	14450	-1000	1755~A~Band adj due to vic dispatch pricer vs intervention \$14,700 @ 1800 sl~
5.59 pm		AGL Energy	Loy Yang A	-20	-1000	N/A	1755~P~010 unexpected/plant limits~excitation issues
6.04 pm		Snowy Hydro	Laverton North	-10	-1000	N/A	17:51:00 A Vic- nsw 5min pd i/c flow 68 higher than 5min pd 18:30@17:46 (11)
6.16 pm		Snowy Hydro	Murray	25	14700	-1000	18:16:00 A Vic- nsw 5min pd price separation \$1,122.29 higher than 5min pd 18:20@18:11 (\$14,314.90)
6.21 pm		AGL Energy	Eildon	-40	-1000	N/A	1815~P~010 unexpected/plant limits~111 pondage limitations
6.31 pm	6.40 pm	EnergyAustralia	Newport	25	14450	-1000	1810~F~Adj bands due to change in financial position sl~
6.37 pm	6.45 pm	AGL Energy	Loy Yang A	20	N/A	-1000	1835~P~030 increase in avail cap~301 plant limit lifted

# **Appendix B: Closing bids**

Figures B1 to B13 highlight the half hour closing bids for participants in South Australia, Victoria and New South Wales with capacity priced at or above \$5000/MWh during the periods in which the spot price exceeded \$5000/MWh. They also show generation output and the spot price.

#### **South Australia**

Figure B1: EnergyAustralia (Hallett, Waterloo) closing bids, dispatch and spot price

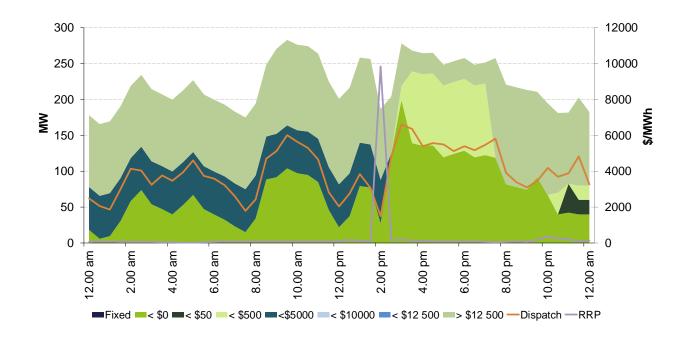


Figure B2: Engie (Dry Creek, Mintaro, Pelican Point, Port Lincoln, Snuggery, Willogoleche) closing bids, dispatch and spot price

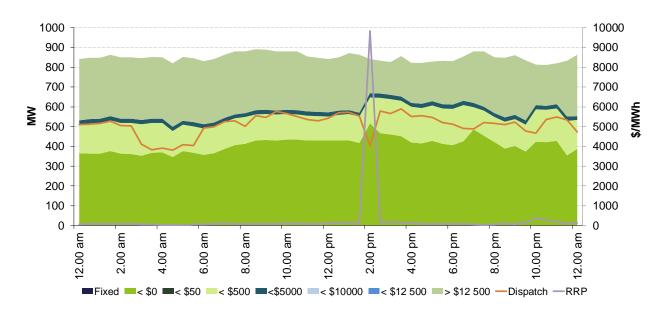


Figure B3: Infigen (Lake Bonney) closing bids, dispatch and spot price

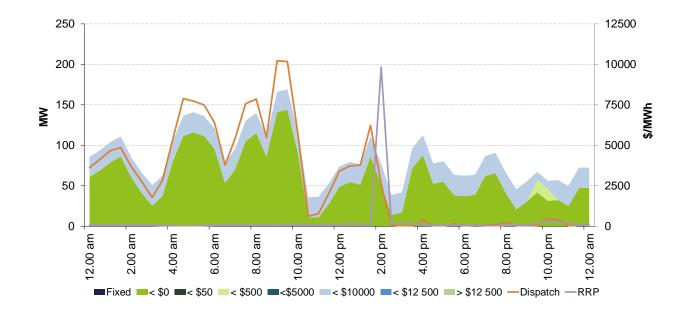


Figure B4: Neoen (Hornsdale Wind Farm, Hornsdale Power Reserve) closing bids, dispatch and spot price

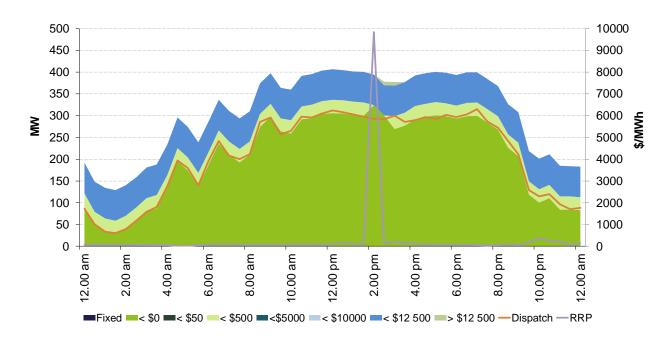
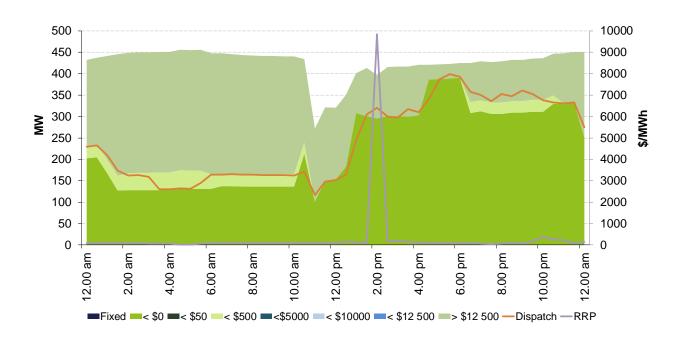


Figure B5: Origin Energy (Ladbroke Grove, Osborne, Quarantine) closing bids, dispatch and spot price



#### Victoria

Figure B6: AGL Energy (Somerton, Dartmouth, Eildon, Loy Yang A, Macarthur, Mckay, Oaklands Hill, West Kiewa) closing bids, dispatch and spot price

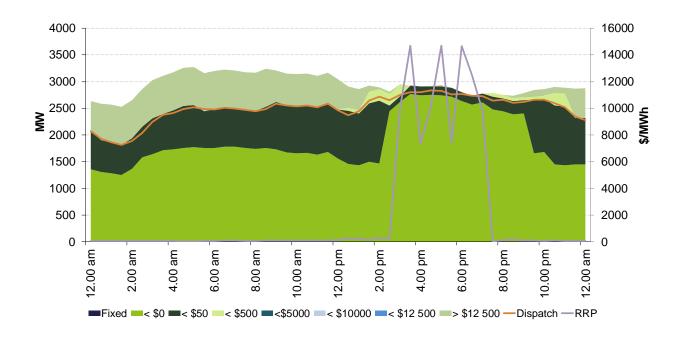


Figure B7: EnergyAustralia (Ballarat, Gannawarra, Jeeralang, Newport, Yallourn) closing bids, dispatch and spot price

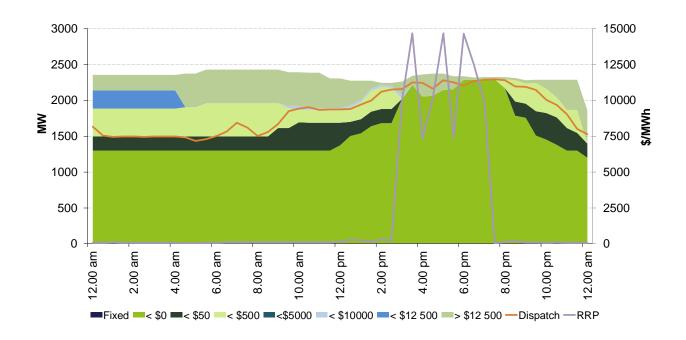


Figure B8: Origin Energy (Mortlake) closing bids, dispatch and spot price

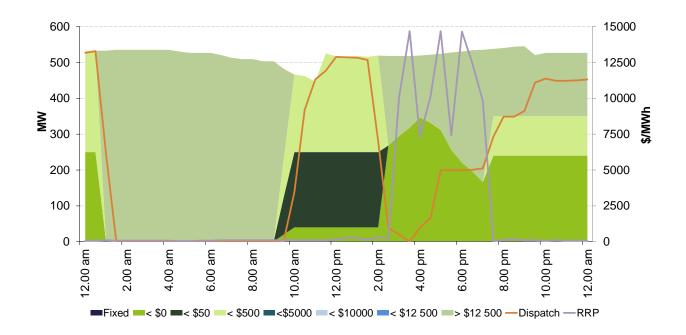


Figure B9: Snowy Hydro (Laverton North, Murray, Valley Power) closing bids, dispatch and spot price

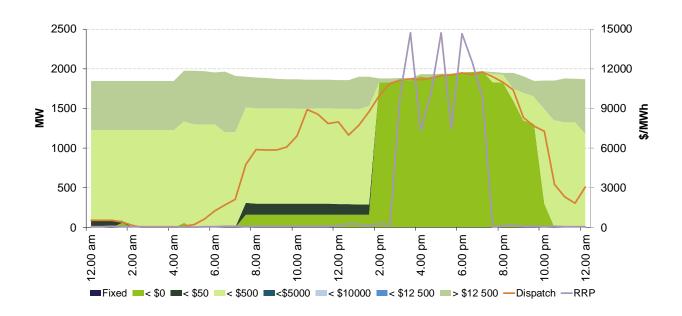


Figure B10: AGL Energy (Bayswater, Hunter Valley GT, Liddell, Nyngan) closing bids, dispatch and spot price

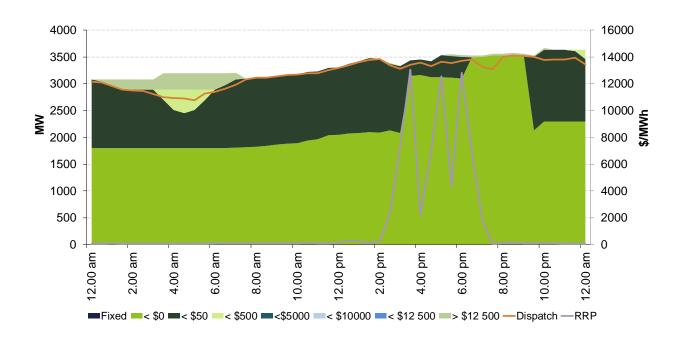


Figure B11: AGL Hydro Partnership (Broken Hill Solar Farm) closing bids, dispatch and spot price

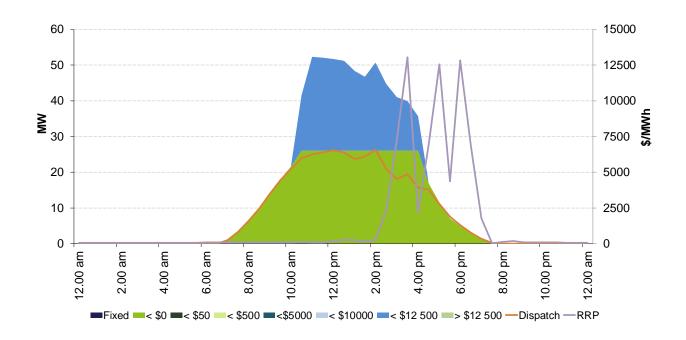


Figure B12: EnergyAustralia (Mt Piper, Tallawarra) closing bids, dispatch and spot price

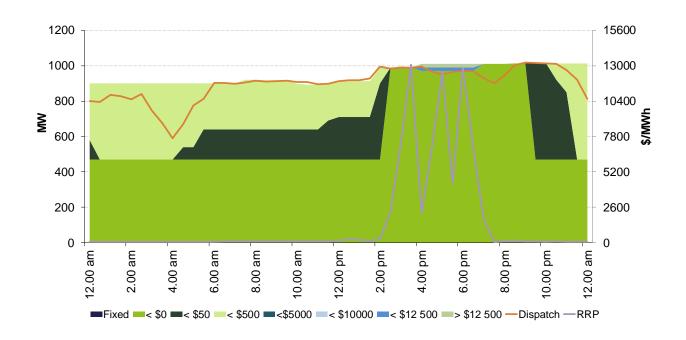
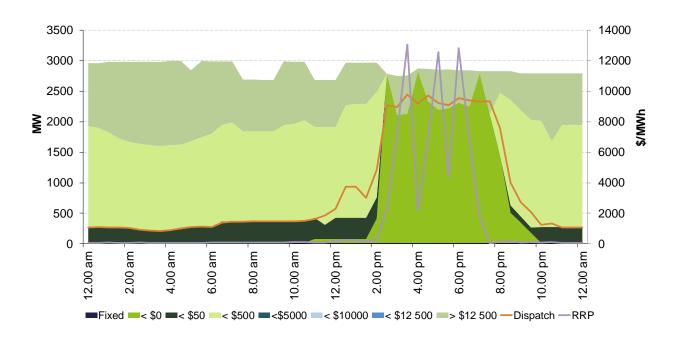


Figure B13: Snowy Hydro (Colongra, Tumut, Upper Tumut, Guthega, Blowering) closing bids, dispatch and spot price



# **Appendix C: Price setter**

The following table identifies for the trading interval in which the spot price exceeded \$5000/MWh, each five minute dispatch interval price and the generating units involved in setting the energy price. This information is published by AEMO. The 30-minute spot price is the average of the six dispatch interval prices. The dispatch prices that are in italics are capped at the price cap of \$14 700/MWh when published by AEMO.

#### **South Australia**

Table 22: South Australia price setter 2 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
1.35 pm	\$109.92	AGL Hydro	AGLSOM	Energy	\$110.00	1	\$110
1.40 pm	\$14 700	Origin Energy	QPS5	Energy	\$14 700	1	\$14 700
1.45 pm	\$14 700	Origin Energy	OSB-AG	Energy	\$14 700	0.49	\$7 203
		Origin Energy	QPS2	Energy	\$14 700	0.14	\$2 058
		Origin Energy	QPS5	Energy	\$14 700	0.38	\$5 586
1.50 pm	\$14 700	Origin Energy	OSB-AG	Energy	\$14 700	0.49	\$7 203
		Origin Energy	QPS2	Energy	\$14 700	0.14	\$2 058
		Origin Energy	QPS5	Energy	\$14 700	0.38	\$5 586
1.55 pm	\$14 700	Origin Energy	OSB-AG	Energy	\$14 700	0.49	\$7 203
		Origin Energy	QPS2	Energy	\$14 700	0.14	\$2 058
		Origin Energy	QPS5	Energy	\$14 700	0.38	\$5 586
2 pm	\$82.43	Engie	PPCCGT	Energy	\$82.43	1	\$82.43

### Spot price \$9832/MWh

#### **New South Wales**

Table 23: New South Wales price setter 3 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
2.35 pm	\$402.14	CS Energy	CALL_B_1	Energy	\$16.62	1.00	\$16.62
		AGL Energy	BW02	Energy	\$38.39	1.00	\$38.39
		Stanwell	STAN-4	Energy	\$44.89	-1.00	-\$44.89
		Stanwell	TARONG#	Raise 5 min	\$1.89	-1.00	-\$1.89
		Delta Electricity	VP5	Raise 5 min	\$100	1.00	\$100
		AGL Energy	BW02	Raise reg	\$1	-1.00	-\$1
		Stanwell	STAN-4	Raise reg	\$65.99	1.00	\$65.99
		CS Energy	CALL_B_1	Raise 60 sec	\$0.01	-0.38	\$0

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
		Delta Electricity	VP6	Raise 60 sec	\$300	0.38	\$114
		CS Energy	CALL_B_1	Raise 6 sec	\$0.01	-0.38	\$0
		Delta Electricity	VP6	Raise 6 sec	\$300	0.38	\$114
2.40 pm	\$1 375.48	AGL Hydro	MCKAY1	Energy	\$155.86	0.89	\$138.72
		AGL Hydro	MCKAY1	Raise 60 sec	\$2	-0.89	-\$1.78
		Delta Electricity	VP6	Raise 60 sec	\$300	0.89	\$267
		AGL Hydro	MCKAY1	Raise 6 sec	\$2	-0.89	-\$1.78
		EnergyAustralia	MP1	Raise 6 sec	\$1 100	0.89	\$979
2.45 pm	\$12 885.86	EnergyAustralia	NPS	Energy	\$14 449.94	0.89	\$12 860.45
2.50 pm	\$2 690.94	Origin Energy	ER01	Energy	-\$1 000	0.14	-\$140
		Origin Energy	ER02	Energy	-\$1 000	0.14	-\$140
		AGL Energy	BW02	Energy	\$38.39	0.73	\$28.02
		CS Energy	GSTONE1	Energy	\$47.73	-0.73	-\$34.84
		Stanwell	TARONG#	Energy	\$70.99	0.73	\$51.82
		EnergyAustralia	BALBG1	Energy	\$10 100.01	-0.73	-\$7 373.01
		EnergyAustralia	JLA01	Energy	\$14 298.94	0.18	\$2573.81
		EnergyAustralia	JLA02	Energy	\$14 298.94	0.18	\$2 573.81
		EnergyAustralia	JLA03	Energy	\$14 298.94	0.18	\$2 573.81
		EnergyAustralia	JLA04	Energy	\$14 298.94	0.18	\$2 573.81
		CS Energy	GSTONE1	Lower reg	\$0.73	-0.73	-\$0.53
		AGL Energy	BW02	Lower reg	\$4	0.73	\$2.92
		EnergyAustralia	BALBG1	Raise 5 min	\$0	0.73	\$0
		AGL Energy	BW02	Raise 5 min	\$100	-0.73	-\$73
		CleanCO	SWAN_E	Raise reg	\$2.28	-0.73	-\$1.66
		CS Energy	GSTONE1	Raise reg	\$14.73	0.73	\$10.75
		EnergyAustralia	BALBG1	Raise 60 sec	\$0	0.73	\$0
		Origin Energy	ER01	Raise 60 sec	\$2.80	-0.14	-\$0.39
		Origin Energy	ER02	Raise 60 sec	\$2.80	-0.14	-\$0.39
		CleanCO	SWAN_E	Raise 60 sec	\$12.50	0.42	\$5.25
		AGL Energy	BW02	Raise 60 sec	\$17	-0.45	-\$7.65
		CS Energy	GSTONE5	Raise 60 sec	\$133.73	-0.42	-\$56.17
		EnergyAustralia	BALBG1	Raise 6 sec	\$0	0.73	\$0
		Origin Energy	ER01	Raise 6 sec	\$1.74	-0.14	-\$0.24
		Origin Energy	ER02	Raise 6 sec	\$1.74	-0.14	-\$0.24
		AGL Energy	BW02	Raise 6 sec	\$17	-0.45	-\$7.65
2.55 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.04	\$588
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.96	\$14 112
3 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.04	\$588

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.96	\$14 112

### Spot price \$7 263/MWh

Table 24: New South Wales price setter 3.30 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
3.05 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
3.10 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
3.15 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.04	\$588
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.96	\$14 112
3.20 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.04	\$588
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.96	\$14 112
3.25 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.04	\$588
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.96	\$14 112
3.30 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.04	\$588
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.96	\$14 112

## Spot price \$13 064/MWh

Table 25: New South Wales price setter 4.30 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
4.05 pm	\$12 785.86	EnergyAustralia	NPS	Energy	\$14 449.94	0.88	\$12 715.95
4.10 pm	\$426	Origin Energy	ER03	Energy	-\$1000	-0.63	\$630.00
		AGL Energy	LD02	Energy	\$0	1.63	\$0.00
		Origin Energy	ER03	Raise 5 min	\$2.79	0.63	\$1.76
		Delta Electricity	VP5	Raise 5 min	\$300	-0.63	-\$189.00
		Origin Energy	ER03	Raise 60 sec	\$2.80	0.63	\$1.76
		AGL Energy	LD02	Raise 60 sec	\$14.80	-0.63	-\$9.32
		Origin Energy	ER03	Raise 6 sec	\$1.74	0.63	\$1.10
		AGL Energy	LD02	Raise 6 sec	\$14.80	-0.63	-\$9.32
4.15 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
4.20 pm	\$12 804.22	Snowy Hydro	MURRAY	Energy	\$14 700	0.87	\$12 789
4.25 pm	\$2 121.79	CS Energy	CALL_B_2	Energy	-\$1 000	-2.61	\$2610
		Darling Downs	DDSF1	Energy	-\$72.05	2.61	-\$188.05
		Delta Electricity	VP5	Energy	\$300	0.50	\$150

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
		Delta Electricity	VP6	Energy	\$300	0.50	\$150
		CS Energy	CALL_B_2	Raise 60 sec	\$0.01	1	\$0.01
		Delta Electricity	VP5	Raise 60 sec	\$300	-0.50	-\$150
		Delta Electricity	VP6	Raise 60 sec	\$300	-0.50	-\$150
		EnergyAustralia	MP1	Raise 60 sec	\$301	0	\$0.00
		CS Energy	CALL_B_2	Raise 6 sec	\$0.01	1	\$0.01
		Delta Electricity	VP5	Raise 6 sec	\$300	-0.50	-\$150
		Delta Electricity	VP6	Raise 6 sec	\$300	-0.50	-\$150
4.30 pm	\$733.41	Origin Energy	ER01	Energy	-\$1 000	-0.25	\$250
		Origin Energy	ER02	Energy	-\$1 000	-0.25	\$250
		Origin Energy	ER03	Energy	-\$1 000	-0.25	\$250
		Stanwell	TARONG#	Energy	-\$1 000	-0.25	\$250
		Stanwell	TARONG#	Energy	-\$1 000	-0.25	\$250
		Stanwell	TARONG#	Energy	-\$1 000	-0.25	\$250
		Ergon Energy	BARCALD	Energy	-\$981.43	0.74	-\$726.26
		AGL Hydro	MCKAY1	Energy	\$0	1.48	\$0
		Origin Energy	ER01	Raise 5 min	\$2.79	0.25	\$0.70
		Origin Energy	ER02	Raise 5 min	\$2.79	0.25	\$0.70
		Origin Energy	ER03	Raise 5 min	\$2.79	0.25	\$0.70
		Stanwell	TARONG#	Raise 5 min	\$3.89	-0.74	-\$2.88
		EnergyAustralia	BALBG1	Raise reg	\$14.69	0.74	\$10.87
		AGL Hydro	MCKAY1	Raise reg	\$60	-1.48	-\$88.80
		Stanwell	TARONG#	Raise reg	\$85.99	0.25	\$21.50
		Stanwell	TARONG#	Raise reg	\$85.99	0.25	\$21.50
		Stanwell	TARONG#	Raise reg	\$85.99	0.25	\$21.50
		EnergyAustralia	BALBG1	Raise 60 sec	\$1.89	-0.74	-\$1.40
		Origin Energy	ER01	Raise 60 sec	\$2.80	0.25	\$0.70
		Origin Energy	ER02	Raise 60 sec	\$2.80	0.25	\$0.70
		Origin Energy	ER03	Raise 60 sec	\$2.80	0.25	\$0.70
		Origin Energy	ER01	Raise 6 sec	\$1.74	0.25	\$0.44
		Origin Energy	ER02	Raise 6 sec	\$1.74	0.25	\$0.44
		Origin Energy	ER03	Raise 6 sec	\$1.74	0.25	\$0.44
		EnergyAustralia	BALBG1	Raise 6 sec	\$8.89	-0.74	-\$6.58

Spot price \$6 958/MWh

Table 26: New South Wales price setter 5 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
4.35 pm	\$12 506.46	AGL Hydro	WKIEWA2	Energy	\$14 700	0.85	\$12 495
4.40 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
4.45 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
4.50 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
4.55 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
5 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700

Spot price \$12 563/MWh

Table 27: New South Wales price setter 6 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
5.35 pm	\$12 488.49	EnergyAustralia	NPS	Energy	\$14 449.94	0.86	\$12 426.95
5.40 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.04	\$588
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.96	\$14 112
5.45 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
5.50 pm	\$14 700	Hydro Tasmania	POAT110	Energy	-\$999.62	-34.34	\$34 326.95
		EnergyAustralia	BALBG1	Energy	\$14 700	31.36	\$46 0992
		EnergyAustralia	YWPS1	Lower 60 sec	\$0.17	31.36	\$5.33
		Hydro	POAT220	Lower 60 sec	\$0.18	-31.36	-\$5.64
		EnergyAustralia	BALBG1	Raise 5 min	\$14 081.81	-31.36	-\$441 605.56
		Hydro	TREVALL	Raise 5 min	\$14 700	31.36	\$460 992
		EnergyAustralia	BALBG1	Raise 60 sec	\$1.89	-31.36	-\$59.27
		EnergyAustrali	BALBG1	Raise 6 sec	\$8.89	-31.36	-\$278.79
5.55 pm	\$14 700	Alinta Energy	LOYYB1	Energy	-\$1 000	-0.43	\$430
		AGL Energy	LD02	Energy	\$14 700	0.54	\$7 938
		AGL Energy	LD04	Energy	\$14 700	0.54	\$7 938
		Snowy Hydro	UPPTUM	Energy	\$14 700	0.43	\$6 321
		Alinta Energy	LOYYB1	Lower 5 min	\$0.07	-0.43	-\$0.03
		Hydro	POAT220	Lower 5 min	\$0.18	0.43	\$0.08
		Alinta Energy	LOYYB1	Lower 60 sec	\$0.04	-0.43	-\$0.02
		Hydro	POAT220	Lower 60 sec	\$0.18	0.43	\$0.08
		Snowy Hydro	UPPTUMU	Raise 5 min	\$0.72	-0.43	-\$0.31
		Alinta Energy	LOYYB1	Raise 5 min	\$9.78	0.43	\$4.21
		AGL Energy	LD02	Raise 60 sec	\$0.01	-0.21	\$0
		AGL Energy	LD04	Raise 60 sec	\$0.01	-0.21	\$0

D	ı	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
			Alinta Energy	LOYYB1	Raise 60 sec	\$9.49	0.43	\$4.08
			AGL Energy	LD02	Raise 6 sec	\$0.01	-0.21	\$0
			AGL Energy	LD04	Raise 6 sec	\$0.01	-0.21	\$0
			Alinta Energy	LOYYB1	Raise 6 sec	\$9.69	0.43	\$4.17
6	6 pm	\$14 700	Origin Energy	ER01	Energy	-\$1 000	-0.29	\$290
			Origin Energy	ER02	Energy	-\$1 000	-0.29	\$290
			Origin Energy	ER03	Energy	-\$1 000	-0.29	\$290.
			Hydro	POAT110	Energy	-\$999.62	0.95	-\$949.64
			Snowy Hydro	TUMUT3	Energy	\$14 700	0.87	\$12 789
			Snowy Hydro	TUMUT3	Raise 5 min	\$0	-0.87	\$0
			Origin Energy	ER01	Raise 5 min	\$2.79	0.29	\$0.81
			Origin Energy	ER02	Raise 5 min	\$2.79	0.29	\$0.81
			Origin Energy	ER03	Raise 5 min	\$2.79	0.29	\$0.81
			Origin Energy	ER01	Raise 60 sec	\$2.80	0.29	\$0.81
			Origin Energy	ER02	Raise 60 sec	\$2.80	0.29	\$0.81
			Origin Energy	ER03	Raise 60 sec	\$2.80	0.29	\$0.81
			Origin Energy	ER01	Raise 6 sec	\$1.74	0.29	\$0.50
			Origin Energy	ER02	Raise 6 sec	\$1.74	0.29	\$0.50
			Origin Energy	ER03	Raise 6 sec	\$1.74	0.29	\$0.50

Spot price \$12 822/MWh

Table 28: New South Wales price setter 6.30 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
6.05 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
		Snowy Hydro	TUMUT3	Raise 5 min	\$0	-1	\$0
		EnergyAustralia	YWPS2	Raise 5 min	\$100	1	\$100
6.10 pm	\$1 229.97	CS Energy	GSTONE5	Energy	-\$1 000	-1.30	\$1 300
		Hydro Tasmania	POAT220	Energy	-\$0.70	0.94	-\$0.66
		CleanCO	SWAN_E	Energy	\$46	1.30	\$59.80
		CleanCO	SWAN_E	Lower reg	\$2.28	1.30	\$2.96
		Origin Energy	ER01	Lower reg	\$45.90	-1.30	-\$59.67
		AGL Energy	LYA4	Raise 5 min	\$0	1.30	\$0
		Stanwell	TARONG#	Raise 5 min	\$3.89	-1.30	-\$5.06
		AGL Energy	LYA4	Raise reg	\$0	-1.30	\$0
		CS Energy	GSTONE5	Raise reg	\$45.73	1.30	\$59.45
		AGL Energy	LYA4	Raise 60 sec	\$0	1.30	\$0

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
		EnergyAustralia	MP1	Raise 60 sec	\$301.00	-0.43	-\$129.43
		AGL Energy	LYA4	Raise 6 sec	\$0	0.87	\$0
6.15 pm	\$12 358.01	Stanwell	STAN-2	Energy	\$44.89	-1	-\$44.89
		CleanCo	KAREEYA	Energy	\$2 657	0.25	\$664.25
		CleanCo	KAREEYA	Energy	\$2 657	0.25	\$664.25
		CleanCo	KAREEYA	Energy	\$2 657	0.25	\$664.25
		CleanCo	KAREEYA	Energy	\$2 657	0.25	\$664.25
		EnergyAustralia	MP1	Energy	\$12 000.89	1	\$12 000.89
		Stanwell	TARONG#	Raise 5 min	\$3.89	-1	-\$3.89
		EnergyAustralia	MP1	Raise 5 min	\$249	1	\$249
		Stanwell	STAN-2	Raise reg	\$2 000	1	\$2000
		EnergyAustralia	MP1	Raise reg	\$4 500.10	-1	-\$4 500.10
6.20 pm	\$385.10	AGL Energy	BW03	Energy	-\$1 000	1	-\$1 000
		Stanwell	TARONG#	Energy	-\$1 000	-0.50	\$500
		Stanwell	TARONG#	Energy	-\$1 000	-0.50	\$500
		Millmerran	MPP_2	Energy	\$25	1	\$25
		Stanwell	TARONG#	Raise 5 min	\$3.89	-1	-\$3.89
		EnergyAustralia	MP1	Raise 5 min	\$249	1	\$249
		AGL Energy	BW03	Raise reg	\$1	-1	-\$1
		Stanwell	TARONG#	Raise reg	\$115.99	0.50	\$58
		Stanwell	TARONG#	Raise reg	\$115.99	0.50	\$58
6.25 pm	\$1 556.84	CS Energy	GSTONE5	Energy	-\$1 000	-1	\$1 000
		Millmerran	MPP_2	Energy	\$25	1	\$25
		Delta Electricity	VP5	Energy	\$300	0.50	\$150
		Delta Electricity	VP6	Energy	\$300	0.50	\$150
		Stanwell	TARONG#	Raise 5 min	\$1.89	-1	-\$1.89
		EnergyAustralia	MP1	Raise 5 min	\$249	1	\$249
		CS Energy	GSTONE5	Raise reg	\$84.73	1	\$84.73
		Delta Electricity	VP5	Raise reg	\$100	-0.50	-\$50
		Delta Electricity	VP6	Raise reg	\$100	-0.50	-\$50
6.30 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.03	\$441
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.71	\$10 437
		Snowy Hydro	UPPTUMU	Energy	\$14 700	0.26	\$3 822

Spot price \$6 886/MWh

### Victoria

Table 29: Victoria price setter 3 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
2.35 pm	\$500.61	CS Energy	CALL_B_1	Energy	\$16.62	1.00	\$16.62
		Stanwell	STAN-4	Energy	\$44.89	-1.00	-\$44.89
		AGL Hydro	MCKAY1	Energy	\$155.86	1.00	\$155.86
		Stanwell	TARONG#	Raise 5 min	\$1.89	-1.00	-\$1.89
		Delta Electricity	VP5	Raise 5 min	\$100	1.00	\$100
		AGL Hydro	MCKAY1	Raise reg	\$20	-1.00	-\$20
		Stanwell	STAN-4	Raise reg	\$65.99	1.00	\$65.99
		CS Energy	CALL_B_1	Raise 60 sec	\$0.01	-0.38	\$0
		Delta Electricity	VP6	Raise 60 sec	\$300	0.38	\$114
		CS Energy	CALL_B_1	Raise 6 sec	\$0.01	-0.38	\$0
		Delta Electricity	VP6	Raise 6 sec	\$300	0.38	\$114
2.40 pm	\$1 551.86	AGL Hydro	MCKAY1	Energy	\$155.86	1.00	\$155.86
		AGL Hydro	MCKAY1	Raise 60 sec	\$2	-1.00	-\$2
		Delta Electricity	VP6	Raise 60 sec	\$300	1.00	\$300
		AGL Hydro	MCKAY1	Raise 6 sec	\$2	-1.00	-\$2
		EnergyAustralia	MP1	Raise 6 sec	\$1100	1.00	\$1100
2.45 pm	\$14 449.94	EnergyAustralia	NPS	Energy	\$14 449.94	1.00	\$14 449.94
2.50 pm	\$14 298.94	EnergyAustralia	JLA01	Energy	\$14 298.94	0.25	\$3 574.74
		EnergyAustralia	JLA02	Energy	\$14 298.94	0.25	\$3 574.74
		EnergyAustralia	JLA03	Energy	\$14 298.94	0.25	\$3 574.74
		EnergyAustralia	JLA04	Energy	\$14 298.94	0.25	\$3 574.74
2.55 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.05	\$735
		Snowy Hydro	TUMUT3	Energy	\$14 700	1.08	\$15 876
3 pm	\$14 700	Origin Energy	ER01	Energy	-\$1 000	-0.28	\$280
		Origin Energy	ER02	Energy	-\$1 000	-0.28	\$280
		EnergyAustralia	BALBG1	Energy	\$10 100.01	1.11	\$11 211.01
		Snowy Hydro	GUTHEGA	Energy	\$14 700	0.02	\$294
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.41	\$6 027
		Stanwell	TARONG#	Raise 5 min	\$1.89	-0.56	-\$1.06
		Origin Energy	ER01	Raise 5 min	\$2.79	0.28	\$0.78
		Origin Energy	ER02	Raise 5 min	\$2.79	0.28	\$0.78
		Stanwell	TARONG#	Raise reg	\$65.99	0.56	\$36.95
		Delta Electricity	VP6	Raise reg	\$500.00	-0.56	-\$280
		EnergyAustralia	BALBG1	Raise 60 sec	\$1.89	-1.11	-\$2.10
		Origin Energy	ER01	Raise 60 sec	\$2.80	0.28	\$0.78

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
		Origin Energy	ER02	Raise 60 sec	\$2.80	0.28	\$0.78
		EnergyAustralia	MP1	Raise 60 sec	\$301.00	0.56	\$168.56
		Origin Energy	ER01	Raise 6 sec	\$1.74	0.28	\$0.49
		Origin Energy	ER02	Raise 6 sec	\$1.74	0.28	\$0.49
		EnergyAustralia	BALBG1	Raise 6 sec	\$8.89	-1.11	-\$9.87
		Delta Electricity	VP6	Raise 6 sec	\$4 885.00	0.56	\$2 735.60

# Spot price \$10 034/MWh

Table 30: Victoria price setter 3.30 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
3.05 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700.00	1.12	\$16 464
3.10 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700.00	1.13	\$16 611
3.15 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700.00	0.05	\$735
		Snowy Hydro	TUMUT3	Energy	\$14 700.00	1.09	\$16 023
3.20 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700.00	0.05	\$735
		Snowy Hydro	TUMUT3	Energy	\$14 700.00	1.09	\$16 023
3.25 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700.00	0.05	\$735
		Snowy Hydro	TUMUT3	Energy	\$14 700.00	1.11	\$16 317
3.30 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700.00	0.05	\$735
		Snowy Hydro	TUMUT3	Energy	\$14 700.00	1.07	\$15 729

### Spot price \$14 700/MWh

Table 31: Victoria price setter 4 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
3.35 pm	\$116.63	Stanwell	TARONG#	Energy	\$70.99	0.41	\$29.11
		Stanwell	TARONG#	Energy	\$70.99	0.41	\$29.11
		Stanwell	TARONG#	Energy	\$70.99	0.41	\$29.11
		Stanwell	TARONG#	Energy	\$70.99	0.41	\$29.11
3.40 pm	\$14 449.94	EnergyAustralia	NPS	Energy	\$14 449.94	1	\$14 449.94
3.45 pm	\$103.19	Engie	PPCCGT	Energy	\$82.43	1.25	\$103.04
3.50 pm	\$115.14	AGL (SA)	TORRA2	Energy	\$87	0.66	\$57.42
		AGL (SA)	TORRA4	Energy	\$87	0.66	\$57.42
3.55 pm	\$14 700	Snowy Hydro	MURRAY	Energy	\$14 700	1	\$14 700

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
4 pm	\$14 449.94	EnergyAustralia	NPS	Energy	\$14 449.94	1	\$14 449.94

## Spot price \$7 322/MWh

Table 32: Victoria price setter 4.30 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
4.05 pm	\$14 449.94	EnergyAustralia	NPS	Energy	\$14 449.94	1	\$14 449.94
4.10 pm	\$1 252.84	CS Energy	GSTONE3	Energy	-\$1 000	-1	\$1 000
		Diamond Energy	OAKEY1S	Energy	\$0	0.26	\$0
		AGL Hydro	MCKAY1	Energy	\$0	1	\$0
		Telstra Energy	EMERASF	Energy	\$0	0.74	\$0
		Stanwell	TARONG#	Raise 5 min	\$1.89	-1	-\$1.89
		Delta Electricity	VP5	Raise 5 min	\$300	1	\$300
		CS Energy	GSTONE3	Raise reg	\$14.73	1	\$14.73
		AGL Hydro	MCKAY1	Raise reg	\$60	-1	-\$60
4.15 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1.15	\$16 905
4.20 pm	\$14 700	Snowy Hydro	MURRAY	Energy	\$14 700	1	\$14 700
4.25 pm	\$14 700	Snowy Hydro	MURRAY	Energy	\$14 700	1	\$14 700
4.30 pm	\$862.66	Origin Energy	ER01	Energy	-\$1 000	-0.29	\$290
		Origin Energy	ER02	Energy	-\$1 000	-0.29	\$290
		Origin Energy	ER03	Energy	-\$1 000	-0.29	\$290
		Stanwell	TARONG#	Energy	-\$1 000	-0.29	\$290
		Stanwell	TARONG#	Energy	-\$1 000	-0.29	\$290
		Stanwell	TARONG#	Energy	-\$1 000	-0.29	\$290
		Ergon Energy	BARCALD	Energy	-\$981.43	0.87	-\$853.84
		AGL Hydro	MCKAY1	Energy	\$0	1.74	\$0
		Origin Energy	ER01	Raise 5 min	\$2.79	0.29	\$0.81
		Origin Energy	ER02	Raise 5 min	\$2.79	0.29	\$0.81
		Origin Energy	ER03	Raise 5 min	\$2.79	0.29	\$0.81
		Stanwell	TARONG#	Raise 5 min	\$3.89	-0.87	-\$3.38
		EnergyAustralia	BALBG1	Raise reg	\$14.69	0.87	\$12.78
		AGL Hydro	MCKAY1	Raise reg	\$60	-1.74	-\$104.40
		Stanwell	TARONG#	Raise reg	\$85.99	0.29	\$24.94
		Stanwell	TARONG#	Raise reg	\$85.99	0.29	\$24.94
		Stanwell	TARONG#	Raise reg	\$85.99	0.29	\$24.94
		EnergyAustralia	BALBG1	Raise 60 sec	\$1.89	-0.87	-\$1.64
		Origin Energy	ER01	Raise 60 sec	\$2.80	0.29	\$0.81

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
		Origin Energy	ER02	Raise 60 sec	\$2.80	0.29	\$0.81
		Origin Energy	ER03	Raise 60 sec	\$2.80	0.29	\$0.81
		Origin Energy	ER01	Raise 6 sec	\$1.74	0.29	\$0.50
		Origin Energy	ER02	Raise 6 sec	\$1.74	0.29	\$0.50
		Origin Energy	ER03	Raise 6 sec	\$1.74	0.29	\$0.50
		EnergyAustralia	BALBG1	Raise 6 sec	\$8.89	-0.87	-\$7.73

# Spot price \$10 111/MWh

Table 33: Victoria price setter 5 pm

	Dienotok						
DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
4.35 pm	\$14 700	AGL Hydro	WKIEWA2	Energy	\$14 700	1	\$14 700
4.40 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1.18	\$17 346
4.45 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1.19	\$17 493
4.50 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1.20	\$17 640
4.55 pm	\$14 700	Hydro Tasmania	POAT220	Energy	\$12	1.13	\$13.56
		Delta Electricity	VP5	Energy	\$300	-0.51	-\$153
		Delta Electricity	VP6	Energy	\$300	-0.51	-\$153
		Snowy Hydro	TUMUT3	Energy	\$14 700	1.03	\$15 141
		Millmerran	MPP_2	Lower reg	\$18.99	-1.03	-\$19.56
		Hydro Tasmania	JBUTTER	Lower reg	\$23	1.03	\$23.69
		EnergyAustralia	YWPS4	Lower 60 sec	\$0.17	-1.03	-\$0.18
		Hydro Tasmania	POAT220	Lower 60 sec	\$0.44	1.03	\$0.45
		Delta Electricity	VP5	Raise 5 min	\$4 885	0.51	\$2 491.35
		Delta Electricity	VP6	Raise 5 min	\$4 885	0.51	\$2 491.35
		Delta Electricity	VP5	Raise 60 sec	\$300	0.51	\$153
		Delta Electricity	VP6	Raise 60 sec	\$300	0.51	\$153
		Delta Electricity	VP5	Raise 6 sec	\$300	0.51	\$153
		Delta Electricity	VP6	Raise 6 sec	\$300	0.51	\$153
5 pm	\$14 700	CS Energy	GSTONE5	Energy	-\$1 000	-1.64	\$1 640
		Stanwell	STAN-4	Energy	\$44.89	-0.13	-\$5.84
		EnergyAustralia	GANNBG1	Energy	\$14 700	1.64	\$24 108
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.70	\$10 290
		EnergyAustralia	GANNBG1	Raise reg	\$0	-1.64	\$0
		CS Energy	GSTONE5	Raise reg	\$45.73	1.64	\$75
		Stanwell	STAN-4	Raise 60 sec	\$13.89	0.13	\$1.81
		EnergyAustralia	MP1	Raise 60 sec	\$301	-0.13	-\$39.13

## Spot price \$14 700/MWh

Table 34: Victoria price setter 5.30 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
5.05 pm	\$14 700	Hydro Tasmania	JBUTTER	Energy	-\$69.86	1.12	-\$78.24
5.10 pm	\$96.96	Stanwell	TARONG#	Energy	\$70.99	0.34	\$24.14
		Stanwell	TARONG#	Energy	\$70.99	0.34	\$24.14
		Stanwell	TARONG#	Energy	\$70.99	0.34	\$24.14
		Stanwell	TARONG#	Energy	\$70.99	0.34	\$24.14
5.15 pm	\$104.59	Stanwell	TARONG#	Energy	\$70.99	0.37	\$26.27
		Stanwell	TARONG#	Energy	\$70.99	0.37	\$26.27
		Stanwell	TARONG#	Energy	\$70.99	0.37	\$26.27
		Stanwell	TARONG#	Energy	\$70.99	0.37	\$26.27
5.20 pm	\$532.07	Origin Energy	ER01	Energy	-\$1 000	-0.26	\$260
		Origin Energy	ER02	Energy	-\$1 000	-0.26	\$260
		Origin Energy	ER03	Energy	-\$1 000	-0.26	\$260
		AGL Energy	LD03	Energy	\$0	1.95	\$0
		Origin Energy	ER01	Raise 5 min	\$2.79	0.26	\$0.73
		Origin Energy	ER02	Raise 5 min	\$2.79	0.26	\$0.73
		Origin Energy	ER03	Raise 5 min	\$2.79	0.26	\$0.73
		EnergyAustralia	MP1	Raise 5 min	\$249	-0.78	-\$194.22
		Origin Energy	ER01	Raise 60 sec	\$2.80	0.26	\$0.73
		Origin Energy	ER02	Raise 60 sec	\$2.80	0.26	\$0.73
		Origin Energy	ER03	Raise 60 sec	\$2.80	0.26	\$0.73
		AGL Energy	LD03	Raise 60 sec	\$38	-0.78	-\$29.64
		Origin Energy	ER01	Raise 6 sec	\$1.74	0.26	\$0.45
		Origin Energy	ER02	Raise 6 sec	\$1.74	0.26	\$0.45
		Origin Energy	ER03	Raise 6 sec	\$1.74	0.26	\$0.45
		AGL Energy	LD03	Raise 6 sec	\$38	-0.78	-\$29.64
5.25 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.05	\$735
		Snowy Hydro	TUMUT3	Energy	\$14 700	1.10	\$16 170
5.30 pm	\$14 449.94	EnergyAustralia	NPS	Energy	\$14 449.94	1	\$14 449.94

Spot price \$7 431/MWh

Table 35: Victoria price setter 6 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
5.35 pm	\$14 449.94	EnergyAustralia	NPS	Energy	\$14 449.94	1	\$14 449.94
5.40 pm	\$14 700	Snowy Hydro	GUTHEGA	Energy	\$14 700	0.05	\$735
		Snowy Hydro	TUMUT3	Energy	\$14 700	1.10	\$16 170
5.45 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700	1.15	\$16 905
5.50 pm	\$14 700	Hydro Tasmania	POAT110	Energy	-\$999.62	-40.25	\$40 234.71
		EnergyAustralia	BALBG1	Energy	\$14 700	36.76	\$54 0372
		EnergyAustralia	YWPS1	Lower 60 sec	\$0.17	36.76	\$6.25
		Hydro Tasmania	POAT220	Lower 60 sec	\$0.18	-36.76	-\$6.62
		EnergyAustralia	BALBG1	Raise 5 min	\$14 081.81	-36.76	-\$517 647.34
		Hydro Tasmania	TREVALL	Raise 5 min	\$14 700	36.76	\$54 0372
		EnergyAustralia	BALBG1	Raise 60 sec	\$1.89	-36.76	-\$69.48
		EnergyAustralia	BALBG1	Raise 6 sec	\$8.89	-36.76	-\$326.80
5.55 pm	\$14 700	Alinta Energy	LOYYB1	Energy	-\$1 000	-0.50	\$500
		AGL Energy	LD02	Energy	\$14 700	0.63	\$9 261
		AGL Energy	LD04	Energy	\$14 700	0.63	\$9 261
		Snowy Hydro	UPPTUMU	Energy	\$14 700	0.50	\$7 350
		Alinta Energy	LOYYB1	Lower 5 min	\$0.07	-0.50	-\$0.04
		Hydro Tasmania	POAT220	Lower 5 min	\$0.18	0.50	\$0.09
		Alinta Energy	LOYYB1	Lower 60 sec	\$0.04	-0.50	-\$0.02
		Hydro Tasmania	POAT220	Lower 60 sec	\$0.18	0.50	\$0.09
		Snowy Hydro	UPPTUMU	Raise 5 min	\$0.72	-0.50	-\$0.36
		Alinta Energy	LOYYB1	Raise 5 min	\$9.78	0.50	\$4.89
		AGL Energy	LD02	Raise 60 sec	\$0.01	-0.25	\$0
		AGL Energy	LD04	Raise 60 sec	\$0.01	-0.25	\$0
		Alinta Energy	LOYYB1	Raise 60 sec	\$9.49	0.50	\$4.75
		AGL Energy	LD02	Raise 6 sec	\$0.01	-0.25	\$0
		AGL Energy	LD04	Raise 6 sec	\$0.01	-0.25	\$0
		Alinta Energy	LOYYB1	Raise 6 sec	\$9.69	0.50	\$4.85
6 pm	\$14 700	Origin Energy	ER01	Energy	-\$1 000	-0.34	\$340
		Origin Energy	ER02	Energy	-\$1 000	-0.34	\$340
		Origin Energy	ER03	Energy	-\$1 000	-0.34	\$340
		Hydro Tasmania	POAT110	Energy	-\$999.62	1.12	-\$1 119.57
		Snowy Hydro	TUMUT3	Energy	\$14 700	1.03	\$15 141
			T-V-	Energy	\$14 700	1.03	\$15 141
		Snowy Hydro	TUMUT3	Raise 5 min	\$0	-1.03	\$0
		Origin Energy	ER01	Raise 5 min	\$2.79	0.34	\$0.95
		Origin Energy	ER02	Raise 5 min	\$2.79	0.34	\$0.95

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
		Origin Energy	ER03	Raise 5 min	\$2.79	0.34	\$0.95
		Origin Energy	ER01	Raise 60 sec	\$2.80	0.34	\$0.95
		Origin Energy	ER02	Raise 60 sec	\$2.80	0.34	\$0.95
		Origin Energy	ER03	Raise 60 sec	\$2.80	0.34	\$0.95
		Origin Energy	ER01	Raise 6 sec	\$1.74	0.34	\$0.59
		Origin Energy	ER02	Raise 6 sec	\$1.74	0.34	\$0.59
		Origin Energy	ER03	Raise 6 sec	\$1.74	0.34	\$0.59

# Spot price \$14 658/MWh

Table 36: Victoria price setter 6.30 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
6.05 pm	\$14 700	Snowy Hydro	TUMUT3	Energy	\$14 700.00	1.17	\$17 199
		Snowy Hydro	TUMUT3	Raise 5 min	\$0	-1.17	\$0
		EnergyAustralia	YWPS2	Raise 5 min	\$100	1.17	\$117
6.10 pm	\$1 454.65	CS Energy	GSTONE5	Energy	-\$1 000	-1.54	\$1 540
		Hydro Tasmania	POAT220	Energy	-\$0.70	1.12	-\$0.78
		CleanCO	SWAN_E	Energy	\$46	1.54	\$70.84
		CleanCO	SWAN_E	Lower reg	\$2.28	1.54	\$3.51
		Origin Energy	ER01	Lower reg	\$45.90	-1.54	-\$70.69
		AGL Energy	LYA4	Raise 5 min	\$0	1.54	\$0
		Stanwell	TARONG#	Raise 5 min	\$3.89	-1.54	-\$5.99
		AGL Energy	LYA4	Raise reg	\$0	-1.54	\$0
		CS Energy	GSTONE5	Raise reg	\$45.73	1.54	\$70.42
		AGL Energy	LYA4	Raise 60 sec	\$0	1.54	\$0
		EnergyAustralia	MP1	Raise 60 sec	\$301	-0.51	-\$153.51
		AGL Energy	LYA4	Raise 6 sec	\$0	1.03	\$0
6.15 pm	\$14 700	Origin Energy	MORTLK1	Energy	\$14 700	0.10	\$1 470
		Origin Energy	MORTLK1	Energy	\$14 700	0.10	\$1 470
		Snowy Hydro	MURRAY	Energy	\$14 700	0.80	\$11 760
6.20 pm	\$14 700	AGL Energy	BW02	Energy	-\$1 000	-1.65	\$1 650
		AGL Energy	BW03	Energy	-\$1 000	1.65	-\$1 650
		Stanwell	TARONG#	Energy	-\$1 000	-0.83	\$830
		Stanwell	TARONG#	Energy	-\$1 000	-0.83	\$830
		Hydro Tasmania	POAT220	Energy	\$12	1.13	\$13.56
		Millmerran	MPP_2	Energy	\$25	1.65	\$41.25
		EnergyAustralia	MP1	Lower reg	\$31.81	-1.03	-\$32.76

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
		Hydro Tasmania	MACKNTS	Lower reg	\$33	1.03	\$33.99
		EnergyAustralia	YWPS4	Lower 60 sec	\$0.17	-1.03	-\$0.18
		Hydro Tasmania	POAT220	Lower 60 sec	\$0.44	1.03	\$0.45
		AGL Energy	BW02	Raise 5 min	\$0.45	1.65	\$0.74
		Stanwell	TARONG#	Raise 5 min	\$3.89	-1.65	-\$6.42
		EnergyAustralia	MP1	Raise 5 min	\$249	1.03	\$256.47
		AGL Energy	BW03	Raise reg	\$1	-1.65	-\$1.65
		Stanwell	TARONG#	Raise reg	\$115.99	0.83	\$96.27
		Stanwell	TARONG#	Raise reg	\$115.99	0.83	\$96.27
		AGL Energy	BW02	Raise 60 sec	\$0.45	1.03	\$0.46
		AGL Energy	BW02	Raise 6 sec	\$0.45	1.03	\$0.46
6.25 pm	\$14 700	CS Energy	GSTONE5	Energy	-\$1 000	-1.00	\$1 000
		Origin Energy	ER03	Energy	-\$1 000	-1.00	\$1 000
		Millmerran	MPP_2	Energy	\$25	1.00	\$25
		Delta Electricity	VP5	Energy	\$300	0.50	\$150
		Delta Electricity	VP6	Energy	\$300	0.50	\$150
		AGL Hydro	WKIEWA1	Energy	\$14 700	1.00	\$14 700
		Stanwell	TARONG#	Raise 5 min	\$1.89	-1.00	-\$1.89
		Origin Energy	ER03	Raise 5 min	\$2.79	1.00	\$2.79
		CS Energy	GSTONE5	Raise reg	\$84.73	1.00	\$84.73
		Delta Electricity	VP5	Raise reg	\$100	-0.50	-\$50
		Delta Electricity	VP6	Raise reg	\$100	-0.50	-\$50
		AGL Hydro	WKIEWA1	Raise 60 sec	\$0.50	-1.00	-\$0.50
		Origin Energy	ER03	Raise 60 sec	\$2.80	1.00	\$2.80
		AGL Hydro	WKIEWA1	Raise 6 sec	\$0.50	-1.00	-\$0.50
		Origin Energy	ER03	Raise 6 sec	\$1.74	1.00	\$1.74
6.30 pm	\$14 700	Origin Energy	ER04	Energy	-\$1 000	-1.00	\$1 000
		EnergyAustralia	BALBG1	Energy	\$1 470	1.00	\$14 700
		Snowy Hydro	GUTHEGA	Energy	\$14 700	0.03	\$441
		Snowy Hydro	TUMUT3	Energy	\$14 700	0.71	\$10 437
		Snowy Hydro	UPPTUMU	Energy	\$14 700	0.26	\$3 822
		EnergyAustralia	BALBG1	Raise 5 min	\$0	-1.00	\$0
		Origin Energy	ER04	Raise 5 min	\$2.79	1.00	\$2.79
		EnergyAustralia	BALBG1	Raise 60 sec	\$0	-1.00	\$0
		Origin Energy	ER04	Raise 60 sec	\$2.80	1.00	\$2.80
		EnergyAustralia	BALBG1	Raise 6 sec	\$0	-1.00	\$0
		Origin Energy	ER04	Raise 6 sec	\$1.74	1.00	\$1.74

Spot price \$12 492/MWh

Table 37: Victoria price setter 7 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
6.35 pm \$14 700	Origin Energy	ER03	Energy	-\$1 000	-1	\$1 000	
	EnergyAustralia	BALBG1	Energy	\$14 700	1	\$14 700	
		Snowy Hydro	TUMUT3	Energy	\$14 700	1	\$14 700
		EnergyAustralia	BALBG1	Raise 5 min	\$0	-1	\$0
		Origin Energy	ER03	Raise 5 min	\$2.79	1	\$2.79
		EnergyAustralia	BALBG1	Raise 60 sec	\$0	-1	\$0
		Origin Energy	ER03	Raise 60 sec	\$2.80	1	\$2.80
		EnergyAustralia	BALBG1	Raise 6 sec	\$0.49	-1	-\$0.49
		Origin Energy	ER03	Raise 6 sec	\$1.74	1	\$1.74
6.40 pm	\$14 700	Origin Energy	MORTLK1	Energy	\$14 700	0.46	\$6 762
		Origin Energy	MORTLK1	Energy	\$14 700	0.46	\$6 762
		AGL Hydro	WKIEWA2	Energy	\$14 700	0.08	\$1 176
6.45 pm	\$14 698.97	Origin Energy	MORTLK1	Energy	\$14 700	0.50	\$7 350
		Origin Energy	MORTLK1	Energy	\$14 700	0.50	\$7 350
		AGL (SA)	TORRB3	Lower 60 sec	\$1.00	-1	-\$1
		AGL (SA)	TORRA2	Lower 6 sec	\$0.03	-1	-\$0.03
6.50 pm	\$14 694.13	AGL (SA)	BARKIPS1	Energy	\$68	0.52	\$35.36
		AGL (SA)	TORRA1	Energy	\$87	-0.19	-\$16.53
		AGL (SA)	TORRA2	Energy	\$87	-0.16	-\$13.92
		AGL (SA)	TORRA4	Energy	\$87	-0.16	-\$13.92
		Origin Energy	MORTLK1	Energy	\$14 700	0.50	\$7 350
		Origin Energy	MORTLK1	Energy	\$14 700	0.50	\$7 350
		AGL (SA)	TORRA1	Lower reg	\$28.96	-0.19	-\$5.50
		AGL (SA)	TORRA2	Lower reg	\$28.96	-0.16	-\$4.63
		AGL (SA)	TORRA4	Lower reg	\$28.96	0.36	\$10.43
		AGL (SA)	TORRA4	Lower 60 sec	\$0.45	-1	-\$0.45
		AGL (SA)	TORRB1	Lower 6 sec	\$0.04	-1	-\$0.04
		AGL (SA)	TORRA4	Raise 60 sec	\$0.50	-1	-\$0.50
		AGL (SA)	TORRB3	Raise 60 sec	\$5	1	\$5.00
6.55 pm	\$137.76	Origin Energy	URANQ11	Energy	-\$1 000	0.04	-\$40
		Origin Energy	URANQ12	Energy	-\$1 000	0.04	-\$40
		Origin Energy	URANQ13	Energy	-\$1 000	0.04	-\$40
		Origin Energy	URANQ14	Energy	-\$1 000	0.04	-\$40
		Origin Energy	ER03	Energy	-\$1 000	-1.03	\$1 030
		Origin Energy	SHGEN	Energy	-\$1 000	0.05	-\$5
		Marubeni	SITHE01	Energy	-\$1 000	0.02	-\$20

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
		Snowy Hydro	CG1	Energy	-\$1 000	0.04	-\$40
		Snowy Hydro	CG2	Energy	-\$1 000	0.04	-\$40
		Snowy Hydro	CG3	Energy	-\$1 000	0.04	-\$40
		Snowy Hydro	CG4	Energy	-\$1 000	0.04	-\$40
		Snowy Hydro	TUMUT3	Energy	-\$1 000	0.40	-\$400
		Snowy Hydro	UPPTUMU	Energy	-\$1 000	0.10	-\$100
		EnergyAustralia	MP1	Energy	-\$1 000	0.14	-\$140
		Hydro Tasmania	JBUTTER	Energy	-\$0.92	1.12	-\$1.03
		Origin Energy	ER03	Raise 60 sec	\$47.99	1.03	\$49.43
		EnergyAustrali	MP1	Raise 6 sec	\$87	1.03	\$89.61
7 pm	\$0	AGL Hydro	MCKAY1	Energy	\$0	1.00	\$0

Spot price \$9 822/MWh

# **Appendix D: Relevant market notices**

The following market notices were used to notify the market of the unplanned network outage, lack of reserves and engagement of Reliability and Emergency Reserve Trader contracts. Further detail can be found on AEMO's Market Notices website.<sup>5</sup>

**Table 38: Market Notices relating to 31 January** 

Market Notice	Date	Time	Description	Region	Time affected
73091	30-Jan	1.02 pm	LOR2 (Forecast)	Victoria	3.30 pm – 5 pm
73092	30 Jan	1.09 pm	LOR1 (Forecast)	Victoria	5 pm – 5.30 pm
73093	30 Jan	1.13 pm	LOR1 (Forecast correction)	Victoria	5 pm – 5.30 pm
73094	30 Jan	1.15 pm	LOR1 (Forecast)	New South Wales	4 pm – 4.30 pm
73099	30 Jan	1.55 pm	LOR2 (Forecast update)	Victoria	3.30 pm – 5 pm
73100	30 Jan	1.59 pm	LOR2 (Forecast update)	Victoria	3.30 pm – 5 pm
73164	30 Jan	10.09 pm	LOR1 (Forecast)	New South Wales	3.30 pm – 6.30 pm
73163	30 Jan	10.09 pm	LOR1 (Forecast update)	Victoria	3.30 pm – 6.30 pm
73165	31 Jan	5.07 am	LOR1 (Forecast update)	Victoria	4 pm – 5 pm
73167	31 Jan	7.22 am	LOR1 (Forecast update)	New South Wales	3.30 pm – 5 pm
73169	31 Jan	12.41 pm	LOR1 (Forecast)	Victoria	3 pm – 5 pm
73172	31 Jan	1.321 pm	Vic-SA separation event	-	
73173	31 Jan	1.47 pm	LOR2 (Forecast)	Victoria	3 pm – 6 pm
73174	31 Jan	1.51 pm	RERT (Intention to negotiate for additional reserve)	Victoria	3 pm – 6 pm
73176	31 Jan	2.02 pm	Non-credible contingency event (Moorabool to Mortlake and Moorabool to Haunted Gulley trip)	-	-
73181	31 Jan	2.04 pm	LOR2 (Forecast correction)	Victoria	3 pm – 6 pm
73183	31 Jan	2.16 pm	LOR2 (Actual)	Victoria	2 pm onwards
73187	31 Jan	2.26 pm	RERT (Activated)	Victoria	3.30 pm – 9.30 pm

<sup>5</sup> AEMO market notices

Electricity spot prices above \$5000/MWh - 31 Janaury 2020

Market Notice	Date	Time	Description	Region	Time affected
73188	31 Jan	3.01 pm	LOR2 (Actual)	New South Wales	3 pm onwards
73189	31 Jan	3.03 pm	RERT (Intention to negotiate for additional reserve)	New South Wales	3.30 pm – 8 pm
73191	31 Jan	3.14 pm	RERT (Intention to negotiate for additional reserve)	New South Wales	3.30 pm – 9 pm
73195	31 Jan	3.57 pm	RERT (Activated)	New South Wales	4 pm – 9 pm
73215	31 Jan	5.21 pm	Update - Non-credible contingency event (Moorabool to Mortlake and Moorabool to Haunted Gulley trip)	-	-
73231	31 Jan	7.21 pm	LOR2 (Actual cancelled)	New South Wales	3 pm - 7.20 pm
73232	31 Jan	7.34 pm	LOR2 (Actual cancelled)	Victoria	2 pm – 7.30 pm
73234	31 Jan	7.50 pm	LOR1 (Forecast cancelled)	New South Wales	-
73236	31 Jan	7.55 pm	LOR1 (Forecast cancelled)	Victoria	-
73242	31 Jan	9.38 pm	RERT (Cancelled)	New South Wales	5 pm – 9 pm
73243	31 Jan	9.38 pm	RERT (Cancelled)	Victoria	3.30 pm – 9.30 pm