

# Electricity spot prices above \$5000/MWh

11 January 2010  
South Australia and Victoria



AUSTRALIAN ENERGY  
REGULATOR

## Introduction

The AER is required to publish a report whenever the electricity spot price exceeds \$5000/MWh.<sup>1</sup> The report:

- describes the significant factors contributing to the spot price exceeding \$5000/MWh, including factors such as 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.

## Summary

On Monday 11 January 2010, the spot price in Victoria exceeded \$5000/MWh for six trading intervals between 2.30 pm and 5.30 pm inclusive. The spot price in South Australia exceeded \$5000/MWh for eight trading intervals between 1.30 pm and 5.30 pm inclusive. The prices prior to the 3 pm trading interval were significantly higher than forecast.

High temperatures in Melbourne (up to 42.8°C) and Adelaide (up to 41°C), saw demand in Victoria reaching a maximum of 9879 MW at 4 pm and in South Australia a maximum of 3089 MW at 4.30 pm<sup>2</sup>. Actual demand in Victoria was up to 540 MW greater than forecast 4 hours ahead.

Import capability into Victoria from New South Wales and into South Australia from Victoria were both up to 400 MW lower than forecast 4 hours ahead.

Day-ahead bidding by LYMMCO saw around 650 MW priced at above \$8700/MWh. This high-priced capacity combined with rebidding of capacity into higher prices by International Power contributed to the high prices in Victoria.

Day-ahead bidding by AGL significantly contributed to the spot prices exceeding \$5000/MWh in South Australia. AGL was the only participant with offers above \$5000/MWh during the high-price period, with around two thirds of its available capacity at Torrens Island Power Station priced at close to the price cap.

Rebidding did not contribute to the high prices in South Australia.

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<sup>1</sup> This requirement is set out in clause 3.13.7 (d) of the National Electricity Rules.

<sup>2</sup> The record demand in Victoria is 10445 MW and the record demand in South Australia is 3318 MW.

## Actual and forecast demand

Figure 1 compares the actual demand, spot price and available capacity in Victoria with that forecast by the Australian Energy Market Operator (AEMO) 4 and 12 hours ahead of dispatch, during the high-price period. Conditions at the time saw demand up to 540 MW higher than forecast (2.30 pm) and available generation capacity up to 250 MW lower than forecast, 4 hours ahead (2.30 pm and 3 pm).

*Figure 1: Victoria actual and forecast demand, spot price and available capacity*

<b>Time</b>		<b>Actual</b>	<b>4 hr forecast</b>	<b>12 hr forecast</b>
<b>2.30 pm</b>	Spot price (\$MW/h)	6839	129	129
	Demand (MW)	9804	9262	9121
	Available capacity (MW)	10 044	10 296	10 308
<b>3.00 pm</b>	Spot price (\$MW/h)	9195	308	9049
	Demand (MW)	9751	9321	9282
	Available capacity (MW)	10 041	10 291	10 308
<b>3.30 pm</b>	Spot price (\$MW/h)	9194	8220	8563
	Demand (MW)	9839	9372	9374
	Available capacity (MW)	10 083	10 276	10 308
<b>4.00 pm</b>	Spot price (\$MW/h)	9200	9402	8694
	Demand (MW)	9879	9548	9425
	Available capacity (MW)	10 063	10 179	10 308
<b>4.30 pm</b>	Spot price (\$MW/h)	8853	9251	8756
	Demand (MW)	9846	9503	9421
	Available capacity (MW)	10 042	10 160	10 308
<b>5.00 pm*</b>	Spot price (\$MW/h)	4458	8216	8757
	Demand (MW)	9589	9360	9419
	Available capacity (MW)	10 057	10 219	10 303
<b>5.30 pm</b>	Spot price (\$MW/h)	5943	1573	8564
	Demand (MW)	9570	9243	9332
	Available capacity (MW)	10 035	10 179	10 303

\* Spot price is less than \$5000/MWh, but is included for completeness.

Figure 2 compares the actual demand, spot price and available capacity in South Australia with that forecast by AEMO 4 and 12 hours ahead of dispatch, during the high-price period. Conditions at the time saw demand up to 245 MW lower than forecast and available generation capacity up to 225 MW higher than forecast.

**Figure 2: South Australia actual and forecast demand, spot price and available capacity**

<b>Time</b>		<b>Actual</b>	<b>4 hr forecast</b>	<b>12 hr forecast</b>
<b>1.30 pm</b>	Spot price (\$MW/h)	5551	299	119
	Demand (MW)	3023	3111	2968
	Available capacity (MW)	3327	3189	3164
<b>2.00 pm</b>	Spot price (\$MW/h)	8524	488	133
	Demand (MW)	3005	3184	3028
	Available capacity (MW)	3341	3199	3161
<b>2.30 pm</b>	Spot price (\$MW/h)	7618	1000	142
	Demand (MW)	2990	3217	3051
	Available capacity (MW)	3355	3190	3157
<b>3.00 pm</b>	Spot price (\$MW/h)	9100	1000	9746
	Demand (MW)	3002	3251	3089
	Available capacity (MW)	3344	3192	3153
<b>3.30 pm</b>	Spot price (\$MW/h)	9100	9100	9100
	Demand (MW)	3033	3276	3137
	Available capacity (MW)	3329	3181	3145
<b>4.00 pm</b>	Spot price (\$MW/h)	9115	9999	9100
	Demand (MW)	3085	3297	3170
	Available capacity (MW)	3288	3063	3134
<b>4.30 pm</b>	Spot price (\$MW/h)	9100	9844	9100
	Demand (MW)	3089	3310	3165
	Available capacity (MW)	3265	3157	3196
<b>5.00 pm*</b>	Spot price (\$MW/h)	4640	9100	9100
	Demand (MW)	3077	3302	3146
	Available capacity (MW)	3238	3174	3161
<b>5.30 pm</b>	Spot price (\$MW/h)	6099	1743	9100
	Demand (MW)	3021	3252	3099
	Available capacity (MW)	3229	3172	3175

\* Spot price is less than \$5000/MWh, but is included for completeness.

## **Generator offers**

### *Victoria*

During the high-price period, around 11 per cent of the total capacity in Victoria was priced above \$5000/MWh.

Around 10 500 MW of available capacity was offered through initial offers (the day ahead). Around 8900 MW of this capacity (85 per cent) was priced below \$300/MWh and the remainder (1600 MW) was priced at above \$8700/MWh. The majority of the capacity priced above \$8700/MWh was offered by LYMMCO at Loy Yang A and by Ecogen at its Jeeralang gas turbine and Newport plants (up to 400 MW remained priced above \$9600/MWh during the high price period).

With no capacity priced between \$300/MWh and \$8700/MWh, any reductions in import capability, rebidding of capacity into high price bands or increases in demand, had the potential to result in a significant jump in the spot price.

During the time of high prices there was up to 205 MW of wind generation, all sourced from non-scheduled plants<sup>3</sup>. Actual wind generation during this time was close to that forecast 4 hours ahead.

The closing bids for all participants in Victoria with capacity priced at or above \$5000/MWh for the high-price period are presented in **Appendix A**. Details regarding the generators involved in setting the price during the high-price period, and how that price was determined by the market systems are presented in **Appendix B**.

#### *South Australia*

Up to 3250 MW of available capacity was offered through initial offers (day-ahead bidding). Around 2250 MW of this capacity (70 per cent) was priced below \$100/MWh and 485 MW of capacity from AGL was priced above \$9000/MWh. A further 515 MW was offered at greater than \$100/MWh but all of this was rebid into lower prices on the evening of 10 January.

With no capacity priced between \$100/MWh and \$9000/MWh, any reductions in import capability, rebidding of capacity into high price bands or increases in demand, had the potential to result in a significant jump in the spot price.

The only low-cost generation that was not offered in on the day was 320 MW at AGL's Torrens Island Power Station in South Australia (120 MW at Torrens Island A unit 3 and 200 MW at Torrens Island B unit 1).

During the time of high prices there was up to 650 MW of wind generation (the highest daytime output from South Australian wind generation for the month). Around 280 MW of this generation was from non-scheduled plants (South Australia has a large amount of non-scheduled wind generation). This output was around 25 per cent higher than forecast 4 hours ahead.

AGL was the only participant with offers above \$5000/MWh during the high-price period, with around two thirds of the capacity at Torrens Island Power Station priced at close to the price cap. This is presented in **Appendix A**. Dispatch of this capacity set the price at greater than \$9100/MWh for 43 out of 54 dispatch intervals in South Australia during this period. Details regarding the generators involved in setting the price during the high-price period, and how that price was determined by the market systems are presented in **Appendix B**.

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<sup>3</sup> With the advent of significant non-scheduled generation, AEMO commenced publishing "native demand". This is the demand supplied by scheduled, semi-scheduled or significant non-scheduled generators. The native demand less the non-scheduled generation is the demand that is met by scheduled and semi-scheduled generators in the dispatch process, and the focus of this report.

## Rebidding

### *Victoria*

Over 10 rebids from 11.51 am, Yallourn reduced the available capacity at Yallourn Power Station by 95 MW. The reasons given for the rebids related to plant or high ambient temperature issues.

At 12.15 pm International Power rebid up to 190 MW of capacity at Loy Yang B from prices below \$12/MWh to above \$1520/MWh. This rebid applied throughout the period of high prices. At the same time, 195 MW across Hazelwood units three to seven was shifted from prices below \$15/MWh to above \$4800/MWh (with 100 MW priced above \$9600/MWh) for just the 2.30 pm trading interval. This rebid also shifted around 50 MW of capacity priced above \$9000/MWh (that was offered in the day-ahead) into prices below \$5000/MWh for the 3 pm to 5 pm trading intervals.

Over several rebids from 2.36 pm, Ecogen shifted 150 MW of available capacity across Jeeralang A units two and four and Jeeralang B units one, two and three, from prices above \$9620/MWh to prices below \$280/MWh. The reasons given were “14:34P Band adj – redistribution of MW”, “14:57P Band adj redistribution of MWs across portfolio”, “15:55P Band adj due to portfolio plant conditions” and “16:03P Band adj redistributions of MWs across portfolio”. Some of these rebids were effective from the 3.30 pm trading interval and all of them were effective for the 4.30 pm trading interval.

There was no other significant rebidding in Victoria.

### *South Australia*

Around 515 MW of capacity was shifted from greater than \$100/MWh into lower prices on the evening of 10 January. There was no other significant rebidding in South Australia.

## Changes to network availability

### *Victoria*

Figure 3 compares the actual import limit with that forecast 4 hours ahead during the high-price periods for the New South Wales to Victoria interconnector. It also highlights the forecast error. Import capability from Tasmania across Basslink was close to forecast.

**Figure 3 Actual and 4 hour ahead forecast import limits into Victoria**

	NSW-VIC (MW)		Forecast error (MW)
	Actual	4hr	
3.00 pm	269	687	-418
3.30 pm	253	385	-132
4.00 pm	279	407	-128
4.30 pm	407	407	0
5.00 pm	373	420	-47
5.30 pm	290	798	-508

Higher output from Snowy Hydro’s Murray generator (located in the Victorian region) compared to forecast contributed to a reduction in import capability from New South Wales into Victoria.

## *South Australia*

Figure 5 compares the actual import limit with that forecast 4 hours ahead across the Heywood and Murraylink interconnectors into South Australia during the constrained period between 1.30 pm and 2.30 pm. It also highlights the combined forecast error.

Combined imports into South Australia during this period were lower than that forecast 4 hours ahead. The average forecast error was 320 MW.

**Figure 5 Actual and 4 hour ahead forecast import limits into South Australia**

	Heywood import limit		Murraylink import limit		Combined forecast error (MW)
	Actual (MW)	4 hour forecast (MW)	Actual (MW)	4 hour forecast (MW)	
1.30 pm	289	374	-41	175	-301
2.00 pm	270	364	-54	167	-315
2.30 pm	166	362	-41	162	-400

The import limit (into South Australia) across the Heywood interconnector was driven by the constraint used to manage the flows across one of the Snuggery to Keith lines for the possible loss of the other Snuggery to Keith line. This constraint has the effect of limiting flow across the Heywood interconnector and restricts generation at Lake Bonney, Ladbroke Grove and Snuggery.

The import limit (into South Australia) across the Murraylink interconnector was also lower than forecast, driven by another constraint. In this case, it was the constraint that protects against overloading of the Ballarat to Bendigo line should there be a loss of the Bendigo to Shepparton line. Imports into South Australia decreased from around 30 MW at 11 am reversing direction to 70 MW into Victoria at 2 pm, which was a “counter-price” flow (i.e. energy was flowing from a high-priced region to a lower-priced region).

For the 1.30 pm and 2 pm trading intervals, Murraylink and Heywood were constrained (or flows into South Australia were at the limit). For the 2.30 pm to 5 pm trading intervals, however, the interconnectors were unconstrained. As a result, the Victoria and South Australia regions were effectively one combined region with comparable prices.

## **Australian Energy Regulator**

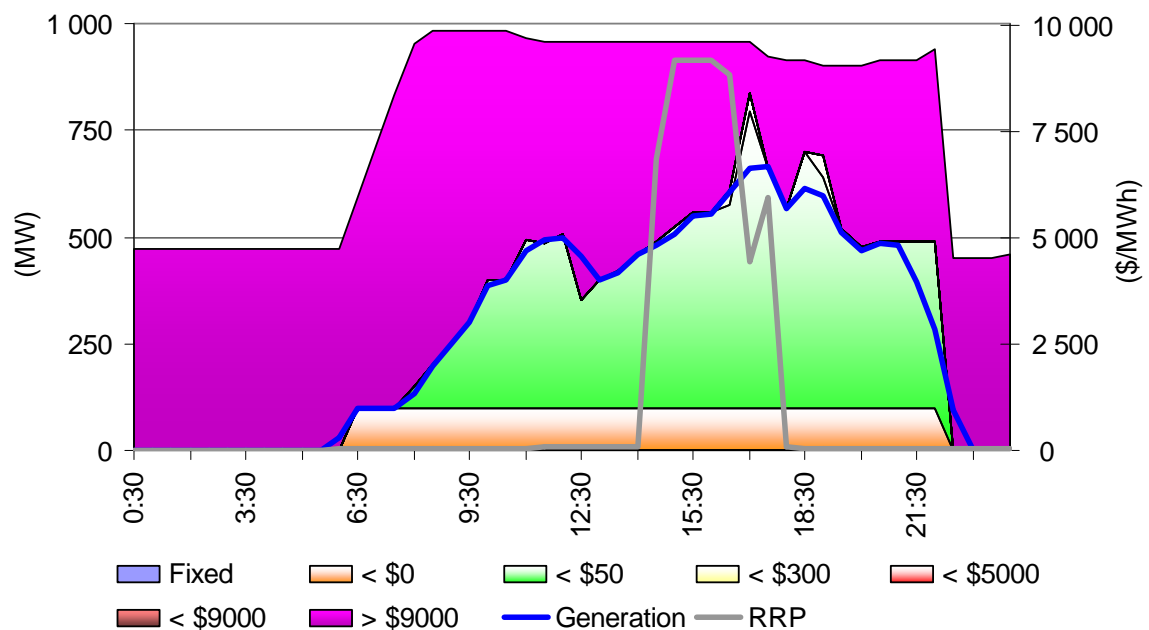
**March 2010**

## Appendix A – Closing bids

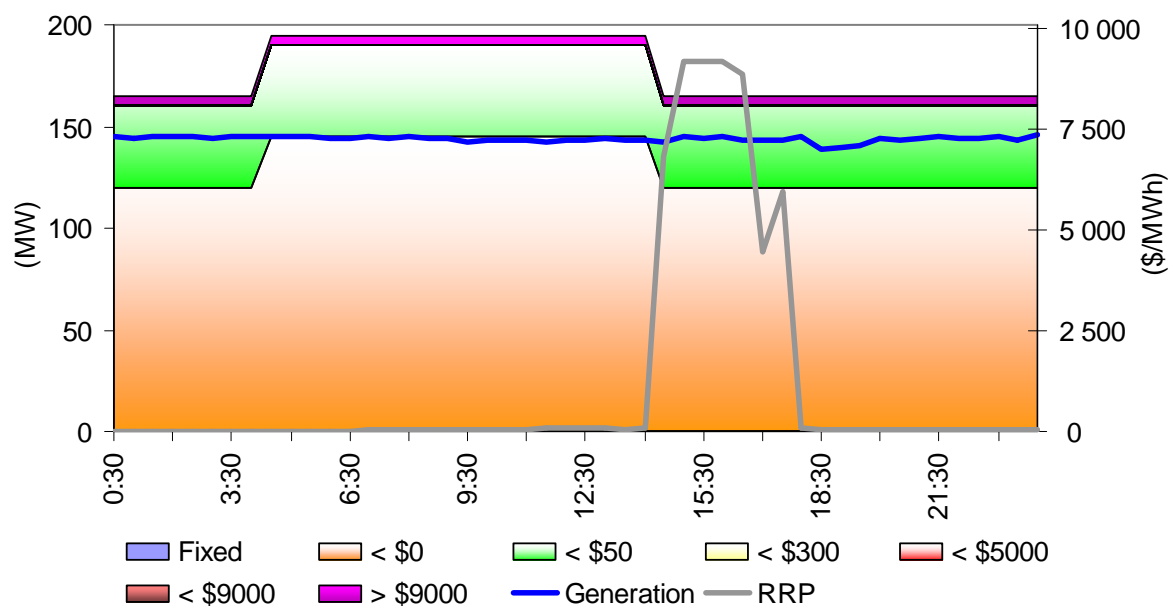
Figures A1 – A4 highlight the half hour closing bids for participants in Victoria with significant capacity priced at or above \$5000/MWh during the trading intervals in which the spot price exceeded \$5000/MWh. It also shows the generation output of that participant and the spot price. Figures A5 and A6 highlight the half hour closing bids for participants in South Australia with significant capacity priced at or above \$5000/MWh during the trading intervals in which the spot price exceeded \$5000/MWh

### Victoria

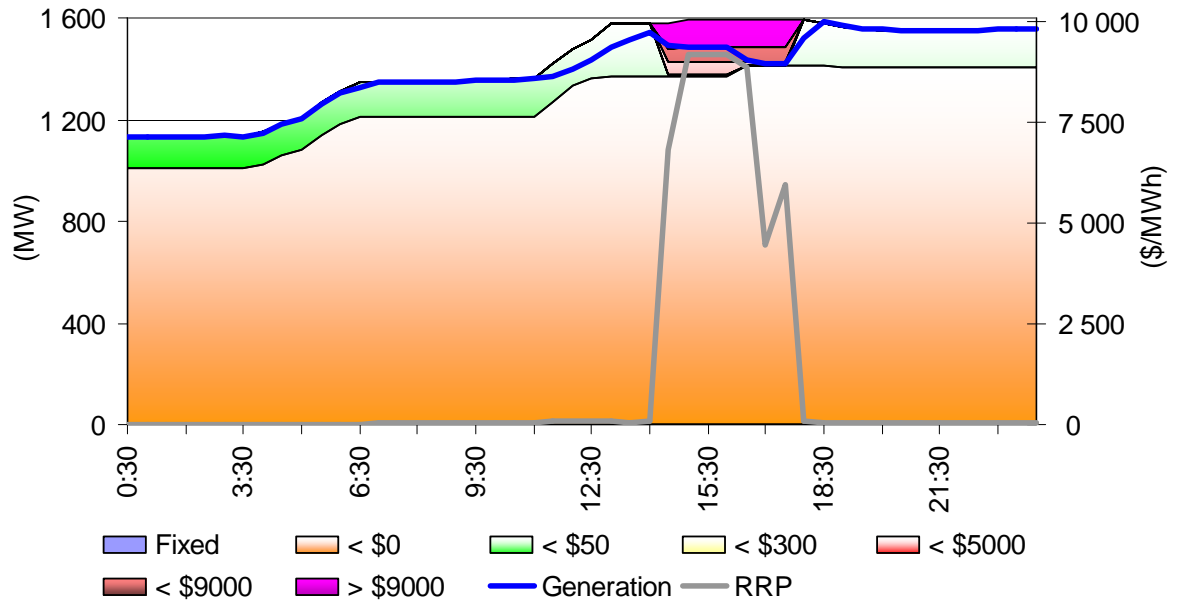
**Figure A1: Ecogen Energy closing bid prices, dispatch and spot price**



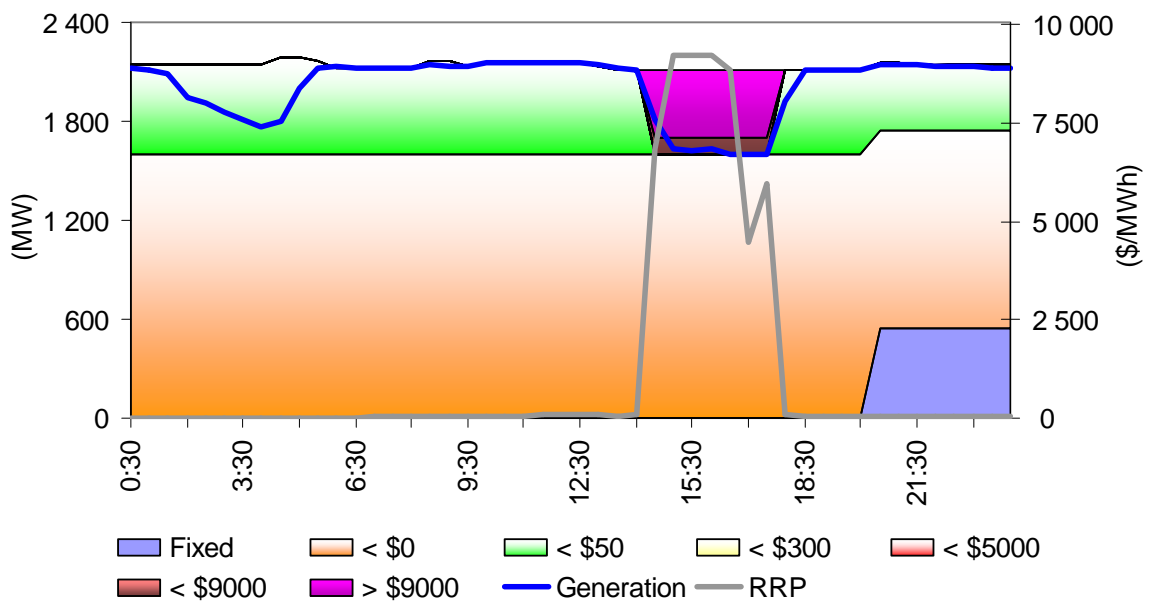
**Figure A2: Energy Brix closing bid prices, dispatch and spot price**



**Figure A3: Hazelwood Power (International Power) closing bid prices, dispatch and spot price**



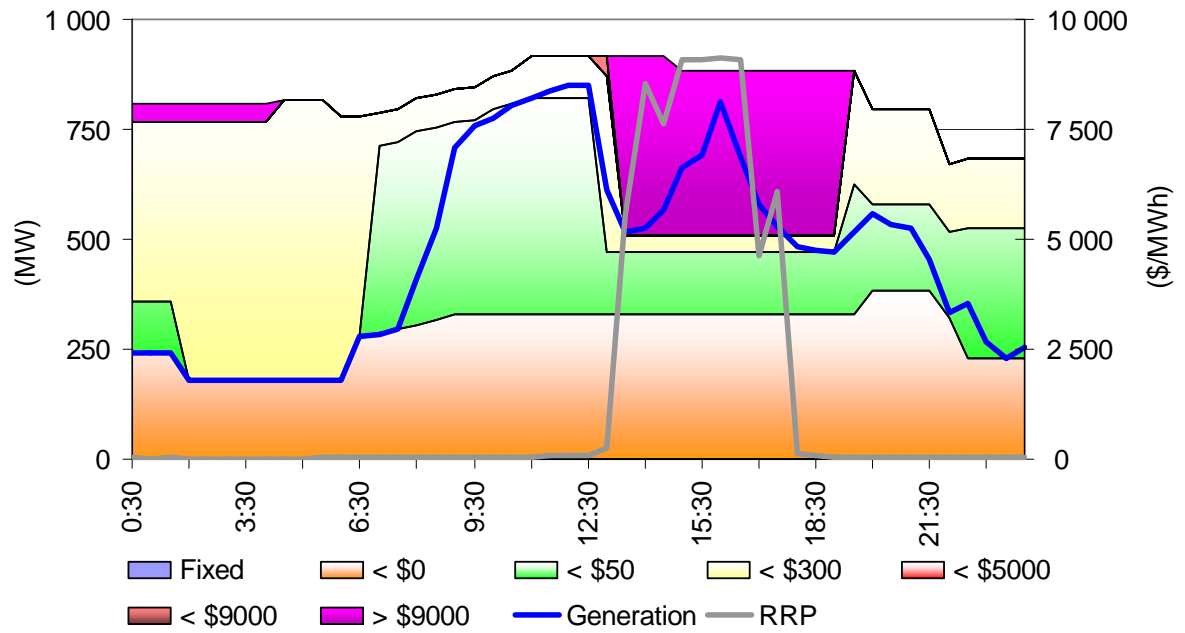
**Figure A4: Loy Yang Marketing Management Company closing bid prices, dispatch and spot price**



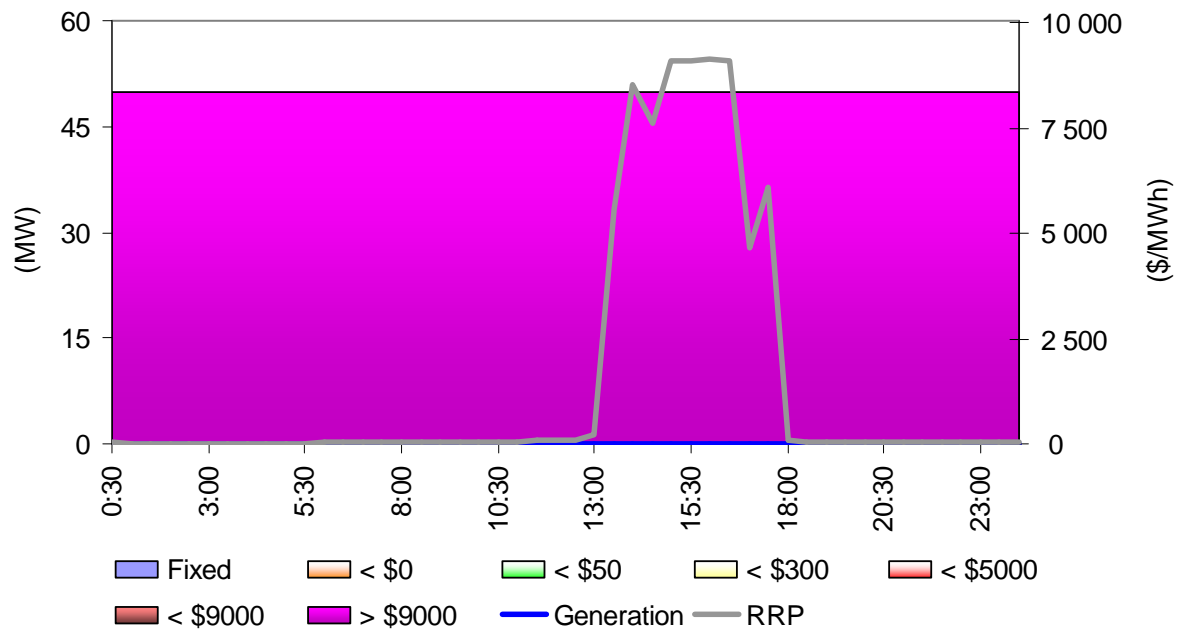


*South Australia*

*Figure A5: AGL (Torrens Island) closing bid prices, dispatch and spot price*



*Figure A6: AGL (Angaston) closing bid prices, dispatch and spot price*



## Appendix B – Price setters for Monday 11 January 2010

### Victoria

The following tables identify the trading intervals in which the spot price exceeded \$5000/MWh in Victoria. Each five minute dispatch interval price and the generating units involved in setting the energy price, as published in the market systems, are shown. This information is published by AEMO<sup>4</sup>. Also shown is the energy or ancillary service offer price involved in determining the dispatch price together with the quantity of that service and the contribution to the total energy price. The 30-minute spot price is the time weighted average of the six dispatch interval prices.

#### Victoria 11 January - 2.30 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
14:05	\$1573.89	International Power	LOYB2	Energy	\$1573.89	1.00	\$1573.89
14:10	\$1573.99	International Power	LOYB1	Energy	\$1573.99	1.00	\$1573.99
14:15	\$9716.05	AGL SA	TORRB2	Energy	\$9999.77	0.21	\$2095.65
		AGL SA	TORRA2	Energy	\$9999.77	0.11	\$1143.07
		AGL SA	TORRA4	Energy	\$9999.77	0.11	\$1143.07
		AGL SA	TORRB4	Energy	\$9999.77	0.21	\$2095.65
		AGL SA	TORRB3	Energy	\$9999.77	0.21	\$2095.65
		AGL SA	TORRA1	Energy	\$9999.77	0.11	\$1143.07
14:20	\$9249.30	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
14:25	\$9799.84	AGL SA	TORRB4	Energy	\$9999.77	0.21	\$2113.65
		AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1152.87
		AGL SA	TORRB2	Energy	\$9999.77	0.21	\$2113.65
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1152.87
		AGL SA	TORRB3	Energy	\$9999.77	0.21	\$2113.65
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1152.87
14:30	\$9125.87	AGL SA	TORRA4	Energy	\$9100.77	0.33	\$3041.93
		AGL SA	TORRA2	Energy	\$9100.77	0.33	\$3041.93
		AGL SA	TORRA1	Energy	\$9100.77	0.33	\$3041.93
<b>Spot price</b>	<b>\$6840/MWh</b>						

#### Victoria 11 January – 3 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
14:35	\$9251.40	Loy Yang	LYA4	Energy	\$9251.40	1.00	\$9251.40
14:40	\$9249.30	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
14:45	\$9249.69	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
		Loy Yang	LYA3	Raise reg	\$0.10	-1.00	-\$0.10
		Stanwell	STAN-3	Raise reg	\$0.49	1.00	\$0.49
14:50	\$9249.30	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
14:55	\$9124.15	AGL SA	TORRB2	Energy	\$9100.77	0.29	\$2606.92
		AGL SA	TORRA2	Energy	\$9100.77	0.14	\$1303.41
		AGL SA	TORRA4	Energy	\$9100.77	0.14	\$1303.41
		AGL SA	TORRB4	Energy	\$9100.77	0.29	\$2606.92
		AGL SA	TORRA1	Energy	\$9100.77	0.14	\$1303.41
		AGL SA	TORRB2	Lower reg	\$0.80	-0.29	-\$0.23
		AGL SA	TORRB3	Lower reg	\$0.80	0.29	\$0.23
15:00	\$9049.49	International Power	HWPS8	Energy	\$9049.49	1.00	\$9049.49
<b>Spot price</b>	<b>\$9196/MWh</b>						

<sup>4</sup> Details on how the price is determined can be found at [www.aemo.com.au](http://www.aemo.com.au)

### Victoria 11 January - 3.30 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
15:05	\$9249.70	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
		Eraring Energy	ER01	Raise reg	\$0.50	1.00	\$0.50
		Loy Yang	LYA3	Raise reg	\$0.10	-1.00	-\$0.10
15:10	\$9249.30	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
15:15	\$8997.29	AGL SA	TORRB2	Energy	\$9100.77	0.22	\$1999.44
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$999.72
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$999.72
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$999.72
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$1999.44
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$1999.44
15:20	\$9169.05	AGL SA	TORRA1	Energy	\$9100.77	0.25	\$2292.30
		AGL SA	TORRA2	Energy	\$9100.77	0.25	\$2292.30
		AGL SA	TORRB3	Energy	\$9100.77	0.50	\$4584.51
15:25	\$9249.30	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
15:30	\$9249.90	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
		Eraring Energy	ER03	Raise reg	\$0.70	1.00	\$0.70
		Loy Yang	LYA3	Raise reg	\$0.10	-1.00	-\$0.10
<b>Spot price</b>		<b>\$9194/MWh</b>					

### Victoria 11 January - 4 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
15:35	\$9251.80	Loy Yang	LYA4	Energy	\$9251.40	1.00	\$9251.40
		Eraring Energy	ER01	Raise reg	\$0.50	1.00	\$0.50
		Loy Yang	LYA4	Raise reg	\$0.10	-1.00	-\$0.10
15:40	\$9251.43	AGL SA	TORRB3	Energy	\$9100.77	1.02	\$9251.30
		Hydro Tasmania	CETHANA	Lower reg	\$1.30	1.02	\$1.32
		AGL SA	TORRB3	Lower reg	\$0.80	-1.02	-\$0.81
		Hydro Tasmania	CETHANA	Lower 5 min	\$0.40	-1.02	-\$0.41
		CS Energy	SWAN_B_4	Lower 5 min	\$0.01	1.02	\$0.01
15:45	\$9249.30	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
15:50	\$9249.30	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
15:55	\$9249.30	Loy Yang	LYA3	Energy	\$9249.30	1.00	\$9249.30
16:00	\$8951.85	AGL SA	TORRA1	Energy	\$9100.77	0.16	\$1491.98
		AGL SA	TORRA2	Energy	\$9100.77	0.16	\$1491.98
		AGL SA	TORRB4	Energy	\$9100.77	0.33	\$2983.96
		AGL SA	TORRB2	Energy	\$9100.77	0.33	\$2983.96
<b>Spot price</b>		<b>\$9201/MWh</b>					

### Victoria 11 January – 4.30 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
16:05	\$8869.65	AGL SA	TORRB4	Energy	\$9100.77	0.28	\$2534.20
		AGL SA	TORRB2	Energy	\$9100.77	0.28	\$2534.20
		AGL SA	TORRA4	Energy	\$9100.77	0.14	\$1267.10
		AGL SA	TORRA1	Energy	\$9100.77	0.14	\$1267.10
		AGL SA	TORRA2	Energy	\$9100.77	0.14	\$1267.10
16:10	\$8872.09	AGL SA	TORRA2	Energy	\$9100.77	0.11	\$985.80
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$1971.59
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$985.80
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$1971.59
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$1971.59
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$985.80
16:15	\$8789.08	AGL SA	TORRB2	Energy	\$9100.77	0.21	\$1953.12
		AGL SA	TORRB4	Energy	\$9100.77	0.21	\$1953.12
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$976.60
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$976.60
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$976.60
		AGL SA	TORRB3	Energy	\$9100.77	0.21	\$1953.12
16:20	\$8934.23	AGL SA	TORRB2	Energy	\$9100.77	0.33	\$2978.04
		AGL SA	TORRA2	Energy	\$9100.77	0.16	\$1489.07
		AGL SA	TORRA1	Energy	\$9100.77	0.16	\$1489.07
		AGL SA	TORRB3	Energy	\$9100.77	0.33	\$2978.04
16:25	\$8786.62	AGL SA	TORRB2	Energy	\$9100.77	0.24	\$2196.65
		AGL SA	TORRA1	Energy	\$9100.77	0.12	\$1098.37
		AGL SA	TORRB3	Energy	\$9100.77	0.24	\$2196.65
		AGL SA	TORRB4	Energy	\$9100.77	0.24	\$2196.65
		AGL SA	TORRA2	Energy	\$9100.77	0.12	\$1098.37
16:30	\$8871.68	AGL SA	TORRB2	Energy	\$9100.77	0.24	\$2217.95
		AGL SA	TORRA2	Energy	\$9100.77	0.12	\$1108.93
		AGL SA	TORRB4	Energy	\$9100.77	0.24	\$2217.95
		AGL SA	TORRB3	Energy	\$9100.77	0.24	\$2217.95
		AGL SA	TORRA1	Energy	\$9100.77	0.12	\$1108.93
<b>Spot price</b>		<b>\$8853/MWh</b>					

### \*Victoria 11 January – 5 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
16:35	\$8,869.38	AGL SA	TORRA1	Energy	\$8,869.38	0.12	\$1,080.47
		AGL SA	TORRA2	Energy	\$8,869.38	0.12	\$1,080.47
		AGL SA	TORRB2	Energy	\$8,869.38	0.24	\$2,160.93
		AGL SA	TORRB3	Energy	\$8,869.38	0.24	\$2,160.93
		AGL SA	TORRB4	Energy	\$8,869.38	0.24	\$2,160.93
16:40	\$8,747.76	AGL SA	TORRA1	Energy	\$8,747.76	0.11	\$934.26
		AGL SA	TORRA2	Energy	\$8,747.76	0.11	\$934.26
		AGL SA	TORRA4	Energy	\$8,747.76	0.11	\$934.26
		AGL SA	TORRB2	Energy	\$8,747.76	0.21	\$1,868.52
		AGL SA	TORRB3	Energy	\$8,747.76	0.21	\$1,868.52
		AGL SA	TORRB4	Energy	\$8,747.76	0.21	\$1,868.52
16:45	\$8,630.41	AGL SA	TORRA1	Energy	\$8,630.41	0.11	\$909.39
		AGL SA	TORRA2	Energy	\$8,630.41	0.11	\$909.39
		AGL SA	TORRA4	Energy	\$8,630.41	0.11	\$909.39
		AGL SA	TORRB2	Energy	\$8,630.41	0.21	\$1,818.77
		AGL SA	TORRB3	Energy	\$8,630.41	0.21	\$1,818.77
		AGL SA	TORRB4	Energy	\$8,630.41	0.21	\$1,818.77
16:50	\$114.66	Hydro Tasmania	GORDON	Energy	\$114.66	1.14	\$130.39
		Hydro Tasmania	LI_WY_CA	Lower 6 sec	\$114.66	1.03	\$117.94
				Lower 60			
		Hydro Tasmania	POAT220	sec	\$114.66	1.03	\$117.94
		Hydro Tasmania	TRIBUTE	Lower reg	\$114.66	1.03	\$117.94
		Stanwell	GSTONE4	Lower reg	\$114.66	-1.03	-\$117.94
16:55	\$280.70	Ecogen	NPS	Energy	\$280.70	1.00	\$280.70
17:00	\$110.89	Hydro Tasmania	REECE1	Energy	\$110.89	1.11	\$122.70
<b>Spot price</b>		<b>\$4458/MWh</b>					

\* Spot price is less than \$5000/MWh, but is included for completeness.

### Victoria 11 January – 5.30 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
17:05	\$88.27	Southern Hydro	MCKAY1	Energy	\$76.86	1.56	\$119.60
		Snowy Hydro	TUMUT3	Energy	\$52.67	-0.59	-\$31.33
17:10	\$98.19	Southern Hydro	MCKAY1	Energy	\$76.86	1.56	\$119.60
		Delta Electricity	MM3	Energy	\$36.00	-0.59	-\$21.41
17:15	\$8865.09	AGL SA	TORRA4	Energy	\$9100.77	0.11	\$984.98
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$984.98
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$1970.04
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$1970.04
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$1970.04
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$984.98
17:20	\$8786.24	AGL SA	TORRA1	Energy	\$9100.77	0.32	\$2928.72
		AGL SA	TORRA2	Energy	\$9100.77	0.32	\$2928.72
		AGL SA	TORRA4	Energy	\$9100.77	0.32	\$2928.72
17:25	\$8909.84	AGL SA	TORRA4	Energy	\$9100.77	0.11	\$989.98
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$1979.96
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$1979.96
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$989.98
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$989.98
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$1979.96
17:30	\$8913.14	AGL SA	TORRA4	Energy	\$9100.77	0.11	\$990.35
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$990.35
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$1980.69
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$990.35
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$1980.69
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$1980.69
<b>Spot price</b>		<b>\$5943/MWh</b>					

## South Australia

The following tables identify the trading intervals in which the spot price exceeded \$5000/MWh in South Australia. Each five minute dispatch interval price and the generating units involved in setting the energy price, as published in the market systems, are shown. This information is published by AEMO<sup>5</sup>. Also shown is the energy or ancillary service offer price involved in determining the dispatch price together with the quantity of that service and the contribution to the total energy price. The 30-minute spot price is the time weighted average of the six dispatch interval prices.

### South Australia 11 January – 1.30 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution		
13:05	\$1342.97	Hydro Tasmania	CETHANA	Energy	\$45.15	2.72	\$122.98		
		Hydro Tasmania	CETHANA	Raise reg	\$0.75	-2.87	-\$2.15		
		CS Energy	SWAN_B_3	Raise 5 min	\$0.75	2.87	\$2.15		
		Hydro Tasmania	CETHANA	Lower 5 min	\$0.40	2.47	\$0.99		
		Hydro Tasmania	CETHANA	Lower 60 sec	\$0.20	2.47	\$0.49		
		Hydro Tasmania	POAT110	Lower 6 sec	\$0.05	2.38	\$0.12		
		Hydro Tasmania	CETHANA	Lower 6 sec	\$0.05	0.09	\$0.00		
		Macquarie Generation	BW03	Lower 5 min	\$0.03	-2.47	-\$0.07		
		Synergen	SNUG1	Energy	-\$1000.00	-0.78	\$780.96		
		Origin Energy	LADBROK1	Energy	-\$1000.00	-0.22	\$218.74		
		Origin Energy	LADBROK2	Energy	-\$1000.00	-0.22	\$218.74		
		13:10	\$9999.77	AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47
				AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85
AGL SA	TORRA4			Energy	\$9999.77	0.12	\$1176.47		
AGL SA	TORRB2			Energy	\$9999.77	0.22	\$2156.85		
AGL SA	TORRA2			Energy	\$9999.77	0.12	\$1176.47		
AGL SA	TORRB4			Energy	\$9999.77	0.22	\$2156.85		
13:15	\$523.11	Hydro Tasmania	POAT110	Energy	\$32.30	2.72	\$87.82		
		Infratil	LKBONNY2	Energy	-\$313.99	-1.39	\$435.26		
13:20	\$1444.86	Snowy Hydro	TUMUT3	Energy	\$89.42	2.55	\$228.17		
		Synergen	SNUG1	Energy	-\$1000.00	-0.78	\$779.83		
		Origin Energy	LADBROK1	Energy	-\$1000.00	-0.22	\$218.42		
		Origin Energy	LADBROK2	Energy	-\$1000.00	-0.22	\$218.42		
13:25	\$9999.77	AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47		
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47		
		AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85		
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47		
		AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85		
		AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85		
13:30	\$9999.77	AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47		
		AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85		
		AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85		
		AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47		
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47		
		AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85		
<b>Spot price</b>		<b>\$5552/MWh</b>							

<sup>5</sup> Details on how the price is determined can be found at [www.aemo.com.au](http://www.aemo.com.au)

## South Australia 11 January – 2 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
13:35	\$9999.77	AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85
13:40	\$9999.77	AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85
13:45	\$1150.98	Southern Hydro	MCKAY1	Energy	\$76.86	2.12	\$163.04
		Origin Energy	LADBROK1	Energy	-\$1000.00	-0.49	\$493.97
		Origin Energy	LADBROK2	Energy	-\$1000.00	-0.49	\$493.97
13:50	\$9999.77	AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47
13:55	\$9999.77	AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47
14:00	\$9999.77	AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85
<b>Spot price</b>		<b>\$8525/MWh</b>					

### South Australia 11 January– 2.30 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
14:05	\$4950.81	International					
		Power	LOYB2	Energy	\$1573.89	2.37	\$3735.82
		Synergen	SNUG1	Energy	-\$1000.00	-0.78	\$778.76
		Origin Energy	LADBROK1	Energy	-\$1000.00	-0.22	\$218.12
		Origin Energy	LADBROK2	Energy	-\$1000.00	-0.22	\$218.12
14:10	\$1657.47	International					
		Power	LOYB1	Energy	\$1573.99	1.05	\$1657.47
14:15	\$9999.77	AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85
14:20	\$9999.77	AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47
14:25	\$9999.77	AGL SA	TORRB2	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA4	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB4	Energy	\$9999.77	0.22	\$2156.85
		AGL SA	TORRA2	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRA1	Energy	\$9999.77	0.12	\$1176.47
		AGL SA	TORRB3	Energy	\$9999.77	0.22	\$2156.85
14:30	\$9100.77	AGL SA	TORRA4	Energy	\$9100.77	0.33	\$3033.56
		AGL SA	TORRA1	Energy	\$9100.77	0.33	\$3033.56
		AGL SA	TORRA2	Energy	\$9100.77	0.33	\$3033.56
<b>Spot price</b>		<b>\$7618/MWh</b>					

### South Australia 11 January – 3 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
14:35	\$9100.77	AGL SA	TORRA2	Energy	\$9100.77	0.20	\$1820.15
		AGL SA	TORRA1	Energy	\$9100.77	0.20	\$1820.15
		AGL SA	TORRB2	Energy	\$9100.77	0.40	\$3640.31
		AGL SA	TORRA4	Energy	\$9100.77	0.20	\$1820.15
14:40	\$9100.77	AGL SA	TORRA2	Energy	\$9100.77	0.50	\$4550.39
		AGL SA	TORRA1	Energy	\$9100.77	0.50	\$4550.39
14:45	\$9100.77	AGL SA	TORRB4	Energy	\$9100.77	0.29	\$2600.18
		AGL SA	TORRA1	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRB2	Energy	\$9100.77	0.29	\$2600.18
		AGL SA	TORRA2	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRA4	Energy	\$9100.77	0.14	\$1300.14
14:50	\$9100.77	AGL SA	TORRA4	Energy	\$9100.77	0.20	\$1820.15
		AGL SA	TORRA2	Energy	\$9100.77	0.20	\$1820.15
		AGL SA	TORRA1	Energy	\$9100.77	0.20	\$1820.15
		AGL SA	TORRB4	Energy	\$9100.77	0.40	\$3640.31
14:55	\$9100.77	AGL SA	TORRB4	Energy	\$9100.77	0.29	\$2600.18
		AGL SA	TORRA4	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRA1	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRA2	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRB2	Energy	\$9100.77	0.29	\$2600.18
		AGL SA	TORRB3	Lower reg	\$0.80	0.29	\$0.23
		AGL SA	TORRB2	Lower reg	\$0.80	-0.29	-\$0.23
15:00	\$9100.77	AGL SA	TORRB4	Energy	\$9100.77	0.29	\$2600.18
		AGL SA	TORRA4	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRA2	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRA1	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRB2	Energy	\$9100.77	0.29	\$2600.18
<b>Spot price</b>		<b>\$9101/MWh</b>					



### South Australia 11 January – 3.30 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
15:05	\$9100.77	AGL SA	TORRA4	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRB4	Energy	\$9100.77	0.29	\$2600.18
		AGL SA	TORRA2	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRB2	Energy	\$9100.77	0.29	\$2600.18
		AGL SA	TORRA1	Energy	\$9100.77	0.14	\$1300.14
15:10	\$9100.77	AGL SA	TORRA1	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB3	Lower reg	\$0.80	0.22	\$0.18
		AGL SA	TORRB2	Lower reg	\$0.80	-0.22	-\$0.18
15:15	\$9100.77	AGL SA	TORRB4	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$2022.37
15:20	\$9100.77	AGL SA	TORRB3	Energy	\$9100.77	0.50	\$4550.39
		AGL SA	TORRA2	Energy	\$9100.77	0.25	\$2275.19
		AGL SA	TORRA1	Energy	\$9100.77	0.25	\$2275.19
15:25	\$9100.77	AGL SA	TORRB3	Energy	\$9100.77	0.33	\$3033.56
		AGL SA	TORRB4	Energy	\$9100.77	0.33	\$3033.56
		AGL SA	TORRA2	Energy	\$9100.77	0.17	\$1516.83
		AGL SA	TORRA1	Energy	\$9100.77	0.17	\$1516.83
15:30	\$9100.77	AGL SA	TORRA2	Energy	\$9100.77	0.25	\$2275.19
		AGL SA	TORRA1	Energy	\$9100.77	0.25	\$2275.19
		AGL SA	TORRB3	Energy	\$9100.77	0.50	\$4550.39
<b>Spot price</b>		<b>\$9101/MWh</b>					

### South Australia 11 January – 4 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
15:35	\$9100.88	AGL SA	TORRB4	Energy	\$9100.77	1.00	\$9100.77
		Hydro Tasmania	CETHANA	Lower reg	\$1.30	1.00	\$1.30
		AGL SA	TORRB4	Lower reg	\$0.80	-1.00	-\$0.80
		Hydro Tasmania	CETHANA	Lower 5 min	\$0.40	-1.00	-\$0.40
		CS Energy	SWAN_B_4	Lower 5 min	\$0.01	1.00	\$0.01
15:40	\$9100.88	AGL SA	TORRB3	Energy	\$9100.77	1.00	\$9100.77
		Hydro Tasmania	CETHANA	Lower reg	\$1.30	1.00	\$1.30
		AGL SA	TORRB3	Lower reg	\$0.80	-1.00	-\$0.80
		Hydro Tasmania	CETHANA	Lower 5 min	\$0.40	-1.00	-\$0.40
		CS Energy	SWAN_B_4	Lower 5 min	\$0.01	1.00	\$0.01
15:45	\$9101.43	AGL SA	TORRB2	Energy	\$9100.77	1.00	\$9100.77
		Hydro Tasmania	CETHANA	Lower reg	\$1.30	1.00	\$1.30
		Hydro Tasmania	CETHANA	Lower 5 min	\$0.40	-1.00	-\$0.40
		AGL SA	TORRB2	Lower reg	\$0.25	-1.00	-\$0.25
		CS Energy	SWAN_B_4	Lower 5 min	\$0.01	1.00	\$0.01
15:50	\$9101.67	AGL SA	TORRB3	Energy	\$9100.77	1.00	\$9100.77
		Hydro Tasmania	JBUTTERS	Lower reg	\$1.30	1.00	\$1.30
		Stanwell	STAN-3	Raise reg	\$0.49	1.00	\$0.49
		Hydro Tasmania	DEVILS_G	Lower 5 min	\$0.40	-1.00	-\$0.40
		AGL SA	TORRB3	Raise reg	\$0.25	-1.00	-\$0.25
		AGL SA	TORRB3	Lower reg	\$0.25	-1.00	-\$0.25
		CS Energy	SWAN_B_4	Lower 5 min	\$0.01	1.00	\$0.01
15:55	\$9187.81	LYMMCO	LYA3	Energy	\$9249.30	0.99	\$9187.79
16:00	\$9100.77	AGL SA	TORRA2	Energy	\$9100.77	0.17	\$1516.83
		AGL SA	TORRB4	Energy	\$9100.77	0.33	\$3033.56
		AGL SA	TORRA1	Energy	\$9100.77	0.17	\$1516.83
		AGL SA	TORRB2	Energy	\$9100.77	0.33	\$3033.56
<b>Spot price</b>		<b>\$9116/MWh</b>					

### South Australia 11 January – 4.30 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
16:05	\$9100.77	AGL SA	TORRB2	Energy	\$9100.77	0.29	\$2600.18
		AGL SA	TORRB4	Energy	\$9100.77	0.29	\$2600.18
		AGL SA	TORRA1	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRA2	Energy	\$9100.77	0.14	\$1300.14
		AGL SA	TORRA4	Energy	\$9100.77	0.14	\$1300.14
16:10	\$9100.77	AGL SA	TORRB4	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$1011.19
16:15	\$9100.77	AGL SA	TORRB4	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$1011.19
16:20	\$9100.77	AGL SA	TORRB2	Energy	\$9100.77	0.33	\$3033.56
		AGL SA	TORRA2	Energy	\$9100.77	0.17	\$1516.83
		AGL SA	TORRA1	Energy	\$9100.77	0.17	\$1516.83
		AGL SA	TORRB3	Energy	\$9100.77	0.33	\$3033.56
16:25	\$9100.77	AGL SA	TORRA1	Energy	\$9100.77	0.13	\$1137.60
		AGL SA	TORRB2	Energy	\$9100.77	0.25	\$2275.19
		AGL SA	TORRB3	Energy	\$9100.77	0.25	\$2275.19
		AGL SA	TORRA2	Energy	\$9100.77	0.13	\$1137.60
		AGL SA	TORRB4	Energy	\$9100.77	0.25	\$2275.19
16:30	\$9100.77	AGL SA	TORRA1	Energy	\$9100.77	0.13	\$1137.60
		AGL SA	TORRB3	Energy	\$9100.77	0.25	\$2275.19
		AGL SA	TORRB4	Energy	\$9100.77	0.25	\$2275.19
		AGL SA	TORRA2	Energy	\$9100.77	0.13	\$1137.60
		AGL SA	TORRB2	Energy	\$9100.77	0.25	\$2275.19
<b>Spot price</b>		<b>\$9101/MWh</b>					

### \*South Australia 11 January – 5 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
16:35	\$9100.77	AGL SA	TORRA1	Energy	\$9100.77	0.13	\$1137.60
		AGL SA	TORRA2	Energy	\$9100.77	0.13	\$1137.60
		AGL SA	TORRB2	Energy	\$9100.77	0.25	\$2275.19
		AGL SA	TORRB3	Energy	\$9100.77	0.25	\$2275.19
		AGL SA	TORRB4	Energy	\$9100.77	0.25	\$2275.19
16:40	\$9100.77	AGL SA	TORRA1	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$2022.37
16:45	\$9100.77	AGL SA	TORRA1	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$2022.37
16:50	\$123.32	Hydro Tasmania	GORDON	Energy	\$100.32	1.22	\$122.69
		Hydro Tasmania	LI_WY_CA	Lower 6 sec Lower 60	\$0.05	1.11	\$0.06
		Hydro Tasmania	POAT220	sec	\$0.20	1.11	\$0.22
		Hydro Tasmania	TRIBUTE	Lower reg	\$1.30	1.11	\$1.44
		Stanwell	GSTONE4	Lower reg	\$0.99	-1.11	-\$1.10
16:55	\$300.71	Ecogen	NPS	Energy	\$280.70	1.07	\$300.71
17:00	\$117.21	Hydro Tasmania	REECE1	Energy	\$100.20	1.17	\$117.20
<b>Spot price</b>		<b>\$4640/MWh</b>					

\* Spot price is less than \$5000/MWh, but is included for completeness.

### South Australia 11 January – 5.30 pm

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
17:05	\$92.48	Southern Hydro	MCKAY1	Energy	\$76.86	1.63	\$125.30
		Snowy Hydro	TUMUT3	Energy	\$52.67	-0.62	-\$32.82
17:10	\$103.35	Southern Hydro	MCKAY1	Energy	\$76.86	1.64	\$125.89
		Delta Electricity	MM3	Energy	\$36.00	-0.63	-\$22.54
17:15	\$9100.77	AGL SA	TORRA1	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$1011.19
17:20	\$9100.77	AGL SA	TORRA2	Energy	\$9100.77	0.33	\$3033.56
		AGL SA	TORRA1	Energy	\$9100.77	0.33	\$3033.56
		AGL SA	TORRA4	Energy	\$9100.77	0.33	\$3033.56
17:25	\$9100.77	AGL SA	TORRB2	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB4	Energy	\$9100.77	0.22	\$2022.37
17:30	\$9100.77	AGL SA	TORRB4	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA4	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRB3	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRB2	Energy	\$9100.77	0.22	\$2022.37
		AGL SA	TORRA1	Energy	\$9100.77	0.11	\$1011.19
		AGL SA	TORRA2	Energy	\$9100.77	0.11	\$1011.19
<b>Spot price</b>		<b>\$6070/MWh</b>					