

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

9 March – 15 March 2008

Summary

The average price in South Australia for the week was \$514/MWh. For the second consecutive week the cumulative price reached close to the \$150 000 threshold that triggers administered pricing, peaking at \$140 000 on Friday. On each day the temperature in Adelaide peaked above 35 degrees leading to the longest-ever recorded heat wave. New record demands of more than 2900 MW occurred on Wednesday, Thursday and Friday¹. The spot price exceeded \$5000/MWh for eleven trading intervals on Wednesday and Thursday. The AER will be issuing a report into the circumstances that led to the spot price exceeding \$5000/MWh in accordance with clause 3.13.7 of the Rules.

Prices in the other regions were normal for this time of the year. A new record demand of 9467 MW occurred in Victoria on Friday, surpassing the previous record of 9344 MW in January.

In the financial markets, prices were relatively stable over the week.

Low reserves were forecast for South Australia on Wednesday and Friday and for Victoria on Friday.

Spot market prices

Figure 1 sets out the volume weighted average price for this week and this financial year to date across the NEM regions and compares them with price outcomes from the previous week and year to date respectively.

Figure 1: volume weighted average spot price by region (\$/MWh)

	Qld	NSW	Vic	SA	Tas
Ave price for 9 March - 15 March	42	47	58	514	69
Financial year to 15 March	67	46	50	121	55
% change from previous week*	60%	42%	57%	-7%	18%
% change from year to date**	85%	15%	6%	137%	31%

*The percentage change between last week's average spot price and the average price for the previous week.

**The percentage change between the average spot price for the current financial year to date and the average spot price over the similar period for the previous financial year

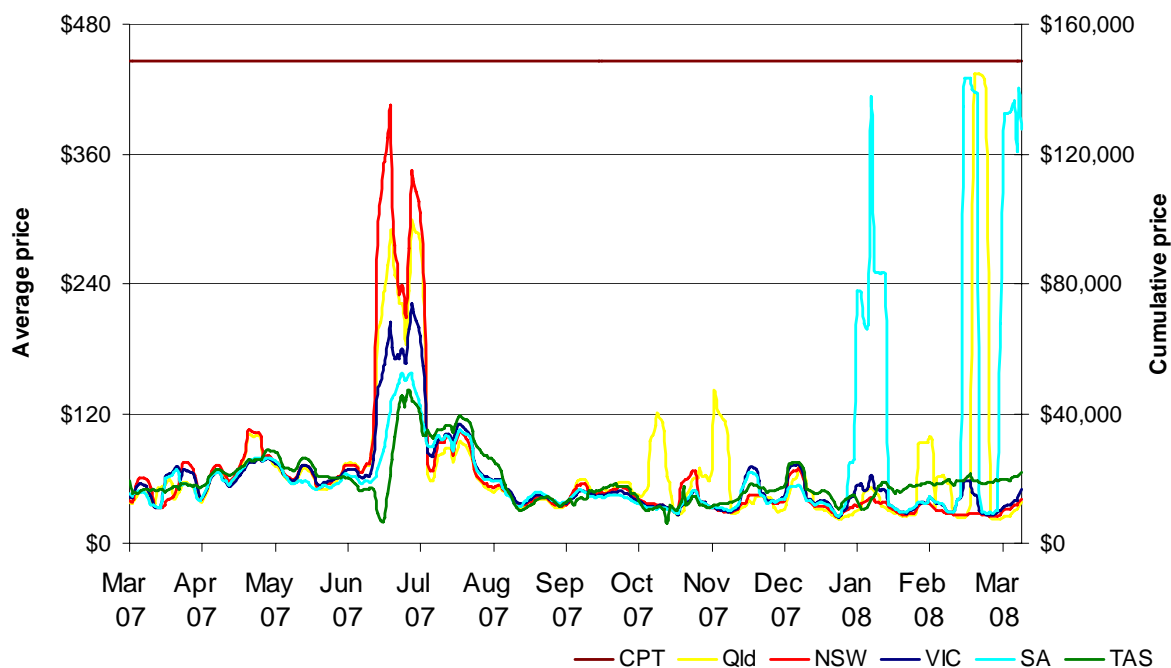
The AER provides further information if the spot price exceeds three times the weekly average.

All regions recorded prices greater than three times the weekly average. Details of these events are attached in Appendix A. Longer term market trends are attached in Appendix B.

¹ The demand, based on dispatchable generation (including wind farms at Lake Bonney stage 2 and Hallett) reached 2923 MW, 2934 MW and 2938 MW on Wednesday, Thursday and Friday. When non-dispatchable generation is included (wind farms at Cathedral rocks, Canunda, Lake Bonney stage 1, Mount Millar, Snowtown, Starfish Hill and Wattle Point) the demand on the same days reached 2944 MW, 3147 MW and 3049 MW. Prior to this week, on the same basis the maximum demand was 2985 MW on Tuesday 19 February.

Figure 2 shows the seven day rolling cumulative price for each region together with the CPT (and the equivalent seven day time-weighted average price).

Figure 2: 7 day rolling cumulative price and CPT



Financial market

Figures 3 to 10 show futures contract² prices traded on the Sydney Futures Exchange as at close of trade on Monday 17 March. Figure 3 shows the calendar base futures contract prices for this year and the next two years, and the three year average. Also shown are percentage changes compared to a week earlier.

Figure 3: Base calendar futures contract prices (\$/MWh)

	QLD		NSW		VIC		SA	
Calendar 2008	50	-1%	42	2%	45	4%	79	3%
Calendar 2009	45	-2%	46	-4%	47	-1%	63	-3%
Calendar 2010	48	2%	53	0%	53	1%	50	0%
Three year average	47	0%	47	-1%	48	1%	64	0%

Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 4 shows the \$300 cap contract price for the current quarter and calendar year and the change from the previous week.

Figure 4: \$300 cap contract prices (\$/MWh)

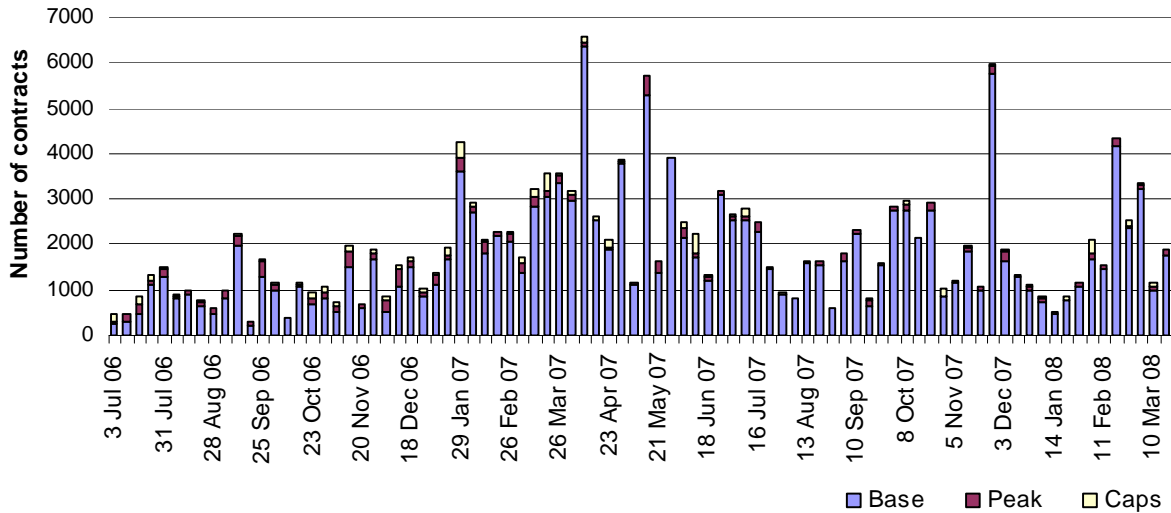
	QLD		NSW		VIC		SA	
Q1 2008 price	38	0%	2	0%	7	75%	75	0%
Calendar 2008	15	0%	6	3%	7	20%	28	10%

Source: d-cyphaTrade www.d-cyphatrade.com.au

² Futures contracts on the SFE are listed by d-cyphaTrade (www.d-cyphatrade.com.au). A futures contract is typically for one MW of electrical energy per hour based on a fixed load profile. A base load profile is defined as the base load period from midnight to midnight Monday to Sunday over the duration of the contract quarter. A peak load profile is defined as the peak-period from 7am to 10pm Monday to Friday (excluding Public holidays) over the duration of the contract quarter.

Figure 5 shows the weekly trading volumes for base, peak and cap contracts, the date is the end of that week.

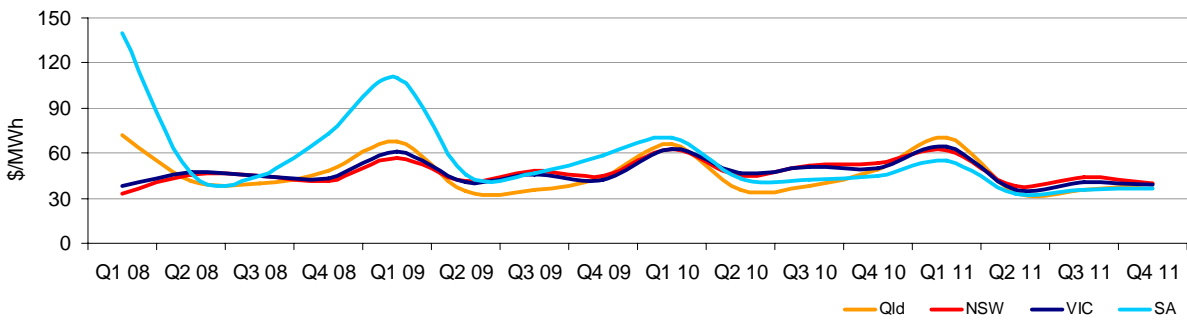
Figure 5: Number of exchange traded contracts per week



Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 6 shows the prices for base contracts for each quarter for the next three years.

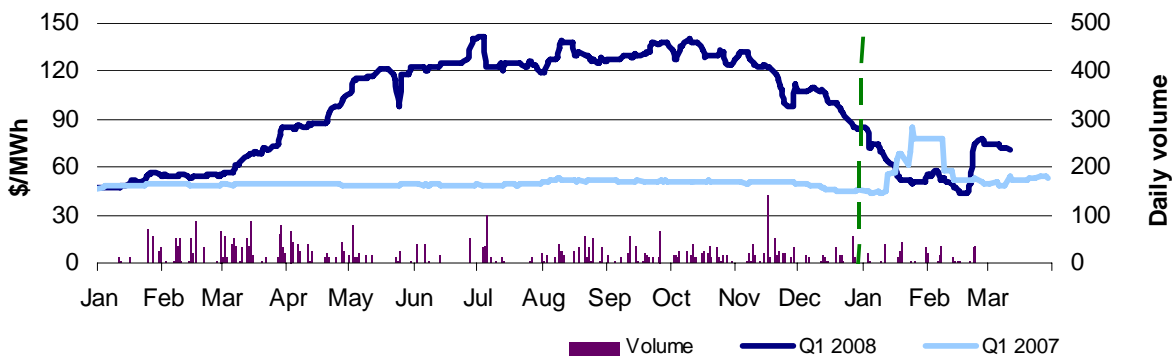
Figure 6: quarterly base future prices 2008 - 2011



Source: d-cyphaTrade www.d-cyphatrade.com.au

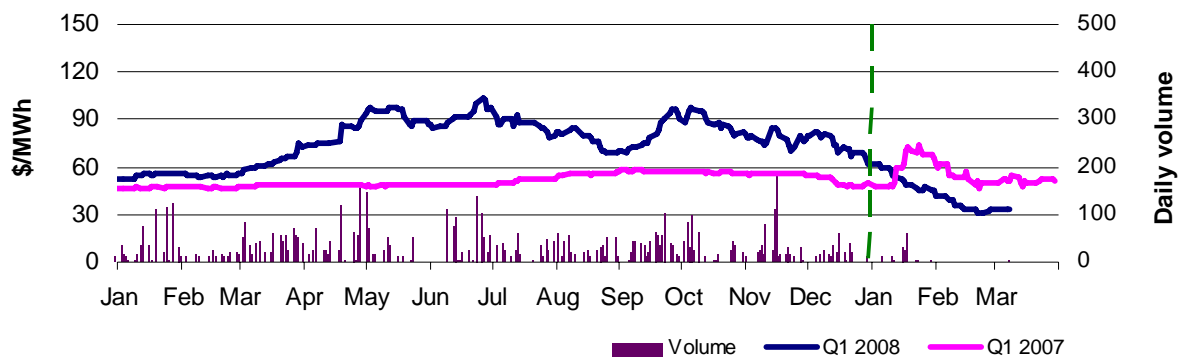
Figure 7-10 compares for each region the closing daily base contract price for the first quarter of 2007 against 2008 and also shows the daily volume of Q1 08 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland



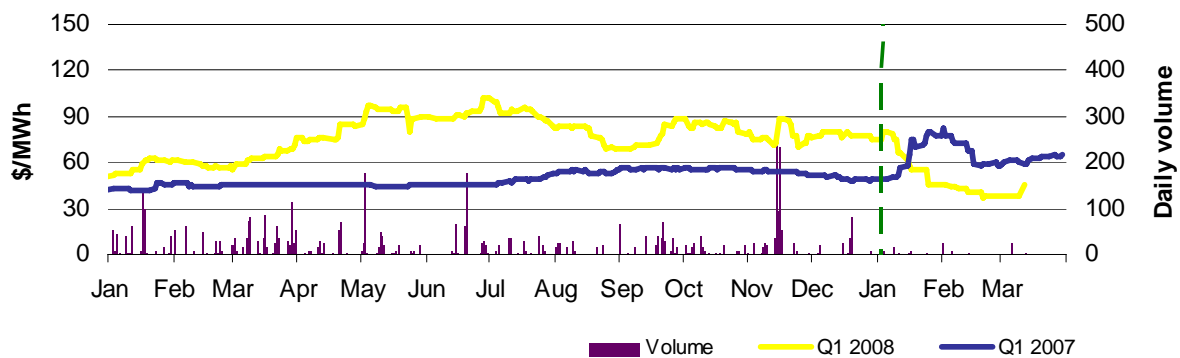
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 8: New South Wales



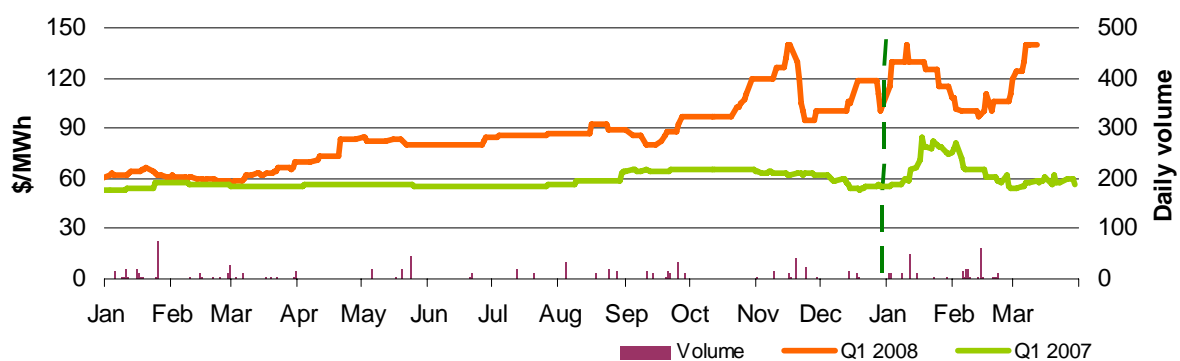
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 9: Victoria



Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 10: South Australia



Source: d-cyphaTrade www.d-cyphatrade.com.au

Spot market forecasting variations

The AER is required by the National Electricity Rules to determine whether there is a significant variation between the forecast spot price published by NEMMCO and the actual spot price and state why the AER considers that the significant price variation occurred. It is not unusual for there to be significant variations as demand forecasts vary and as participants react to changing market conditions. For the week, there were 176 trading intervals where actual prices significantly varied from forecasts. Reasons for these variances are summarised in Figure 11.

Figure 11: reasons for variations between forecast and actual prices

	Availability	Demand	Network	Combination
Price is higher than forecast	14%	34%	0%	13%
Price is lower than forecast	0%	35%	0%	3%

Demand and bidding patterns

The AER reviews demand, network limitations and generator bidding as part of our market monitoring to better understand the drivers behind price variations. Figure 12 shows changes to the offer price and available capacity of generation in each region for the on-peak periods only³. For example, in Queensland 344 MW less was offered at prices less than \$20/MWh this week compared to the previous week. Also included is the change in average demand during peak periods for comparison.

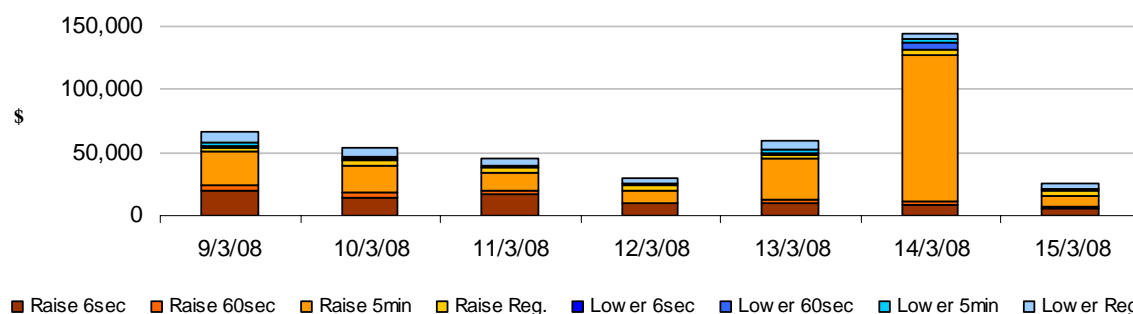
Figure 12: Changes in available generation compared to the previous week during peak times

\$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	-344	-93	-822	147
New South Wales	402	18	279	498
Victoria	-104	1	-271	574
South Australia	115	-96	222	205
Tasmania	216	23	-24	35
Snowy	0	171	55	-3
Total	285	24	-561	1,456

Ancillary services market

The total cost of ancillary services on the mainland for the week was \$337 000 or less than 0.1 per cent of turnover in the energy market. The total cost of ancillary services in Tasmania for the week was \$88 000 or 0.7 per cent of the turnover in the Tasmanian energy market. Figure 13 shows the daily breakdown of cost for each frequency control ancillary service.

Figure 13: daily frequency control ancillary service cost



Australian Energy Regulator March 2008

³ Peak periods is defined as between trading intervals ending 7.30 am and 10 pm on weekdays, which aligns with the SFE contract definition.

APPENDIX A:

Detailed Market Analysis



9 March – 15 March 2008

National: Spot prices within the national market are regularly aligned with conditions in one region reflected across all others. There were six occasions where the spot price aligned across the mainland regions and the New South Wales price was greater than three times the New South Wales weekly average price of \$47/MWh – the New South Wales spot price has been used as a proxy national price under these conditions as New South Wales is located in the centre of the NEM.

Thursday, 13 March

3:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	151.73	300.01	87.71
NEM demand (MW)	31 038	30 956	30 869
Available capacity (MW)	37 068	37 233	37 563
3:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	273.40	300.01	100.48
NEM demand (MW)	31 166	31 157	31 108
Available capacity (MW)	37 205	37 380	37 831
4:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	278.86	300.01	100.24
NEM demand (MW)	31 378	31 115	31 156
Available capacity (MW)	37 170	37 364	37 840

Conditions at the time saw NEM demand close to forecast and near the summer record. Prices were higher than that forecast 12 hours ahead. The price in South Australia exceeded \$5000/MWh during this time and the AER will be issuing a report into the circumstances that led to the spot price exceeding \$5000/MWh in accordance with clause 3.13.7 of the Rules.

At 6.51 am Macquarie Generation rebid 360 MW of capacity at Bayswater from prices below \$85/MWh to above \$500/MWh. The reason given was “Manage Snowy-CSC/CSP Constraint”.

Over two rebids at 8.59 am and 9.35 am, Delta Electricity reduced the availability of Wallerawang unit seven by 240 MW. This capacity was previously bid inflexible. The reason given was “Condenser conductivity limit::capacity limit change” and “Condenser limit::capacity limit/ROC change”.

Over several rebids from 9.33 am CS Energy reduced 128 MW of capacity across Collinsville and Kogan Creek. The reasons given were “Colnsvl_4 unit trip”, “Colnsvl unit availability and “KPP_1 ambient conditions”.

From 12.36 pm TRUenergy reduced 125 MW of capacity at Yallourn all of which was priced below \$5/MWh. The reasons given were “Capacity adjustment due to ambient conditions”, “Vacuum limitation”, “Capacity adj due to plant conditions” and “Capacity adj due to thermal conditions”.

From 1.55 pm Stanwell Corporation rebid 250 MW of capacity at Gladstone from prices below \$35/MWh to above \$9000/MWh. The reasons given were “Rearrange/rebalance portfolio::change avail/MW distrib” and “Material change in market conditions:: change avail/MW distrib”.

There was no other significant rebidding.

Friday, 14 March

3:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	225.95	262.91	121.81
NEM demand (MW)	31 981	31 711	31 624
Available capacity (MW)	37 024	37 380	37 354
4:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	277.34	67.60	100.24
NEM demand (MW)	31 990	31 548	31 554
Available capacity (MW)	37 128	37 254	37 401
4:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	171.15	56.31	64.13
NEM demand (MW)	31 710	31 277	31 445
Available capacity (MW)	36 984	37 250	37 483

Conditions at the time saw NEM demand 440 MW higher than forecast and close to the summer record. Throughout this period there was around 31 650 MW of generation in the NEM priced under \$100/MWh.

Prices across the NEM were following the conditions in Victoria, where demand reached a new record of 9469 MW. The price in Victoria peaked at \$392/MWh.

Prices in Queensland and New South Wales were higher than forecast and closely aligned with prices in Victoria.

There was no significant rebidding.

Queensland: There were seven occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of \$42/MWh. Six of these occurred when prices were generally aligned across all regions and is detailed in the national market outcomes section. The remaining occasion is presented below.

Friday, 14 March

1:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	132.13	250.79	105.54
Demand (MW)	6921	6973	7002
Available capacity (MW)	10 016	10 116	10 137

Conditions at the time saw demand and availability close to that forecast with prices aligned across all mainland regions. NEM demand was at near record levels, with the Queensland price generally lower than forecast four hours ahead.

At 11.06 am CS Energy rebid 210 MW of capacity at Callide B from prices above \$9000/MWh to below \$80/MWh. The reason given was “Portfolio optimisation”.

At 11.10 am Stanwell Corporation rebid 160 MW of capacity at Gladstone from prices below \$60/MWh to above \$4600/MWh. The reason given was “Portfolio optimisation::change MW distrib”.

There was no other significant rebidding.

Victoria: There were six occasions where the spot price in Victoria was greater than three times the Victoria weekly average price of \$58/MWh. Five of these occurred when prices were generally aligned across all regions and is detailed in the national market outcomes section. The remaining occasion is presented below.

Monday, 10 March

3:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	182.36	109.26	42.70
Demand (MW)	7715	7245	6547
Available capacity (MW)	7738	8095	8115

Conditions at the time saw demand 470 MW and 1170 MW higher than forecast four and 12 hours ahead respectively. Available capacity was up to 370 MW lower than that forecast four and 12 hours ahead, although most of this capacity was priced above \$100/MWh.

At 9.50 am International Power rebid 206 MW of capacity at Loy Yang B from prices under \$15/MWh to above \$260/MWh. The reason given was “response to predispatch”.

There was no other significant rebidding.

South Australia: There were eight occasions where the spot price in South Australia was greater than three times the South Australia weekly average price of \$514/MWh.

Wednesday, 12 March

4:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9999.72	9999.72	9999.72
Demand (MW)	2915	2905	2895
Available capacity (MW)	2949	2976	2865
5:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9999.72	9999.72	9999.72
Demand (MW)	2877	2896	2889
Available capacity (MW)	3001	2978	3130
5:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9999.72	55.72	63.11
Demand (MW)	2824	2873	2863
Available capacity (MW)	3036	2978	3130
6:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9999.72	55.72	62.58
Demand (MW)	2769	2789	2777
Available capacity (MW)	3017	2953	3130

The AER will be issuing a report into the circumstances that led to the spot price exceeding \$5000/MWh in accordance with clause 3.13.7 of the Rules.

Thursday, 13 March

2:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	8352.48	390.88	9999.72
Demand (MW)	2865	2711	2709

Available capacity (MW)	3411	3354	3374
4:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9999.72	9999.72	9999.72
Demand (MW)	2935	2888	2823
Available capacity (MW)	3437	3370	3373
5:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9999.72	9999.72	9999.72
Demand (MW)	2925	2861	2799
Available capacity (MW)	3444	3360	3367
5:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9999.72	9999.72	263.61
Demand (MW)	2900	2812	2756
Available capacity (MW)	3432	3361	3368

The AER will be issuing a report into the circumstances that led to the spot price exceeding \$5000/MWh in accordance with clause 3.13.7 of the Rules.

Tasmania: There was one occasion where the spot price in Tasmania was greater than three times the Tasmania weekly average price of \$69/MWh.

Monday, 10 March

4:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	838.35	112.18	75.18
Demand (MW)	1105	1066	1057
Available capacity (MW)	2099	2099	2044

Conditions at the time saw demand and available capacity close to that forecast.

Following higher than forecast prices in the mainland, Hydro Tasmania adjusted its portfolio and began exporting energy to the mainland for the 3.30 pm trading interval. This only lasted for the trading interval, with offer prices at Hydro Tasmania returning to previous levels and Basslink again changed direction with the commencement of the 4 pm trading interval. Interactions between the Basslink no-go zone, the frequency markets and the energy market saw 8 MW of capacity - priced around \$5000/MWh - dispatched at 3.35 pm, the first dispatch interval of the 4 pm trading interval. Basslink passed through the no-go zone by 3.40 pm and prices returned to normal levels.

There was no significant rebidding.

Appendix B: Detailed NEM Price and Demand Trends



Table 1: Financial year to date spot market volume weighted average price

Financial year	QLD	NSW	SNOWY	VIC	SA	TAS
2007-08 (\$/MWh) YTD	67	46	32	50	121	55
2006-07 (\$/MWh) YTD	36	40	27	47	51	42
Change (YTD)	85%	15%	17%	6%	137%	31%
2006-07 (\$/MWh)	57	67	38	61	59	51

Table 2: NEM turnover

Financial year	NEM Turnover* (\$, billion)	Energy (TWh)
2007-08 YTD	\$8.4	147
2006-07	\$12.7	206
2005-06	\$7.9	201
Change (2005-06 to 2006-07)	61%	2.7%

* estimated value

Table 3: Recent monthly and quarterly spot market volume weighted average price and turnover

Volume weighted average (\$/MWh)	QLD	NSW	SNOWY	VIC	SA	TAS	Turnover (\$, billion)
Nov-07	58	38	29	46	47	45	0.77
Dec-07	41	43	32	50	54	52	0.78
Jan-08	52	36	28	45	186	48	0.94
Feb-08	161	28	24	41	207	58	1.30
Mar-08	33	39	26	49	474	64	0.72
Q4 2006	23	27	22	29	40	37	1.40
Q4 2007	56	41	30	44	46	44	2.35
Change	142%	51%	37%	52%	15%	20%	

Table 4: ASX energy futures contract prices (compared with settled price for Q1 2007) at 18 March

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2008								
Price on 11 Mar (\$/MW)	75	105	31	45	38	62	106	210
Price on 18 Mar (\$/MW)	71	105	36	45	45	60	150	250
% increase since 1 March 07	28%	7%	-34%	-52%	-19%	-40%	163%	147%
Traded in the last week (MW)	20	0	52	0	5	0	0	0
Traded since 1 March 07	3664	397	5751	382	3958	657	749	142
Settled price for Q1 07 (\$/MW)	53	85	51	74	65	109	56	88

Table 5: Changes to availability of low priced generation capacity offered to the market

Comparison:	QLD	NSW	SNOWY	VIC	SA	TAS	NEM
January 08 with January 07							
MW Priced <\$20	-8	-409	22	-83	84	13	-381
MW Priced \$20 to \$50	79	989	-260	116	-178	1	747
February 08 with February 07							
MW Priced <\$20	-243	-732	4	-221	-44	-94	-1331
MW Priced \$20 to \$50	318	1,387	282	-38	0	-66	1883
March 08 with March 07							
MW Priced <\$20	78	-160	14	34	91	-23	35
MW Priced \$20 to \$50	57	1,080	464	-97	-72	28	1460