

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

2 March – 8 March 2008

Summary

The average price in South Australia for the week was \$555/MWh, which is the highest for any region since market start. The cumulative price reached \$132 000 - just short of the \$150 000 threshold that triggers administered pricing. Demand reached near record levels on Wednesday, Thursday and Friday as a result of very high temperatures. The spot price in South Australia exceeded \$5000/MWh over 13 trading intervals on Wednesday, Thursday and Friday. 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 lower than average for this time of the year.

In the financial markets, Base Calendar prices increased across the board over the week, most significantly in South Australia for 2008 and 2009 where prices increased by nine per cent and 10 per cent respectively.

Low reserves were forecast for South Australia on Monday, Wednesday, Thursday and 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 2 March - 8 March	26	33	37	555	58
Financial year to 1 March	67	46	50	105	55
% change from previous week*	10%	30%	38%	1824%	3%
% change from year to date**	91%	15%	7%	110%	30%

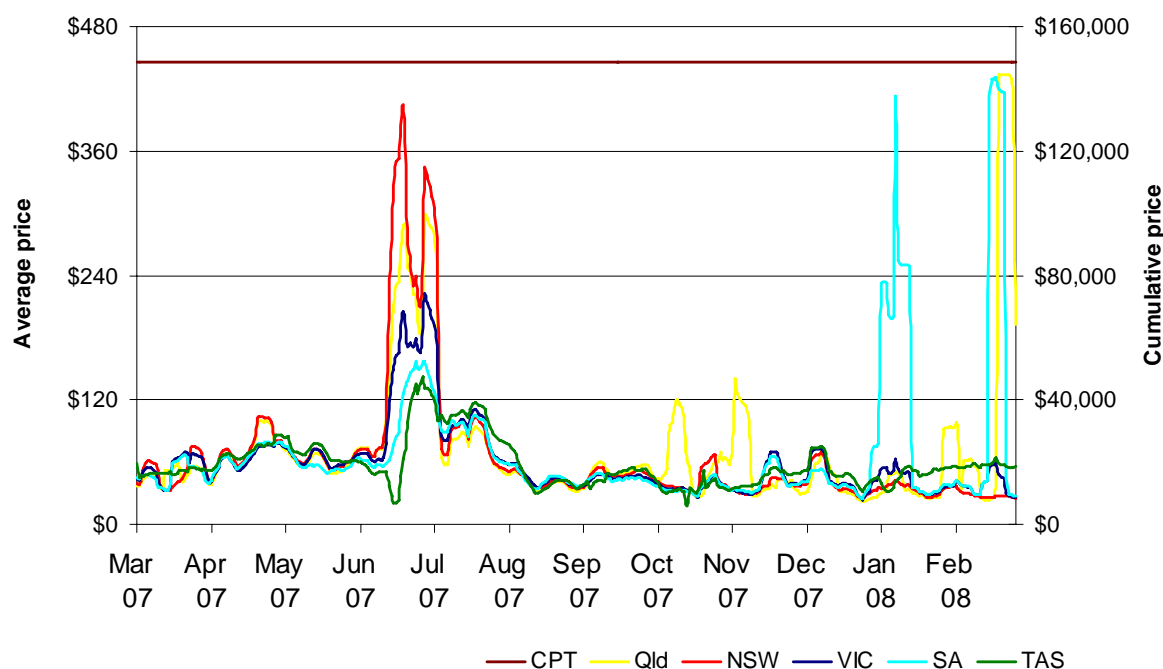
*The percentage change between last week's average spot price and the average price for the previous week.

**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. Details of these events are attached in Appendix A. The price exceeded three times the weekly average in South Australia on 13 occasions. Longer term market trends are attached in Appendix B.

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 contract¹ prices traded on the Sydney Futures Exchange as at close of trade on Monday 10 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%	41	2%	43	3%	76	9%
Calendar 2009	45	1%	48	5%	48	6%	65	10%
Calendar 2010	47	0%	53	1%	52	2%	50	0%
Three year average	48	1%	47	2%	48	4%	64	7%

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)

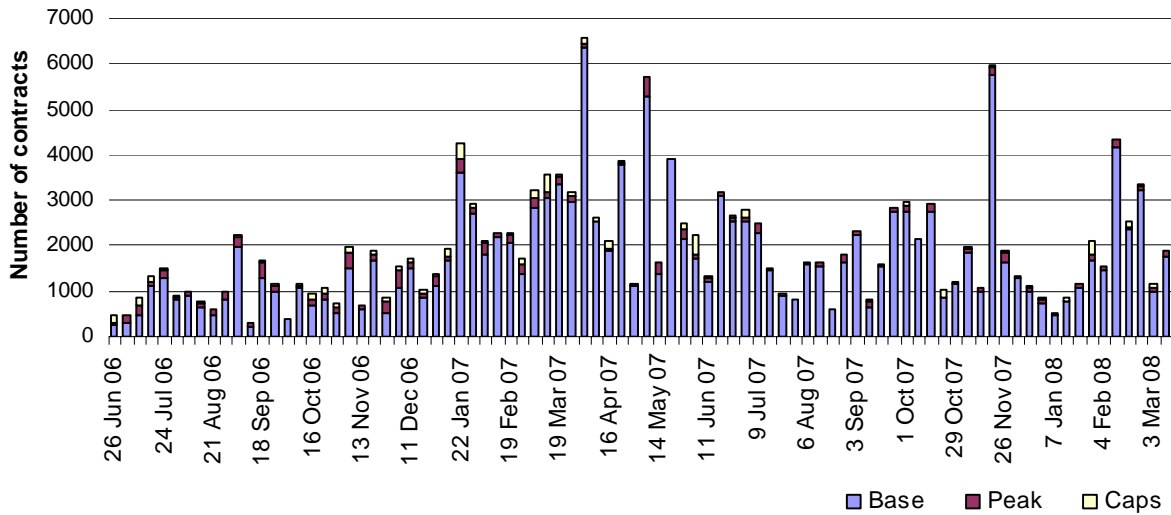
	QLD		NSW		VIC		SA	
Q1 2008 price	38	0%	2	0%	7	75%	75	0%
Calendar 2008	15	0%	6	3%	7	20%	28	10%

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

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

¹ 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.

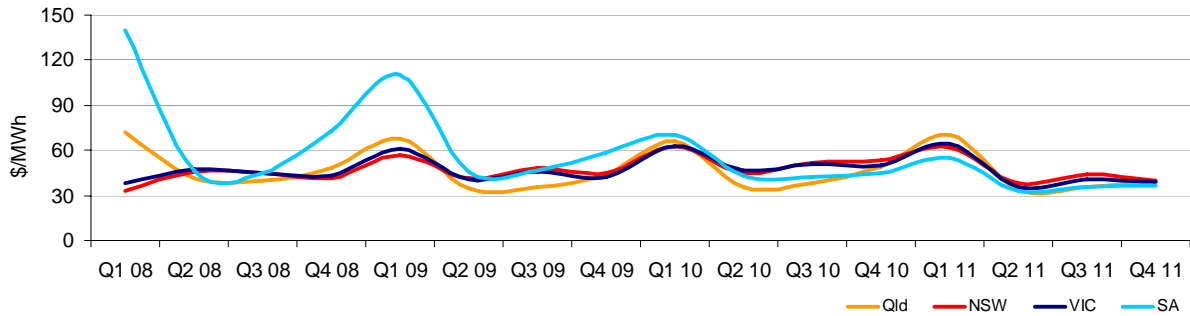
Figure 5: Number of exchange traded contracts per week



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

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

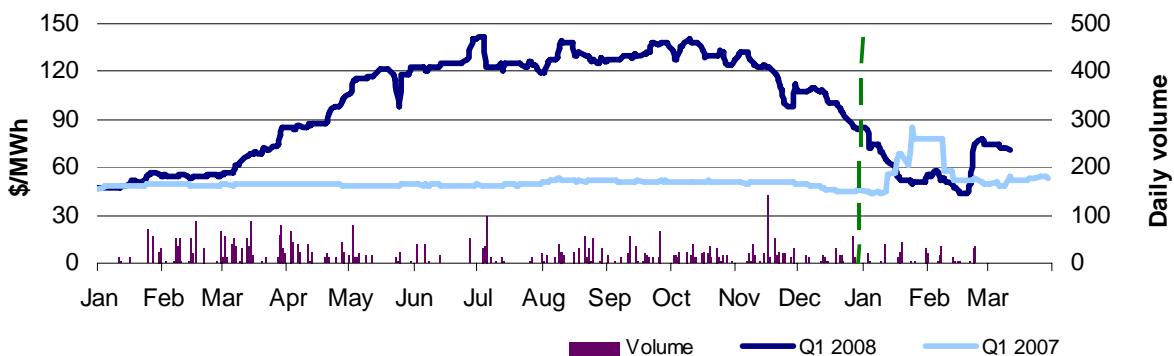
Figure 6: quarterly base future prices 2008 - 2011



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

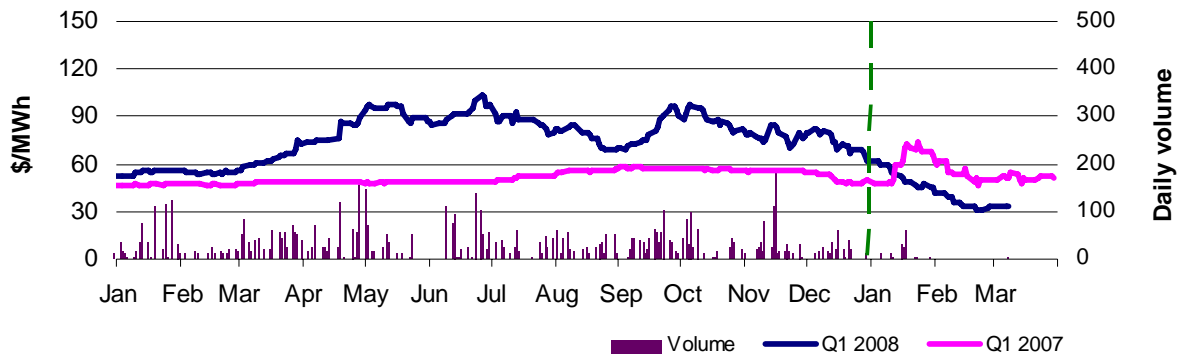
Figure 7-10 compares for each region the closing daily base contract price for the first quarter of 2007 against 2008 and also shows the daily volume of Q1 08 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland



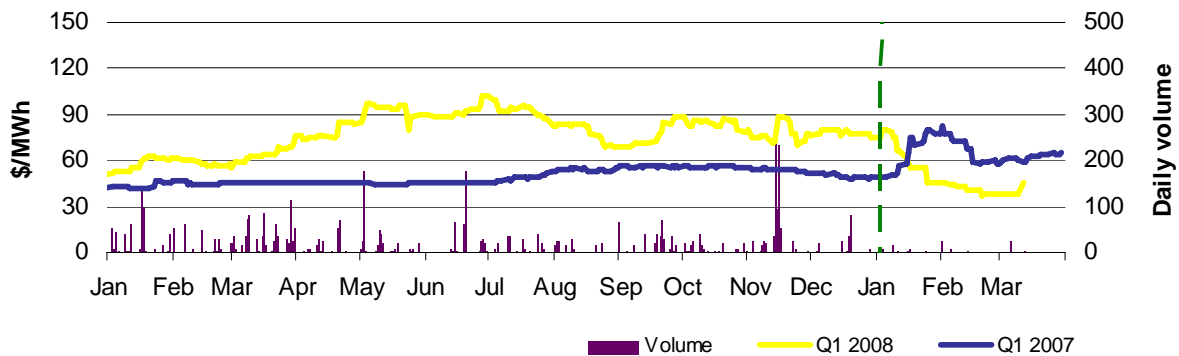
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 8: New South Wales



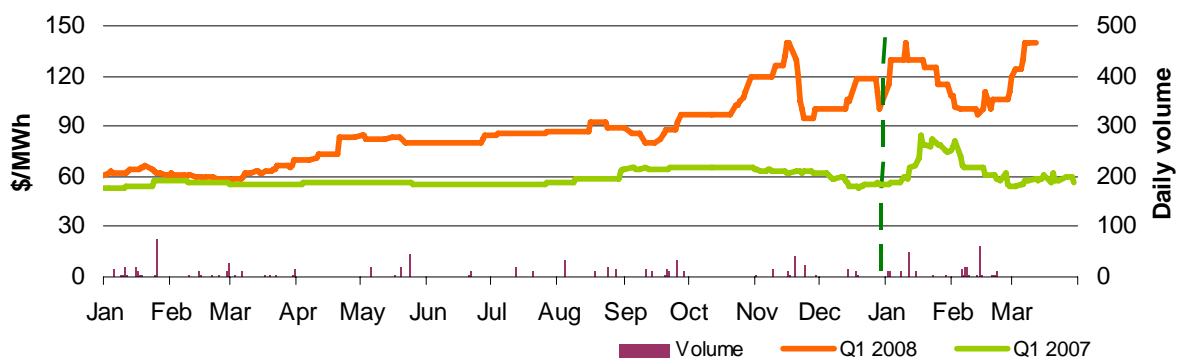
Source: d-cyphaTrade www.d-cyphatrade.com.au

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 105 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	13%	4%	0%	18%
Price is lower than forecast	1%	58%	0%	6%

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 only². For example, in Queensland 213 MW more 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.

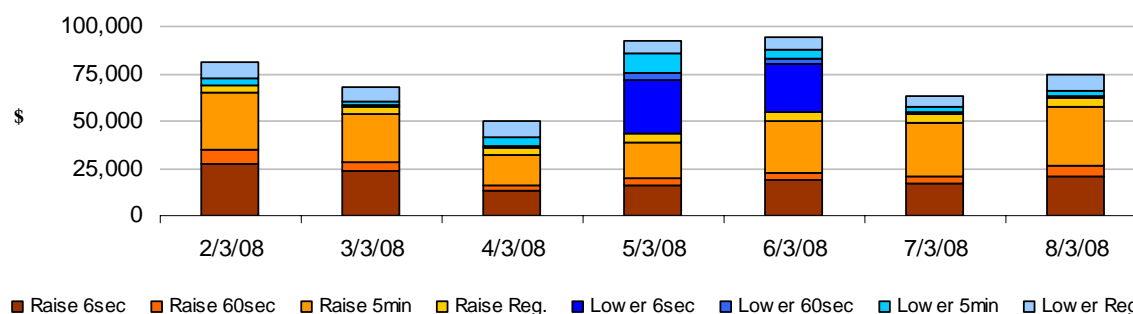
Figure 12: Changes in available generation compared to the previous week during peak times

\$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	213	54	386	-214
New South Wales	-381	-285	-1,054	122
Victoria	84	33	238	248
South Australia	323	-97	372	459
Tasmania	-2	4	136	1
Snowy	0	94	13	-9
Total	237	-198	92	607

Ancillary services market

The total cost of ancillary services on the mainland for the week was \$395 000 or less than one per cent of turnover in the energy market. The total cost of ancillary services in Tasmania for the week was \$128 000 or 1 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

² 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



2 March – 8 March 2008

Queensland: There were four occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of \$26/MWh. On each occasion, however, prices were lower than in any other region.

Wednesday, 5 March

4:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	78.27	76.39	31.92
Demand (MW)	6713	6817	6897
Available capacity (MW)	10 585	10 809	10 838

Conditions at the time saw demand and available capacity close to that forecast four and 12 hours ahead. Price was also close to that forecast four hours ahead. There was no significant rebidding.

Thursday, 6 March

3:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	82.08	88.55	74.91
Demand (MW)	6772	6914	6837
Available capacity (MW)	10 533	10 500	10 635
3:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	83.57	88.53	74.35
Demand (MW)	6777	6896	6817
Available capacity (MW)	10 568	10 494	10 635
4:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	82.00	94.59	74.64
Demand (MW)	6756	6900	6822
Available capacity (MW)	10 606	10 494	10 635

Conditions at the time saw demand and available capacity close to that forecast four and 12 hours ahead. Prices were close to forecast and there was no significant rebidding.

South Australia: There were 13 occasions where the spot price in South Australia was greater than three times the South Australia weekly average price of \$555/MWh.

Wednesday, 5 March

3:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9252.07	9949.89	500.02
Demand (MW)	2598	2631	2524
Available capacity (MW)	2974	2954	2930
3:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9949.52	9950.17	1807.07
Demand (MW)	2624	2663	2553
Available capacity (MW)	3007	2954	2930
4:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9975.23	9950.26	1818.06
Demand (MW)	2679	2679	2568
Available capacity (MW)	2996	2954	2930
4:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9967.00	9950.72	9037.25
Demand (MW)	2703	2687	2576
Available capacity (MW)	2998	2950	2926
5:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9950.40	9948.41	1796.84
Demand (MW)	2697	2677	2558
Available capacity (MW)	2993	2950	2926
5:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	8299.86	8726.00	1805.72
Demand (MW)	2675	2648	2531
Available capacity (MW)	2986	2940	2926

Conditions at the time saw demand and available capacity close to that forecast four and 12 hours ahead. Prices were close to that forecast four hours ahead and up to \$9000/MWh greater than that forecast 12 hours ahead. The forecast discrepancy is predominantly due to rebids made in between the forecast and actual times.

On 3 March, NEMMCO forecast Low Reserve Conditions (LRC) for South Australia between 2.30 pm to 5.30 pm. The maximum deficiency was estimated to be 74 MW. A market response increased the reserves above the required threshold and as a result NEMMCO cancelled the LRC the following day.

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, 6 March

3:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9717.35	574.59	9949.45
Demand (MW)	2689	2533	2607
Available capacity (MW)	3061	3079	3077
3:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9950.42	500.03	2183.91
Demand (MW)	2707	2602	2628
Available capacity (MW)	3064	3079	3077
4:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9950.75	1560.00	8752.01
Demand (MW)	2740	2610	2638
Available capacity (MW)	3067	3077	3077
4:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9950.66	1799.55	8752.01
Demand (MW)	2735	2660	2637
Available capacity (MW)	3075	3082	3076
5:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	9950.25	1000.00	2188.61
Demand (MW)	2715	2640	2617
Available capacity (MW)	3085	3082	3076

Conditions at the time saw demand and available capacity close to that forecast four and 12 hours ahead. Prices were up to \$9000/MWh above that forecast four hours ahead.

On 3 March, NEMMCO forecast an LRC condition for South Australia between 2.30 pm and 5.30 pm. The maximum deficiency was estimated to be 81 MW. A market response increased the reserves above the required threshold and as a result NEMMCO cancelled the LRC the following day.

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

Friday, 7 March

3:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	6979.01	6954.17	7004.2
Demand (MW)	2758	2766	2740
Available capacity (MW)	3087	3059	3021
4:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	7004.2	6954.17	7004.2
Demand (MW)	2809	2772	2747
Available capacity (MW)	3072	3051	3021

Conditions at the time saw demand and available capacity close to that forecast four and 12 hours ahead. Prices were also close to that forecast four and 12 hours ahead.

On 4 March, NEMMCO forecast an LRC condition for South Australia between 12.30 pm and 6 pm. The maximum deficiency was estimated to be 183 MW.

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.

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	105	55
2006-07 (\$/MWh) YTD	35	40	27	47	50	42
Change (YTD)	91%	15%	18%	6%	110%	30%
2006-07 (\$/MWh)	57	67	38	61	59	51

Table 2: NEM turnover

Financial year	NEM Turnover* (\$, billion)	Energy (TWh)
2007-08 YTD	\$8.1	143
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	25	32	22	36	508	58	0.31
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 3 March

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2008								
Price on 4 Mar (\$/MW)	75	105	31	45	38	62	106	210
Price on 11 Mar (\$/MW)	72	105	33	45	38	60	140	225
% increase since 1 March 07	31%	7%	-39%	-52%	-32%	-40%	145%	122%
Traded in the last week (MW)	5	0	5	0	25	25	0	0
Traded since 1 March 07	3224	372	5374	362	3528	552	724	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	190	-175	-1	131	126	-76	194
MW Priced \$20 to \$50	91	1,051	472	-122	-83	-5	1404