

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

22 June – 28 June 2008

Summary

Average prices for the week on the mainland ranged from \$43/MWh in Victoria and South Australia to \$60/MWh in Queensland. These prices represent an increase in all regions compared to the previous week, consistent with a decrease in low priced capacity in Queensland and an increase in demand in New South Wales. Prices in Tasmania averaged \$49/MWh.

In the financial markets, base futures prices were lower across all regions compared to the previous week with contracts traded continuing to increase. Cap contract prices have fallen in both New South Wales and Victoria.

Spot market prices

Figure 1 sets out the volume weighted average price for this week and the 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 22 June – 28 June	60	44	43	43	49
Financial year to 28 June	58	45	51	102	57
% change from previous week*	72%	19%	12%	11%	-13%
% change from year to date**	2%	-34%	-16%	73%	12%

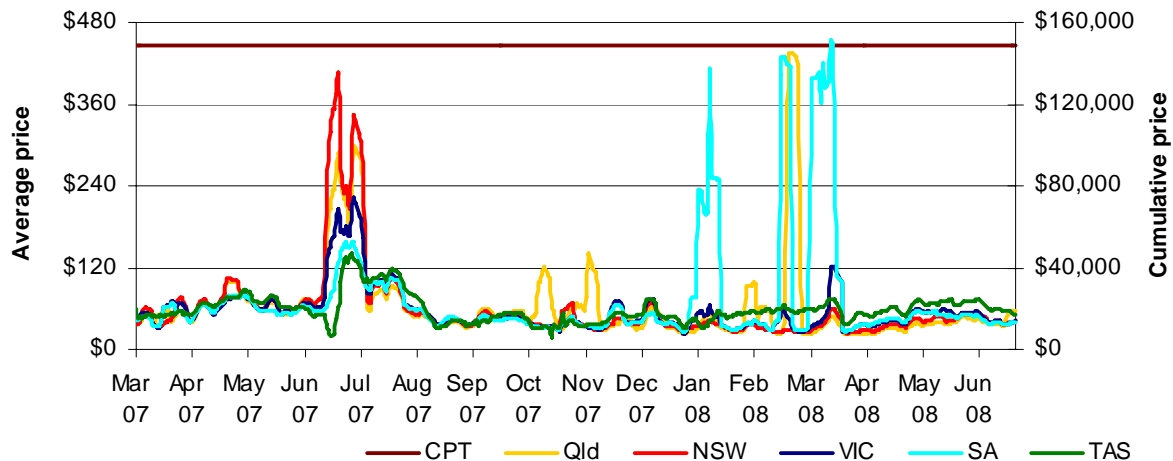
*The percentage change between last week's average spot price and the average price for the previous week.

**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. 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) for the last 15 months.

Figure 2: Seven day rolling cumulative price and CPT



Financial markets

Figures 3 to 10 show futures contract¹ prices traded on the Sydney Futures Exchange as at close of trade on Monday 30 June. Figure 3 shows the financial year base futures contract prices for the current year, the following two years, and the three year average. Also shown are percentage changes compared to a week earlier.

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

	QLD		NSW		VIC		SA	
Financial 2008-09	57	-3%	49	-7%	50	-6%	66	-2%
Financial 2009-10	52	-3%	53	-3%	52	-4%	55	-2%
Financial 2010-11	56	0%	54	0%	67	0%	49	0%
Three year average	55	-2%	52	-3%	56	-3%	57	-1%

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

Figure 4 shows the \$300 cap contract price for the first quarter of 2009 and the 2009 calendar year and the change from the previous week.

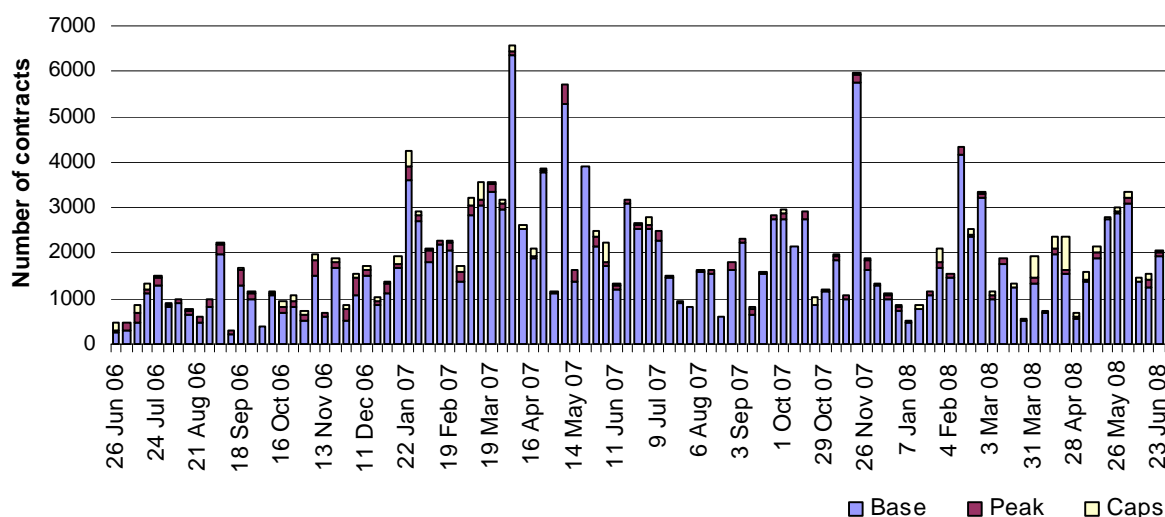
Figure 4: \$300 cap contract prices (\$/MWh)

	QLD		NSW		VIC		SA	
Q1 2009 price	43	0%	24	-11%	24	-12%	65	0%
Calendar 2009	17	0%	12	-11%	11	-7%	21	0%

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

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

Figure 5: Number of exchange traded contracts per week

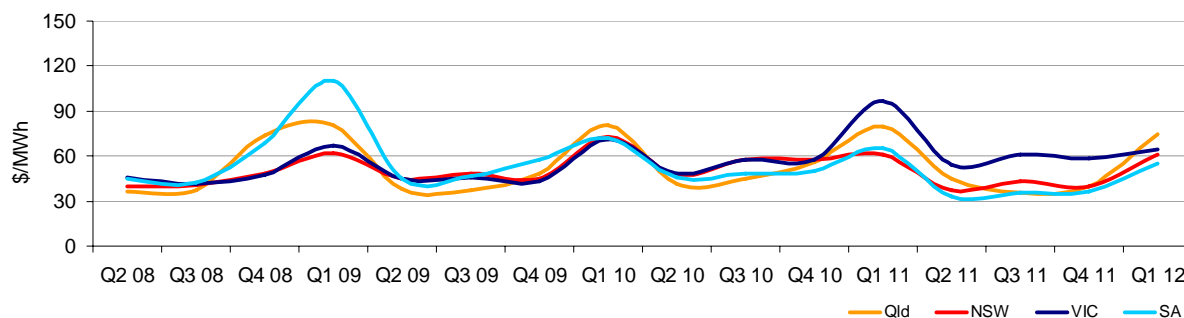


Source: d-cyphaTrade www.d-cyphatrade.com.au

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 7 am to 10 pm Monday to Friday (excluding Public holidays) over the duration of the contract quarter.

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

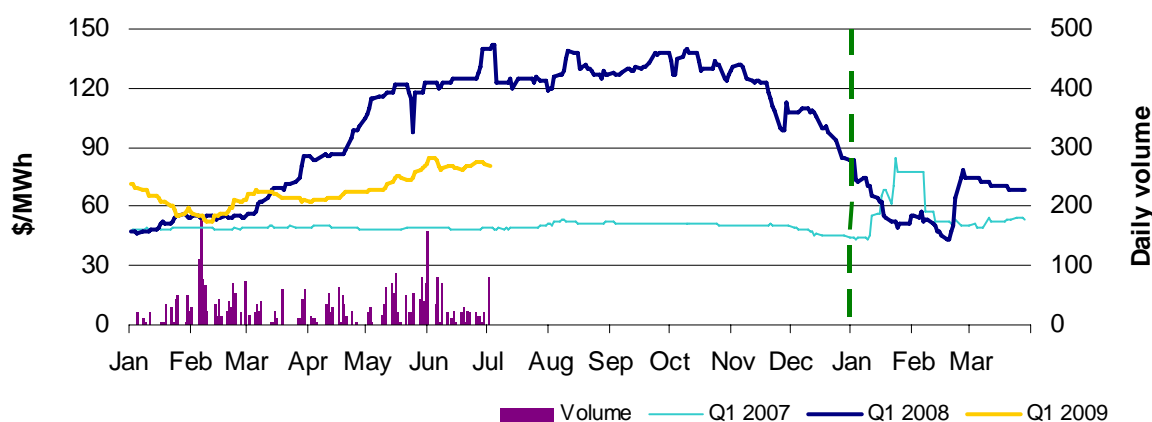
Figure 6: Quarterly base future prices 2008 - 2011



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

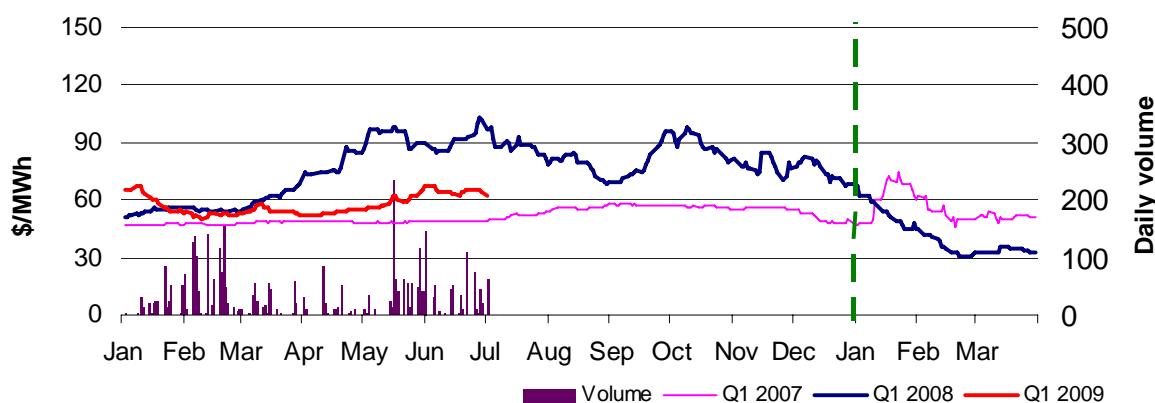
Figures 7-10 compares for each region the closing daily base contract price for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 09 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



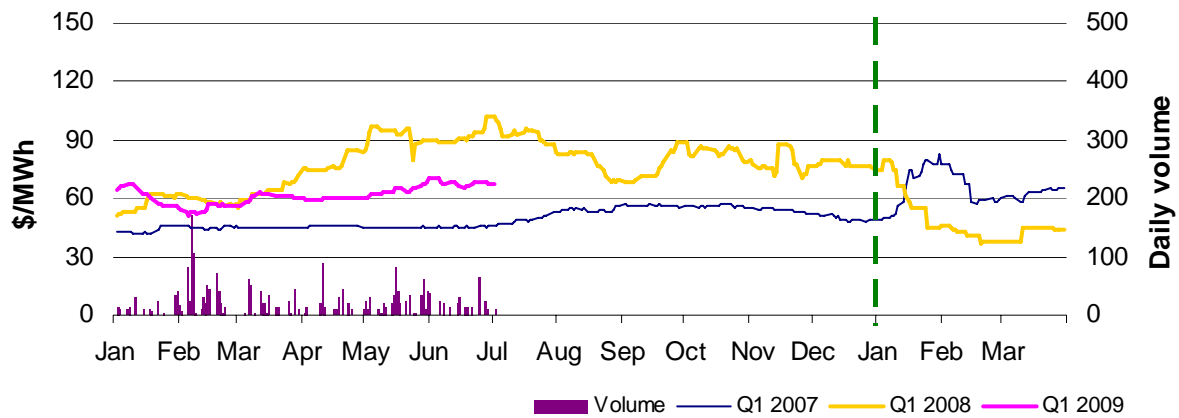
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 8: New South Wales Q1 2007, 2008 and 2009



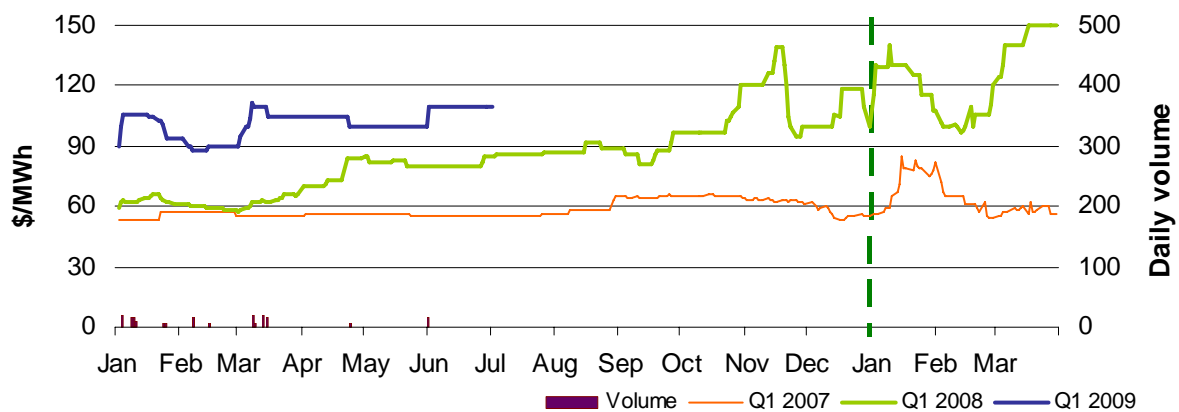
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 9: Victoria Q1 2007, 2008 and 2009



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

Figure 10: South Australia Q1 2007, 2008 and 2009



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. There were 86 trading intervals where actual prices significantly varied from forecasts² throughout the week. This compares to the weekly average in 2007 of 125 counts. Reasons for these variances are summarised in Figure 11³.

Figure 11: Reasons for variations between forecast and actual prices

	Availability	Demand	Network	Combination
Price is higher than forecast	5%	48%	0%	23%
Price is lower than forecast	0%	19%	0%	4%

² A trading interval is counted as having a variation if the actual price differs significantly from the forecast price either four or twelve hours ahead.

³ The table summarises (as a percentage) the number of times when the actual price differs significantly from the forecast price four or twelve hours ahead and the major reason for that variation. The reasons are classified as availability (which means that there is a change in the total quantity or price offered for generation), demand forecast inaccuracy, changes to network capability or as a combination of factors (when there is not one dominant reason). An instance where both twelve and four hour ahead forecasts differ significantly from the actual price will be counted as two variations.

Demand and bidding patterns

The AER reviews demand, network limitations and generator bidding as part of its 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 only⁴. For example, in Queensland 387 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

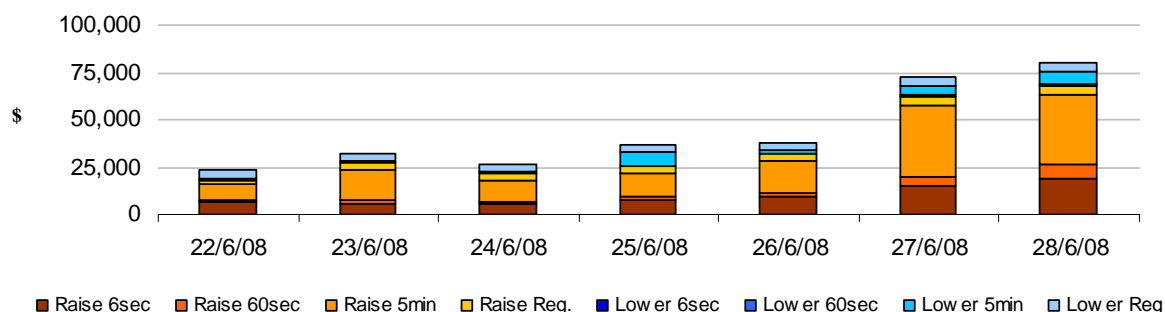
\$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	-387	46	-547	65
New South Wales	105	114	308	386
Victoria	-41	61	-25	-42
South Australia	-49	-7	-41	-19
Tasmania	177	39	-50	-22
Snowy	-95	43	-139	1
Total	-290	296	-493	369

Ancillary services market

The total cost of ancillary services on the mainland for the week was \$235 000 or 0.1 per cent of turnover in the energy market. The total cost of ancillary services in Tasmania for the week was \$73 000 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 July 2008

⁴ Peak period is defined as between 7 am and 10 pm on weekdays, which aligns with the SFE contract definition.

APPENDIX A:

Detailed Market Analysis



22 June – 28 June 2008

National: Spot prices within the national market are regularly aligned with conditions in one region reflected across all others. There were three occasions where the price generally aligned across all regions and the New South Wales, Victoria and South Australian prices were greater than three times the weekly average price. In the following table 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.

Monday, 23 June

5:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	144.52	57.39	63.21
Demand (MW)	29 426	28 557	28 374
Available capacity (MW)	36 343	36 350	36 264
6:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	178.54	100.77	131.65
Demand (MW)	30 927	29 994	29 577
Available capacity (MW)	36 158	36 359	36 269
6:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	167.49	131.40	129.11
Demand (MW)	31 029	30 109	29 568
Available capacity (MW)	36 286	36 329	36 234

Conditions at the time saw demand 1000 MW higher than forecast four hours ahead. Available capacity was close to that forecast four and twelve hours ahead. Actual demand was 700 MW higher than forecast just before the 5.30 pm trading interval.

There was no significant rebidding.

Queensland: There were three occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of \$60/MWh.

Sunday, 22 June

5:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	1646.98	43.88	54.80
Demand (MW)	6153	6247	6254
Available capacity (MW)	8206	8621	8611

Conditions at the time saw demand close to forecast and available capacity 400 MW lower than forecast.

At 5.10 pm the five minute price reached above \$9000/MWh. This coincided with a five minute increase in demand of 130 MW and 445 MW of low priced generation was off. This resulted in 28 MW of generation dispatched at above \$9000/MWh. At 7.35 am demand

reduced slightly and one of the generators that was off got a start and prices returned to previous levels.

Over two rebids at 1.35 pm and 4.54 pm CS Energy reduced the availability of Kogan Creek by 150 MW due to ashing problems. All of the capacity was priced below \$20/MWh.

At 5.02 pm Babcock and Brown Power rebid 155 MW of capacity at Braemar unit two from prices below \$40/MWh to above \$9000/MWh. The reason given was “RTS delayed”.

At 4.52 pm Stanwell Corporation’s Gladstone unit five tripped reducing availability by 280 MW all of which was priced below \$50/MWh.

There was no other significant rebidding.

Monday, 23 June

7:30 am	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	1632.49	47.87	47.24
Demand (MW)	6711	6685	6654
Available capacity (MW)	8816	8911	9001

Conditions at the time saw demand close to that forecast four and twelve hours ahead. Available capacity was slightly lower than forecast four and twelve hours ahead.

At 7.10 am the five minute price reached above \$9000/MWh. This coincided with a five minute increase in demand of 135 MW and 300 MW of low priced generation was off. This resulted in 8 MW of generation dispatched at above \$9000/MWh. At 7.35 am demand reduced by 60 MW and prices returned to previous levels.

There was no significant rebidding.

Tuesday, 24 June

7:30 am	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	1729.00	41.65	153.58
Demand (MW)	6879	6711	6931
Available capacity (MW)	8660	8709	8714

Conditions at the time saw demand higher than forecast four hours ahead but lower than that forecast 12 hours ahead. Available capacity was slightly lower than forecast four and twelve hours ahead.

At 7.30 am the five minute price reached above \$9000/MWh. This coincided with a five minute increase in demand of 60 MW and 150 MW of low priced generation was off. This resulted in 44 MW of generation dispatched at above \$9000/MWh. At 7.35 am demand reduced by 60 MW and prices returned to previous 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	58	45	31	51	102	57
2006-07 (\$/MWh) YTD	57	67	38	60	58	50
Change (YTD)	2%	-34%	-17%	-16%	74%	13%
2006-07 (\$/MWh)	57	67	38	61	59	51

Table 2: NEM turnover

Financial year	NEM Turnover* (\$, billion)	Energy (TWh)
2007-08 YTD	\$11.1	207
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)
Feb-08	161	28	24	41	207	58	1.30
Mar-08	31	37	29	65	325	57	1.12
Apr-08	29	34	28	41	44	56	0.60
May-08	41	47	36	56	53	68	0.87
Jun-08	44	45	28	45	43	60	0.74
Q1 2007	60	57	29	75	69	50	3.26
Q1 2008	80	34	27	50	243	54	3.36
Change	34%	-40%	-8%	-33%	252%	9%	

Table 4: ASX energy futures contract prices at 30 June

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2009								
Price on 23 Jun (\$/MW)	82	142	66	104	69	114	110	160
Price on 30 Jun (\$/MW)	81	145	62	103	67	108	110	160
Open interest on 30 Jun	2098	139	2023	66	1477	434	145	0
Traded in the last week (MW)	136	0	140	0	45	80	0	0
Traded since 1 Jan 08	3428	302	3732	68	2396	540	170	0
Settled price for Q1 08(\$/MW)	68	97	32	42	43	65	152	322

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

Comparison:	QLD	NSW	SNOWY	VIC	SA	TAS	NEM
April 08 with April 07							
MW Priced <\$20	1,048	1,029	0	-201	-139	41	1777
MW Priced \$20 to \$50	-45	827	527	-97	150	60	1422
May 08 with May 07							
MW Priced <\$20	526	570	-74	-84	0	-71	866
MW Priced \$20 to \$50	89	277	419	-62	-42	25	707
June 08 with June 07							
MW Priced <\$20	307	370	-25	-62	-70	-405	114
MW Priced \$20 to \$50	302	202	299	41	44	95	985