

# WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY  
REGULATOR

6 April – 12 April 2008

## Summary

Average prices for the week on the mainland ranged from \$25/MWh in Queensland to \$40/MWh in South Australia and in Tasmania averaged \$54/MWh. These prices represent a slight increase compared to the previous week, consistent with marginal increases in demand and reductions in low priced generation capacity.

In the financial markets, Base calendar and financial year prices remained steady across all regions.

## 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 6 April - 12 April	25	28	37	40	54
Financial year to 12 April	63	45	51	116	55
% change from previous week*	4%	3%	2%	7%	4%
% change from year to date**	65%	6%	6%	125%	25%

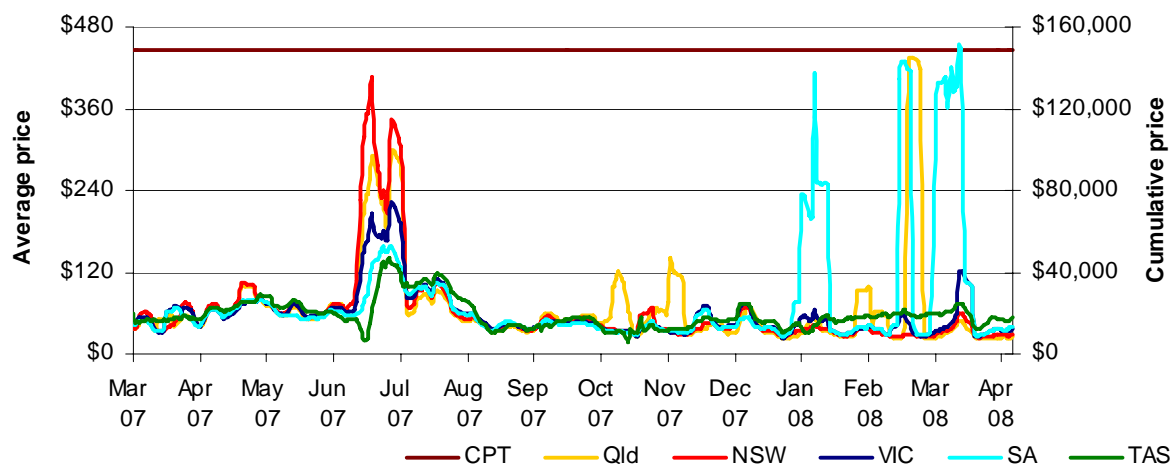
\*The percentage change between last week's average spot price and the average price for the previous week.

\*\*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. Longer term market trends are attached in Appendix A.

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: Seven day rolling cumulative price and CPT**



## Financial markets

Figures 3 to 10 show futures contract<sup>1</sup> prices traded on the Sydney Futures Exchange as at close of trade on Monday 14 April. Figure 3 shows the financial year 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 financial year futures contract prices (\$/MWh)**

	QLD		NSW		VIC		SA	
Financial 2009	46	1%	45	0%	47	0%	66	0%
Financial 2010	46	4%	50	0%	49	2%	54	0%
Financial 2011	51	2%	52	1%	52	4%	44	0%
Three year average	48	2%	49	1%	50	2%	55	0%

Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://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.

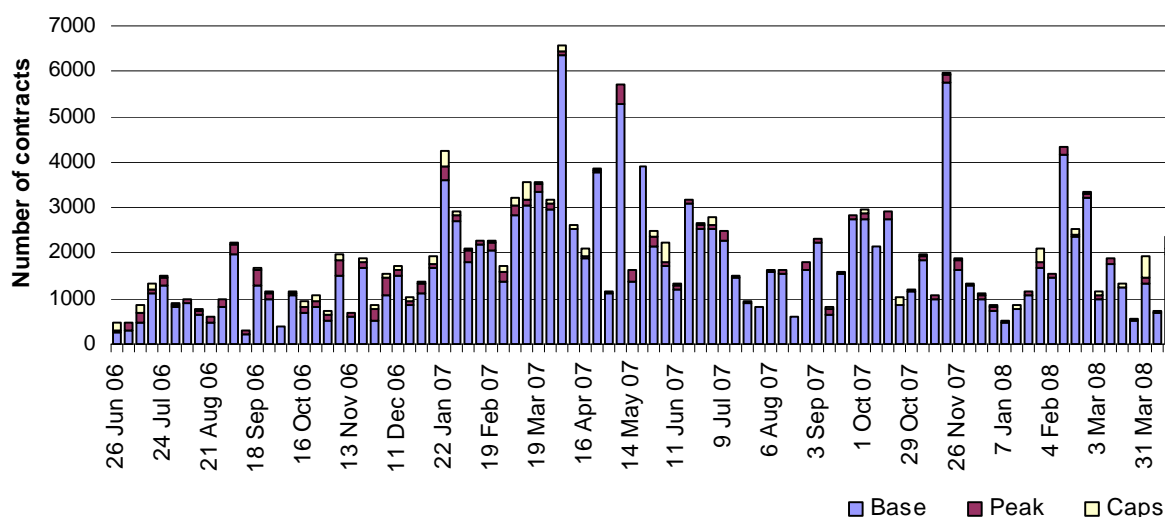
**Figure 4: \$300 cap contract prices (\$/MWh)**

	QLD		NSW		VIC		SA	
Q1 2009 price	30	-14%	23	0%	24	-10%	40	0%
Calendar 2009	13	-1%	12	0%	11	-6%	14	0%

Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://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.

**Figure 5: Number of exchange traded contracts per week**

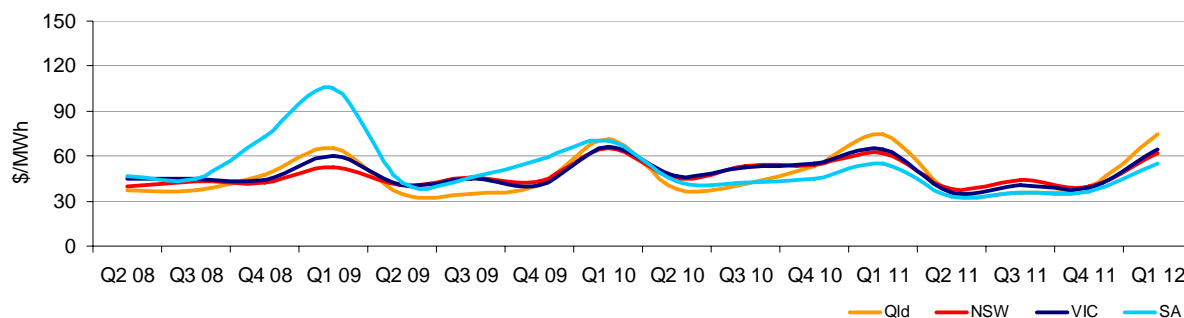


Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

<sup>1</sup> Futures contracts on the SFE are listed by d-cyphaTrade ([www.d-cyphatrade.com.au](http://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 three years.

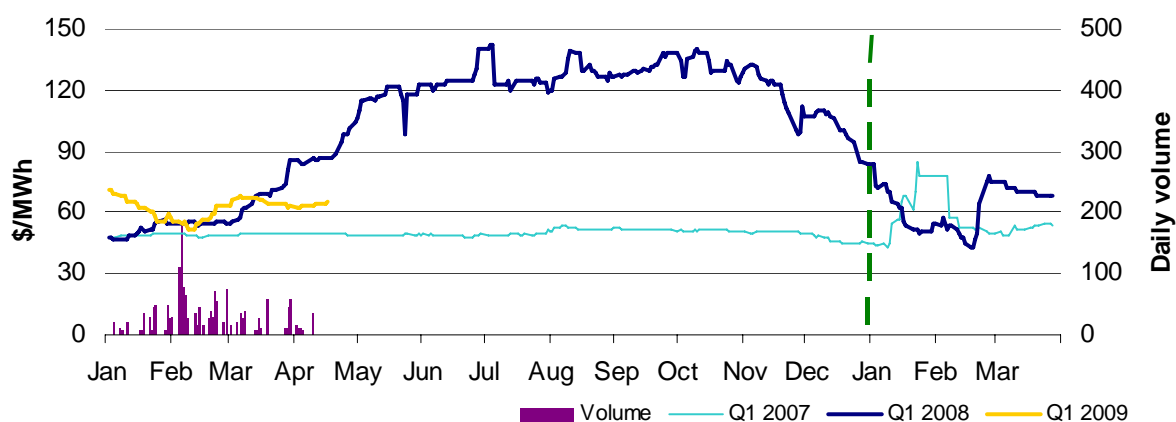
**Figure 6: Quarterly base future prices 2008 - 2011**



Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

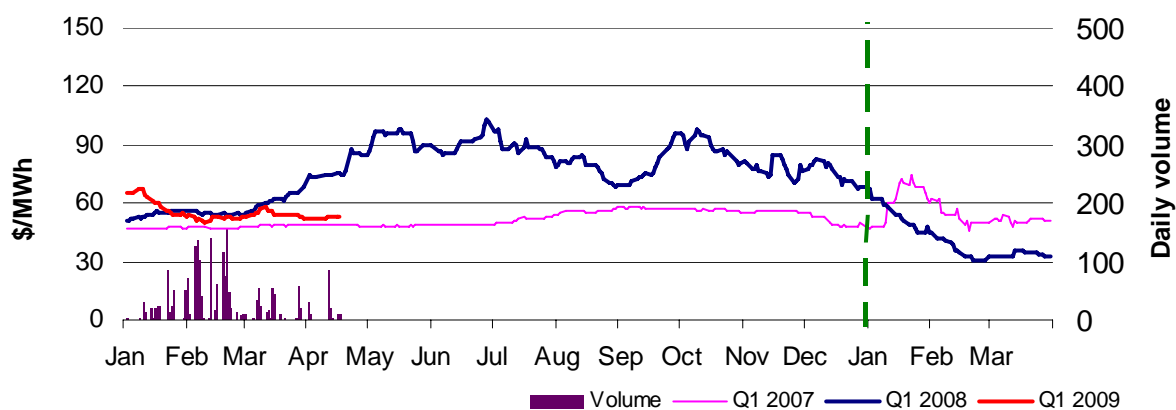
Figure 7-10 compares for each region the closing daily base contract price for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 09 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

**Figure 7: Queensland Q1 2007, 2008 and 2009**



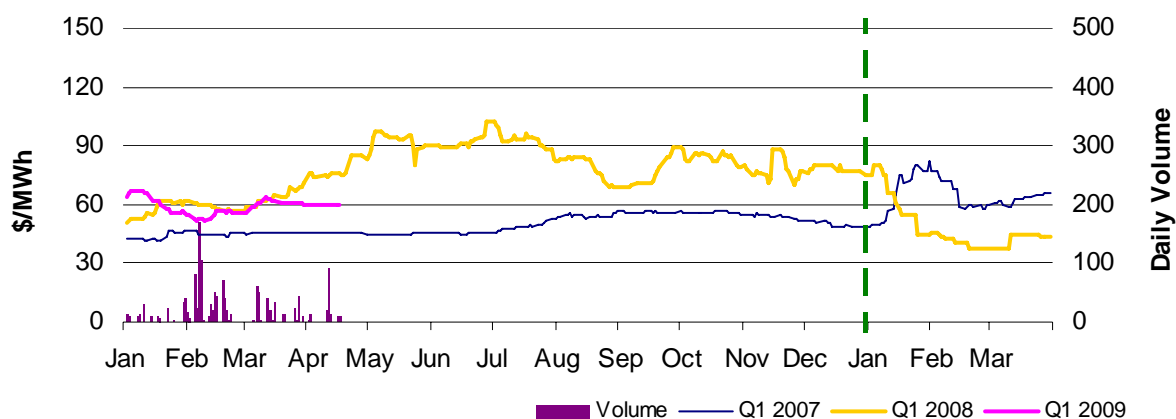
Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

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



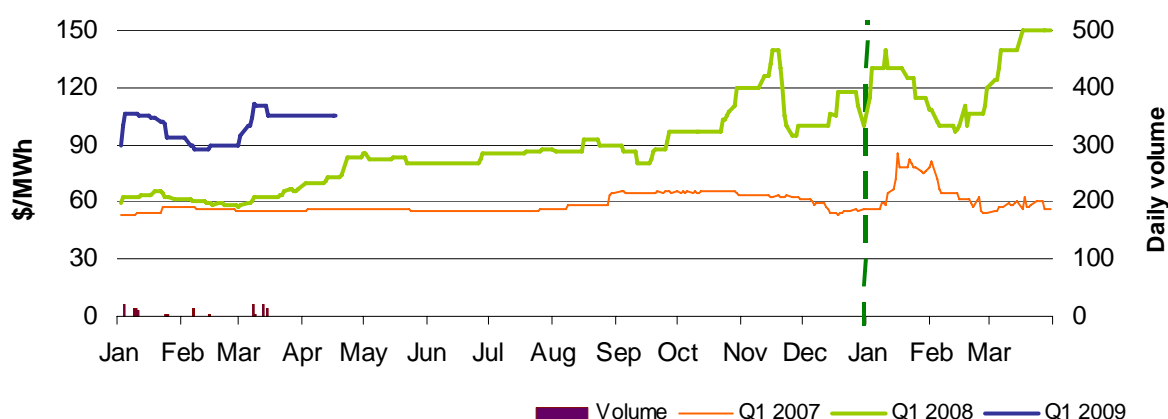
Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

**Figure 9: Victoria Q1 2007, 2008 and 2009**



Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

**Figure 10: South Australia Q1 2007, 2008 and 2009**



Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://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 70 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	2%	35%	0%	60%
Price is lower than forecast	0%	3%	0%	1%

### 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 only<sup>2</sup>. For example, in Queensland 161 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.

<sup>2</sup> Peak periods is defined as between trading intervals ending 7.30 am and 10 pm on weekdays, which aligns with the SFE contract definition.

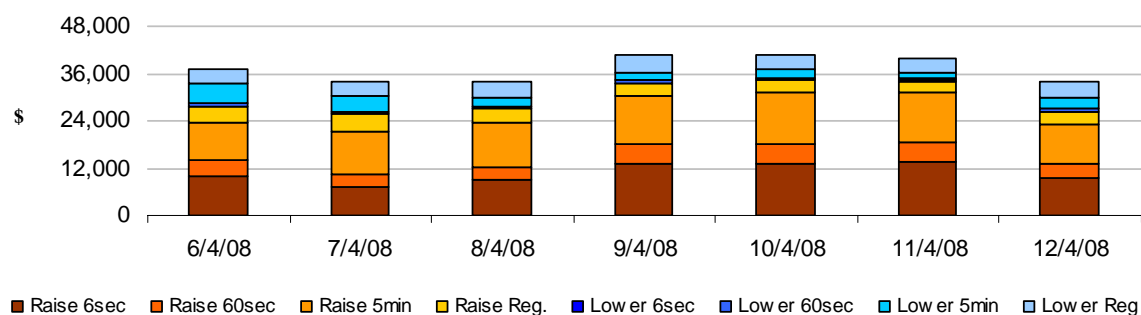
**Figure 12: Changes in available generation compared to the previous week during peak times**

\$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	-161	-24	-247	-154
New South Wales	84	-161	78	163
Victoria	297	-184	400	174
South Australia	-116	49	-65	85
Tasmania	-103	0	-133	1
Snowy	-104	31	-209	4
Total	-103	-289	-176	272

### Ancillary services market

The total cost of ancillary services on the mainland for the week was \$204 000 or 0.2 per cent of turnover in the energy market. The total cost of ancillary services in Tasmania for the week was \$56 000 or 0.5 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**



## Appendix A: 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	63	45	31	51	116	55
2006-07 (\$/MWh) YTD	38	42	29	48	51	44
Change (YTD)	66%	6%	10%	6%	125%	25%
2006-07 (\$/MWh)	57	67	38	61	59	51

**Table 2: NEM turnover**

Financial year	NEM Turnover* (\$, billion)	Energy (TWh)
2007-08 YTD	\$9.1	163
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)
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	31	37	29	65	325	57	1.12
Apr-08	25	28	26	36	39	51	0.23
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 14 April**

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2009								
Price on 07 Apr (\$/MW)	64	110	52	89	59	102	105	160
Price on 14 Apr (\$/MW)	65	113	53	89	60	102	105	160
Open interest on 7 Apr	1776	70	1485	66	1219	337	140	0
Traded in the last week (MW)	175	3	131	0	125	15	0	0
Traded since 1 Jan 08	1894	142	2088	68	1475	300	150	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
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	134	-130	27	-59	46	-19	-1
MW Priced \$20 to \$50	7	1,087	463	-100	-51	27	1434