

# WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY  
REGULATOR

3 May-9 May 2009

## Summary

Average spot prices for the mainland regions ranged from \$31/MWh in Queensland to \$38/MWh in Victoria and South Australia. The average spot price in Tasmania was \$55/MWh.

On 4 May, the Federal Government announced that the commencement of the proposed Carbon Pollution Reduction Scheme will be delayed by one year to 1 July 2011, and that the carbon price will be fixed at \$10/tonne for the first year of the scheme. Since the announcement there have been a high number of trades, with prices initially falling by up to ten per cent in base contract prices post Q2 2010, and falling further by up to four per cent by the end of the week.

## Spot market prices

Figure 1 sets out the volume weighted average prices for 3 May to 9 May and the financial year to date across the National Electricity Market. It compares these prices 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
Average price for 3 May – 9 May	31	33	38	38	55
Financial year to date	37	44	52	75	50
% change from previous week	-22%	-29%	-24%	-21%	-29%
% change from year to date	-38%	-1%	2%	-33%	-11%

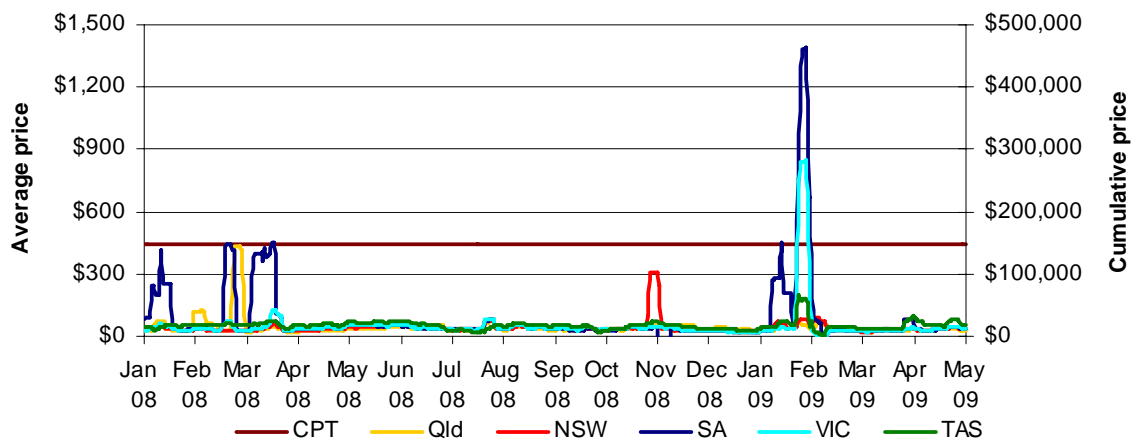
\*The percentage change between last week's average spot price and the average price for the previous week.

\*\*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 Cumulative Price Threshold (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 (SFE) as at close of trade on Monday 11 May. Figure 3 shows the base futures contract prices for the next three financial 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 2009-10	43	0%	45	0%	48	0%	56	1%
Financial 2010-11	45	-2%	48	-6%*	50	-1%	65	0%
Financial 2011-12	60	-1%	61	-5%	64	-1%	69	0%
Three year average	49	-1%	51	-4%	54	0%	63	0%

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

\* there were trades in this product but not in others.

Figure 4 shows the \$300 cap contract price for the first quarter of 2010 and the 2010 financial year and the percentage change from the previous week.

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

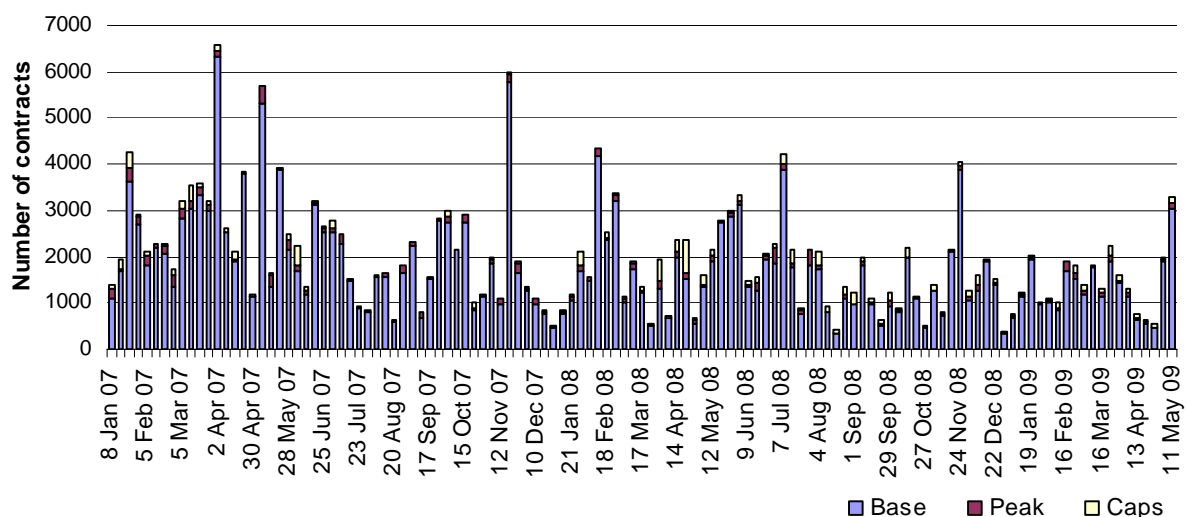
	QLD		NSW		VIC		SA	
Q1 2010	27	0%	21	-7%	35	0%	45	0%
Financial 2009-10	12	0%	10	-2%	12	-2%	17	5%

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

Note: there were no trades in these products.

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**



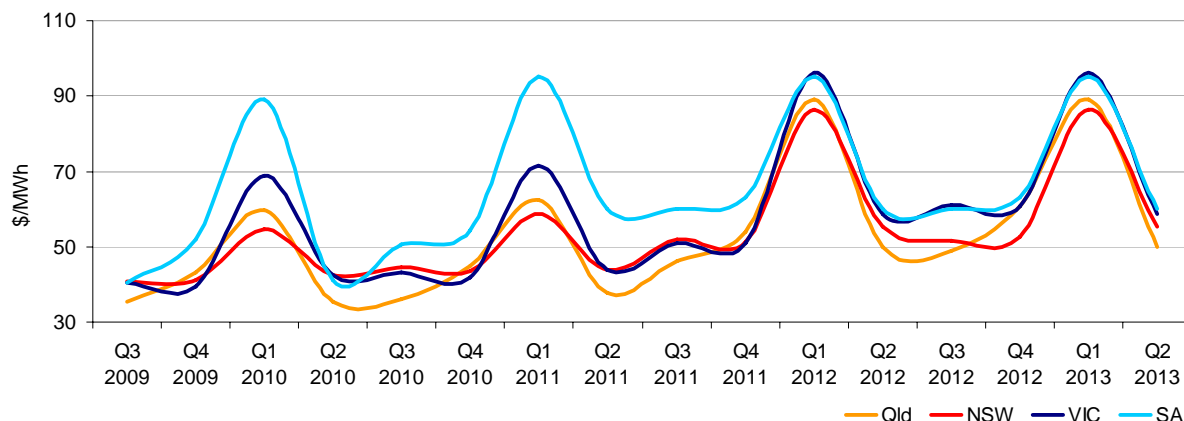
Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

<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 four financial years.

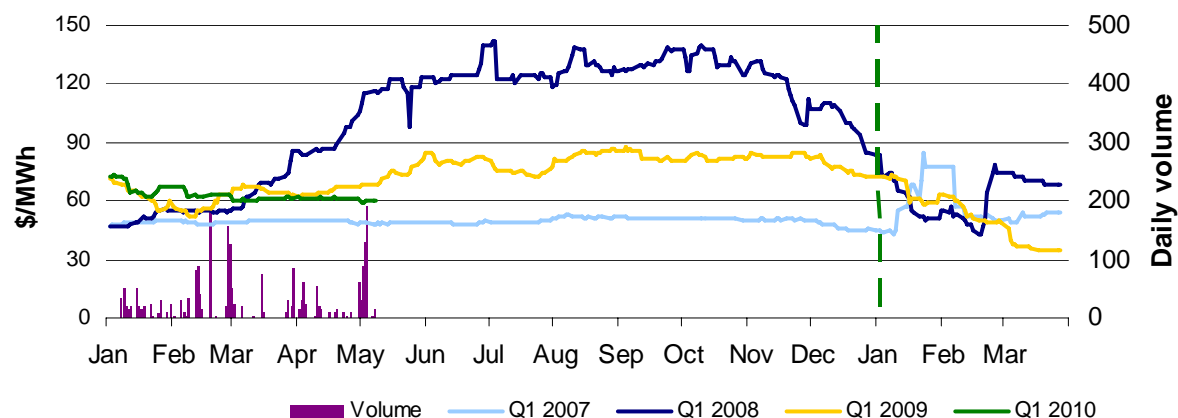
**Figure 6: Quarterly base future prices Q3 2009 – Q2 2013**



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

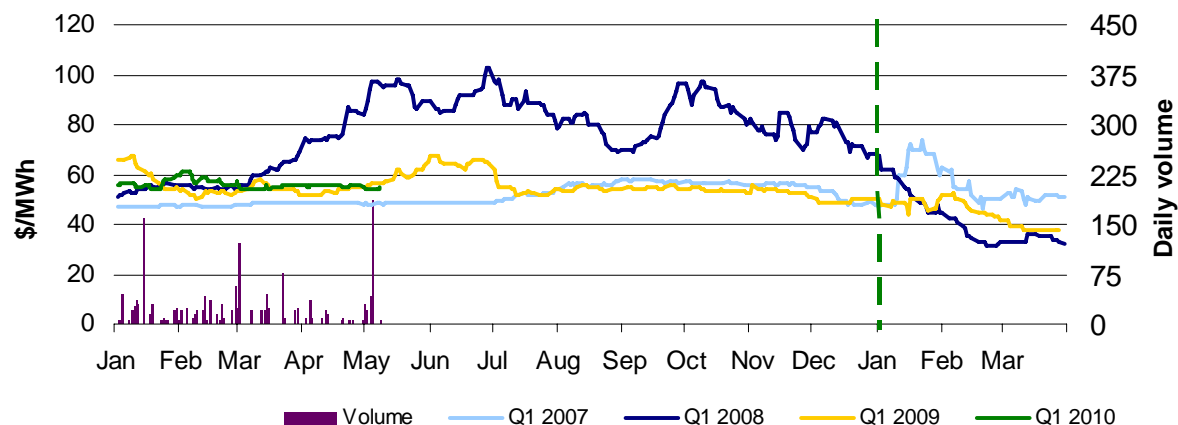
Figures 7-10 compare for each region the closing daily base contract prices for the first quarter of 2007, 2008, 2009 and 2010. Also shown is the daily volume of Q1 2010 base contracts traded. The vertical dashed line signifies the start of the Q1 period for which the contracts are being purchased.

**Figure 7: Queensland Q1 2007, 2008, 2009 and 2010**



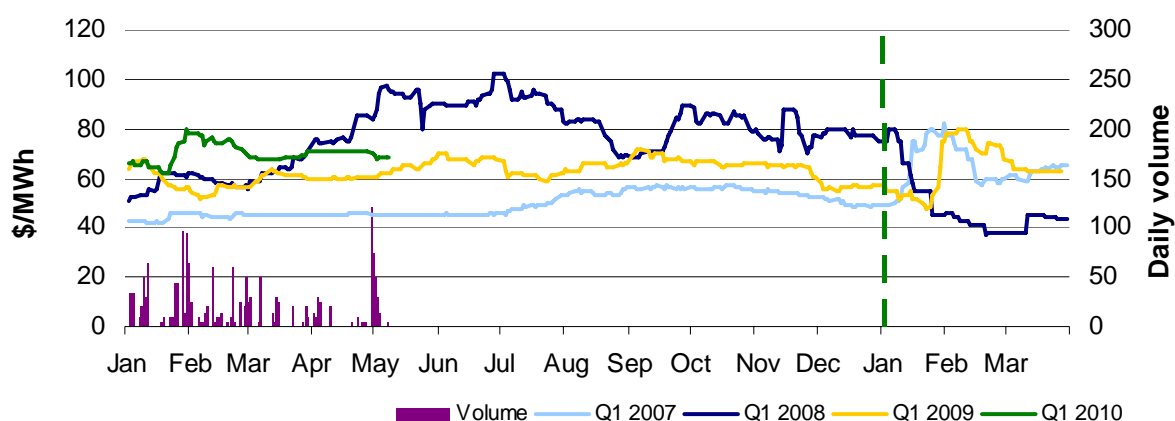
Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

**Figure 8: New South Wales Q1 2007, 2008, 2009 and 2010**



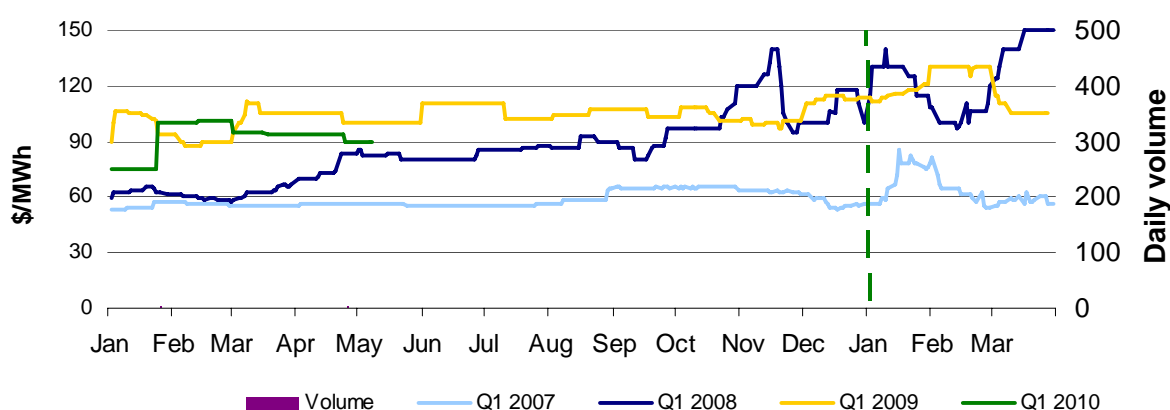
Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

**Figure 9: Victoria Q1 2007, 2008, 2009 and 2010**



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

**Figure 10: South Australia Q1 2007, 2008, 2009 and 2010**



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

### Spot market forecasting variations

The AER is required under 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, if there is a variation, state why the AER considers 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 107 trading intervals throughout the week where actual prices varied significantly from forecasts<sup>2</sup>. This compares to the weekly average in 2008 of 130 counts. Reasons for these variances are summarised in Figure 11<sup>3</sup>.

**Figure 11: Reasons for variations between forecast and actual prices**

	Availability	Demand	Network	Combination
% of total above forecast	0%	29%	0%	0%
% of total below forecast	66%	3%	0%	2%

<sup>2</sup> A trading interval is counted as having a variation if the actual price differs significantly from the forecast price either four or 12 hours ahead.

<sup>3</sup> The table summarises (as a percentage) the number of times when the actual price differs significantly from the forecast price four or 12 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 four and 12 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 the change in total available capacity in each region from the previous week and at the price levels shown, for peak periods<sup>4</sup>. For example, in Queensland 20 MW more capacity was offered at prices under \$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 and average demand compared to the previous week during peak periods**

MW	<\$20/MWh	Between \$20 and \$50/MWh	Total availability	Change in average demand
Qld	20	-44	207	-208
NSW	506	-41	697	-4
VIC	-260	314	-85	-167
SA	64	-2	75	77
TAS	-175	130	96	-66
<b>TOTAL</b>	155	357	990	-368

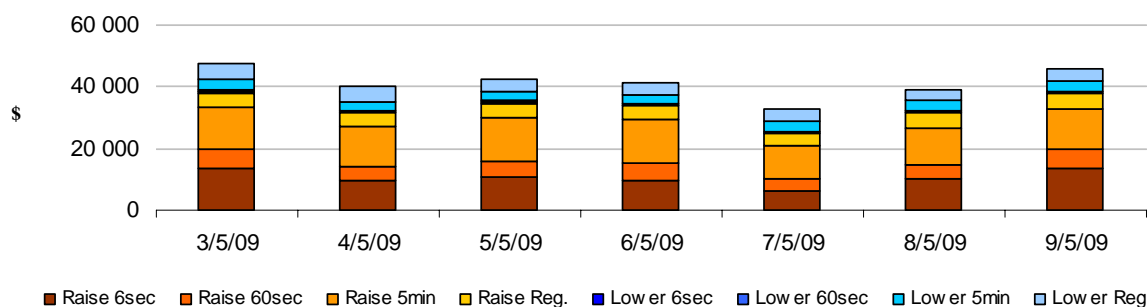
## Ancillary services market

The total cost of frequency control ancillary services on the mainland for the week was \$229 000 or less than one per cent of turnover in the energy market.

The total cost of ancillary services in Tasmania for the week was \$60 000 or less than one per cent of turnover in the energy market in Tasmania.

Figure 13 shows the daily breakdown of cost for each frequency control ancillary service for the NEM.

**Figure 13: Daily frequency control ancillary service cost**



## Australian Energy Regulator

May 2009

<sup>4</sup> A peak period is defined as between 7 am and 10 pm on weekdays, which aligns with the SFE contract definition.

## Detailed NEM Price and Demand Trends



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

Financial year	QLD	NSW	VIC	SA	TAS
2008-09 (\$/MWh) YTD	37	44	52	75	50
2007-08 (\$/MWh) YTD	60	44	51	111	56
Change*	-38%	-1%	2%	-33%	-11%
2007-08 (\$/MWh)	58	44	51	101	57

**Table 2: NEM turnover**

Financial year	NEM Turnover** (\$, billion)	Energy (TWh)
2008-09 YTD	\$8.292	178
2007-08	\$11.125	208

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

Volume weighted average (\$/MWh)	QLD	NSW	VIC	SA	TAS	Turnover (\$, billion)
Jan-09	44	57	190	374	85	1.962
Feb-09	42	47	38	47	40	0.709
Mar-09	27	26	26	35	37	0.466
Apr-09	34	38	40	38	69	0.622
May-09 MTD	31	33	39	38	55	0.175
Q1 2009	37	43	87	161	55	3.136
Q1 2008	80	34	50	243	54	3.358
Change*	-53%	28%	73%	-34%	1%	1.09%

**Table 4: ASX energy futures contract prices at 11 May**

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2010								
Price on 04 May (\$/MW)	60	104	54	91	69	123	89	102
Price on 11 May (\$/MW)	60	102	55	90	69	123	89	102
Open interest on 11 May	1885	80	1428	12	1605	40	8	0
Traded in the last week (MW)	430	15	250	0	100	0	0	0
Traded since 1 Jan 09 (MW)	2295	95	1610	12	1708	45	8	0
Settled price for Q1 09(\$/MW)	35	48	38	48	62	114	102	200

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

Comparison:	QLD	NSW	VIC	SA	TAS	NEM
March 09 with March 08						
MW Priced <\$20/MWh	-557	-386	119	-246	-50	-1121
MW Priced \$20 to \$50/MWh	562	347	129	-1	-2	1035
April 09 with April 08						
MW Priced <\$20/MWh	-755	-678	323	366	-41	-785
MW Priced \$20 to \$50/MWh	698	-218	-214	-33	57	290
May 09 with May 08						
MW Priced <\$20/MWh	-588	-424	285	233	-161	-655
MW Priced \$20 to \$50/MWh	543	-19	95	48	199	865

\*Note: These percentage changes are calculated on VWA prices prior to rounding

\*\* Estimated value