

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

21 June-27 June 2009

Summary

Average spot prices for the mainland regions ranged from \$24/MWh in Queensland to \$28/MWh in South Australia. The average spot price in Tasmania was \$42/MWh, significantly lower than the previous two weeks.

Spot market prices

Figure 1 sets out the volume weighted average prices for 21 June to 27 June and the financial year to date across the National Electricity Market (NEM). 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 21 June – 27 June	24	26	27	28	42
Financial year to date	36	43	49	69	62
% change from previous week*	-6	-9	-10	-12	-90
% change from year to date**	-37	-4	-3	-32	10

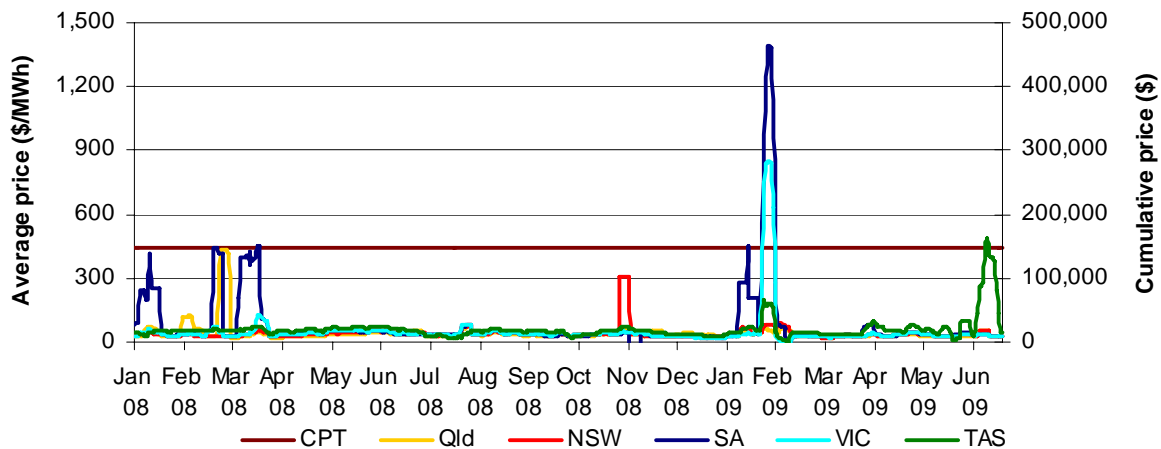
*The percentage change between last week's average spot price and the average price for the previous week.

**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. This is detailed 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 Cumulative Price Threshold (CPT) (and the equivalent seven day time weighted average price).

Figure 2: Seven day rolling cumulative price, average price and CPT



Financial markets

Figures 3 to 10 show futures contract¹ prices traded on the Sydney Futures Exchange (SFE) as at close of trade on Monday 29 June. Figure 3 shows the base futures contract prices for the next three calendar years, and the three year average. Also shown are percentage changes compared to the previous week.

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

	QLD		NSW		VIC		SA	
Calendar Year 2010	42*	0%	45*	0%	47	1%	53	0%
Calendar Year 2011	45*	1%	48*	0%	51*	0%	69	0%
Calendar Year 2012	55*	0%	59	-4%	63	-9%	69	0%
Three year average	48	0%	51	-2%	54	-3%	64	0%

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

* there were trades in these products but not in others.

Figure 4 shows the \$300 cap contract price for the first quarter of 2010 and the 2009-10 financial year and the percentage change from the previous week.

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

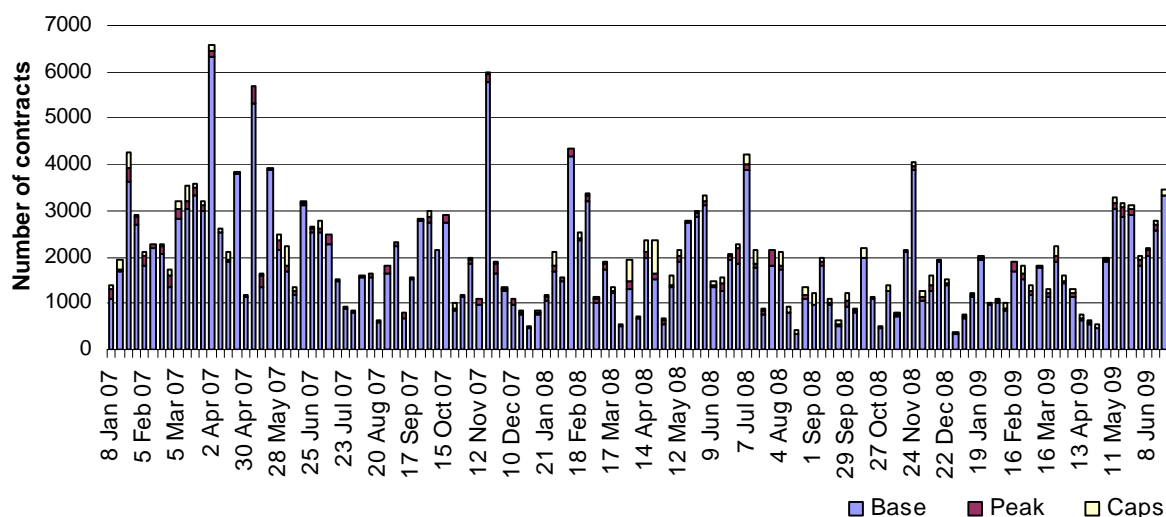
	QLD		NSW		VIC		SA	
Q1 2010	26	0%	21	0%	35	0%	45	0%
Financial 2009-10	11	-1%	10	0%	12	1%	18	5%

Source: d-cyphaTrade 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

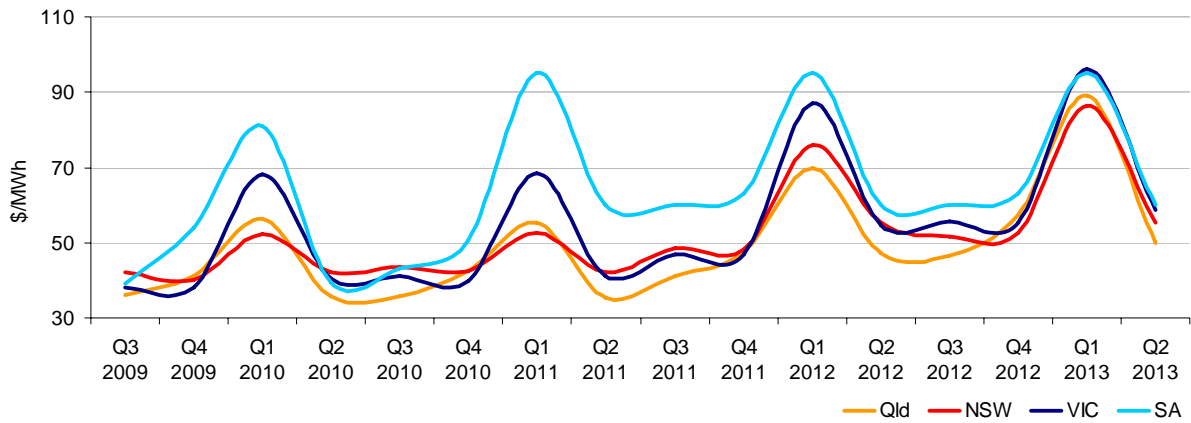


Source: d-cyphaTrade www.d-cyphatrade.com.au

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

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.

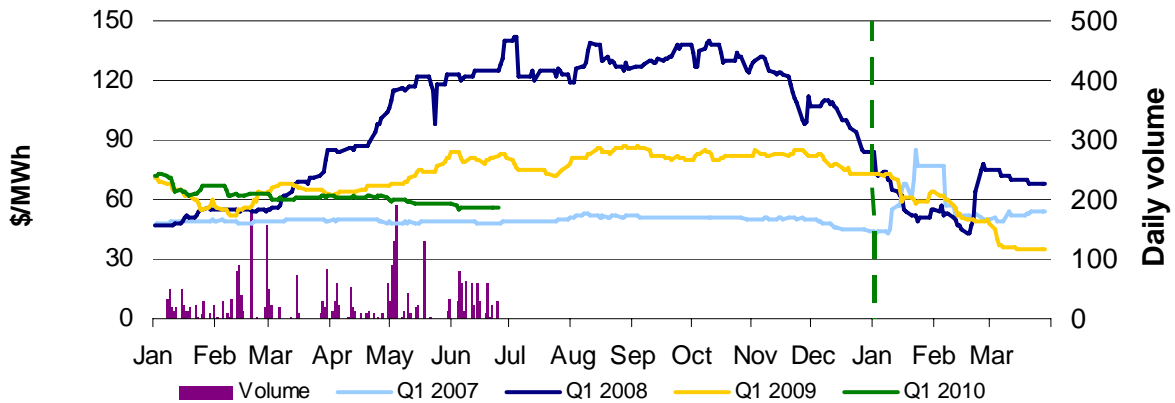
Figure 6: Quarterly base future prices Q3 2009 – Q2 2013



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

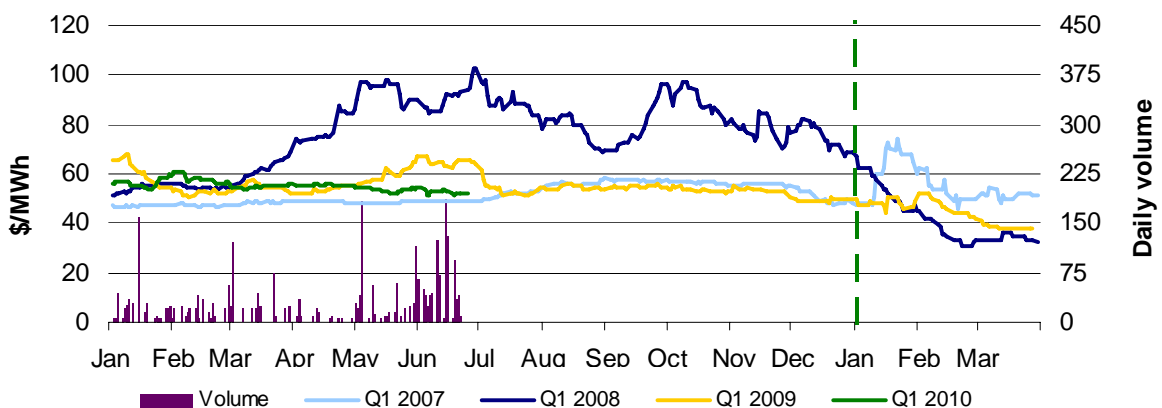
Figures 7-10 compare for each region the closing daily base contract prices for the first quarter of 2007, 2008, 2009 and 2010. Also shown is the daily volume of Q1 2010 base contracts traded. The vertical dashed line signifies the start of the Q1 period for which the contracts are being purchased.

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



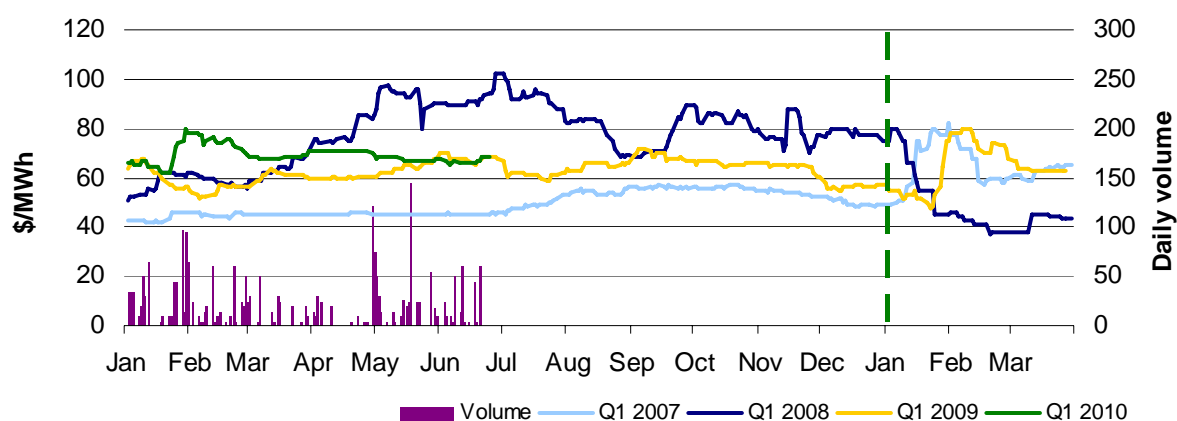
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



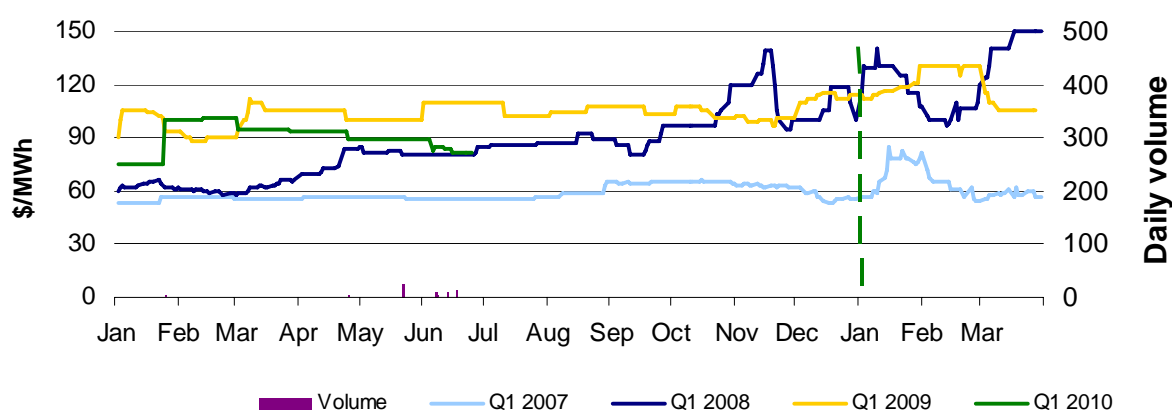
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



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

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



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

Spot market forecasting variations

The AER is required under the National Electricity Rules (Electricity Rules) to determine whether there is a significant variation between the forecast spot price published by NEMMCO, 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 117 trading intervals throughout the week where actual prices varied significantly from forecasts². This compares to the weekly average in 2008 of 130 counts. Reasons for these variances are summarised in Figure 11³.

Figure 11: Reasons for variations between forecast and actual prices

	Availability	Demand	Network	Combination
% of total above forecast	0	54	0	0
% of total below forecast	44	1	0	0

² 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.

³ 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 periods⁴. For example, in Queensland 199 MW less 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	-119	55	306	73
NSW	-331	301	182	-337
VIC	-20	-181	-295	-265
SA	134	-12	171	-9
TAS	-100	184	-2	16
TOTAL	-436	347	362	-522

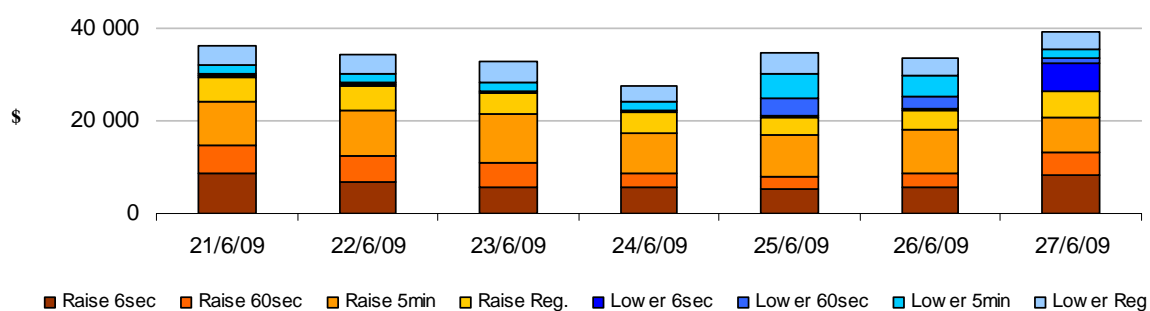
Ancillary services market

The total cost of frequency control ancillary services (FCAS) on the mainland for the week was \$169,000 or less than one per cent of turnover in the energy market.

The total cost of FCAS in Tasmania for the week was \$70,000 or less than one per cent of turnover in the energy market.

Figure 13 shows the daily breakdown of cost for FCAS for the NEM.

Figure 13: Daily frequency control ancillary service cost



Australian Energy Regulator

July 2009

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

21 June - 27 June 2009

Queensland/New South Wales: There was one occasion where the spot price aligned in Queensland and New South Wales and the price was greater than three times the weekly average price. The New South Wales spot price has been used as a proxy.

Thursday, 25 June

6:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	86.62	61.39	60.64
Demand (MW)	19 305	18 980	19 014
Available capacity (MW)	24 014	24 115	24 107

Conditions at the time saw demand 325 MW greater than that forecast four hours ahead and available capacity around 100 MW less than that forecast four hours ahead.

At 2.06 pm, CS Energy reduced the available capacity at Swanbank unit four by 120 MW (all of which was price below \$25/MWh). The reason given was “Swan_B_4 RTS delay”.

Over four rebids at around 4.50 pm, Delta Electricity rebid a total of 280 MW of capacity across its two Vales Points units, Wallerawang unit seven and Mount Piper unit two from prices below \$60/MWh to above \$8600/MWh. Each rebid only affected one unit and the rebid reason given on each occasion was “Demand higher than expected::Band shift”.

At 5.59 pm, Millmerran Energy Trader rebid 110 MW of capacity across its Millmerran units from prices below \$10/MWh to prices above \$9700/MWh. The reason given was “QNI_PD_Constraint::Change MW distribution”.

There was no other significant rebidding.

Tasmania: There was one occasion where the spot price in Tasmania was greater than three times the Tasmania weekly average price of \$42/MWh.

Wednesday, 24 June

5:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	126.95	33.02	30.50
Demand (MW)	1449	1405	1401
Available capacity (MW)	2037	2133	2133

Conditions at the time saw demand close to forecast and available capacity around 95 MW less than forecast.

From around 4.35 pm Aurora Energy’s Tamar Valley (unit TVPP104) failed to start and the unit was bid unavailable at 4.53 pm causing availability to be reduced by 58 MW. All of this capacity was priced below \$35/MWh.

As there was only 100 MW of capacity priced between \$33/MWh and \$95/MWh, the reduction in availability combined with the increase in demand led to the dispatch of higher-priced generation resulting in a sharp increase in the spot price.

There was no other significant rebidding.

Detailed NEM Price and Demand Trends

for Weekly Market Analysis
21 June - 27 June 2009



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

Financial year	QLD	NSW	VIC	SA	TAS
2008-09 (\$/MWh) YTD	36	43	49	69	62
2007-08 (\$/MWh) YTD	58	45	51	102	57
Change*	-37%	-4%	-3%	-32%	10%
2007-08 (\$/MWh)	58	44	51	101	57

Table 2: NEM turnover

Financial year	NEM Turnover** (\$, billion)	Energy (TWh)
2008-09 YTD	\$9.376	206
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)
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	28	31	33	35	49	0.550
Jun-09 MTD	34	39	32	34	213	0.710
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 29 June

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2010								
Price on 22 Jun (\$/MW)	56	95	53	85	66	118	81	121
Price on 29 Jun (\$/MW)	56	96	52	85	68	119	81	121
Open interest on 29 Jun	2069	140	1773	30	1685	35	53	0
Traded in the last week (MW)	118	5	180	5	65	0	0	0
Traded since 1 Jan 09 (MW)	3133	175	2959	52	2382	50	73	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
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	-276	-484	523	122	22	-92
MW Priced \$20 to \$50/MWh	547	198	-80	21	236	921
June 09 with June 08						
MW Priced <\$20/MWh	209	64	472	14	28	787
MW Priced \$20 to \$50/MWh	463	763	-205	55	259	1335

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

** Estimated value