

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

19 April-25 April 2009

Summary

Average spot prices for the mainland regions ranged from \$34/MWh in Queensland and South Australia to \$36/MWh in New South Wales and Victoria.

The average spot price in Tasmania was \$49/MWh. Frequency control ancillary services prices and energy prices returned to pre April levels.

Spot market prices

Figure 1 sets out the volume weighted average prices for 19 April to 25 April 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 19 April – 25 April	34	36	36	34	49
Financial year to 25 April	37	44	53	76	49
% change from previous week*	17%	12%	16%	19%	-9%
% change from previous year to date**	-39%	0%	4%	-33%	-11%

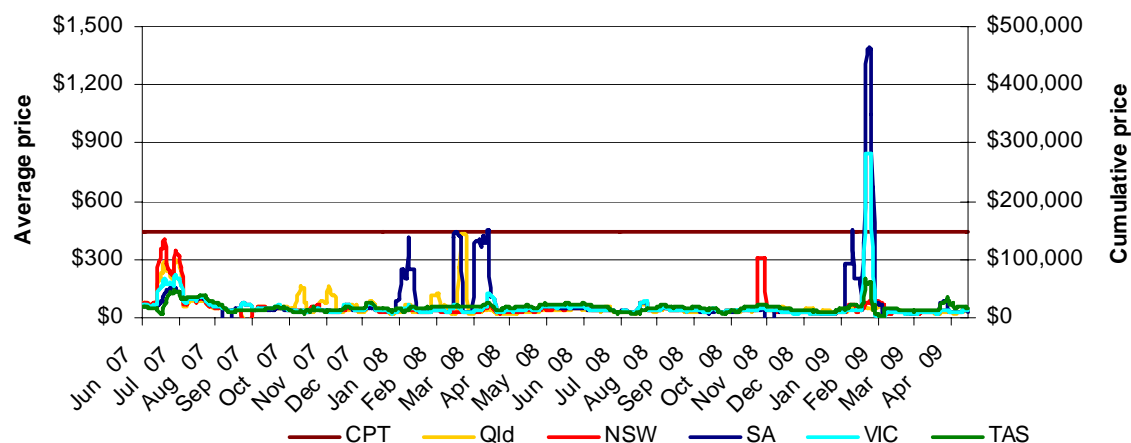
*The percentage change between last week's average spot price and the average price for the previous week.

**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. Details of these events are attached at 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 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 27 April. Figure 3 shows the base futures contract prices for the next three financial years, and the three year average. Also shown are percentage changes from the previous week.

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

	QLD		NSW		VIC		SA	
Financial 2009-10	44	0%	46	-1%	49	0%	58	0%
Financial 2010-11	50	-1%	54	-1%	56	0%	66	0%
Financial 2011-12	63	1%	65	0%	67	0%	69	0%
Three year average	52	0%	55	-1%	57	0%	65	0%

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

Note: there were no trades in these products.

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)

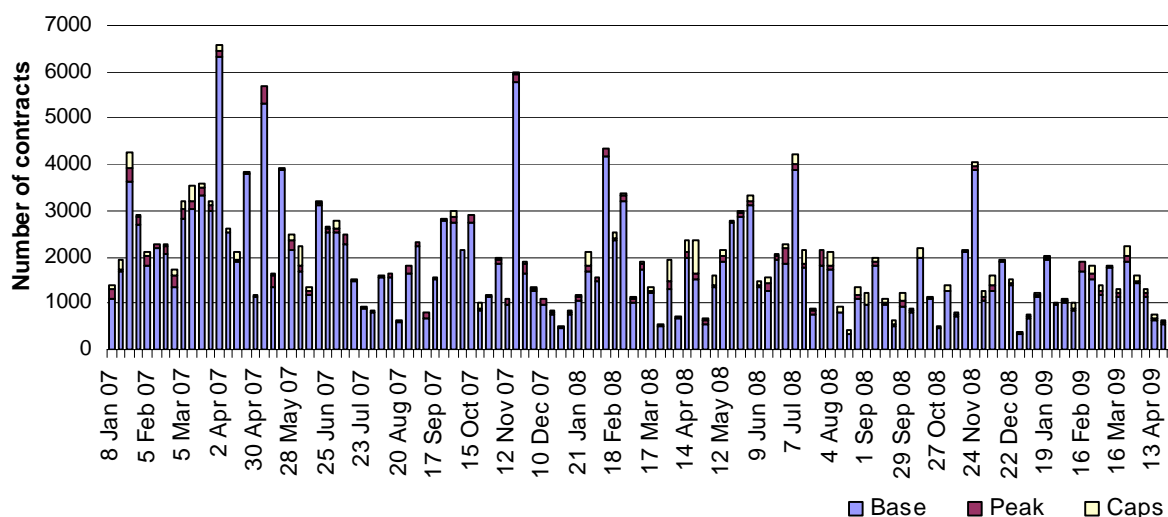
	QLD		NSW		VIC		SA	
Q1 2010 (% Change)	27	0%	22	0%	35	0%	45	0%
FY 2010 (% Change)	12	0%	11	-1%	12	0%	16	-1%

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

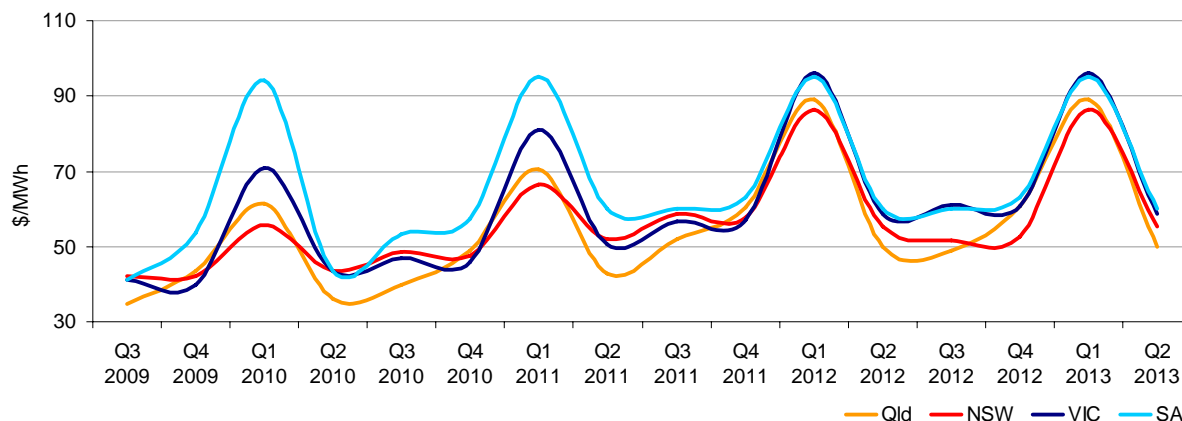


Source: d-cyphaTrade www.d-cyphatrade.com.au

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 financial years.

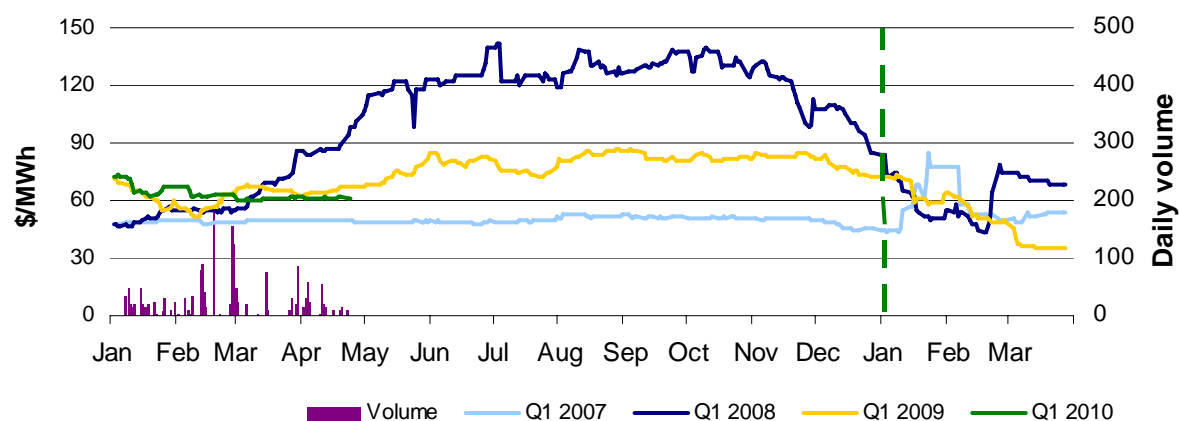
Figure 6: Quarterly base future prices Q3 2009 – Q2 2013



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

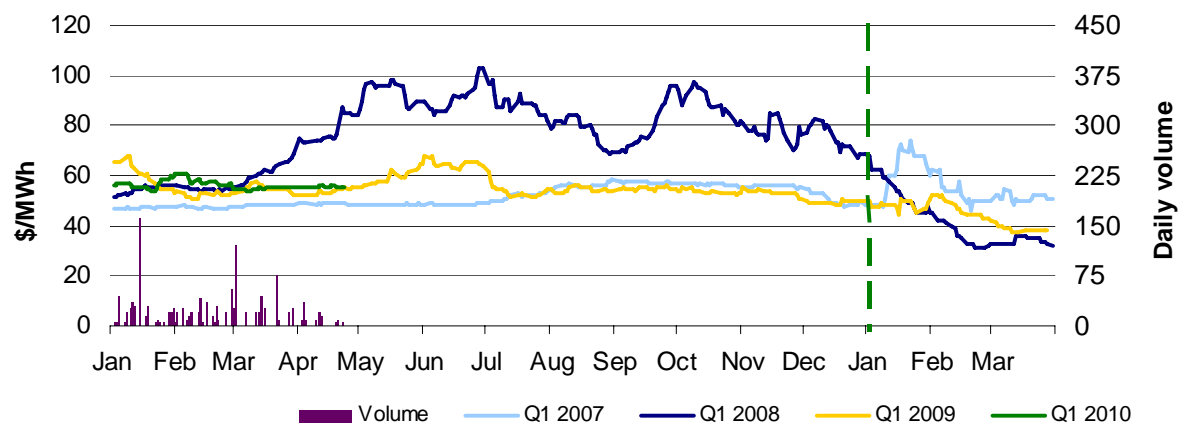
Figures 7-10 compare for each region the closing daily base contract prices for the first quarter of 2007, 2008, 2009 and 2010. Also shown is the daily volume of Q1 2010 base contracts traded. The vertical dashed line signifies the start of the Q1 period for which the contracts are being purchased.

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



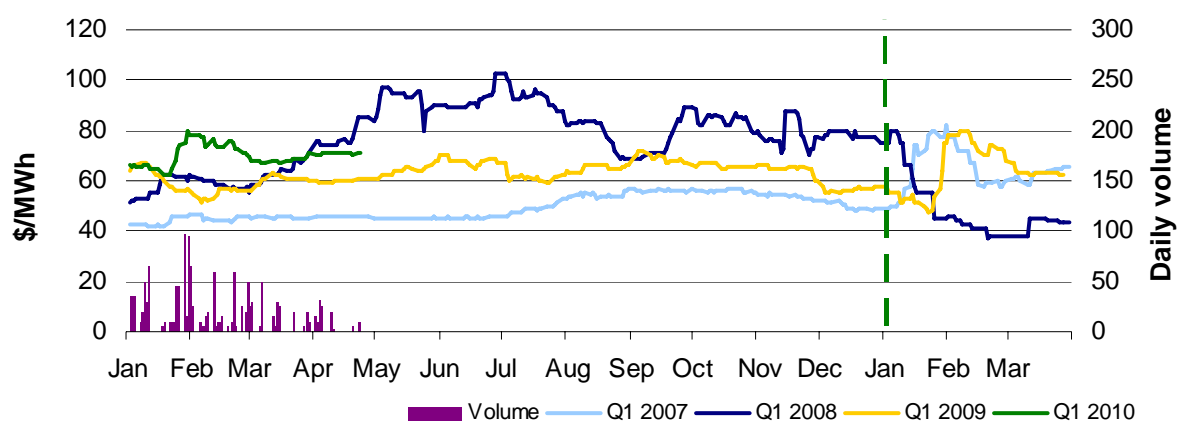
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



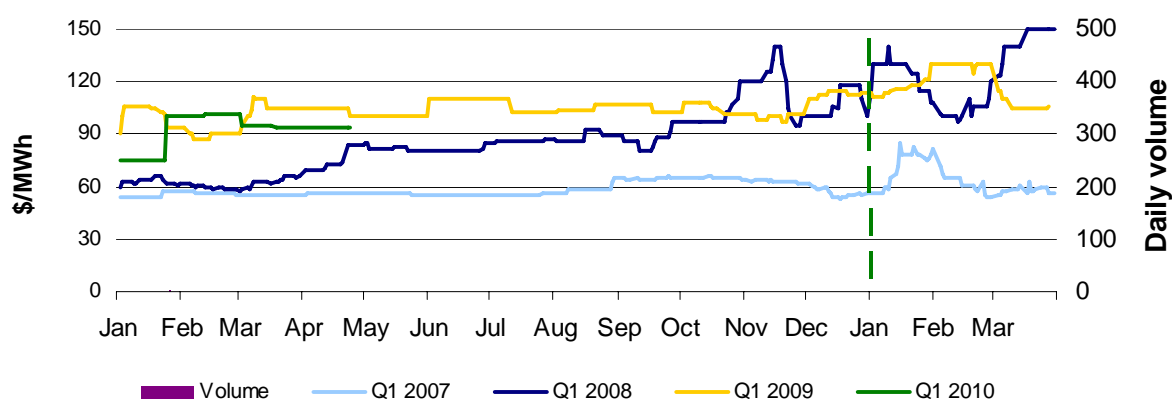
Source: d-cyphaTrade www.d-cyphatrade.com.au

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 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 116 trading intervals where actual prices varied significantly from forecasts² throughout the week. 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	5%	26%	0%	0%
% of total below forecast	60%	9%	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 at the price levels shown, for peak periods only⁴. For example, in Queensland 426 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 times

MW	<\$20/MWh	Between \$20 and \$50/MWh	Total availability	Change in average demand
Qld	-426	-27	-531	-60
NSW	468	33	310	300
Vic	118	-135	-249	433
SA	-105	20	-177	44
Tas	203	-63	-119	27
TOTAL	258	-172	-766	744

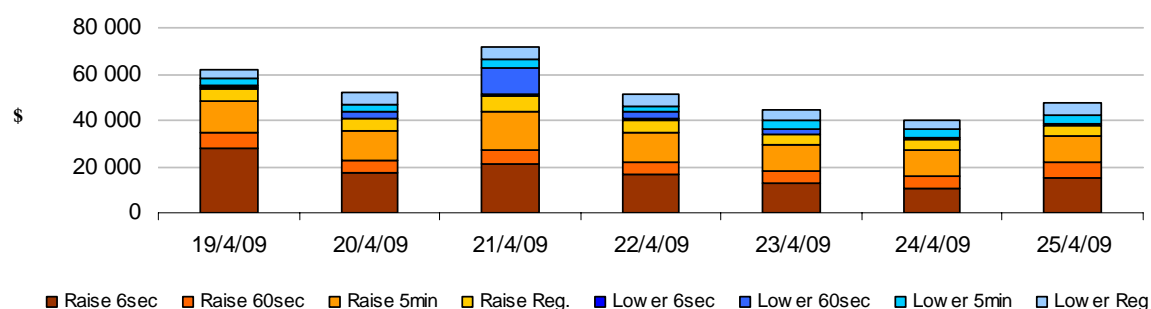
Ancillary services market

The total cost of frequency control ancillary services on the mainland for the week was \$314 000 or less than one per cent of turnover in the mainland energy market.

The total cost of ancillary services in Tasmania for the week was \$55 000 or less than one per cent of turnover in the energy market in Tasmania.

A change in bidding strategy for FCAS by Hydro Tasmania from 4 am 17 April saw FCAS and energy prices return to pre April levels. 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

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

Detailed Market Analysis



AUSTRALIAN ENERGY
REGULATOR

19 April - 25 April 2009

Queensland: There were two occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of \$34/MWh.

Tuesday, 21 April

6.00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	131.01	52.51	53.99
Demand (MW)	6735	6690	6775
Available capacity (MW)	8747	9155	8952
6.30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	109.33	72.08	56.69
Demand (MW)	6764	6710	6788
Available capacity (MW)	8745	8974	9186

Conditions at the time saw demand close to that forecast four and 12 hours ahead. Available capacity was up to 408 MW lower than that forecast four hours ahead.

Over three rebids from 1.52 pm, Stanwell Corporation delayed the return of its Gladstone unit five, which reduced available capacity by 280 MW (the majority of which was priced below \$51/MWh). The reasons given were “extend previous bid::change avail/MW distrib” and “unit ramp up/down pre/post outage::change availability”.

There was no other significant rebidding.

New South Wales: There were two occasions where the spot price in New South Wales was greater than three times the New South Wales weekly average price of \$36/MWh.

Tuesday, 21 April

6.00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	133.29	55.01	54.38
Demand (MW)	9800	9574	9658
Available capacity (MW)	10 996	11 528	12 050
6.30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	111.45	74.06	58.58
Demand (MW)	9913	9698	9785
Available capacity (MW)	10 956	11 298	12 050

Conditions at the time saw demand up to 226 MW higher than that forecast four hours ahead. Available capacity was up to 530 MW lower than that forecast four hours ahead and up to 1095 MW lower than that forecast 12 hours ahead.

Over three rebids from 1.54 pm, Delta Electricity delayed the return of its Mount Piper two and Wallerawang eight units, and reduced the available capacity of its Wallerawang seven unit, which removed up to 960 MW of available capacity (the majority of which was priced below zero). The reasons given were “return to service::capacity limit/ROC change” and “milling capacity::milling limit change”.

There was no other significant rebidding.

Detailed NEM Price and Demand Trends



AUSTRALIAN ENERGY
REGULATOR

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	53	76	49
2007-08 (\$/MWh) YTD	61	44	51	113	55
Change*	-39%	0%	4%	-33%	-11%
2007-08 (\$/MWh)	58	44	51	101	57

Table 2: NEM turnover

Financial year	NEM Turnover** (\$, billion)	Energy (TWh)
2008-09 YTD	\$7.970	170
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)
Dec-08	36	25	23	26	33	0.476
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 MTD	32	35	36	35	65	0.475
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 27 April

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2010								
Price on 20 Apr (\$/MW)	62	104	56	91	71	122	94	102
Price on 27 Apr (\$/MW)	61	105	56	91	71	123	94	102
Open interest on 27 Apr	1620	65	1217	12	1426	35	6	0
Traded in the last week (MW)	35	0	20	0	15	0	0	0
Traded since 1 Jan 09	1760	80	1320	12	1398	40	6	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
February 09 with February 08						
MW Priced <\$20/MWh	-373	32	-3	72	33	-241
MW Priced \$20 to \$50/MWh	328	141	149	-89	10	539
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	-753	-657	315	331	-72	-835
MW Priced \$20 to \$50/MWh	705	-164	-346	42	-26	211

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

** Estimated value