

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

7 – 13 December 2008

Summary

In Queensland the price averaged \$52/MWh, as a result of high prices on Wednesday and Thursday. Average spot prices in the other regions ranged from \$25/MWh in Victoria and New South Wales to \$35/MWh in Tasmania.

Spot market prices

Figure 1 sets out the volume weighted average prices for 7 December to 13 December 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
Ave price for 7 – 13 December	52	25	25	27	35
Financial year to 13 December	39	48	40	39	45
% change from previous week*	54	-11	-6	1	-5
% change from year to date**	-34	-9	-26	-27	-20

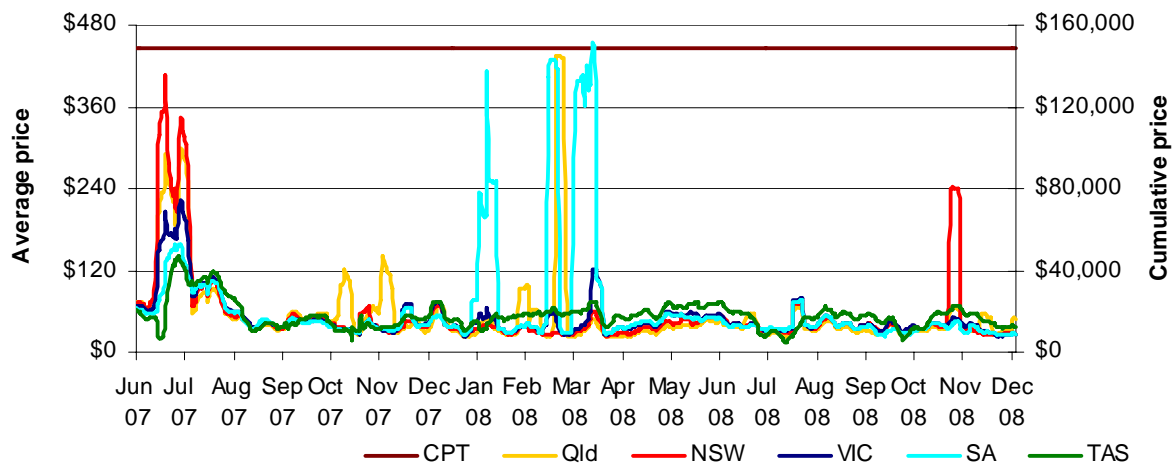
*The percentage change between last week's average spot price and the average price for the previous week.

**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 Cumulative Price Threshold (CPT) (and the equivalent seven day time-weighted average price) for the last 18 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 (SFE) as at close of trade on Monday 15 December. 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	48	0%	48	1%	50	1%	57	0%
Financial 2010-11	59	-1%	60	1%	63	3%	61	0%
Financial 2011-12	57	-1%	50	0%	59	4%	60	0%
Three year average	55	-1%	53	1%	57	3%	59	0%

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.

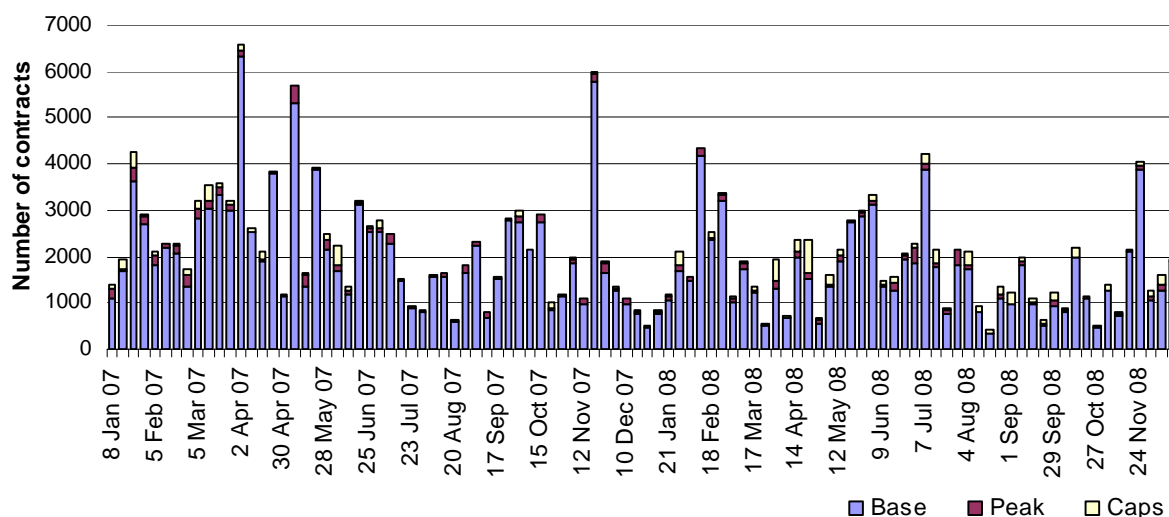
Figure 4: \$300 cap contract prices (\$/MWh)

	QLD		NSW		VIC		SA	
Q1 2009 price	40	-9%	14	0%	19	12%	75	7%
Calendar 2009	16	-6%	9	0%	10	6%	23	5%

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

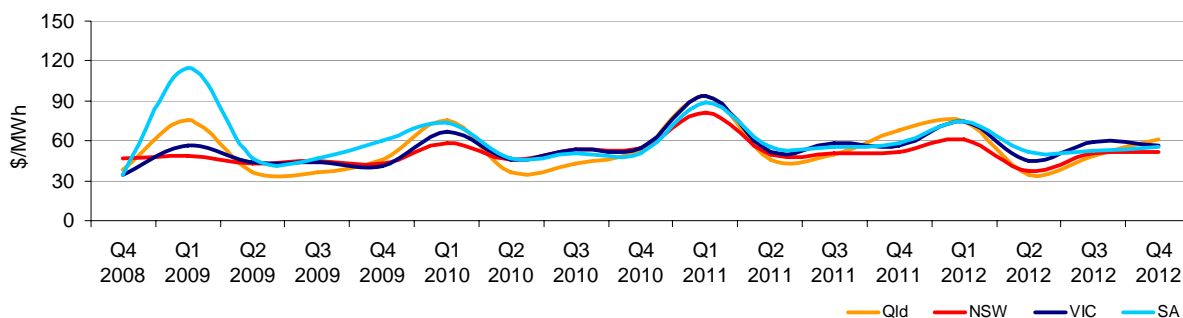


Source: d-cyphaTrade www.d-cyphatrade.com.au

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.

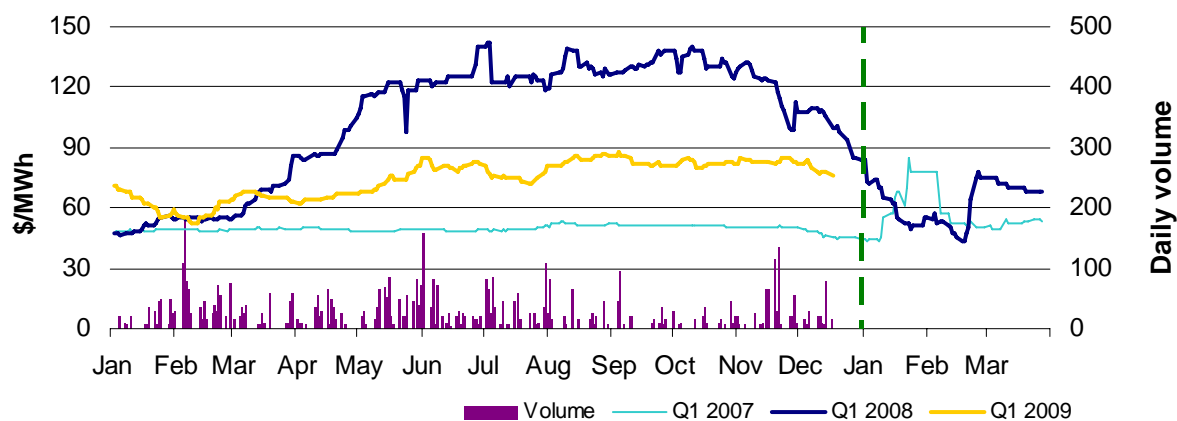
Figure 6: Quarterly base future prices 2008 - 2012



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

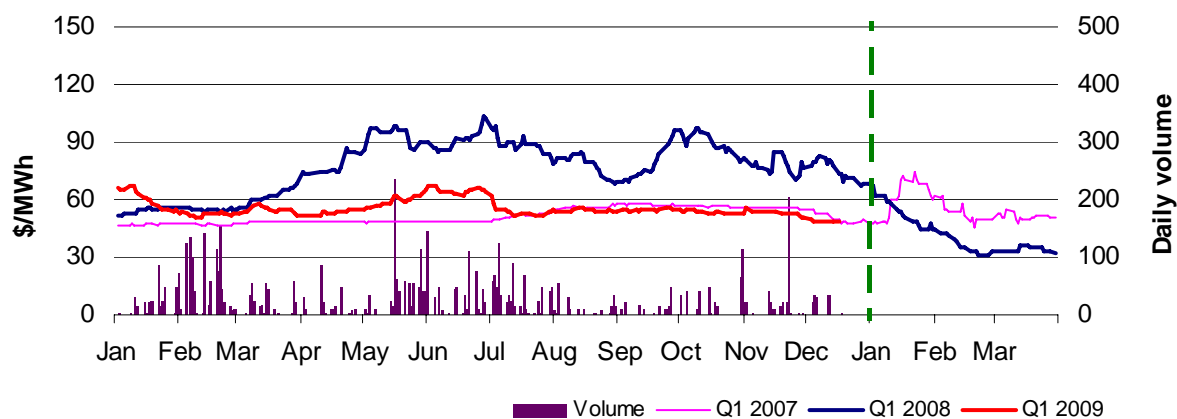
Figures 7-10 compare for each region the closing daily base contract prices for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 2009 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



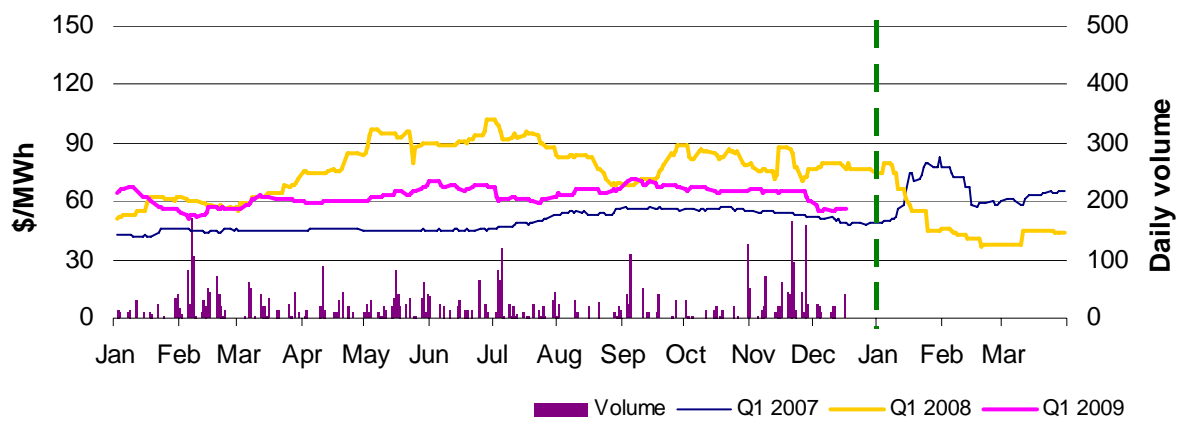
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



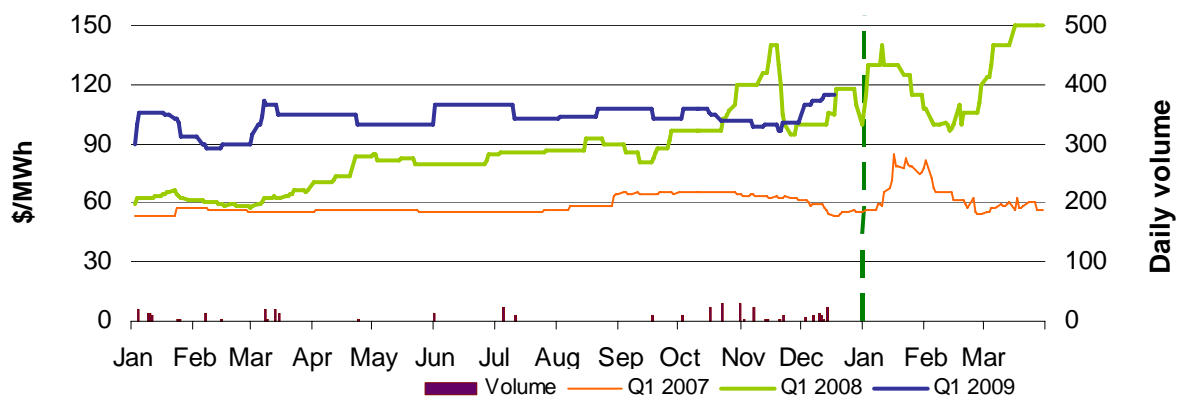
Source: d-cyphaTrade www.d-cyphatrade.com.au

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 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 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 65 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	10%	23%	0%	7%
Price is lower than forecast	48%	11%	0%	1%

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 peak periods only⁴. For example, in Queensland 844 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 compared to the previous week during peak times

\$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	844	36	817	-117
New South Wales	162	308	484	-234
Victoria	-12	80	185	-89
South Australia	86	-58	213	97
Tasmania	-40	80	10	-32
Total	1,040	446	1,709	-375

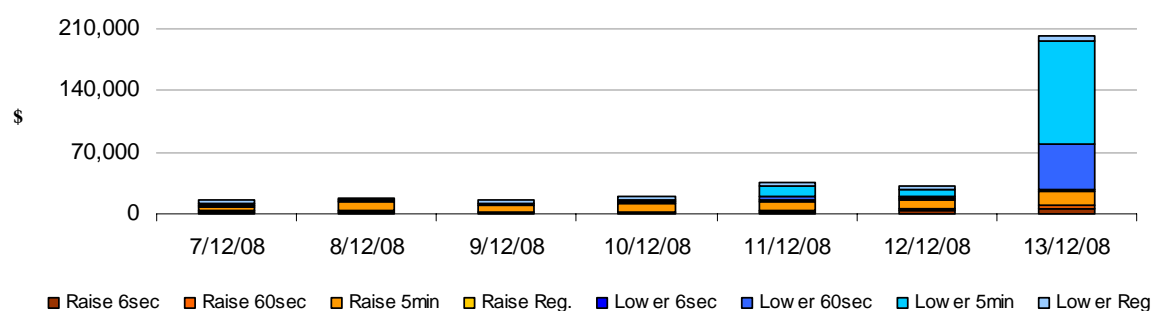
Ancillary services market

The total cost of frequency control ancillary services on the mainland for the week was \$106 000 or less than one per cent of turnover in the energy market.

A step change in the bidding strategy by Hydro Tasmania on Saturday saw the prices for Lower 5 minute and Lower 60 second services increase to \$445/MW. The total cost of ancillary services in Tasmania for the week was \$231 000 or 3.6 per cent of turnover in the energy market in Tasmania. Almost the entire cost accrued on Saturday.

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



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

Detailed Market Analysis

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Queensland: There were four occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of \$52/MWh.

Wednesday, 10 December

12:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	3321.20	39.70	28.23
Demand (MW)	7758	7690	7535
Available capacity (MW)	9171	9561	10 323
2:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	1752.20	39.87	34.99
Demand (MW)	7906	7767	7604
Available capacity (MW)	9025	10 239	10 321
2:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	166.22	39.33	32.98
Demand (MW)	7973	7785	7628
Available capacity (MW)	9113	10 229	10 321

Conditions at the time saw demand 188 MW greater than that forecast four hours ahead and 345 MW greater than that forecast 12 hours ahead. Available generation was around 1200 MW less than that forecast 4 hours ahead and around 1300 MW less than that forecast 12 hours ahead.

At the time, there were maximum imports across QNI and Directlink was being forced south at around 90 MW by a planned network outage.

At 9.57 am Braemar Power Projects Pty Ltd shifted 145 MW at Braemar unit one from prices below \$20/MWh to above \$9000/MWh; the rebid reason was “Manage gas constraints”. A rebid at 12.27 pm reduced the availability of Braemar unit one to zero; the rebid reason was “Change in PD”.

After the loss of the unit earlier in the day, CS Energy Ltd’s Kogan Creek Power Station was forecast to return to service from about 1.30 pm. However, a rebid at 12.04 pm, delayed the unit’s return resulting in a reduction of 750 MW of available generation capacity compared to that forecast. Kogan Creek Power Station resumed operation early the following morning.

At 10.53 am CS Energy Ltd rebid advising that its Callide B unit two had tripped, resulting in a reduction in available generation of 310 MW.

Over two rebids at 10.12 am and 11.29 am Millmerran Energy Trader Pty Ltd shifted a total of 160 MW from below \$10/MWh to above \$9000/MWh across Millmerran units one and two. The reasons given were “Changed PD::change MW Distribution” and “Changed PD::adjust MW distribution”.

Over several rebids from 10.40 am, Stanwell Corporation Ltd shifted 165 MW from below \$100/MWh to above \$9000/MWh across its portfolio. The rebid reasons were “fuel management::change avail/MW distrib”, “extend previous bid::change avail/MW distrib” and “rearrange/rebalance portfolio::change avail/MW distrib”.

Thursday, 11 December

1:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	1386.11	55.40	36.11
Demand (MW)	8340	8250	7932
Available capacity (MW)	10 101	10 333	10 208

Over several rebids from 10.14 am to 11.58 am, CS Energy Ltd shifted around 250 MW from below \$100/MWh to above \$5000/MWh. Rebid reasons given were “F portfolio optimisation”, “P Swan_E gas management” and “PKPP_1 SCC maintenance”.

At 9.30 am Millmerran Energy Trader Pty Ltd rebid shifting 158 MW from prices below \$10/MWh to above \$9000/MWh across both its units. The rebid reason was “Changed PD::adjust MW dist”.

Stanwell Corporation Ltd shifted around 310 MW across its portfolio from prices below \$500/MWh to above \$9000/MWh over rebids at 12.41 pm, 1.11 pm and 1.15 pm. Rebid reasons given were “Testing::change MW”, “extend previous bid::change avail/MW distrib” and “Technical issues::change avail/MW distrib”. Stanwell’s 1.11 pm rebid, which became effective at 1.20 pm, shifted 250 MW of this capacity into higher price bands. Limited ability of other generation to ramp up lower price generation led to the price spiking to \$8001/MWh at 1.20pm. At 1.25pm the price returned to previous levels.