

WEEKLY ELECTRICITY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

11 – 17 October 2009

Summary

Average spot prices ranged from \$22/MWh in Tasmania to \$27/MWh in Queensland and New South Wales.

Spot market prices

Figure 1 sets out the volume weighted average prices for the week 11 to 17 October 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 11 – 17 October	27	27	26	26	22
% change from previous week*	-16	-15	-11	-19	-13
09/10 financial YTD	26	29	25	27	24
% change from 08/09 financial YTD**	-27	-30	-39	-34	-45

*The percentage change between last week's average spot price and the average price for the previous week. Calculated on VWA prices prior to rounding.

**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. Percentage changes are calculated on VWA prices prior to rounding.

Longer term market trends are attached in Appendix A¹.

Financial markets

Figures 2 to 9 show futures contract² prices traded on the Sydney Futures Exchange (SFE) as at close of trade on Monday 19 October. Figure 2 shows the base futures contract prices for the next three calendar years, and the three year average. Also shown are percentage changes³ compared to the previous week.

Figure 2: Base calendar year futures contract prices (\$/MWh)

	QLD		NSW		VIC		SA	
Calendar Year 2010	37	0%	41*	2%	40*	1%	49	4%
Calendar Year 2011	40*	1%	44*	1%	44*	1%	55	-7%
Calendar Year 2012	48*	0%	51	-9%	54	-5%	69	0%
Three year average	42	0%	45	-3%	46	-2%	58	-1%

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

* denotes trades in the product.

¹ Monitoring the performance of the wholesale market is a key part of the AER's role and an overview of the market's performance in the long-term is provided on the AER website. Long-term statistics can be found there on, amongst other things, demand, spot prices, contract prices and frequency control ancillary services prices.

To access this information go to

www.aer.gov.au -> Monitoring, reporting and enforcement -> Electricity market reports -> Long-term analysis.

² 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.

³ Calculated on prices prior to rounding.

Figure 3 shows the \$300 cap contract price for the first quarter of 2010 and the 2010 calendar year and the percentage change⁴ from the previous week.

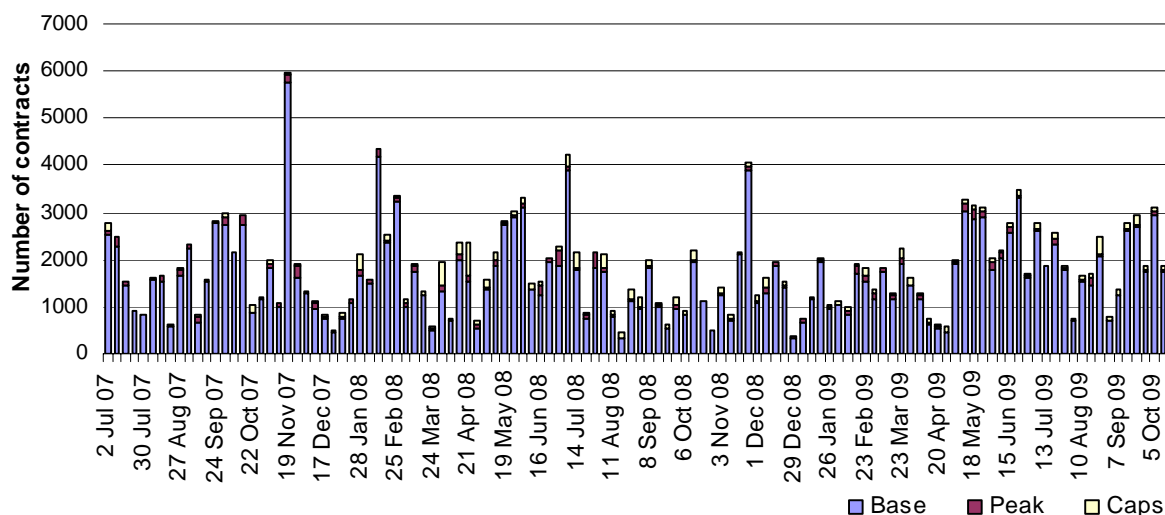
Figure 3: \$300 cap contract prices (\$/MWh)

	QLD		NSW		VIC		SA	
Q1 2010 (% Change)	23	0%	19	0%	24*	-3%	42	0%
2010 (% Change)	11	-1%	11	2%	9	-5%	14	0%

Source: d-cyphaTrade www.d-cyphatrade.com.au
 * denotes trades in the product.

Figure 4 shows the weekly trading volumes for base, peak and cap contracts. The date represents the end of the trading week.

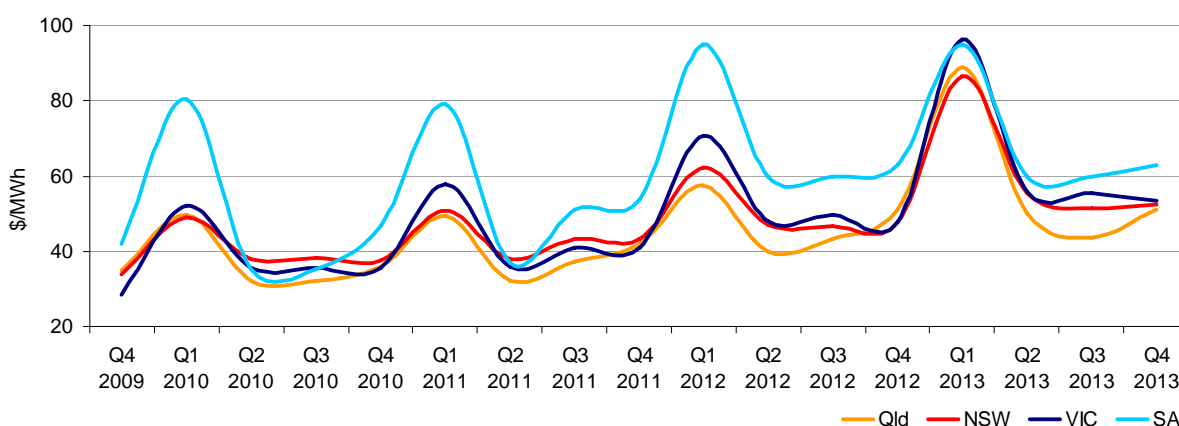
Figure 4: Number of exchange traded contracts per week



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

Figure 5 shows the prices for base contracts for each quarter for the next four financial years.

Figure 5: Quarterly base future prices Q4 2009 – Q3 2013

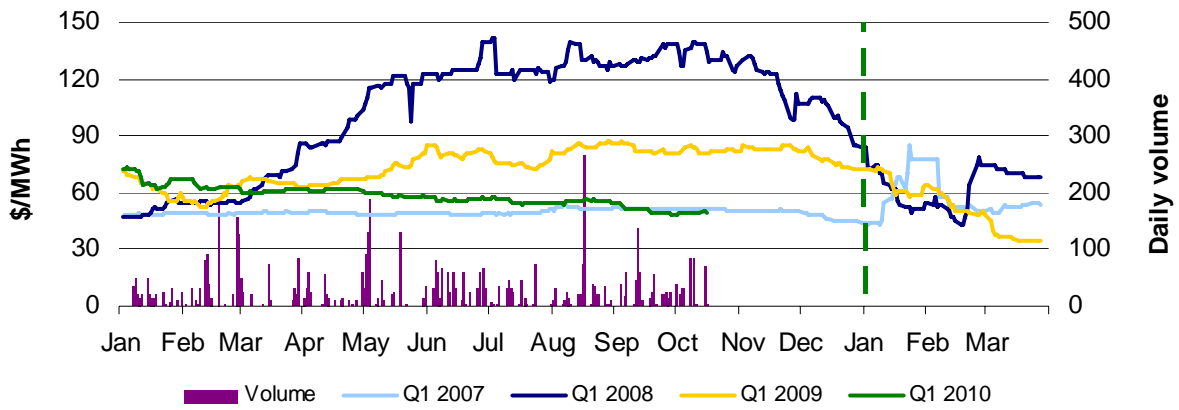


Source: d-cyphaTrade www.d-cyphatrade.com.au

Figures 6-9 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. To understand the diagrams, the dark-blue line demonstrates that throughout the middle of 2007, the market had an expectation of very high spot prices in the first quarter of 2008.

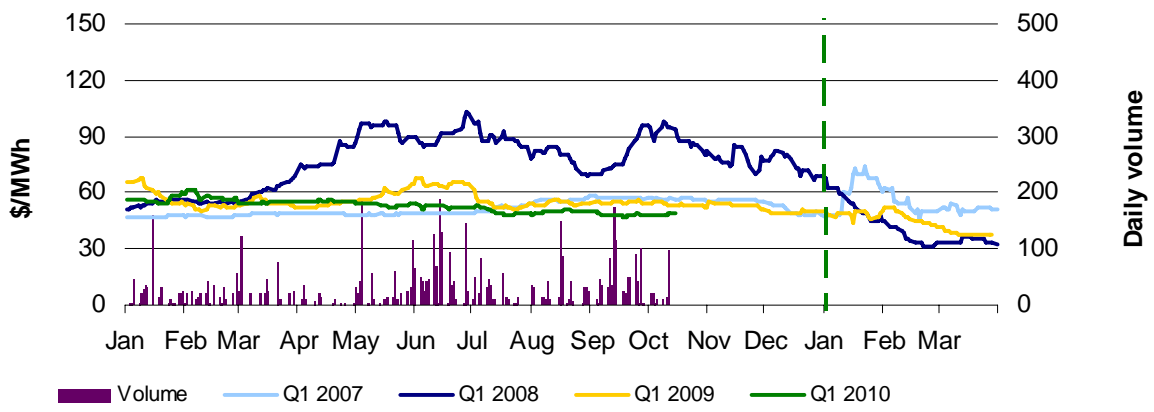
⁴ Calculated on prices prior to rounding.

Figure 6: Queensland Q1 2007, 2008, 2009 and 2010



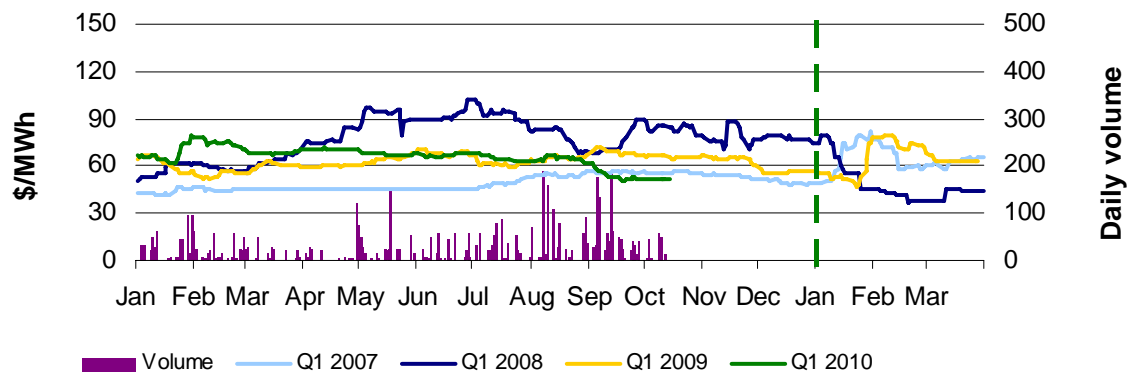
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 7: New South Wales Q1 2007, 2008, 2009 and 2010



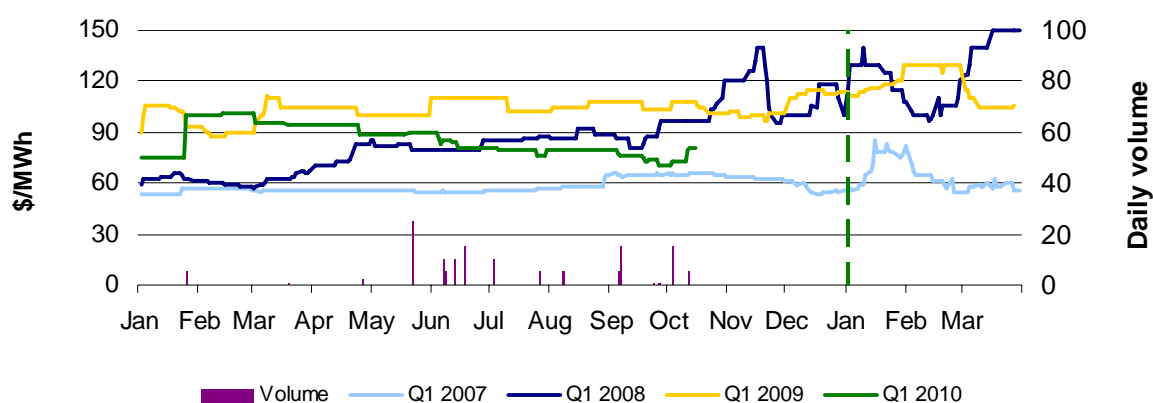
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 8: Victoria Q1 2007, 2008, 2009 and 2010



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

Figure 9: South Australia Q1 2007, 2008, 2009 and 2010



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

*The daily volume scale for South Australia is smaller than for other regions to reflect the lower liquidity in the market in South Australia.

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 the Australian Energy Market Operator (AEMO) 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 44 trading intervals throughout the week where actual prices varied significantly from forecasts⁵. This compares to the weekly average in 2008 of 130 counts. Reasons for these variances are summarised in Figure 10⁶.

Figure 10: Reasons for variations between forecast and actual prices

	Availability	Demand	Network	Combination
% of total above forecast	21%	17%	0%	0%
% of total below forecast	62%	0%	0%	0%

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 11 shows the weekly change in total available capacity at various price levels during peak periods⁷. For example, in Queensland 344 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.

⁵ 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.

⁶ 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.

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

Figure 11: 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	344	-63	437	235
NSW	312	-60	369	-15
VIC	-314	145	-485	-40
SA	274	-124	144	-9
TAS	-334	417	8	-61
TOTAL	282	315	473	110

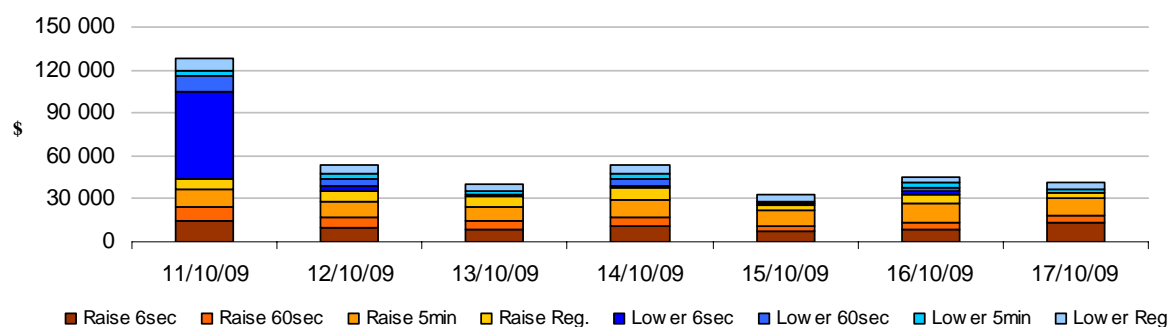
Ancillary services market

The total cost of frequency control ancillary services (FCAS) on the mainland for the week was \$224 000 or less than one per cent of energy turnover on the mainland.

The total cost of FCAS in Tasmania for the week was \$172 000 or about four per cent of energy turnover in Tasmania. On 11 October at 6.15 am the five-minute price for lower 6 second ancillary services reached \$5604/MW. This was driven by an increase in the requirement for all services at this time as a result of the metered flow across Basslink reaching the no-go zone of +/- 50 MW.

Figure 12 shows the daily breakdown of cost for each FCAS for the NEM.

Figure 12: Daily frequency control ancillary service cost



Detailed NEM Price and Demand Trends

for Weekly Market Analysis
11 October - 17 October 2009



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

Financial year	QLD	NSW	VIC	SA	TAS
2009-10 (\$/MWh) (YTD)	26	29	25	27	24
2008-09 (\$/MWh) (YTD)	36	41	42	41	43
Change*	-27%	-30%	-39%	-34%	-45%
2008-09 (\$/MWh)	36	43	49	69	62

Table 2: NEM turnover

Financial year	NEM Turnover** (\$, billion)	Energy (TWh)
2009-10 (YTD)	\$1.637	61
2008-09	\$9.413	208
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)
Jun-09	33	37	31	33	194	0.746
Jul-09	29	34	28	29	27	0.539
Aug-09	24	25	23	24	22	0.418
Sep-09	25	26	24	28	22	0.406
Oct-09 (MTD)	29	29	28	28	22	0.261
Q3 2009	26	28	25	27	24	1.377
Q3 2008	36	41	42	42	44	2.226
Change*	-29%	-31%	-41%	-36%	-46%	-38.16%

Table 4: ASX energy futures contract prices at 19 October

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2010								
Price on 12 Oct (\$/MW)	50	83	48	80	51	91	73	145
Price on 19 Oct (\$/MW)	50	83	49	80	52	93	81	145
Open interest on 19 Oct	2795	150	2517	71	2804	190	77	0
Traded in the last week (MW)	166	0	120	0	124	50	5	0
Traded since 1 Jan 09 (MW)	5208	235	5223	98	5209	296	135	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
August 09 with August 08						
MW Priced <\$20/MWh	-131	-261	-343	67	513	-155
MW Priced \$20 to \$50/MWh	47	140	-194	-58	251	187
September 09 with September 08						
MW Priced <\$20/MWh	-236	-1137	-194	6	507	-1054
MW Priced \$20 to \$50/MWh	-7	981	10	-82	90	991
October 09 with October 08 (MTD)						
MW Priced <\$20/MWh	-110	-301	221	23	145	-22
MW Priced \$20 to \$50/MWh	-103	321	-18	-24	431	607

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

** Estimated value