

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

9 – 15 November 2008

Summary

Average spot prices on the mainland ranged from \$32/MWh in Queensland to \$44/MWh in Victoria. In Tasmania the spot price averaged \$57/MWh.

In the financial markets, contract prices were similar to the previous week.

Spot market prices

Figure 1 sets out the volume weighted average prices for this week 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 9 – 15 November	32	33	44	43	57
Financial year to 15 November	38	52	42	41	46
% change from previous week*	-25%	-20%	0%	21%	-11%
% change from year to date**	-38%	-3%	-21%	-25%	-18%

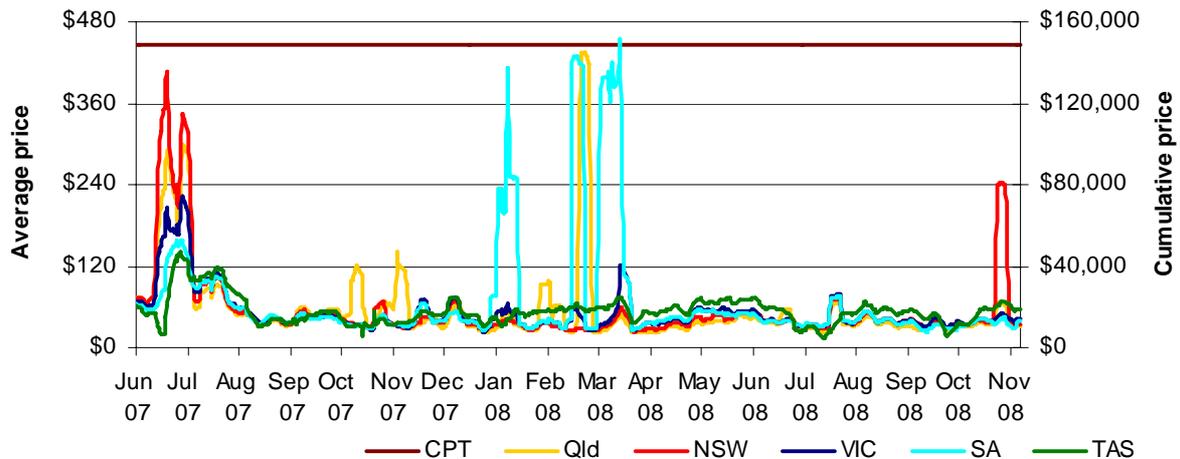
*The percentage change between last week's average spot price and the average price for the previous week.

**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 17 November. 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	50	-1%	50	0%	51	0%	55	0%
Financial 2010-11	60	2%	61	0%	63	0%	61	1%
Financial 2011-12	57	2%	50	0%	54	0%	55	6%
Three year average	56	1%	54	0%	56	0%	57	2%

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.

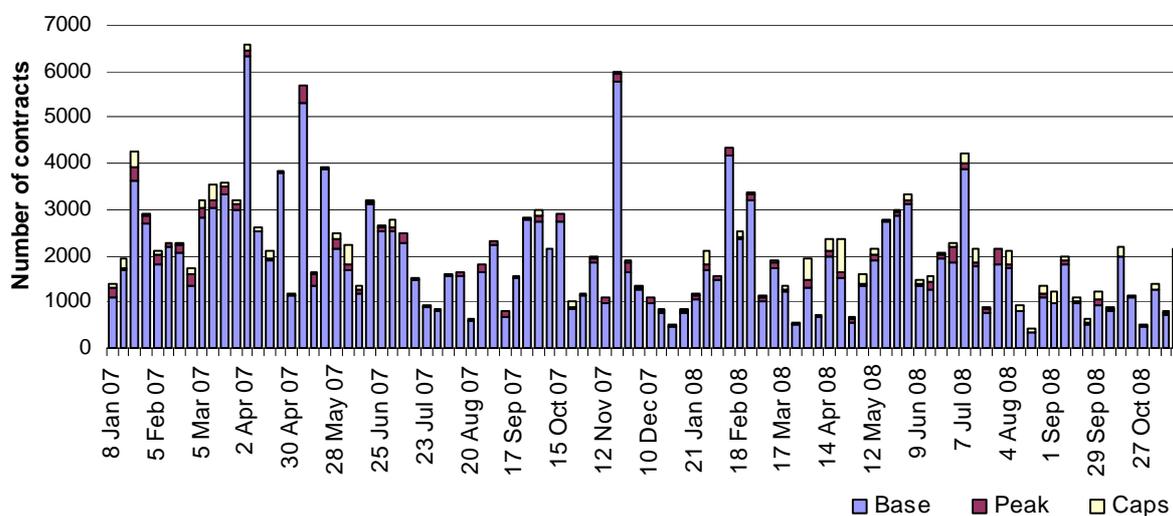
Figure 4: \$300 cap contract prices (\$/MWh)

	QLD		NSW		VIC		SA	
Q1 2009 price	44	0%	18	0%	25	-2%	65	0%
Calendar 2009	18	-1%	10	0%	11	-2%	21	0%

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

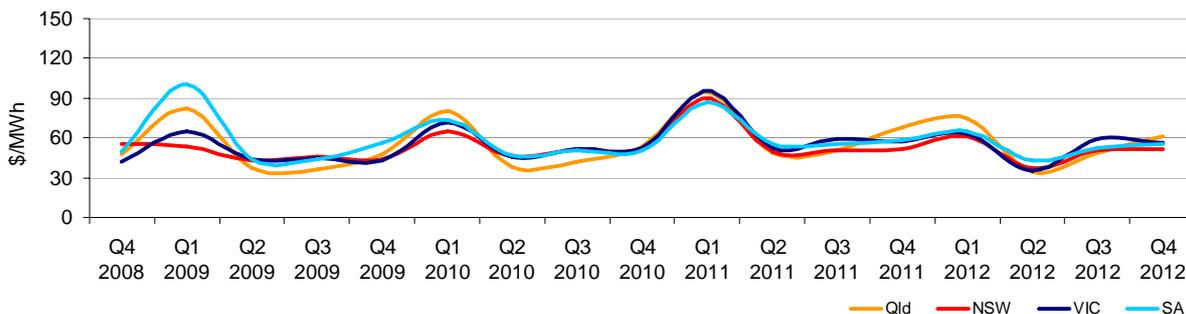


Source: d-cyphaTrade www.d-cyphatrade.com.au

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.

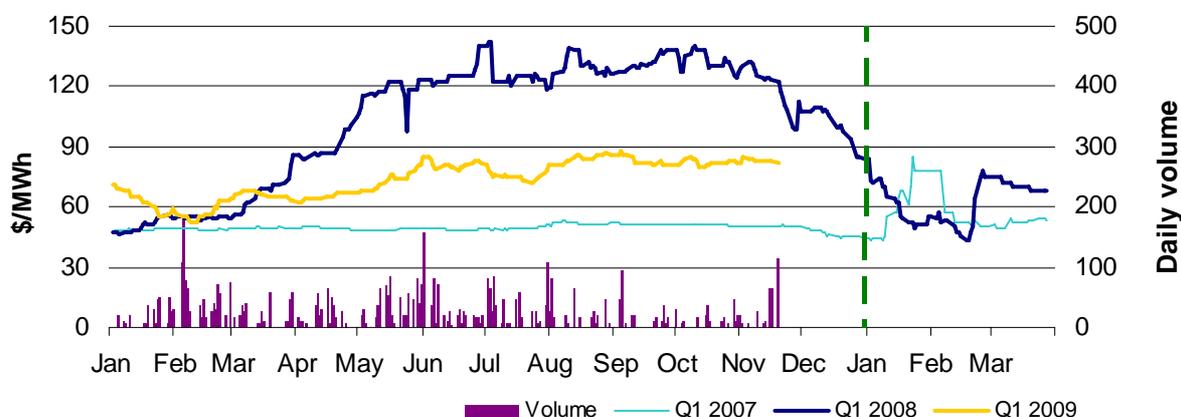
Figure 6: Quarterly base future prices 2008 - 2012



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

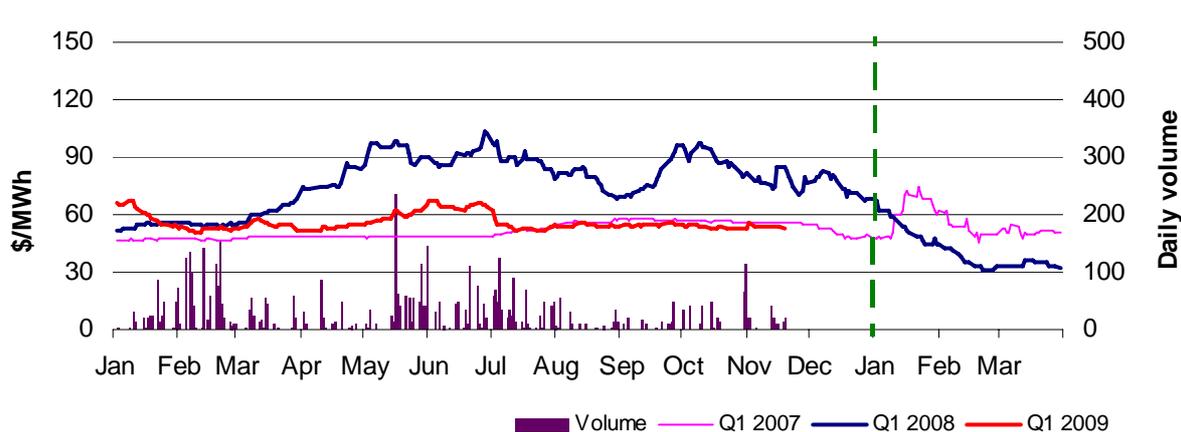
Figures 7-10 compare for each region the closing daily base contract prices for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 2009 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



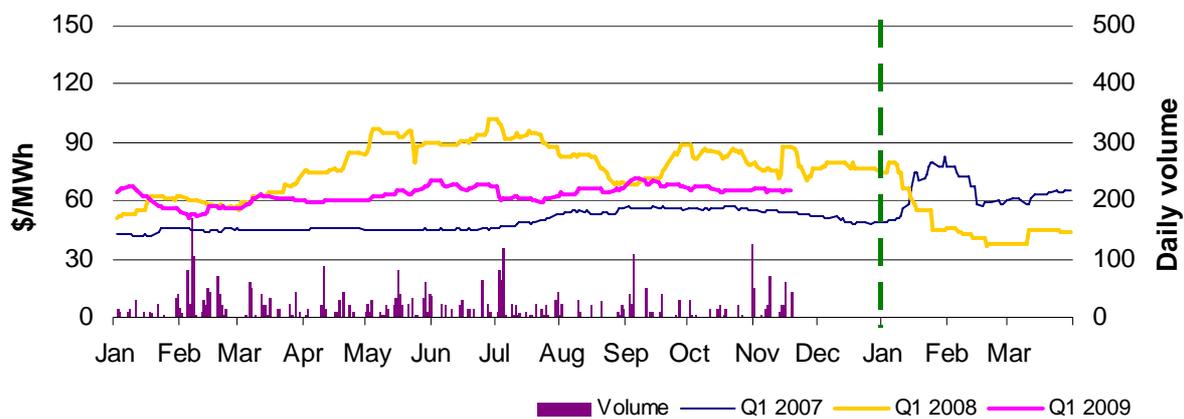
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



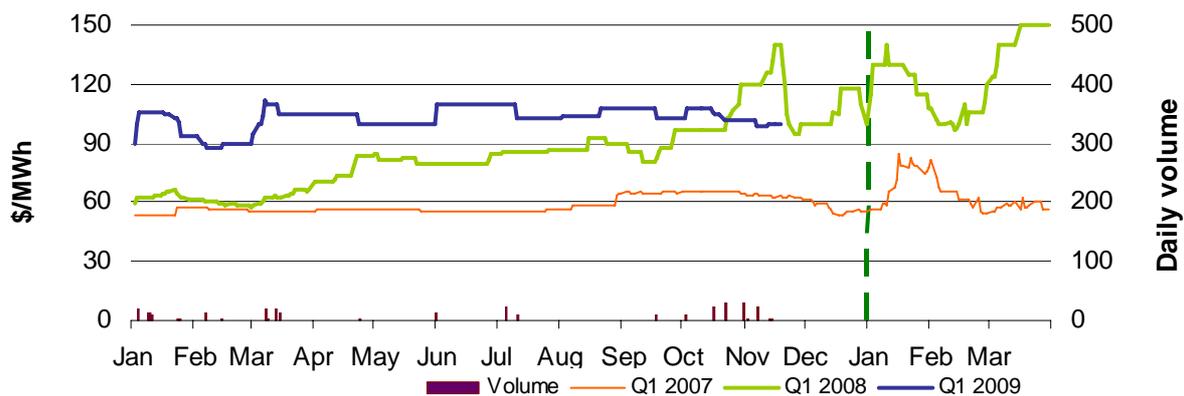
Source: d-cyphaTrade www.d-cyphatrade.com.au

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 87 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	1%	83%	0%	0%
Price is lower than forecast	16%	0%	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 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 25 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 compared to the previous week during peak times

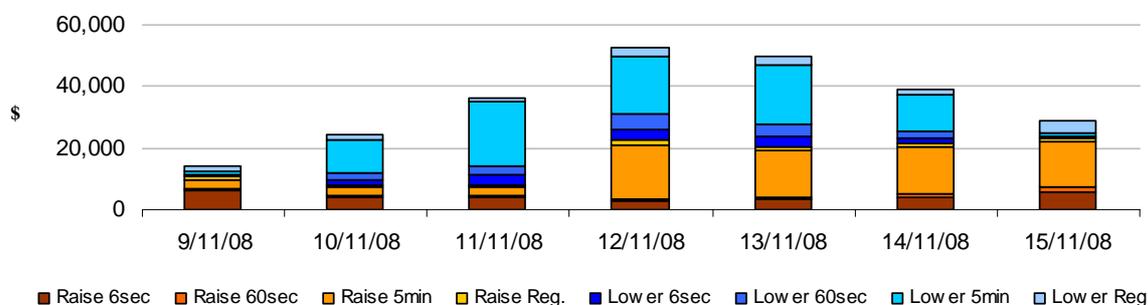
\$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	-25	-47	-419	-278
New South Wales	-207	1,500	1,870	600
Victoria	98	-25	-153	813
South Australia	114	-94	102	301
Tasmania	-143	10	-120	-68
Total	-163	1,344	1,280	1,368

Ancillary services market

The total cost of ancillary services on the mainland for the week was \$147 000 or less than one per cent of turnover in the energy market.

The total cost of ancillary services in Tasmania for the week was \$32 000 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



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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.

Appendix A:

Detailed Market Analysis



9 – 15 November 2008

Victoria and South Australia: There were five occasions where the spot price in South Australia was greater than three times the South Australia weekly average price of \$43/MWh. Prices in Victoria were aligned with South Australia at the time.

Wednesday, 12 November

	Actual	4 hr forecast	12 hr forecast
12:30 pm			
Price ¹ (\$/MWh)	133.09	55.52	55.18
Demand ² (MW)	10088	9386	9321
Available capacity ³ (MW)	11034	11222	11254
1:00 pm			
Price (\$/MWh)	135.54	56.75	57.07
Demand (MW)	10199	9474	9420
Available capacity (MW)	11069	11214	11253
2:00 pm			
Price (\$/MWh)	132.89	79.95	65.10
Demand (MW)	10456	9716	9548
Available capacity (MW)	11121	11190	11277
3:00 pm			
Price (\$/MWh)	195.71	91.91	71.24
Demand (MW)	10507	9937	9632
Available capacity (MW)	10949	11099	11266
3:30 pm			
Price (\$/MWh)	154.81	158.82	72.45
Demand (MW)	10573	10481	9660
Available capacity (MW)	10957	11154	11362

1: Prices in South Australia

2: The combined South Australia and Victoria demand.

3: The combined available capacity in South Australia and Victoria

Conditions at the time saw demand up to 192 MW and 770 MW higher than forecast in South Australia and Victoria respectively.

At 1.46 pm, Snowy Hydro rebid 248 MW of capacity at its Murray unit from prices below \$75/MWh to above \$145/MWh. The reason given was “13:46:M:Manage V-NSW Const:Band shift up”.

At 2.33 pm, Ecogen Energy reduced its availability at Jeeralang B power station by 218 MW, all priced below \$45/MWh. The reason given was “Capacity adj due to ambient temperature”. There were no other significant rebids.

Tasmania: There was one occasion where the spot price in Tasmania was greater than three times the Tasmania weekly average price of \$57/MWh. This occurred during the higher prices in Victoria and South Australia.

Wednesday, 12 November

	Actual	4 hr forecast	12 hr forecast
3:00 pm			
Price (\$/MWh)	171.41	89.57	73.32
Demand (MW)	1248	1167	1167
Available capacity (MW)	1986	1986	2016

Conditions at the time saw demand up to 79 MW higher than forecast 4 hours ahead. There were no significant rebids.

Appendix B 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	38	52	42	41	46
2007-08 (\$/MWh) YTD	61	53	53	53	56
Change	-38%	-3%	-20%	-23%	-18%
2007-08 (\$/MWh)	58	44	51	101	57

Table 2: NEM turnover

Financial year	NEM Turnover* (\$, billion)	Energy (TWh)
2008-09 YTD	\$3.6	80
2007-08	\$11.1	208
2006-07	\$12.7	206
Change (2006-07 to 2007-08)	-12%	0.8%

* estimated value

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

Volume weighted average (\$/MWh)	QLD	NSW	SNOWY	VIC	SA	TAS	Turnover (\$, billion)
Jul-08	40	44	-	46	48	31	0.82
Aug-08	37	42	-	42	44	56	0.79
Sep-08	32	37	-	38	34	46	0.61
Oct-08	43	94	-	41	37	47	1.05
Nov-08 MTD	37	38	-	44	40	60	0.34
Q3 2008	36	41	-	42	42	44	2.23
Q3 2007	56	59	-	60	62	65	3.17
Change	-35%	-31%	-	-30%	-31%	-32%	

Table 4: ASX energy futures contract prices at 10 November

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2009								
Price on 10 Nov (\$/MW)	83	150	54	89	65	117	99	197
Price on 17 Nov (\$/MW)	82	151	53	89	65	117	100	197
Open interest on 17 Nov	2541	168	2529	171	2082	459	210	15
Traded in the last week (MW)	255	5	75	0	155	0	8	0
Traded since 1 Jan 08	5208	414	5415	215	3973	707	345	15
Settled price for Q1 08(\$/MW)	68	97	32	42	43	65	152	322

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

Comparison:	QLD	NSW	SNOWY*	VIC	SA	TAS	NEM
September 08 with September 07							
MW Priced <\$20	913	717	-	-84	137	147	1829
MW Priced \$20 to \$50	189	-401	-	186	187	37	199
October 08 with October 07							
MW Priced <\$20	248	-230	-	-138	112	-356	-364
MW Priced \$20 to \$50	357	-325	-	150	45	-36	191
November 08 with November 07							
MW Priced <\$20	-584	-1402	-	-161	116	94	-1900
MW Priced \$20 to \$50	-403	1998	-	88	58	-160	1140

*For comparative purposes Snowy generation for July 2007 and 2008 has been incorporated into New South Wales and Victoria