WEEKLY MARKET ANALYSIS

AUSTRALIAN ENERGY REGULATOR

16 – 22 November 2008

Summary

Spot prices averaged $64/MWh for the week in Queensland. This represents an increase compared to the previous week, primarily as a result of high prices on the afternoon of 20 November when the spot price peaked at $5061/MWh at 2.30 pm. In accordance with clause 3.13.7 of the National Electricity Rules (NER), the AER will issue a separate report into the circumstances that led to the spot price exceeding $5000/MWh.

Average spot prices in the other regions were lower compared to the previous week, averaging around $30/MWh New South Wales, Victoria and South Australia, and $46/MWh in Tasmania.

In the financial markets, the highest volume in exchange traded products for four months saw contract prices generally higher compared to the previous week.

Spot market prices

Figure 1 sets out the volume weighted average prices for 16-22 November 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)

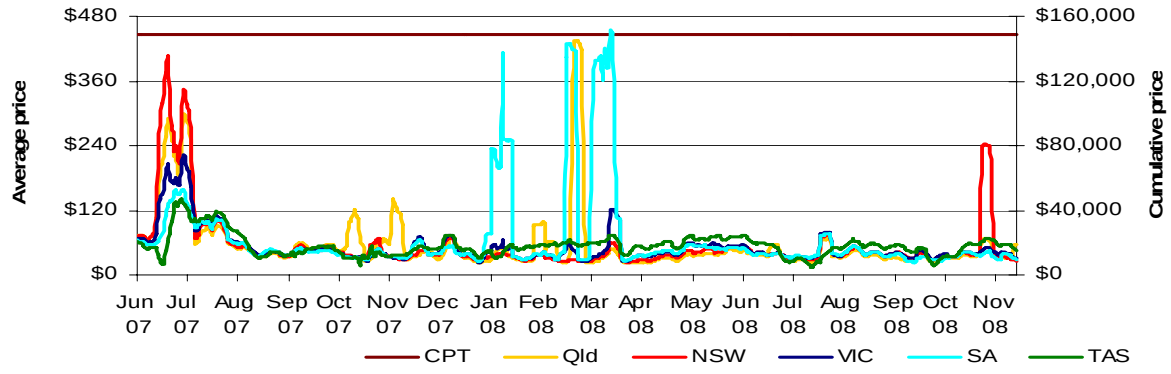
	Qld	NSW	VIC	SA	Tas
Ave price for 16 – 22 November	64	27	31	30	46
Financial year to 22 November	39	51	42	40	46
% change from previous week*	100%	-18%	-30%	-31%	-19%
% change from year to date**	-35%	-4%	-22%	-26%	-18%

*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 contract[1] prices traded on the Sydney Futures Exchange (SFE) as at close of trade on Monday 24 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	51	2%	51	2%	52	1%	55	0%
Financial 2010-11	60	1%	62	2%	64	2%	61	1%
Financial 2011-12	57	0%	50	0%	54	0%	58	4%
Three year average	56	1%	54	1%	56	1%	58	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.

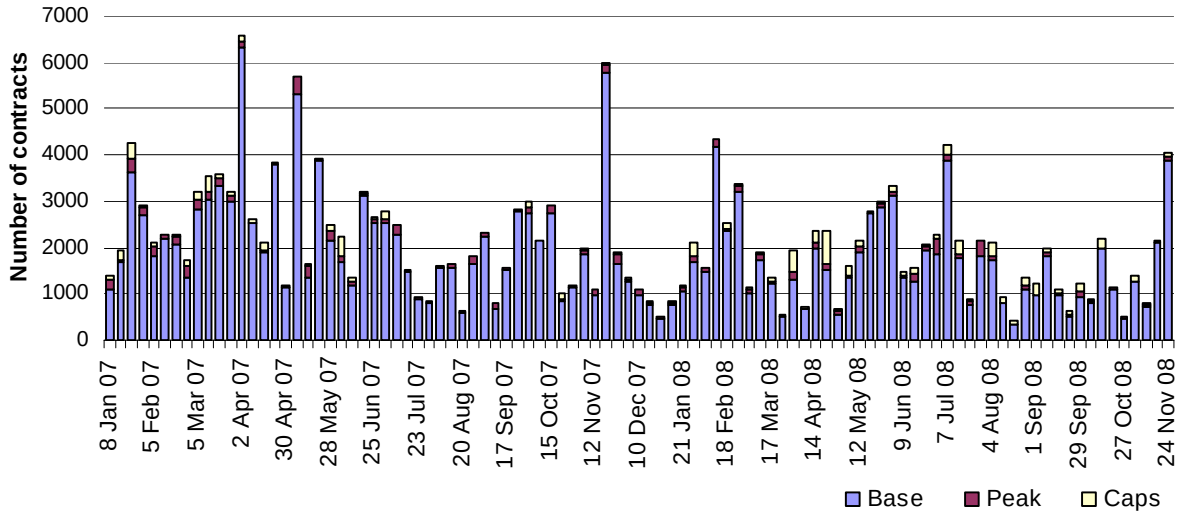
Figure 4: $300 cap contract prices ($/MWh)

	QLD		NSW		VIC		SA	
Q1 2009 price	45	2%	18	0%	25	0%	65	0%
Calendar 2009	18	1%	10	0%	11	0%	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

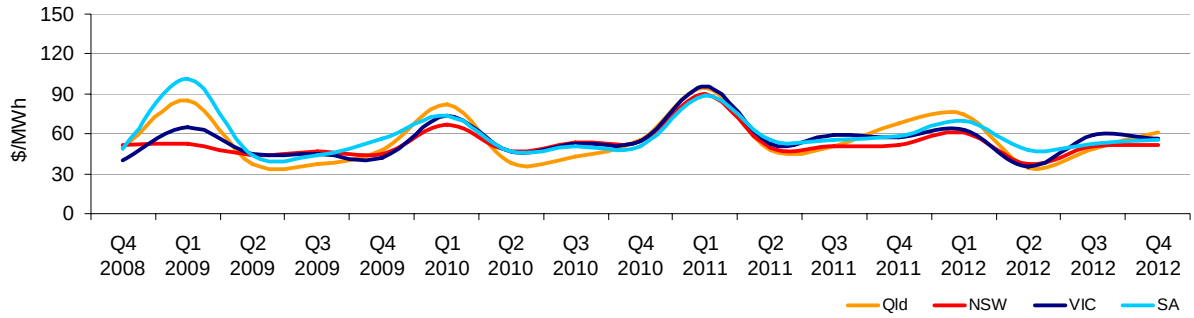


Source: d-cyphaTrade www.d-cyphatrade.com.au

[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.

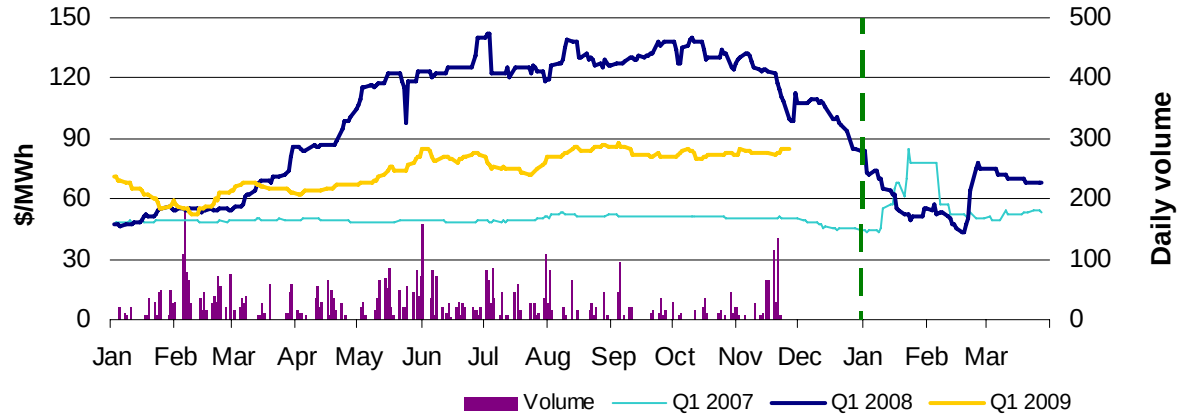
Figure 6: Quarterly base future prices 2008 - 2012



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

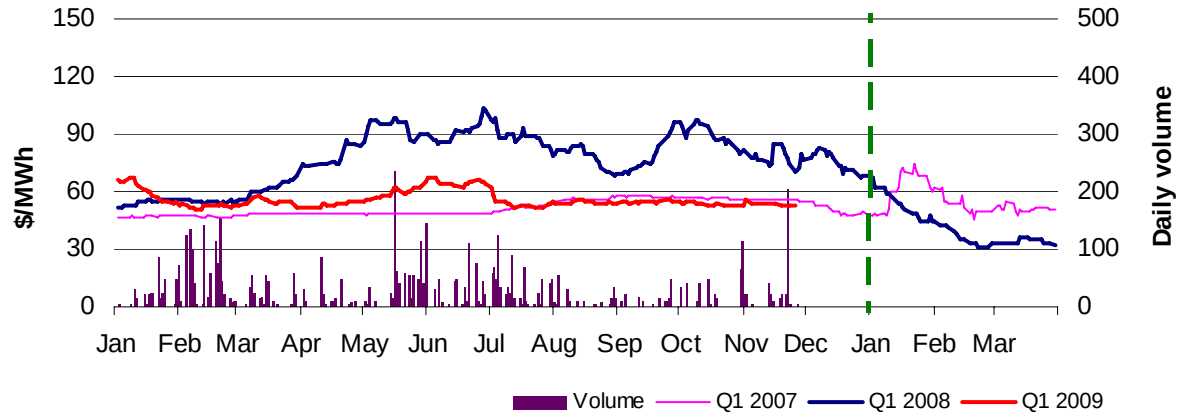
Figures 7-10 compare for each region the closing daily base contract prices for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 2009 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



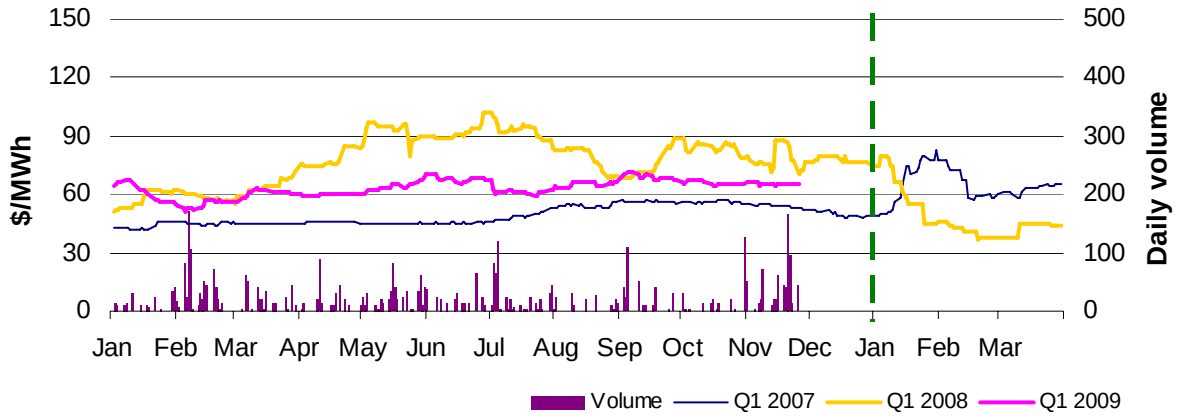
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



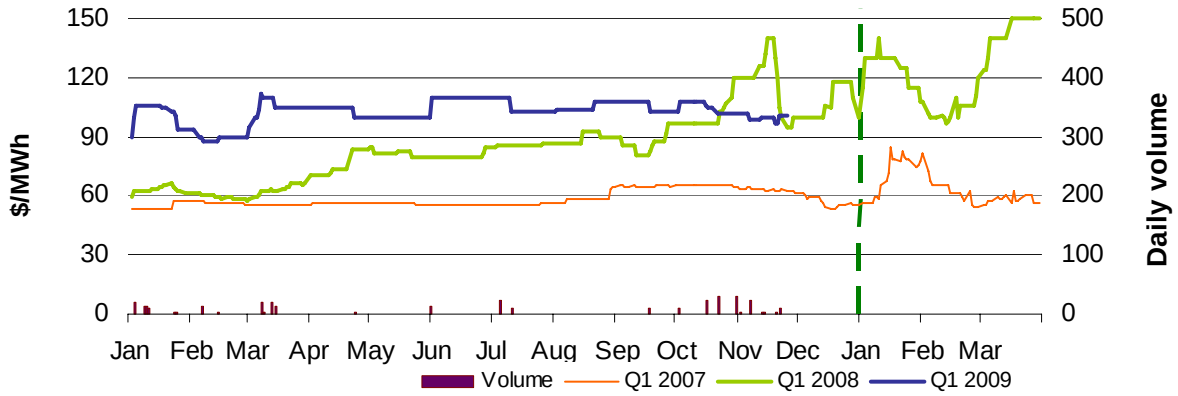
Source: d-cyphaTrade www.d-cyphatrade.com.au

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 66 trading intervals where actual prices significantly varied from forecasts[2] throughout the week. This compares to the weekly average in 2007 of 125 counts. Reasons for these variances are summarised in Figure 11[3].

Figure 11: Reasons for variations between forecast and actual prices

	Availability	Demand	Network	Combination
Price is higher than forecast	0%	52%	0%	8%
Price is lower than forecast	40%	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 only[4]. For example, in Queensland 175 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

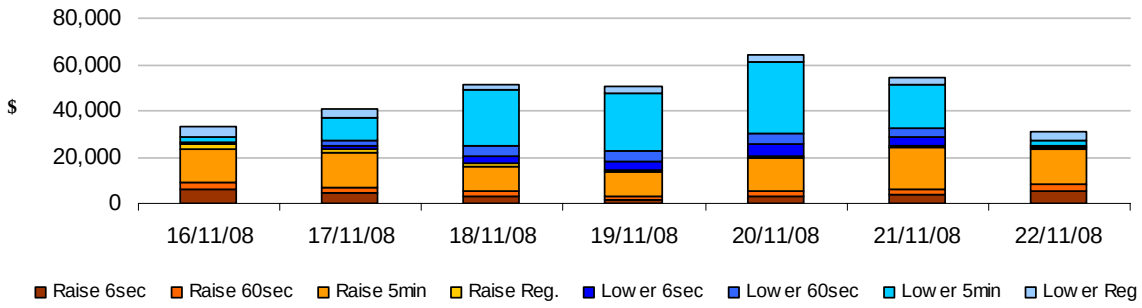
$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	175	-146	-34	184
New South Wales	209	-18	48	-492
Victoria	-160	-51	350	-499
South Australia	-64	170	-35	-264
Tasmania	85	11	-69	49
Total	245	-34	260	-1022

Ancillary services market

The total cost of ancillary services on the mainland for the week was $285 000 or less than one per cent of turnover in the energy market.

The total cost of ancillary services in Tasmania for the week was $41 000 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.

Detailed Market Analysis

AUSTRALIAN ENERGY REGULATOR

16 – 22 November 2008

Queensland: There were four occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of $64/MWh.

Sunday, 16 November

2:00 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	1709.97	28.01	24.24
Demand (MW)	6910	6480	6415
Available capacity (MW)	8913	8910	9350

Conditions at the time saw demand 430 MW greater than forecast four hours ahead. Available generation was close to that forecast four hours ahead but around 440 MW lower than that forecast 12 hours ahead.

At 8.36 am Millmerran Energy Trader's Millmerran unit one tripped, reducing available capacity by 435 MW, the majority of which was priced below $10/MWh.

At 1.40 pm, following the unplanned outage of the Middle Ridge to Millmerran line a network constraint was invoked by NEMMCO. This constraint caused a reduction in allowable dispatch from south west Queensland generators and from New South Wales, and dispatch across QNI changed from flowing north at 90 MW to flowing south at 99 MW. This step change combined with limited ability from other Queensland generators to increase output caused the 5-minute price to spike to $10 000/MWh. The network constraint also applied for the 1.45 pm dispatch interval and was then revoked, allowing QNI to change direction to flow north at 84 MW. At the same time demand in Queensland fell by 150 MW and prices returned to previous levels.

There were no significant rebids.

Thursday, 20 November

1:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	924.90	55.40	35.57
Demand (MW)	7434	7140	7202
Available capacity (MW)	8982	9228	9592
2:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	5061.39	244.49	35.80
Demand (MW)	7400	7269	7212
Available capacity (MW)	8859	9097	9602
3:00 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	1695.61	74.50	39.17
Demand (MW)	7355	7215	7165
Available capacity (MW)	8846	9099	9255

Conditions at the time saw demand around 300 MW greater than that forecast four hours ahead. Available capacity was 250 MW lower than that forecast four hours ahead and 750 MW lower than that forecast 12 hours ahead.

In accordance with clause 3.13.7 of the NER, the AER will issue a separate report into the circumstances that led to the spot price exceeding $5000/MWh.

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 ($/MWh) YTD	39	51	42	40	46
2007-08 ($/MWh) YTD	61	53	54	54	56
Change	-35%	-4%	-22%	-26%	-18%
2007-08 ($/MWh)	58	44	51	101	57

Table 2: NEM turnover

Financial year	NEM Turnover* ($, billion)	Energy (TWh)
2008-09 YTD	$3.8	84
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	46	34	-	40	37	56	0.49
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 24 November

	QLD		NSW		VIC		SA	
Q1 2009	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Price on 17 Nov ($/MW)	82	151	53	89	65	117	100	197
Price on 24 Nov ($/MW)	85	152	53	89	65	113	101	191
Open interest on 24 Nov	2551	174	2640	171	2192	474	179	20
Traded in the last week (MW)	170	25	233	0	361	50	16	25
Traded since 1 Jan 08	5378	439	5648	215	4334	757	361	40
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	-247	412	-	-115	18	-89	-21
MW Priced $20 to $50	439	-83	-	-30	4	-46	284

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