WEEKLY ELECTRICITY MARKET ANALYSIS

AUSTRALIAN ENERGY REGULATOR

11 July – 17 July 2010

Summary

The weekly average spot price was $20/MWh in Queensland, $23/MWh in Victoria and $24/MWh in New South Wales, South Australia and Tasmania.

There were negative spot prices in South Australia associated with moderate wind generation and low demand very early on Tuesday and Wednesday morning, and on Wednesday afternoon as a result of limited export capability.

Spot market prices

Figure 1 sets out the volume weighted average prices for the week 11 July to 17 July 2010 and the 09/10 financial year across the 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 July – 17 July 2010	20	24	23	24	24
% change from previous week*	-8	-12	-17	-23	-27
09/10 financial	37	52	42	82	30
% change from 08/09 financial **	3	23	-14	20	-51

*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 A[1].

Financial markets

Figures 2 to 9 show futures contract[2] prices traded on the Sydney Futures Exchange (SFE) as at close of trade on Monday 19 July 2010. Figure 2 shows the base futures contract prices for the next three calendar years, and the three year average. Also shown are percentage changes[3] compared to the previous week.

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[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 traded 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 2: Base calendar year futures contract prices ($/MWh)

	QLD		NSW		VIC		SA	
Calendar Year 2011	32*	-1%	41*	0%	38*	0%	45	1%
Calendar Year 2012	34*	-1%	44*	0%	40*	-2%	46	0%
Calendar Year 2013	58	-1%	60	0%	59	0%	69	0%
Three year average	41	-1%	48	0%	46	-1%	53	0%

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

Figure 3 shows the $300 cap contract price for the first quarter of 2011 and the 2011 calendar year and the percentage change[4] from the previous week.

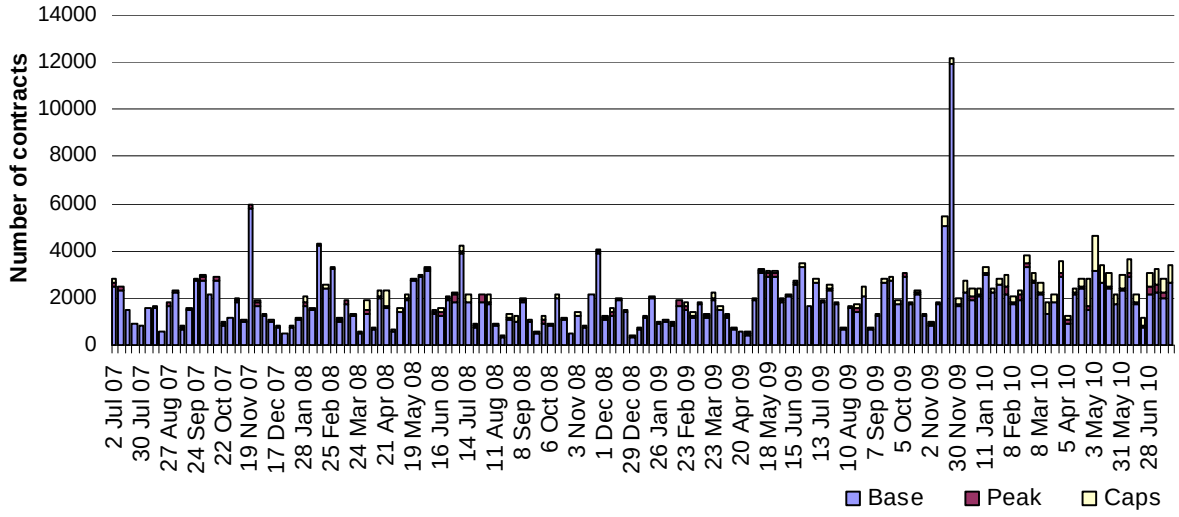
Figure 3: $300 cap contract prices ($/MWh)

	QLD		NSW		VIC		SA	
Q1 2011 (% Change)	17*	0%	20*	-3%	26	1%	38*	-6%
2011 (% Change)	8	-5%	12	-1%	10	0%	13	-4%

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

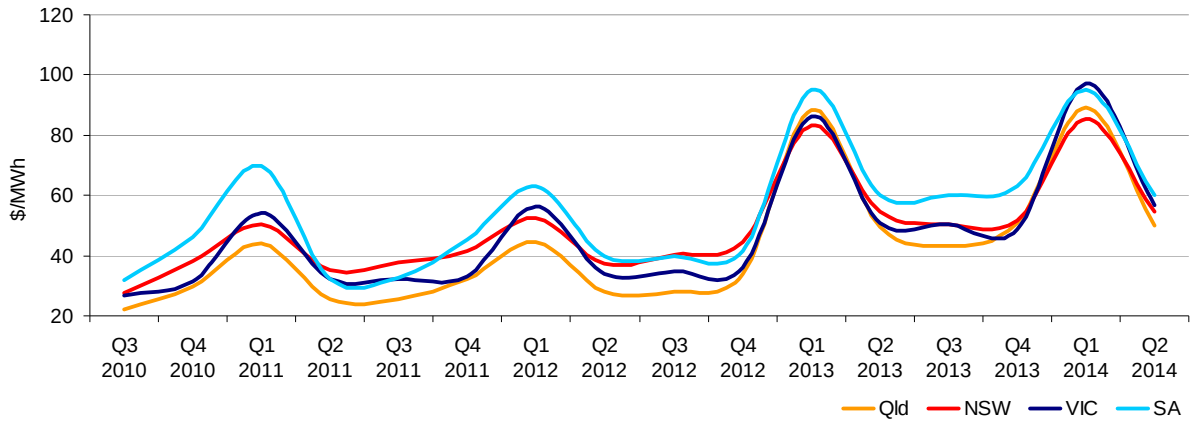


Source: d-cyphaTrade www.d-cyphatrade.com.au

[4] Calculated on prices prior to rounding.

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

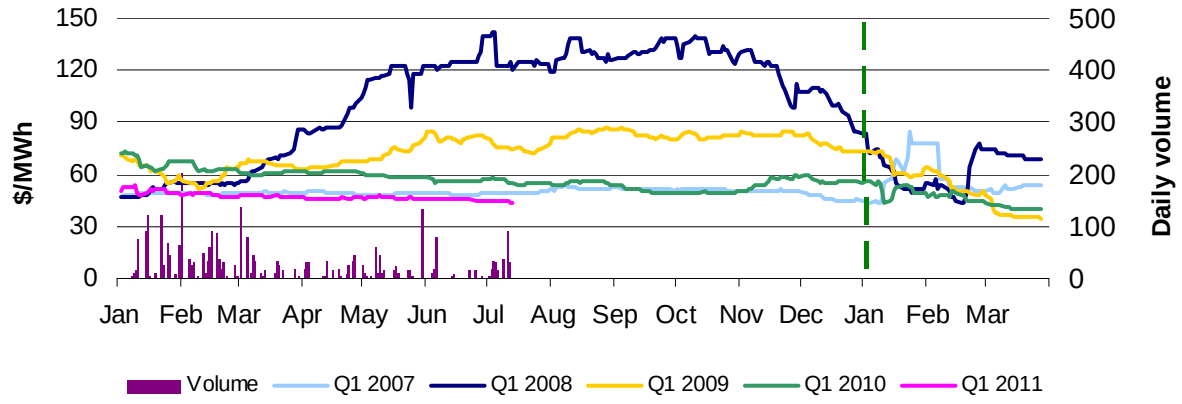
Figure 5: Quarterly base future prices Q3 2010 – Q2 2014



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

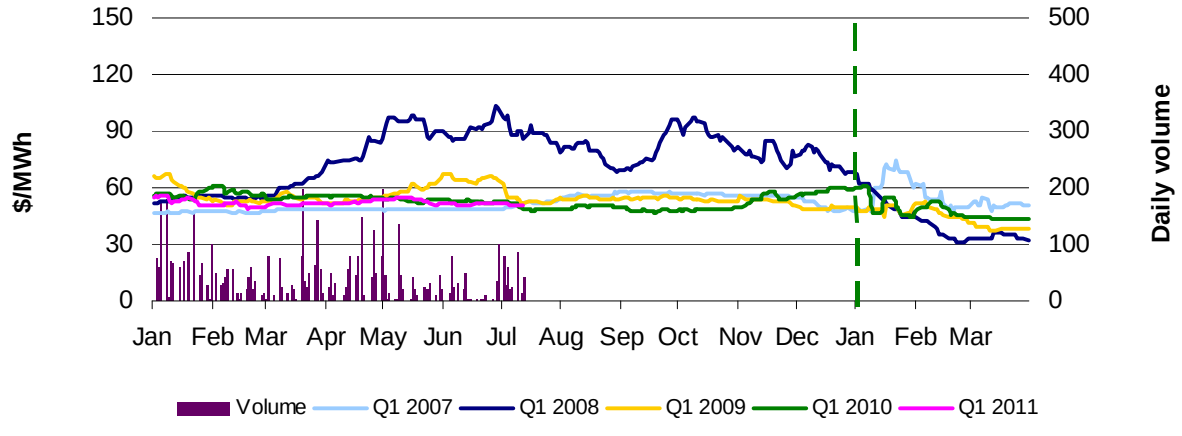
Figures 6-9 compare for each region the closing daily base contract prices for the first quarter of 2007, 2008, 2009, 2010 and 2011. Also shown is the daily volume of Q1 2011 base contracts traded. The vertical dashed line signifies the start of the Q1 period for which the contracts are being purchased. 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.

Figure 6: Queensland Q1 2007, 2008, 2009, 2010 and 2011



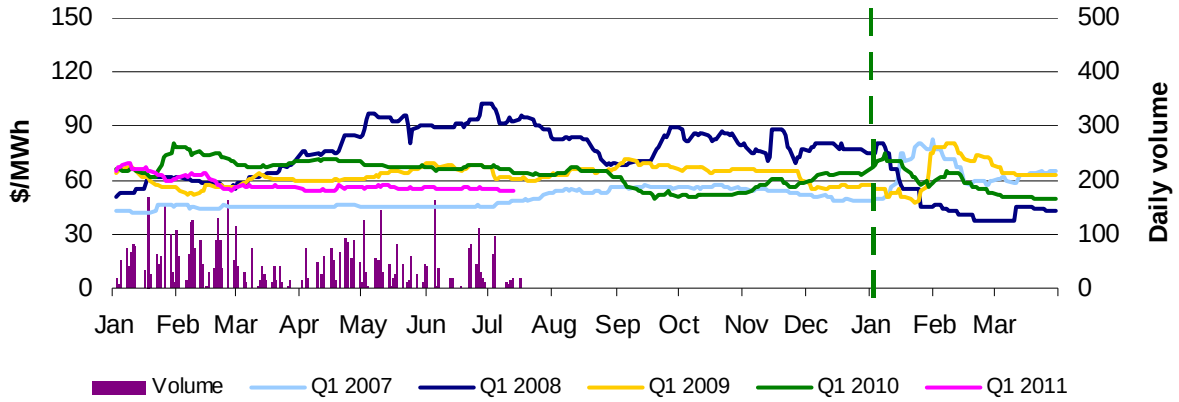
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 7: New South Wales Q1 2007, 2008, 2009, 2010 and 2011



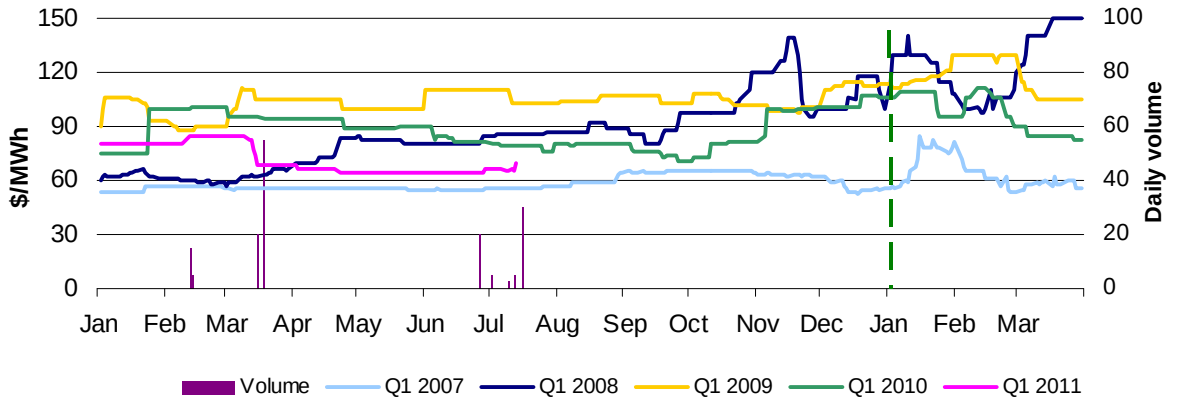
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 8: Victoria Q1 2007, 2008, 2009, 2010 and 2011



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

Figure 9: South Australia Q1 2007, 2008, 2009, 2010 and 2011



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.

**This graph was modified on 23/7/2010 to correct an error in the original report.

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 21 trading intervals throughout the week where actual prices varied significantly from forecasts[5]. This compares to the weekly average in 2009 of 103 counts. Reasons for these variances are summarised in Figure 10[6].

Figure 10: Reasons for variations between forecast and actual prices

	Availability	Demand	Network	Combination
% of total above forecast	0	18	3	3
% of total below forecast	46	26	0	4

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 periods[7]. For example, in Queensland 145 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 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	145	-117	-71	-135
NSW	-136	-253	359	-605
VIC	-118	109	-94	-228
SA	154	-187	45	-211
TAS	227	10	26	-85
TOTAL	272	-438	265	-1264

[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.

Ancillary services market

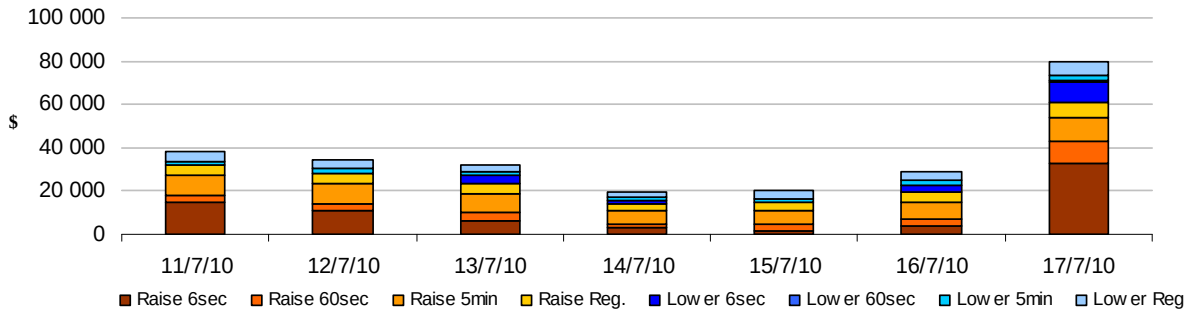
The total cost of frequency control ancillary services (FCAS) on the mainland for the week was $179 000 or less than one per cent of energy turnover on the mainland.

The total cost of FCAS in Tasmania for the week was $74 000 or around one and a half per cent of energy turnover in Tasmania. The majority of this accrued on Saturday 17 July when Basslink was out of service. Several days earlier Basslink was offered as unavailable from 5 am to 5.30 pm. A rebid at 3.38 pm by Basslink Pty Ltd, effective immediately, restored the interconnector to full availability. The reason given was "STPASA". This rebid reason is not compliant with the AER's *Rebidding and Technical Parameters Guideline* (published on 1 December 2009). The AER will seek further information from Basslink Pty Ltd on this matter.

From 5 am to 3.55 pm, Basslink was unable to transfer FCAS and all Tasmania requirements needed to be sourced locally. As a result, the requirements for all services increased from 5.05 am. Coincident with this, there was a step decrease in the availability of low-priced (less than $0.50/MW) offers for the raise 6-second service from Hydro Tasmania. The combination of these factors saw the raise 6-second ancillary service price in Tasmania increase from $0/MW to $24/MW and remain at that level until the return of BassLink when the requirements reduced and the price fell to around $1/MW.

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

Figure 12: Daily frequency control ancillary service cost



Australian Energy Regulator
July 2010

Detailed NEM Price and Demand Trends

for Weekly Market Analysis
11 July - 17 July 2010

AUSTRALIAN ENERGY REGULATOR

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

Financial year	QLD	NSW	VIC	SA	TAS
2009-10 ($/MWh)	37	52	42	82	30
2008-09 ($/MWh)	36	43	49	69	62
Change*	3%	23%	-14%	20%	-51%

Table 2: NEM turnover

Financial year	NEM Turnover** ($, billion)	Energy (TWh)
2009-10	$9.643	206
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)
Mar-10	25	27	24	25	26	0.443
Apr-10	22	25	84	32	25	0.625
May-10	22	29	32	31	61	0.509
Jun-10	23	35	33	38	32	0.563
Jul-10 (MTD)	22	27	26	30	28	0.261
Q2 2010	22	30	48	34	40	1.697
Q2 2009	32	35	34	35	106	1.918
Change*	-30%	-16%	40%	-5%	-63%	-11.51%

Table 4: ASX energy futures contract prices at end of 19 July

	QLD		NSW		VIC		SA	
Q1 2011	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Price on 12 Jul ($/MW)	44	77	51	85	54	97	66	100
Price on 19 Jul ($/MW)	44	77	51	84	54	97	70	100
Open interest on 19 Jul	1722	123	2927	225	3277	40	88	0
Traded in the last week (MW)	160	0	141	0	73	0	38	0
Traded since 1 Jan 10 (MW)	2970	94	5014	240	5519	40	158	0
Settled price for Q1 10($/MW)	40	65	44	68	50	89	83	160

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

Comparison:	QLD	NSW	VIC	SA	TAS	NEM
May 10 with May 09						
MW Priced <$20/MWh	1400	-590	-619	172	155	517
MW Priced $20 to $50/MWh	-707	1109	57	-121	213	551
June 10 with June 09						
MW Priced <$20/MWh	959	-520	-482	46	227	230
MW Priced $20 to $50/MWh	-743	378	301	-43	345	237
July 10 with July 09 (MTD)						
MW Priced <$20/MWh	1094	-337	134	106	-152	845
MW Priced $20 to $50/MWh	-518	432	174	12	374	474

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