WEEKLY MARKET ANALYSIS

AUSTRALIAN ENERGY REGULATOR

15-21 February 2009

Summary

The average spot price for the mainland ranged from $25/MWh in New South Wales to $42/MWh in Queensland, which experienced near record demand later in the week. The average spot price for Tasmania was $46/MWh.

In the financial market, trades and prices were generally at a similar level to the previous week.

Spot market prices

Figure 1 sets out the volume weighted average prices for 15 to 21 February 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)

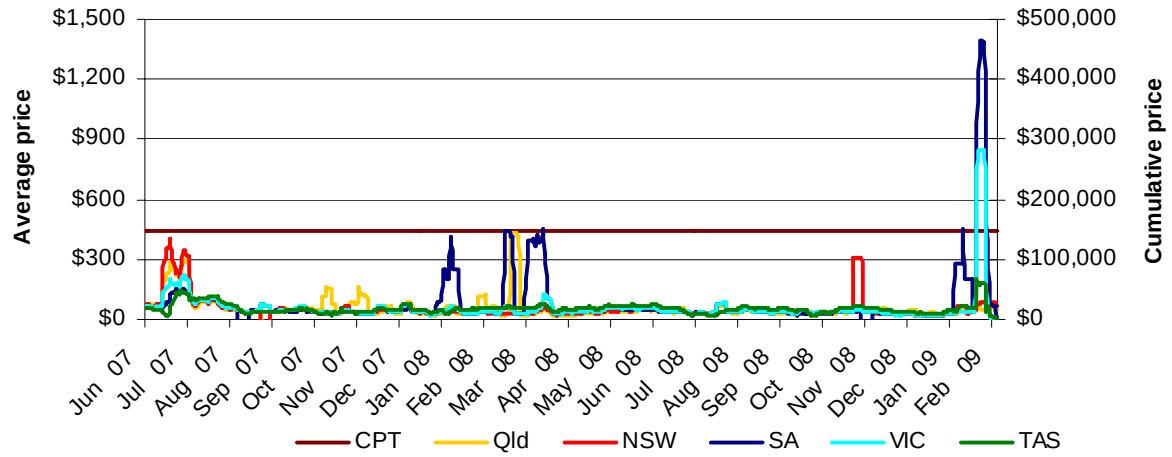
	Qld	NSW	VIC	SA	Tas
Average price for 15 – 21 February	42	25	31	36	46
Financial year to 21 February	40	48	58	86	49
% change from previous week*	-21%	-52%	42%	57%	24%
% change from year to date**	-43%	2%	15%	-5%	-11%

*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).

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 23 February. 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	45	1%	48	-1%*	51	0%	63	0%
Financial 2010-11	57	0%	59	0%	63	0%	67	0%
Financial 2011-12	63	-1%	63	1%	67	0%	69	0%
Three year average	55	0%	57	0%	60	0%	66	0%

Source: d-cyphaTrade www.d-cyphatrade.com.au
* There were trades in this product but not others.

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.

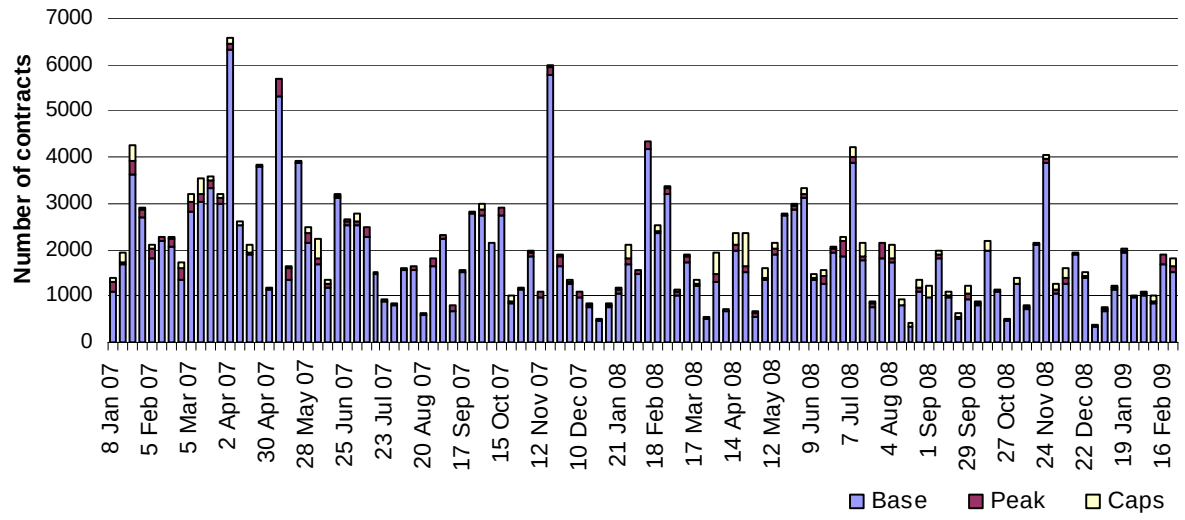
Figure 4: $300 cap contract prices ($/MWh)

	QLD		NSW		VIC		SA	
Q1 2009 price	16	-11%*	9	-47%	35	-8%*	90	6%
Calendar 2009	9	-5%	7	-22%	13	-7%	28	6%

Source: d-cyphaTrade www.d-cyphatrade.com.au
* There were trades in this product but not others.

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

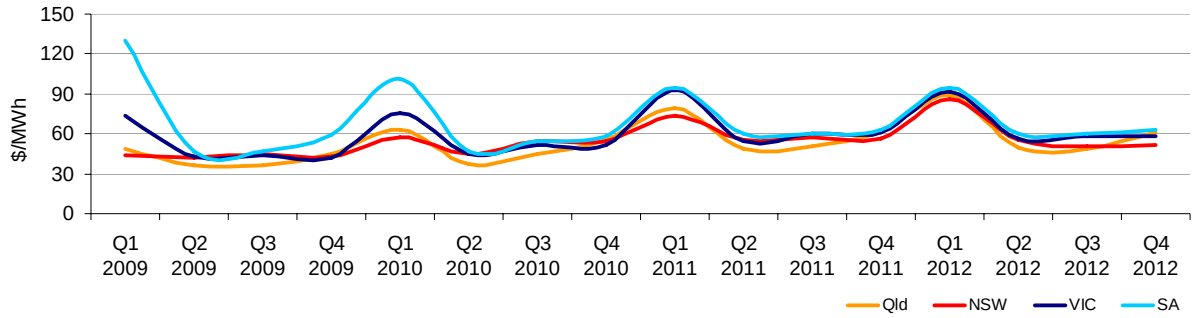


Source: d-cyphaTrade www.d-cyphatrade.com.au

[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.

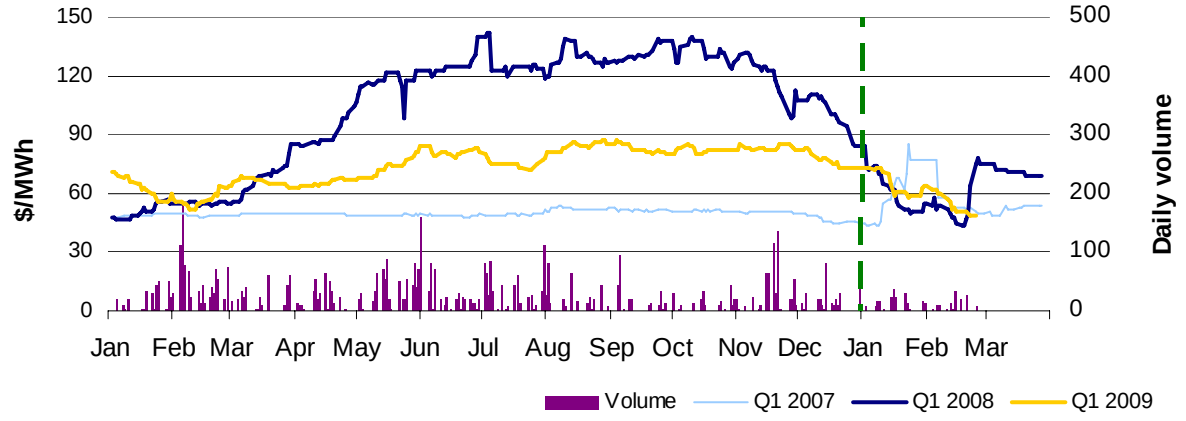
Figure 6: Quarterly base future prices 2009 - 2012



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

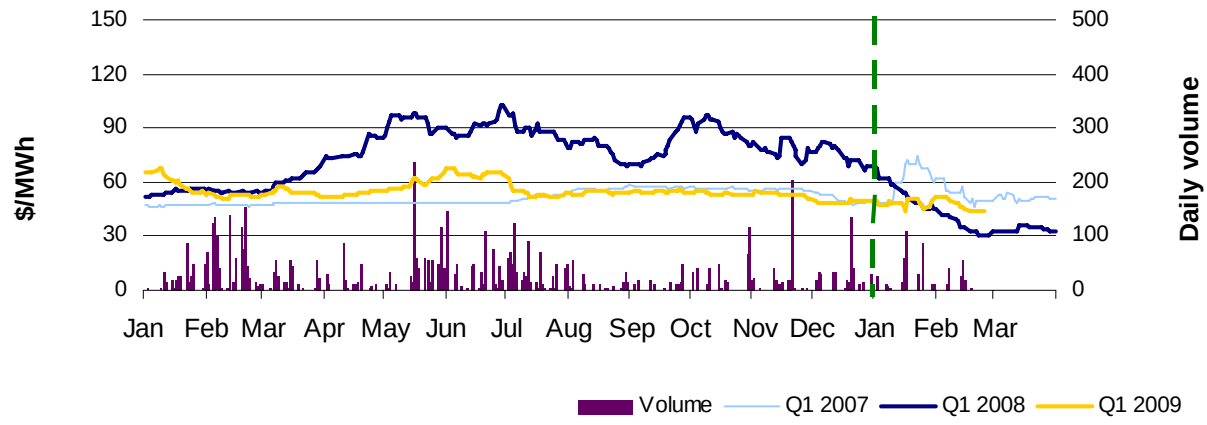
Figures 7-10 compare for each region the closing daily base contract prices for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 2009 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



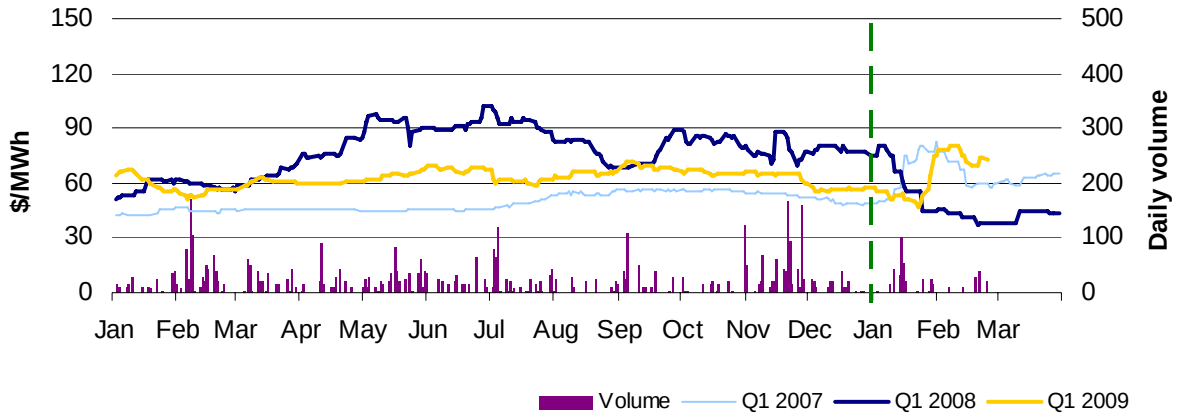
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



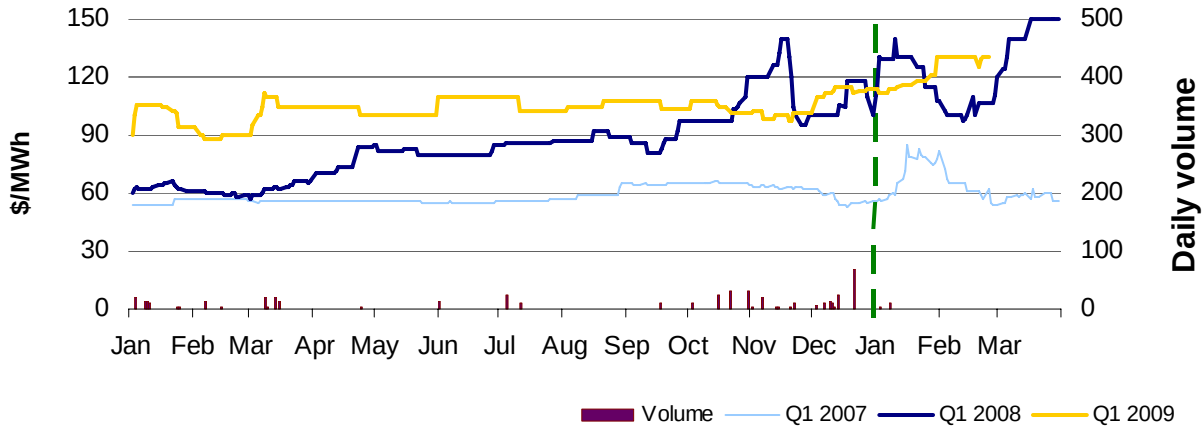
Source: d-cyphaTrade www.d-cyphatrade.com.au

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 108 trading intervals where actual prices significantly varied from forecasts[2] throughout the week. This compares to the weekly average in 2008 of 130 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
% of total above forecast	3%	32%	0%	1%
% of total below forecast	56%	8%	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 239 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 and average demand compared to the previous week during peak times

$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	-239	157	-468	-69
New South Wales	324	-318	-300	267
Victoria	496	374	386	728
South Australia	152	41	227	514
Tasmania	32	-15	-2	-18
Total	765	239	-157	1422

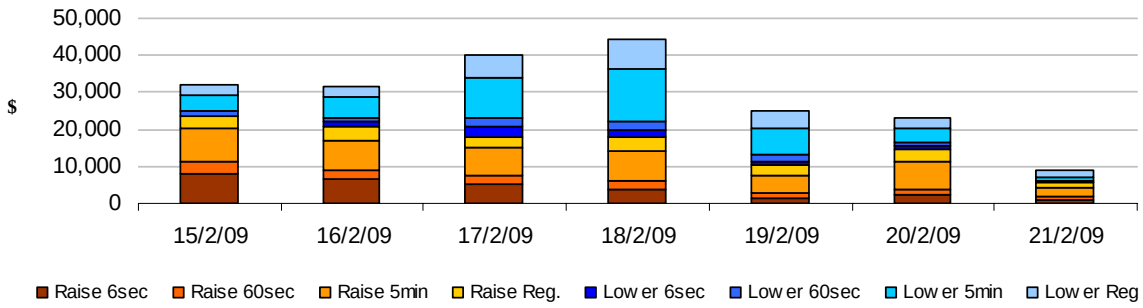
Ancillary services market

The total cost of frequency control ancillary services on the mainland for the week was $174 000 or less than one per cent of turnover in the energy market.

The total cost of ancillary services in Tasmania for the week was $31 000 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



Australian Energy Regulator
March 2009

[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

15-21 February 2009

Queensland: There were five occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of $42/MWh.

Friday, 20 February

12:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	194.56	49.01	49.01
Demand (MW)	8271	7997	7934
Available capacity (MW)	9425	9724	9724
1:00 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	157.51	64.79	64.79
Demand (MW)	8316	8077	8026
Available capacity (MW)	9448	9724	9723
1:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	227.46	243.46	243.46
Demand (MW)	8353	8181	8095
Available capacity (MW)	9388	9723	9722
2:00 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	265.95	245.99	245.99
Demand (MW)	8381	8217	8145
Available capacity (MW)	9421	9722	9721
2:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	2999.59	290.80	250.78
Demand (MW)	8356	8257	8204
Available capacity (MW)	9545	9719	9721

Conditions at the time saw demand up to 275 MW higher than forecast four hours ahead and close to record levels. Available capacity was up to 330 MW lower than that forecast four hours ahead.

Flow across QNI into Queensland was limited to less than 200 MW as a result of a system normal constraint managing the avoidance of a voltage collapse on the loss of Kogan Creek. This limit was close to that forecast.

With around 110 MW of capacity priced between $300/MWh and $9000/MWh and most generators in Queensland either fully dispatched or ramp rate limited, an increase in demand at 2.10 pm saw the five minute price spike from $297/MWh to $9810/MWh and the spot price for the 2.30 pm trading interval reach $2999.59.

Over several rebids from 10.09 am CS Energy reduced the available capacity across its portfolio by 156 MW. The reasons given were “Load increase market conditions”, “Call_B vacuum limitation” and “Colnsv_unit RTS delay”. A rebid at 1.49 pm, effective from 2 pm shifted 113 MW at Swanbank E from negative prices to above $5000/MWh. The reason given was “Changed sensitivities”.

Over two rebids at 11.54 am and 12.04 pm AGL Hydro reduced the available capacity at Yabulu by 142 MW (a majority of which was priced below $90/MWh). The reasons given were “Plant failure::capacity change due to plant problems” and “Plant limitations::adj to unit commitment”. At 2.12 pm, following the 2.10 pm five-minute dispatch price spike, a rebid increased the availability of Yabulu by 100 MW. The reason given was “Plant limitations::lifted”.

There was no other significant rebidding.

Victoria: There were two occasions where the spot price in Victoria was greater than three times the Victoria weekly average price of $31/MWh.

Tuesday, 17 February

4:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	100.86	65.44	65.03
Demand (MW)	7722	7339	7341
Available capacity (MW)	9208	9070	9308
5:00 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	98.69	50.26	51.93
Demand (MW)	7631	7211	7214
Available capacity (MW)	9237	9070	9308

Conditions at the time saw demand up to 420 MW greater than forecast four hours ahead leading to the dispatch of higher price generation. Available capacity was around 170 MW higher than forecast four hours ahead. The prices in Victoria and South Australia were aligned.

There was no significant rebidding.

South Australia: There were two occasions where the spot price in South Australia was greater than three times the South Australia weekly average price of $36/MWh.

Tuesday, 17 February

4:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	110.99	73.29	68.71
Demand (MW)	2433	2441	2262
Available capacity (MW)	2697	2712	2766
5:00 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	108.51	56.02	55.77
Demand (MW)	2433	2411	2250
Available capacity (MW)	2680	2715	2768

Demand and available capacity were close to that forecast four hours ahead. Demand was up to 180 MW greater than that forecast 12 hours ahead. The prices in Victoria and South Australia were aligned.

There was no significant rebidding.

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 ($/MWh) YTD	40	48	58	86	49
2007-08 ($/MWh) YTD	54	47	51	92	55
Change	-27%	2%	15%	-6%	-11%
2007-08 ($/MWh)	58	44	51	101	57

Table 2: NEM turnover

Financial year	NEM Turnover* ($, billion)	Energy (TWh)
2008-09 YTD	$6.9	136
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 ($/MWh)	QLD	NSW	VIC	SA	TAS	Turnover ($, billion)
Oct-08	43	94	41	37	47	1.05
Nov-08	40	32	36	34	51	0.60
Dec-08	36	25	23	26	33	0.48
Jan-09	44	57	190	374	85	1.96
Feb-09 MTD	46	54	42	52	40	0.60
Q4 2008	39	51	34	32	44	2.13
Q4 2007	56	41	44	46	44	2.35
Change	-29%	23%	-23%	-30%	0%	-0.48%

Table 4: ASX energy futures contract prices at 23 February

	QLD		NSW		VIC		SA	
Q1 2009	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Price on 16 Feb ($/MW)	51	82	46	68	72	140	130	200
Price on 23 Feb ($/MW)	49	78	44	68	74	140	130	200
Open interest on 23 Feb	2521	263	2766	231	2440	484	267	20
Traded in the last week (MW)	46	0	5	0	69	0	0	0
Traded since 1 Jan 08	6157	544	6599	295	5163	807	529	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	VIC	SA	TAS	NEM
December 08 with December 07						
MW Priced <$20	-78	295	805	-142	16	897
MW Priced $20 to $50	320	414	-150	145	140	870
January 09 with January 08						
MW Priced <$20	-423	-799	25	39	-26	-1184
MW Priced $20 to $50	420	1043	178	52	-64	1629
February 09 with February 08						
MW Priced <$20	-313	82	-124	101	51	-203
MW Priced $20 to $50	322	134	137	-83	-4	506