

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

30 November – 6 December 2008

Summary

Average spot prices ranged from \$27/MWh in Victoria and South Australia to \$37/MWh in Tasmania. In the financial markets, for the second consecutive week contract prices were generally lower.

Spot market prices

Figure 1 sets out the volume weighted average prices for 30 November to 6 December 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 30 November – 6 December	34	28	27	27	37
Financial year to 6 December	38	49	40	39	46
% change from previous week*	29%	11%	-4%	-10%	-9%
% change from year to date**	-35%	-8%	-25%	-27%	-19%

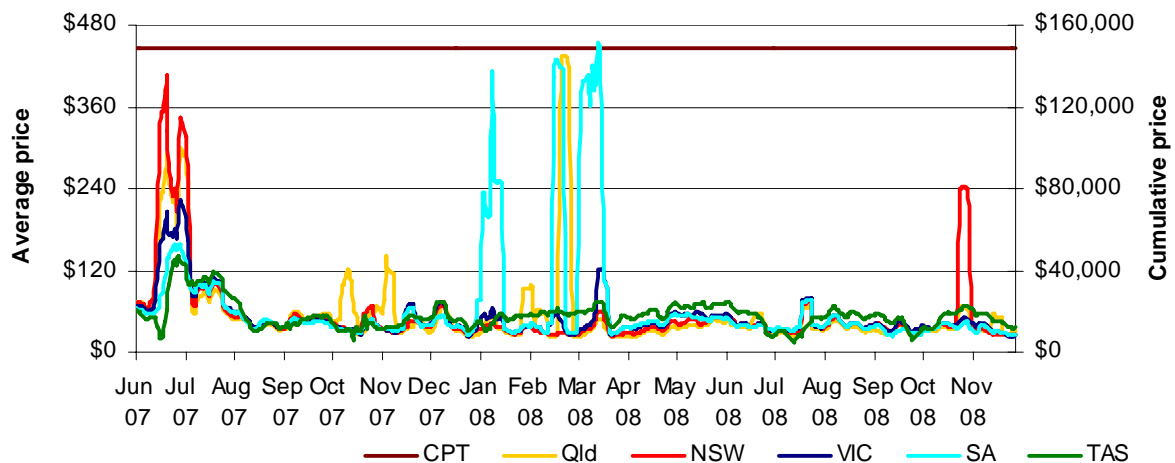
*The percentage change between last week's average spot price and the average price for the previous week.

**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 8 December. 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	49	-4%	48	-6%	49	-4%	57	0%
Financial 2010-11	59	-1%	59	-4%	61	-3%	61	0%
Financial 2011-12	57	0%	50	0%	56	5%	60	4%
Three year average	55	-2%	52	-3%	56	-1%	59	1%

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.

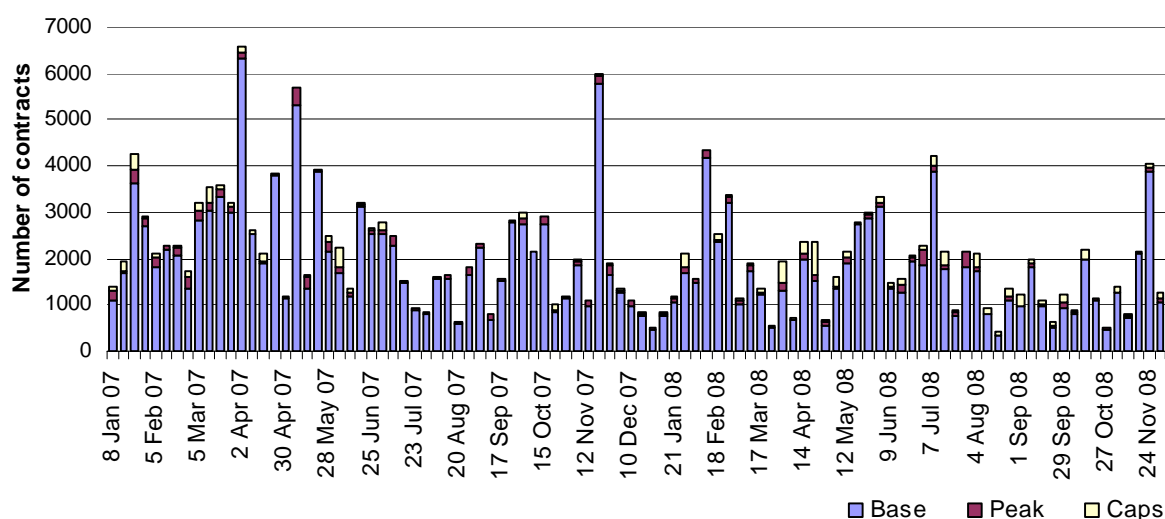
Figure 4: \$300 cap contract prices (\$/MWh)

	QLD		NSW		VIC		SA	
Q1 2009 price	44	1%	14	-14%	17	-12%	70	8%
Calendar 2009	17	-4%	9	-6%	9	-5%	22	6%

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

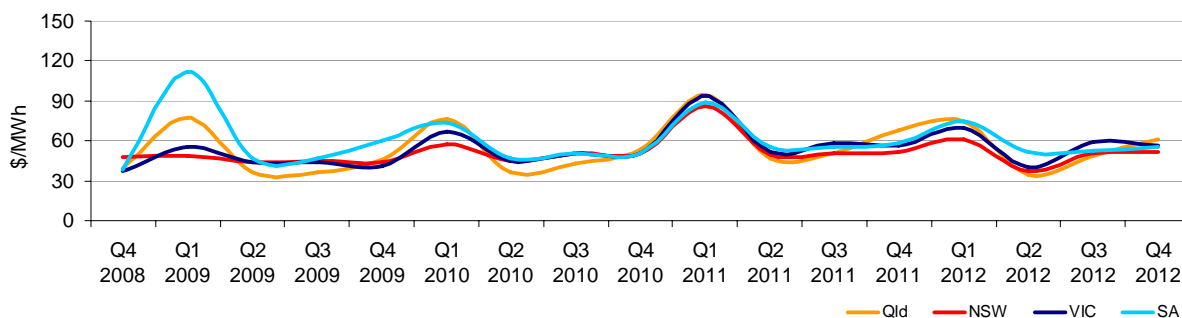


Source: d-cyphaTrade www.d-cyphatrade.com.au

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.

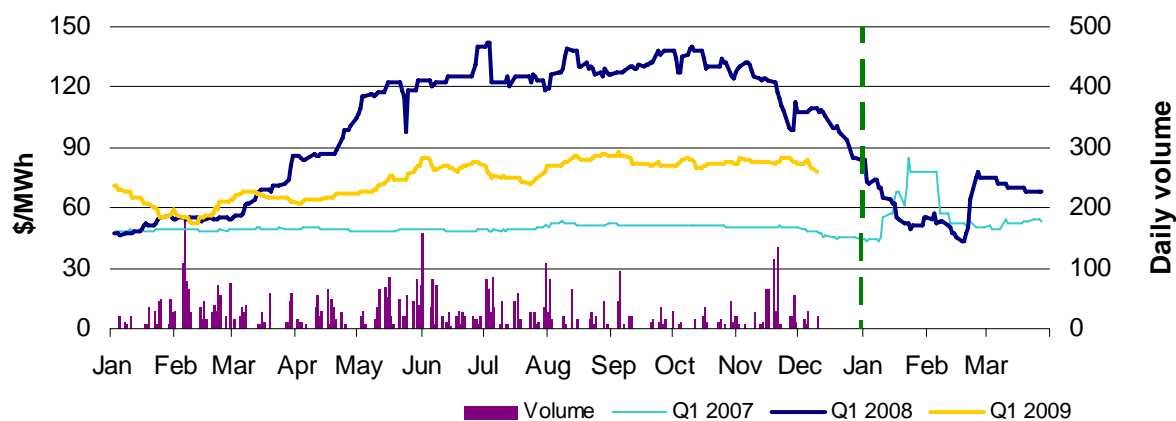
Figure 6: Quarterly base future prices 2008 - 2012



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

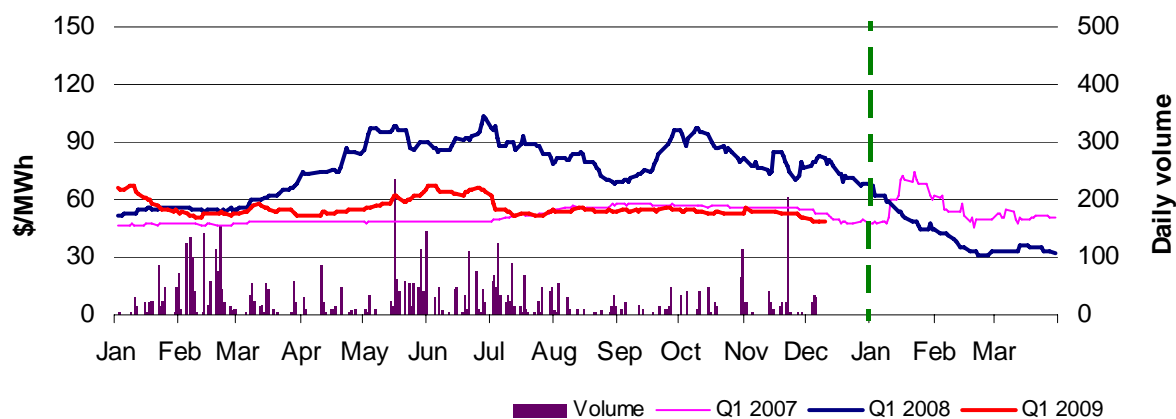
Figures 7-10 compare for each region the closing daily base contract prices for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 2009 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



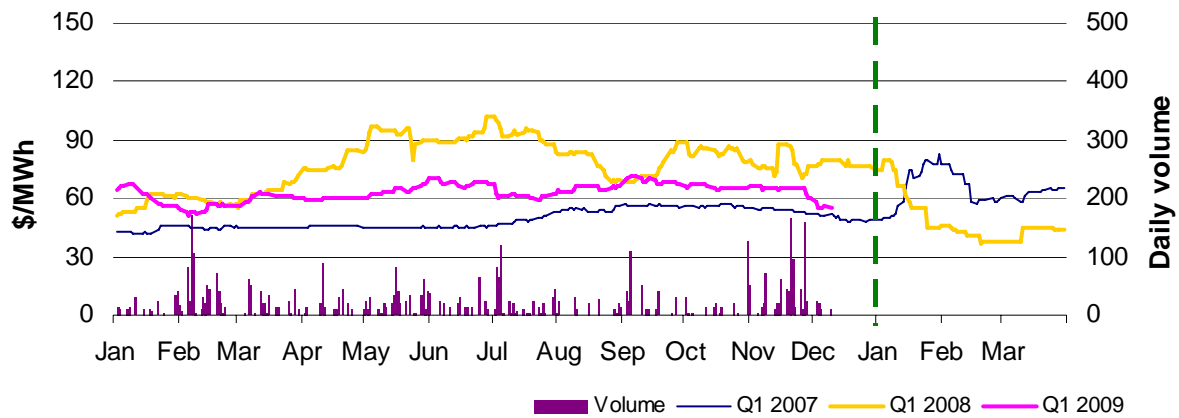
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



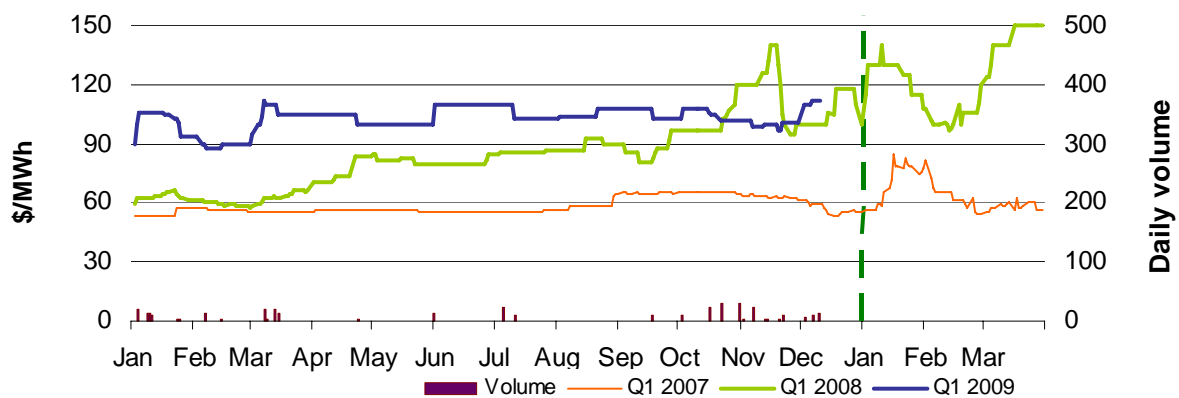
Source: d-cyphaTrade www.d-cyphatrade.com.au

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 115 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	5%	67%	0%	0%
Price is lower than forecast	16%	7%	0%	5%

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 845 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

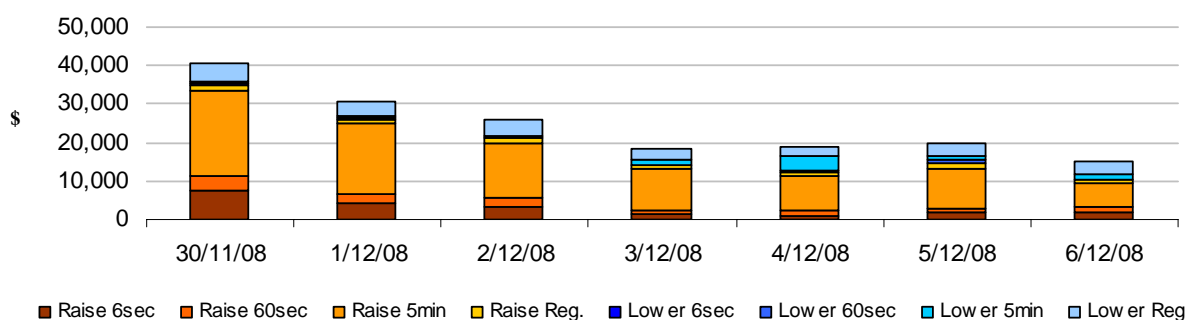
\$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	-845	58	-1066	438
New South Wales	-103	-276	-504	451
Victoria	252	-182	-51	-93
South Australia	-21	-73	-131	-136
Tasmania	91	59	-108	-1
Total	-626	-414	-1,860	659

Ancillary services market

The total cost of ancillary services on the mainland for the week was \$129 000 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



Australian Energy Regulator December 2008

⁴ Peak period is defined as between 7 am and 10 pm on weekdays, which aligns with the SFE contract definition.

Detailed Market Analysis

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National: There were four occasions where the spot price aligned nationally and the New South Wales price was greater than three times the New South Wales weekly average price of \$28/MWh. The New South Wales spot price is used as a proxy national price under these conditions as New South Wales is located in the centre of the NEM.

Friday, 5 December

2:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	91.99	35.84	41.00
Demand (MW)	28 624	28 295	27 919
Available capacity (MW)	35 591	36 825	36 102
3:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	99.01	41.84	41.32
Demand (MW)	28 814	28 280	27 986
Available capacity (MW)	35 465	36 339	36 159
3:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	89.63	41.63	41.32
Demand (MW)	28 832	28 199	28 033
Available capacity (MW)	35 876	36 525	36 409
4:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	94.73	41.00	41.00
Demand (MW)	28 955	28 132	28 022
Available capacity (MW)	35 669	36 376	36 457

Conditions at the time saw demand up to 820 MW higher than forecast four hours ahead and available capacity 1230 MW lower than forecast four hours ahead.

At 10.20 am TRUenergy reduced the available capacity of Yallourn unit two from 360 MW to zero, all of which was priced below \$5/MWh. The reason given was “Plant conditions-reduce unit output”.

Over two rebids at 12.13 pm and 12.47 pm, Tarong Energy reduced the available capacity of Tarong North by 443 MW to zero, all of which was priced below \$15/MWh. The reasons given were “TN off line ::Adjust availability” and “Tarong North feed pump issues:: delayed RTS”.

At 12.48 pm Stanwell Corporation reduced the available capacity of Gladstone unit three by 140 MW for the 2 pm trading interval, most of which was priced below \$60/MWh. The reason given was “Condensor Backflush::change availability”.

At 1.26 pm Hydro Tasmania rebid 348 MW of capacity across its portfolio from prices below \$75/MWh to above \$100/MWh. The reason given was “Change in price forecast”.

There were no other significant rebids.

Queensland: There were four occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of \$34/MWh. One of these occurred when prices were generally aligned across all regions and is detailed in the national market outcomes section. The other three occasions are presented below.

Tuesday, 2 December

9:00 am	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	354.71	27.96	30.00
Demand (MW)	7180	6993	6996
Available capacity (MW)	9473	9833	10 021

Conditions at the time saw demand 190 MW higher than forecast four hours ahead and available capacity lower than forecast four hours ahead.

At 8.45 am the 5 minute price reached \$1972/MWh following the unplanned loss of Stanwell Corporation's Stanwell unit two from 350 MW.

There was no other significant rebidding.

Tuesday, 2 December

4:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	111.88	39.01	32.98
Demand (MW)	8091	7856	7513
Available capacity (MW)	9444	9838	9977

Conditions at the time saw demand 245 MW higher than forecast four hours ahead and available capacity around 400 MW lower than forecast four hours ahead.

Over several rebids from 12.11 pm the availability of Callide C Power Station was reduced by 105 MW, all of which was priced below \$30/MWh. The reasons given were "Coal feeder failure" and "Energy limitations".

At 3.36 pm Stanwell Corporation reduced the available capacity at Gladstone unit five by 130 MW. The reason given was "Condenser backflush:: change availability".

At 3.39 pm CS Energy rebid 203 MW of capacity at Swanbank E from prices below zero to above \$130/MWh. The reason given was "Portfolio optimisation".

There was no other significant rebidding.

Thursday, 4 December

1:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	107.35	64.49	250.78
Demand (MW)	8192	8069	8005
Available capacity (MW)	9624	9671	9686

Conditions at the time saw demand and available capacity close to forecast four hours ahead.

Over several rebids from 12.23 pm Stanwell Corporation rebid 345 MW of capacity to above \$9000/MWh across its portfolio - the majority of which was previously priced below \$50/MWh. The reasons given were "Rearrange/rebalance portfolio::change avail/MW distrib", "Extend previous bid::change avail/MW distrib" and "Manage transmission constraint".

There was no other significant rebidding.

Victoria: There were six occasions where the spot price in Victoria was greater than three times the Victorian weekly average price of \$27/MWh. Four of these occurred when prices were generally aligned across all regions and are detailed in the national market outcomes section. The remaining two occasions are presented below.

Friday, 5 December

1:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	80.47	38.75	42.18
Demand (MW)	7269	7065	6714
Available capacity (MW)	9048	9464	9499
2:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	89.84	39.80	41.85
Demand (MW)	7292	7014	6678
Available capacity (MW)	8979	9464	9494

Conditions at the time saw demand around 280 MW higher than forecast four hours ahead. Available capacity was around 480 MW lower than forecast.

At 10.20 am TRU Energy reduced the available capacity of Yallourn unit two from 360 MW to zero, all of which was priced below \$5/MWh. The reason given was “Plant conditions-reduce unit output”.

There was no other significant rebidding.

Tasmania: There were two occasions where the spot price in Tasmania was greater than three times the Tasmania weekly average price of \$37/MWh. One of these occurred when prices were generally aligned across all regions and is detailed in the national market outcomes section and the other is presented below.

Friday, 5 December

2:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	143.55	48.22	48.22
Demand (MW)	1146	1119	1088
Available capacity (MW)	1676	1676	1676

Conditions at the time saw demand and available capacity close to forecast.

Over several rebids from 1.53 pm Hydro Tasmania rebid 244 MW of capacity across its portfolio from prices below \$75/MWh to above \$200/MWh. The reason given was “Prices higher than forecast”.

There was no other significant rebidding.

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	49	40	39	46
2007-08 (\$/MWh) YTD	59	53	54	54	57
Change	-35%	-8%	-25%	-27%	-19%
2007-08 (\$/MWh)	58	44	51	101	57

Table 2: NEM turnover

Financial year	NEM Turnover* (\$, billion)	Energy (TWh)
2008-09 YTD	\$4.0	92
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)
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	40	32	-	36	34	51	0.60
Dec-08 MTD	36	30	-	29	28	39	0.11
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 8 December

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2009								
Price on 01 Dec (\$/MW)	82	151	50	89	58	107	110	191
Price on 08 Dec (\$/MW)	78	143	49	80	55	95	112	191
Open interest on 08 Dec	2372	219	2469	171	2257	474	201	20
Traded in the last week (MW)	55	45	65	0	40	0	25	0
Traded since 1 Jan 08	5553	484	5738	215	4594	757	394	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
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	-175	391	-	26	4	-62	183
MW Priced \$20 to \$50	450	25	-	-41	10	-27	417
December 08 with December 07							
MW Priced <\$20	-638	253	-	709	-56	118	386
MW Priced \$20 to \$50	375	423	-	-161	139	95	871

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