

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

6 July – 12 July 2008

Summary

Average prices for the week on the mainland ranged between \$30/MWh in Queensland and \$37/MWh in South Australia. These prices represent a slight increase in all regions compared to the previous week, consistent with an increase in demand.

In the financial markets, base futures prices were lower across all regions compared to the previous week.

Spot market prices

Figure 1 sets out the volume weighted average price for this week and the financial year to date across the NEM regions and compares them 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 6 July – 12 July	30	34	35	37	31
Financial year to 12 July	29	32	34	36	29
% change from previous week*	10%	9%	9%	8%	31%
% change from year to date**	-63%	-64%	-65%	-65%	-73%

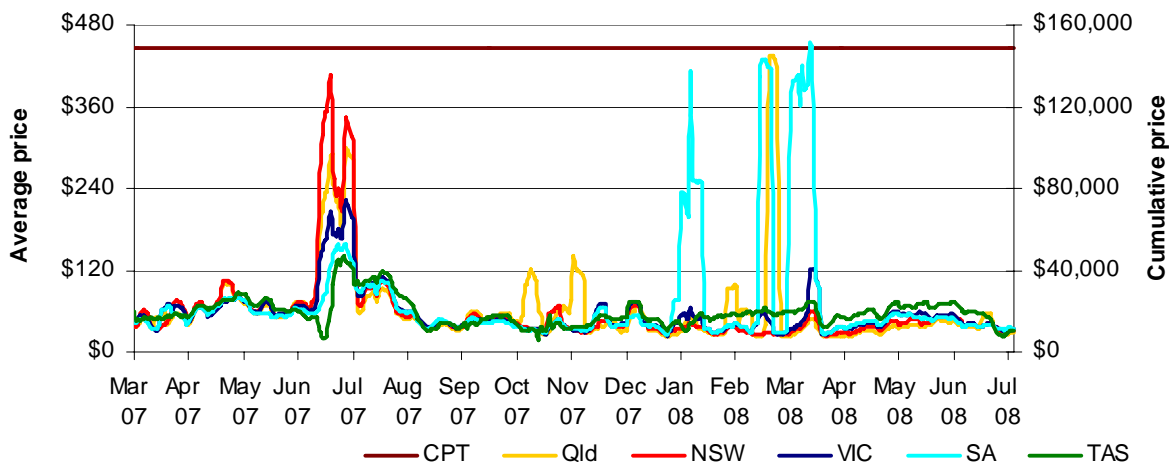
*The percentage change between last week's average spot price and the average price for the previous week.

**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 CPT (and the equivalent seven day time-weighted average price) for the last 15 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 as at close of trade on Monday 14 July. Figure 3 shows the financial year base futures contract prices for the current year, the following two 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 2008-09	51	-3%	41	-3%	44	-3%	61	-5%
Financial 2009-10	47	-1%	47	-5%	48	-2%	54	-5%
Financial 2010-11	55	-1%	51	-2%	65	-1%	49	0%
Three year average	51	-2%	46	-3%	52	-2%	55	-3%

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.

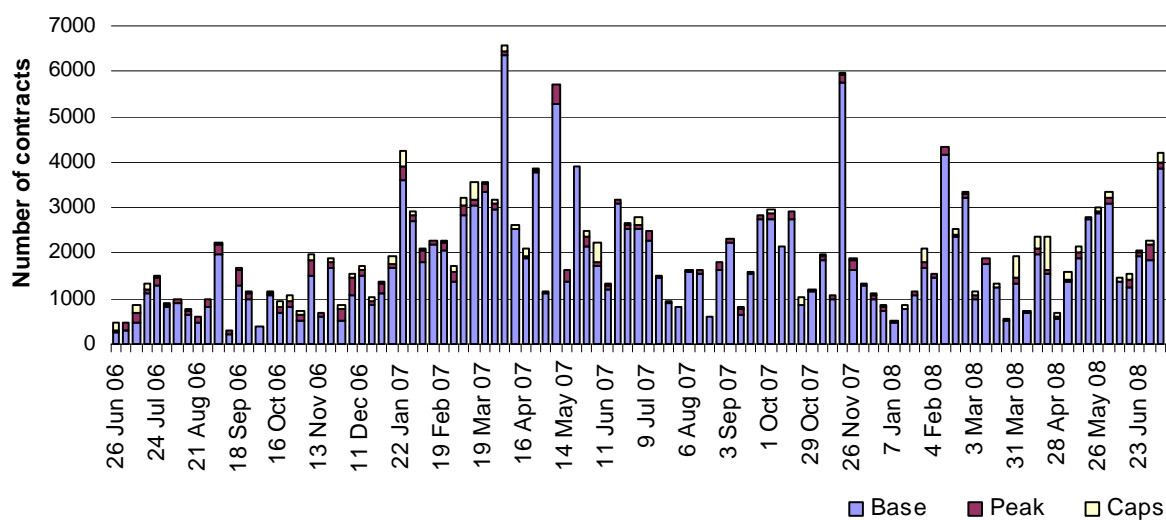
Figure 4: \$300 cap contract prices (\$/MWh)

	QLD		NSW		VIC		SA	
Q1 2009 price	40	0%	22	-1%	24	-1%	65	0%
Calendar 2009	15	0%	11	-1%	11	-1%	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

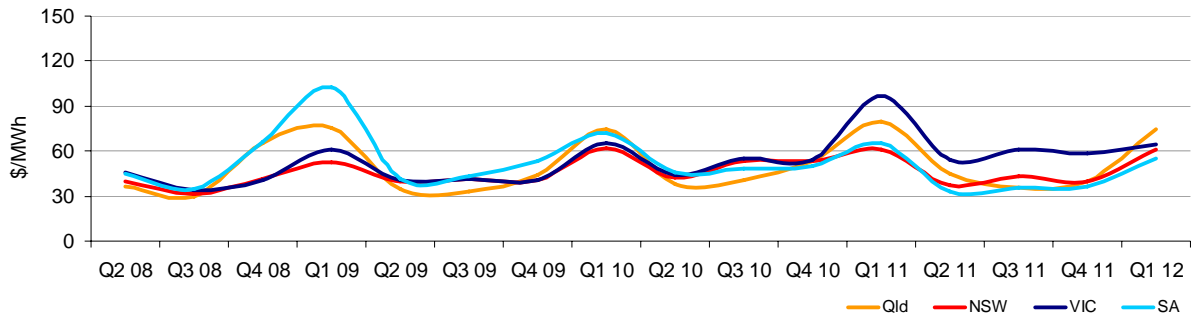


Source: d-cyphaTrade www.d-cyphatrade.com.au

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.

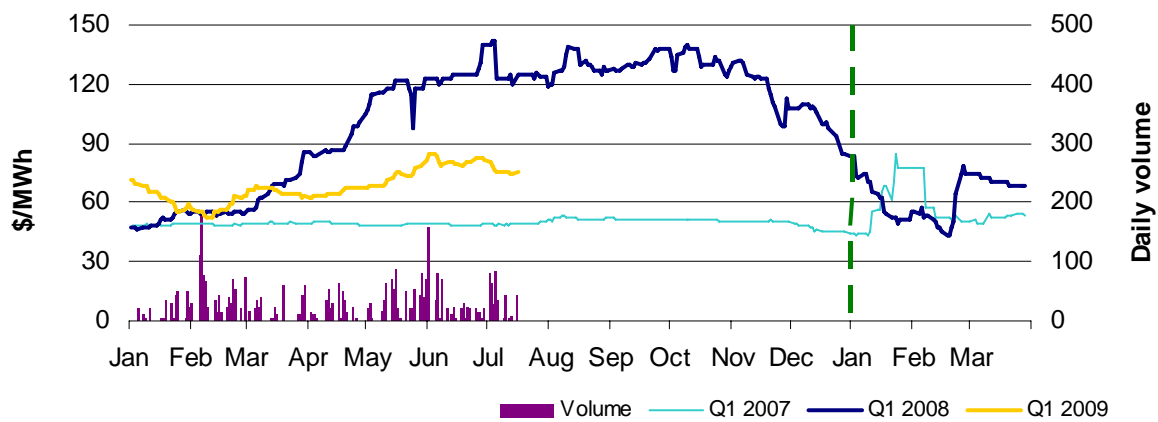
Figure 6: Quarterly base future prices 2008 - 2011



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

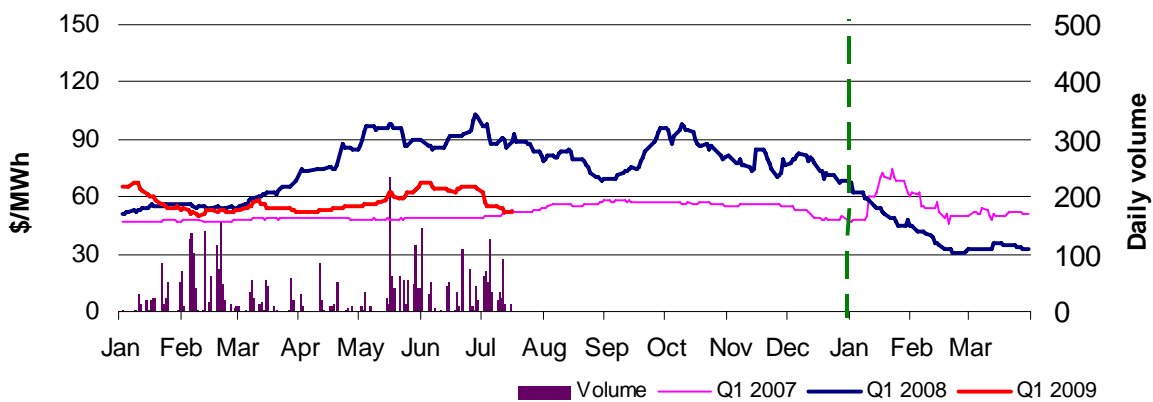
Figures 7-10 compares for each region the closing daily base contract price for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 09 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



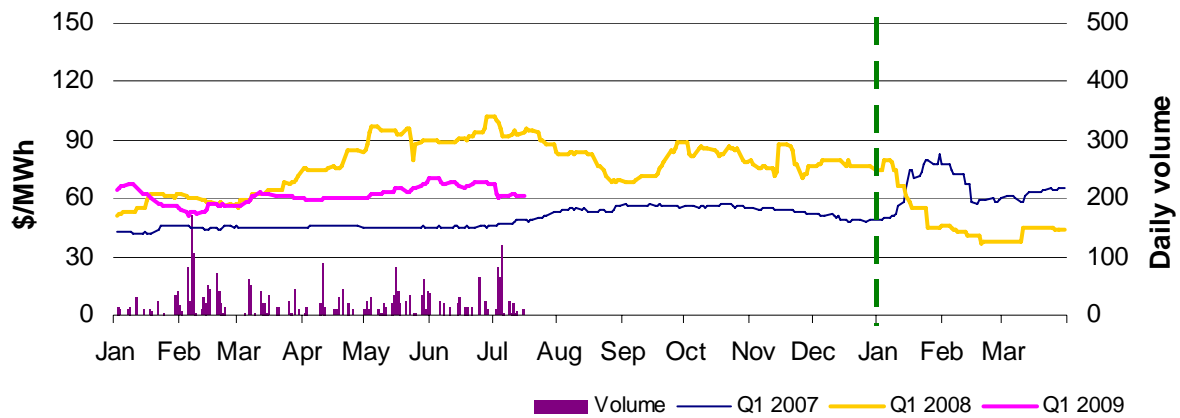
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



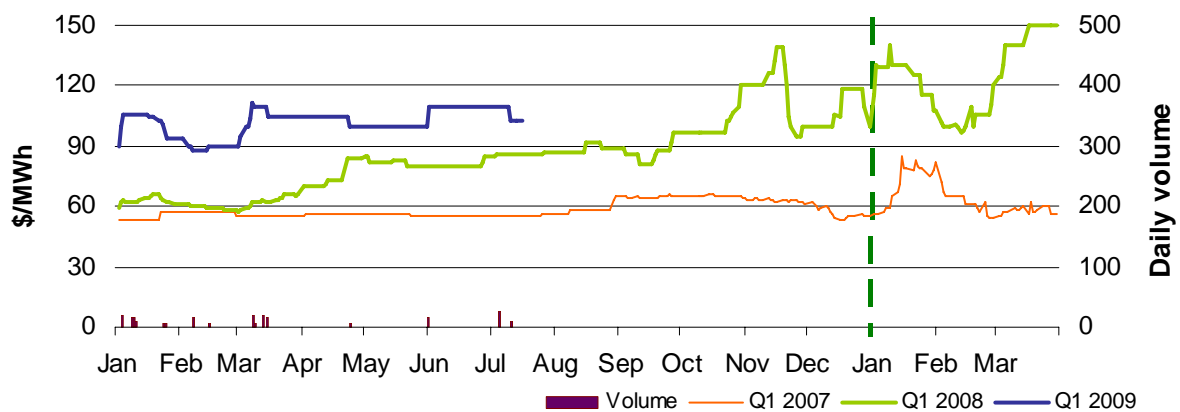
Source: d-cyphaTrade www.d-cyphatrade.com.au

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 by 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 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 72 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%	79%	0%	0%
Price is lower than forecast	15%	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 on-peak periods only⁴. For example, in Queensland 219 MW more was offered at prices less than \$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

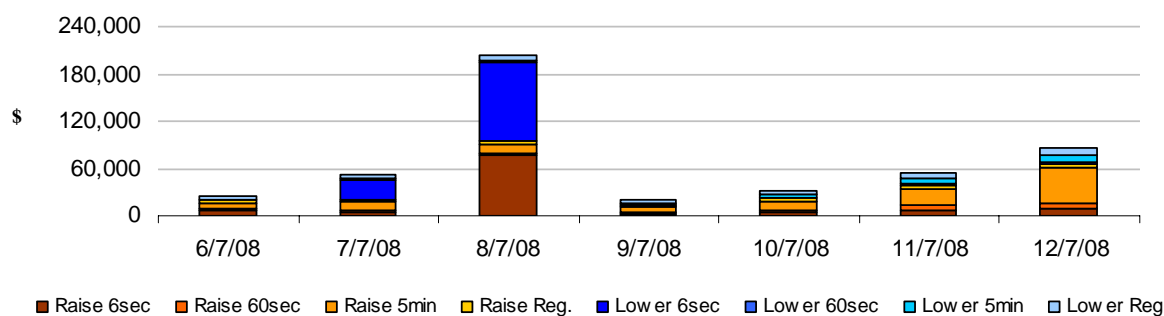
\$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	219	116	57	268
New South Wales	34	52	251	505
Victoria	185	-24	203	236
South Australia	43	-26	57	81
Tasmania	-6	164	-24	1
Total	474	281	544	1,091

Ancillary services market

The total cost of ancillary services on the mainland for the week was \$201 000 or 0.1 per cent of turnover in the energy market. The total cost of ancillary services in Tasmania for the week was \$272 000 or 4 per cent of the turnover in the Tasmanian energy market. On Tuesday, the price of raise 6 second services exceeded \$4000/MW in three dispatch intervals between 2.50 am and 3 am. This following the loss of the Sheffield to Burnie 220 kV line and the interruption of around 260 MW of mainly industrial load. Later in the day, interaction between the Basslink no-go zone, and the frequency and energy markets saw prices for lower 6 second services exceed \$1700/MW in six dispatch intervals.

Figure 13 shows the daily breakdown of cost for each frequency control ancillary service.

Figure 13: Daily frequency control ancillary service cost



Australian Energy Regulator July 2008

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

6 July – 12 July 2008

National: Spot prices within the national market are regularly aligned with conditions in one region reflected across all others. There were two occasions where the price generally aligned across all regions and the price in New South Wales, Victoria and South Australia was greater than three times the weekly average. In the following table the New South Wales spot price has been used as a proxy national price under these conditions.

Wednesday, 9 July

6:30 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	102.79	41.00	41.00
Demand (MW)	32 104	30 169	29 986
Available capacity (MW)	38 438	38 856	38 892
7:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	101.31	41.00	39.31
Demand (MW)	31 891	29 903	29 784
Available capacity (MW)	38 364	38 506	38 892

Conditions at the time saw demand 2000 MW higher than forecast. Available capacity was close to that forecast four hours ahead but 530 MW lower than that forecast 12 hours ahead.

Over two rebids at 2.28 pm and 2.38 pm, CS Energy reduced the availability of Kogan Creek by 400 MW all of which was priced below \$15/MWh. The reasons given were “Kogan SCC limitations” and “Kogan ash problems”.

There was no other significant rebidding.

Queensland: There were four occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of \$30/MWh. Two of these occurred when prices were generally aligned across all regions and are detailed in the national market outcomes section above. The remaining two occasions are presented below.

Wednesday, 9 July

6:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	91.49	30.00	31.92
Demand (MW)	7503	6856	6855
Available capacity (MW)	10 014	10 557	10 553

Conditions at the time saw demand 650 MW higher than forecast four and 12 hours ahead. Available capacity was 500 MW lower than forecast four and 12 hours ahead.

The rebids by CS Energy that reduced the availability of Kogan Creek by 380 MW discussed above, continued to impact on prices in Queensland into the evening. At 3.02 pm Callide Power Trading reduced the availability of Callide C unit four by 95 MW all of which was priced below \$20/MWh. The reason given was “High tube temps”.

There was no other significant rebidding.

Thursday, 10 July

7:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	91.98	62.92	46.27
Demand (MW)	7348	7548	7495
Available capacity (MW)	9873	9936	10 365

Conditions at the time saw demand slightly below that forecast four and 12 hours ahead. Available capacity was 500 MW below that forecast 12 hours ahead.

At 10.07 am Tarong Energy delayed the return to service of Tarong unit three, reducing its availability by 200 MW, the majority of which was priced below \$40/MWh.

At 11.28 am CS Energy reduced the availability of Kogan Creek by 200 MW with the reason “KPP_1 SCC issues”. At 6.35 pm it reduced the availability by a further 100 MW. The reason given was “Kogan ash problems”. All of this capacity was priced below \$15/MWh.

There was no other significant rebidding.

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
2007-08 (\$/MWh)	29	32	34	36	29
2006-07 (\$/MWh)	77	88	94	101	105
Change	-62%	-63%	-64%	-64%	-73%
2006-07 (\$/MWh)	57	67	61	59	51

Table 2: NEM turnover

Financial year	NEM Turnover* (\$, billion)	Energy (TWh)
2007-08	\$11.1	208
2006-07	\$12.7	206
2005-06	\$7.9	201
Change (2006-07 to 2007-08)	61%	2.7%

* 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)
Mar-08	31	37	29	65	325	57	1.12
Apr-08	29	34	28	41	44	56	0.60
May-08	41	47	36	56	53	68	0.87
Jun-08	43	44	28	44	42	57	0.77
Jul-08	29	32	-	34	36	29	0.23
Q2 2007	119	146	-	99	83	74	3.26
Q2 2008	38	42	-	47	46	61	3.36
Change	-68%	-71%	-	-52%	-44%	-18%	

Table 4: ASX energy futures contract prices at 14 July

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2009								
Price on 07 Jul (\$/MW)	75	133	55	88	62	103	110	160
Price on 14 Jul (\$/MW)	75	133	52	85	61	103	103	160
Open interest on 14 Jul	2082	144	1962	76	1493	444	145	0
Traded in the last week (MW)	101	0	181	0	46	0	10	0
Traded since 1 Jan 08	3745	307	4211	83	2738	615	205	0
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
May 08 with May 07							
MW Priced <\$20	526	570	-74	-84	0	-71	866
MW Priced \$20 to \$50	89	277	419	-62	-42	25	707
June 08 with June 07							
MW Priced <\$20	307	376	-25	-58	-70	-405	125
MW Priced \$20 to \$50	302	438	299	104	44	95	1284
July 08 with July 07							
MW Priced <\$20	506	817	-	100	5	611	2040
MW Priced \$20 to \$50	332	-742	-	295	169	103	156

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