

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

1 June – 7 June 2008

Summary

Average prices for the week on the mainland ranged from \$46/MWh in Queensland to \$58/MWh in Victoria. Prices in Tasmania averaged \$73/MWh. These prices represent an increase in New South Wales and Victoria compared to the previous week due to reduced availability of low-priced generation.

Spot market prices

Figure 1 sets out the volume weighted average price for this week and this 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 1 June – 7 June	46	56	58	51	73
Financial year to 7 June	59	45	51	106	57
% change from previous week*	-4%	5%	5%	-3%	4%
% change from year to date**	36%	-6%	0%	97%	19%

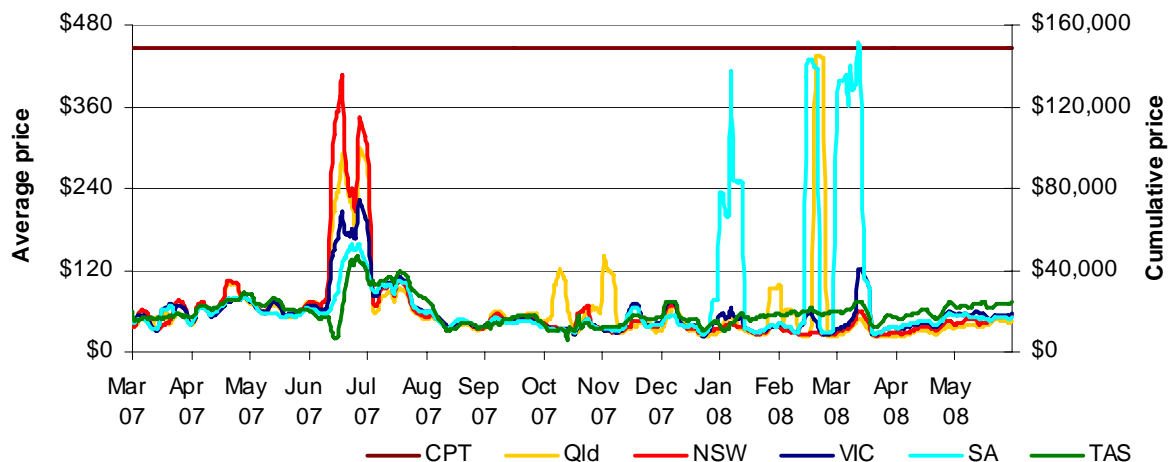
*The percentage change between last week's average spot price and the average price for the previous week.

**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. Queensland and New South Wales regions recorded prices greater than 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 Friday 6 June. Figure 3 shows the financial year base futures contract prices for this year and the next 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	58	-1%	53	-2%	54	-1%	67	0%
Financial 2009-10	54	-1%	55	-1%	54	0%	55	0%
Financial 2010-11	57	0%	54	0%	67	-1%	49	5%
Three year average	56	-1%	54	-1%	58	-1%	57	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.

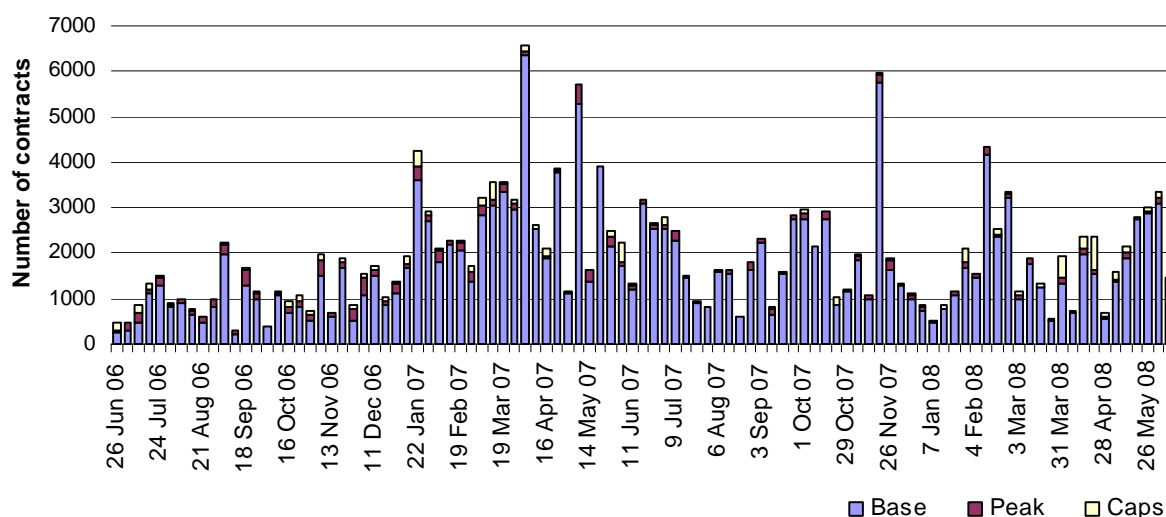
Figure 4: \$300 cap contract prices (\$/MWh)

	QLD		NSW		VIC		SA	
Q1 2009 price	39	-5%	27	0%	27	-6%	65	0%
Calendar 2009	16	-3%	13	0%	12	-4%	20	0%

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

Figure 5 shows the weekly trading volumes for base, peak and cap contracts, the date is the end of that week.

Figure 5: Number of exchange traded contracts per week

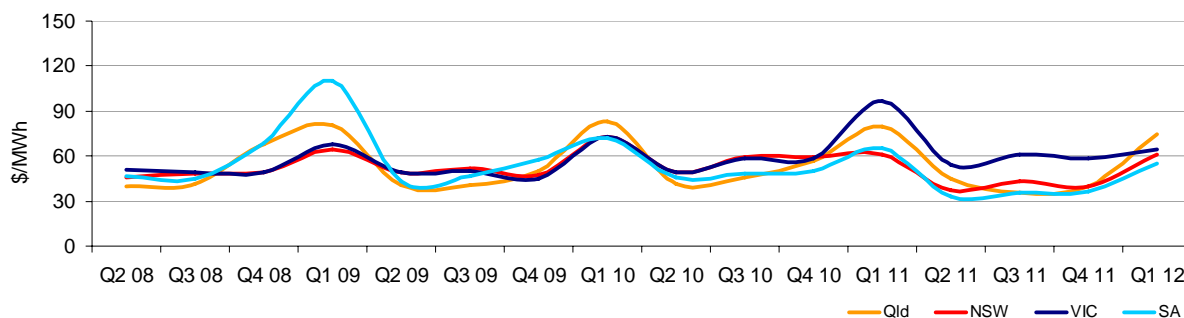


Source: d-cyphaTrade www.d-cyphatrade.com.au

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.

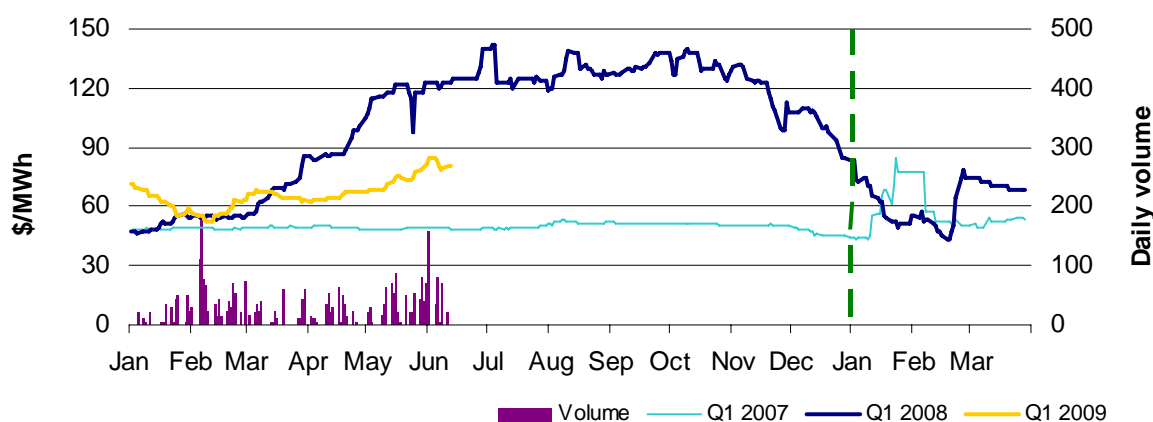
Figure 6: Quarterly base future prices 2008 - 2011



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

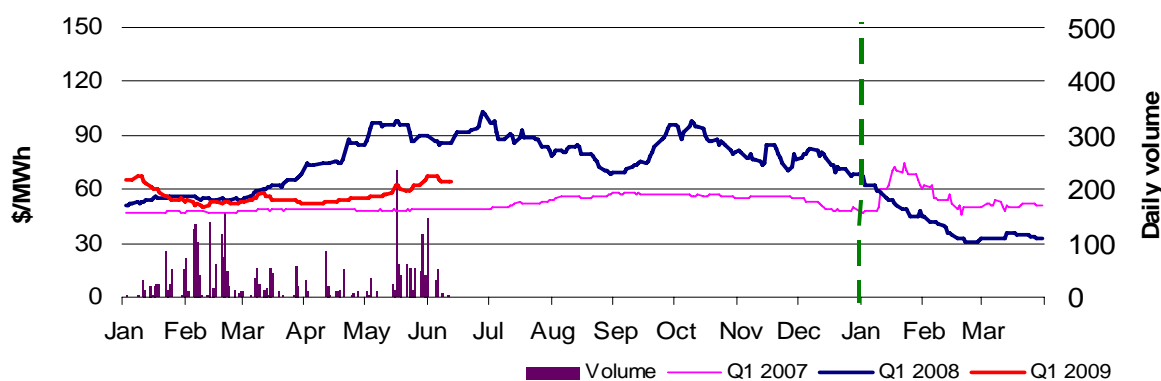
Figures 7-10 compares for each region the closing daily base contract price for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 09 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



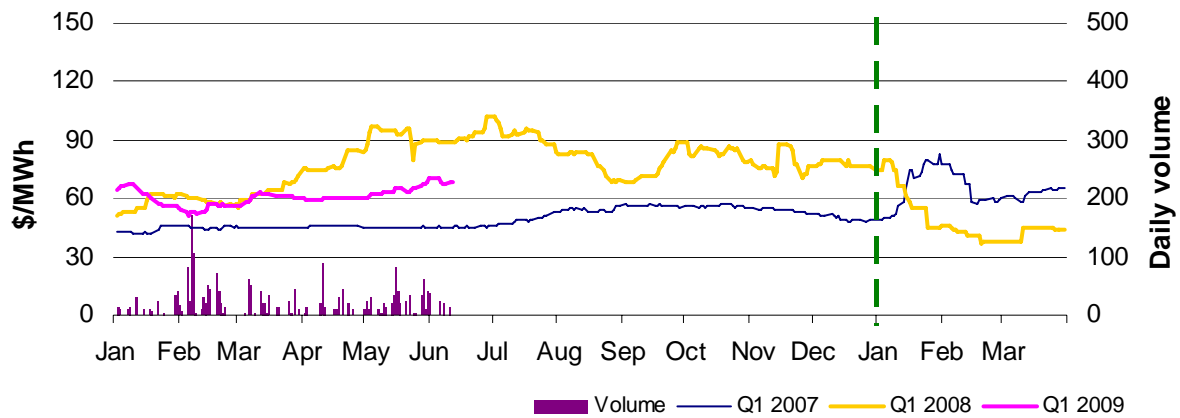
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



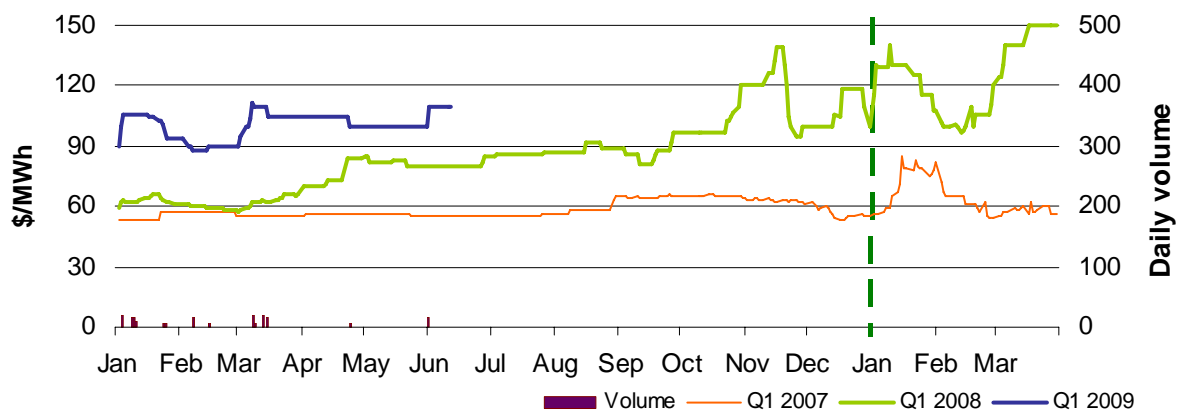
Source: d-cyphaTrade www.d-cyphatrade.com.au

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. For the week, there were 71 trading intervals where actual prices significantly varied from forecasts². 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	11%	50%	0%	25%
Price is lower than forecast	0%	11%	0%	2%

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 our 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 413 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.

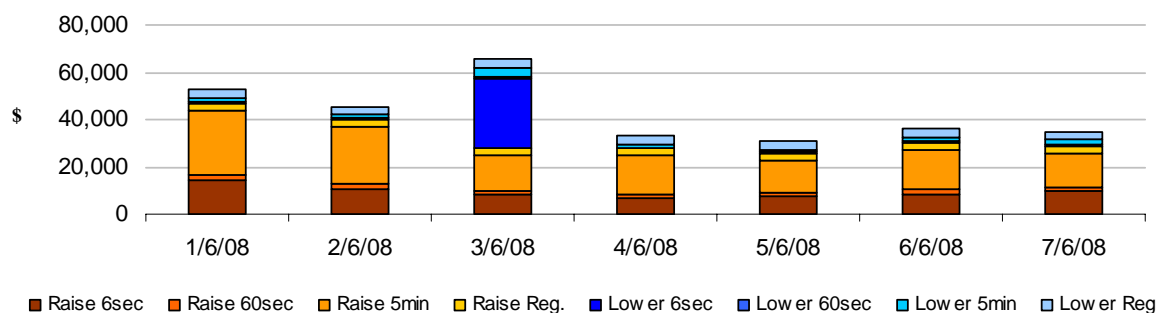
Figure 12: Changes in available generation compared to the previous week during peak times

\$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	413	-44	489	7
New South Wales	-361	-113	-182	245
Victoria	-69	-60	-301	89
South Australia	169	-24	266	13
Tasmania	-291	32	10	-7
Snowy	0	-24	-56	-5
Total	-140	-234	225	341

Ancillary services market

The total cost of ancillary services on the mainland for the week was \$218 000 or 0.1 per cent of turnover in the energy market. The total cost of ancillary services in Tasmania for the week was \$80 000 or 0.5 per cent of the turnover in the Tasmanian energy market. 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 June 2008

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

APPENDIX A:

Detailed Market Analysis



1 June – 7 June 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 New South Wales and Queensland prices were greater than three times the weekly average price. In the following table the New South Wales spot price has been used as a proxy national price under these conditions as New South Wales is located in the centre of the NEM.

Wednesday, 4 June

6:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	178.64	137.32	104.27
Demand (MW)	29 614	29 541	29 367
Available capacity (MW)	34 606	34 610	35 454

Conditions at the time saw demand and available capacity close to that forecast four hours ahead but available capacity was up to 850 MW lower than that forecast 12 hours ahead.

Over two rebids at 10.09 am and 11.22 am Delta Electricity reduced the availability of Vales Point unit five by 660 MW to zero. All of this capacity was priced below zero. The reason given was “Boiler tube leak::fixed load change”.

Over two rebids at 3.47 pm and 3.49 pm Millmerran Energy Trader shifted 150 MW of capacity at Millmerran from prices below \$10/MWh to above \$270/MWh. The reason given was “QNI_PD constraint :: change MW distribution”.

At 5.09 pm CS Energy rebid 135 MW of capacity at Swanbank from prices below \$80/MWh to above \$240/MWh. The reason given was “Portfolio optimisation”.

At 5.40 pm Stanwell reduced the availability of Gladstone unit one by 120 MW, 70 MW was priced below \$55/MWh. The reason given was “Condenser backflush::change availability”.

There was no other significant rebidding.

Thursday, 5 June

6:00 pm	Actual	4 hr forecast	12 hr forecast
Price (\$/MWh)	171.67	126.95	116.25
Demand (MW)	29 220	29 188	29 174
Available capacity (MW)	35 033	35 271	35 424

Conditions at the time saw demand and available capacity close to that forecast four and 12 hours ahead.

Over two rebids at 10.19 am and 5.51 pm Delta Electricity reduced the capacity of Munmorah unit four by 300 MW, 280 MW was priced below \$20/MWh. The reasons given were “Boiler tube leak::capacity limit change” and “Combustion group trip:capacity limit change”.

At 11.09 am, Millmerran Energy Trader reduced the availability of Millmerran unit 2 by 35 MW. All of this capacity was priced at less than \$10/MWh. The rebid reason given was

“Changed plant conditions”. A second rebid at 3.52 pm shifted 55 MW of capacity from prices of less than \$10/MWh to around \$270/MWh. The rebid reason given was “QNI PD constraint::change MW distribution”.

At 4.32 pm, Stanwell Corporation shifted 80 MW of capacity at Gladstone from prices of less than \$30/MWh to above \$270/MWh. The rebid reason given was “Portfolio optimisation::Change MW distrib”. At 5.21 pm the availability of Gladstone unit three was reduced by 135 MW, 55 MW of which was priced below \$50/MWh. The reason given was “Condenser backflush::change availability”.

At 4.36 pm, CS Energy reduced the availability of Kogan Creek by 100 MW. All of this capacity was priced at less than \$20/MWh. The rebid reason given was “Kogan SCC limits”. A second rebid at 4.57 pm shifted 135 MW of capacity at Swanbank B from prices of less than \$75/MWh to around \$150/MWh. The rebid reason given was “Portfolio optimisation”.

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	SNOWY	VIC	SA	TAS
2007-08 (\$/MWh) YTD	59	45	32	51	106	57
2006-07 (\$/MWh) YTD	43	47	32	51	54	48
Change (YTD)	36%	-5%	-2%	0%	97%	19%
2006-07 (\$/MWh)	57	67	38	61	59	51

Table 2: NEM turnover

Financial year	NEM Turnover* (\$, billion)	Energy (TWh)
2007-08 YTD	\$10.6	195
2006-07	\$12.7	206
2005-06	\$7.9	201
Change (2005-06 to 2006-07)	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)
Feb-08	161	28	24	41	207	58	1.30
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	46	56	36	58	51	73	0.22
Q1 2007	60	57	29	75	69	50	3.26
Q1 2008	80	34	27	50	243	54	3.36
Change	34%	-40%	-8%	-33%	252%	9%	

Table 4: ASX energy futures contract prices at 10 June

	QLD		NSW		VIC		SA	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Q1 2009								
Price on 02 Jun (\$/MW)	84	149	68	104	70	120	110	160
Price on 06 Jun (\$/MW)	81	141	65	104	68	115	110	160
Open interest on 06 Jun	2020	144	1872	66	1375	359	145	0
Traded in the last week (MW)	177	0	61	0	60	5	0	0
Traded since 1 Jan 08	3132	287	3261	68	2188	415	170	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
April 08 with April 07							
MW Priced <\$20	1,048	1,029	0	-201	-139	41	1777
MW Priced \$20 to \$50	-45	827	527	-97	150	60	1422
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	543	-326	-36	-310	-116	-599	-843
MW Priced \$20 to \$50	304	204	301	1	-19	134	925