

WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY
REGULATOR

13 April – 19 April 2008

Summary

Average prices for the week on the mainland ranged from \$33/MWh in Queensland to \$47/MWh in South Australia. Prices in Tasmania averaged \$62/MWh. These prices represent an increase compared to the previous week, with a reduction of around 1000 MW in low priced capacity.

In the Sydney Futures Exchange, base calendar and financial year prices rose slightly across all regions except South Australia. Quarter 1 2009 cap contracts in Queensland and South Australia increased by 10 per cent and 13 per cent respectively with record volumes for cap products.

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 13 April - 19 April | 33 | 37 | 44 | 47 | 62 |
| Financial year to 19 April | 62 | 44 | 51 | 114 | 55 |
| % change from previous week* | 31% | 30% | 19% | 16% | 15% |
| % change from year to date** | 58% | 2% | 4% | 120% | 24% |

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

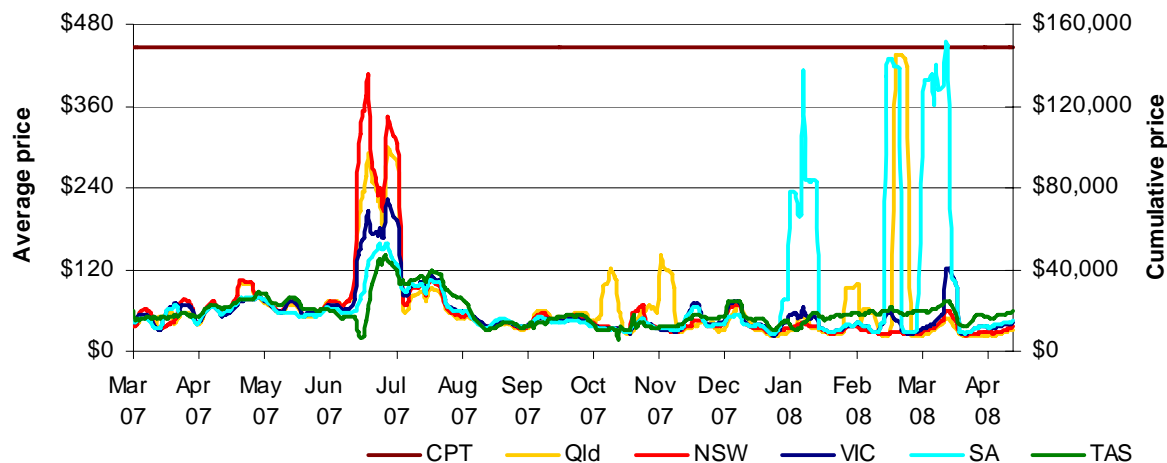
**The percentage change between the average spot price for the current financial year to date and the average spot price over the similar period for the previous financial year

The AER provides further information if the spot price exceeds three times the weekly average. Longer term market trends are attached in Appendix A.

There were Low Reserve Conditions forecast on Tuesday for Friday and Saturday in South Australia. On Wednesday these conditions were cancelled following a market response.

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).

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 21 April. 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 2009 | 47 | 3% | 45 | 1% | 48 | 1% | 64 | -3% |
| Financial 2010 | 46 | 1% | 50 | 1% | 50 | 1% | 54 | -3% |
| Financial 2011 | 51 | 0% | 52 | 0% | 52 | 0% | 44 | 0% |
| Three year average | 48 | 1% | 49 | 1% | 50 | 0% | 54 | -1% |

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

Figure 4 shows the \$300 cap contract price for the current quarter and calendar year and the change from the previous week.

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

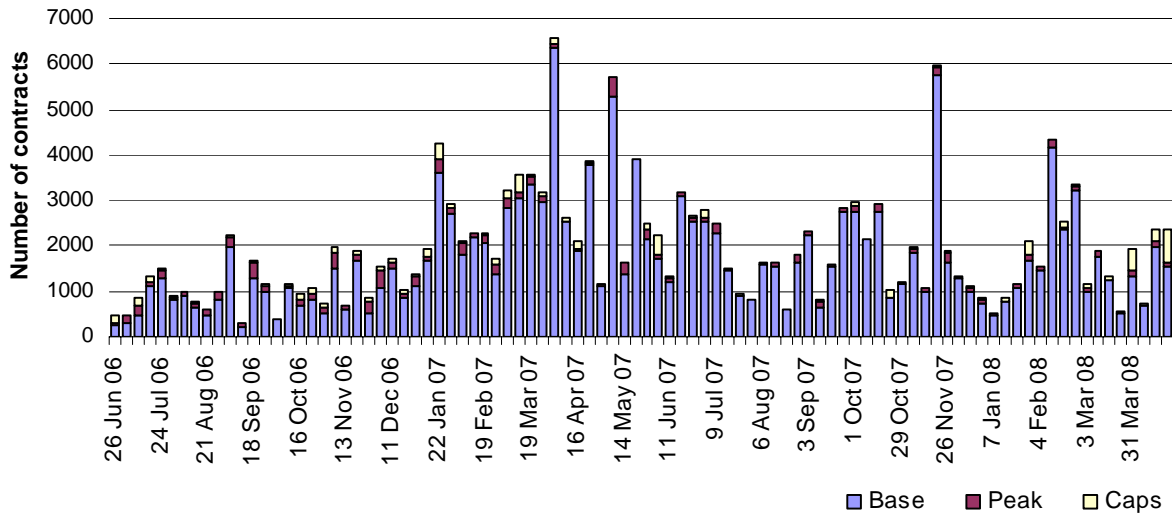
| | QLD | | NSW | | VIC | | SA | |
|---------------|-----|-----|-----|-----|-----|----|----|-----|
| Q1 2009 price | 33 | 10% | 24 | 4% | 24 | 0% | 45 | 13% |
| Calendar 2009 | 13 | 6% | 12 | -2% | 11 | 1% | 15 | 9% |

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.

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.

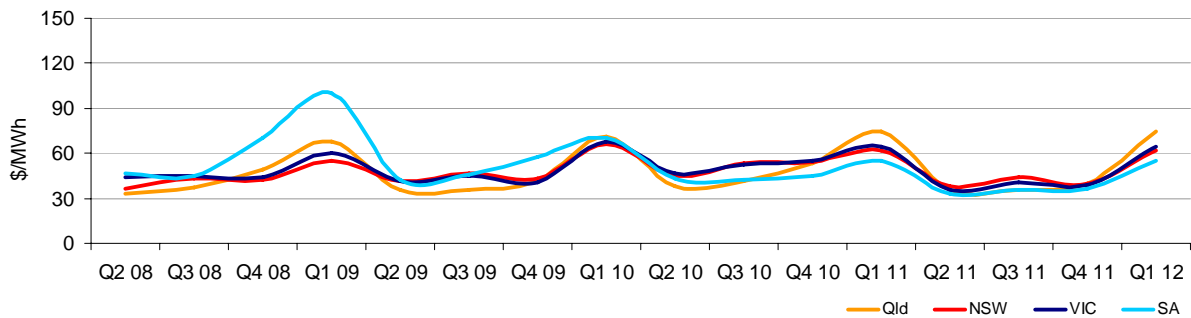
Figure 5: Number of exchange traded contracts per week



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

Figure 6 shows the prices for base contracts for each quarter for the next three years.

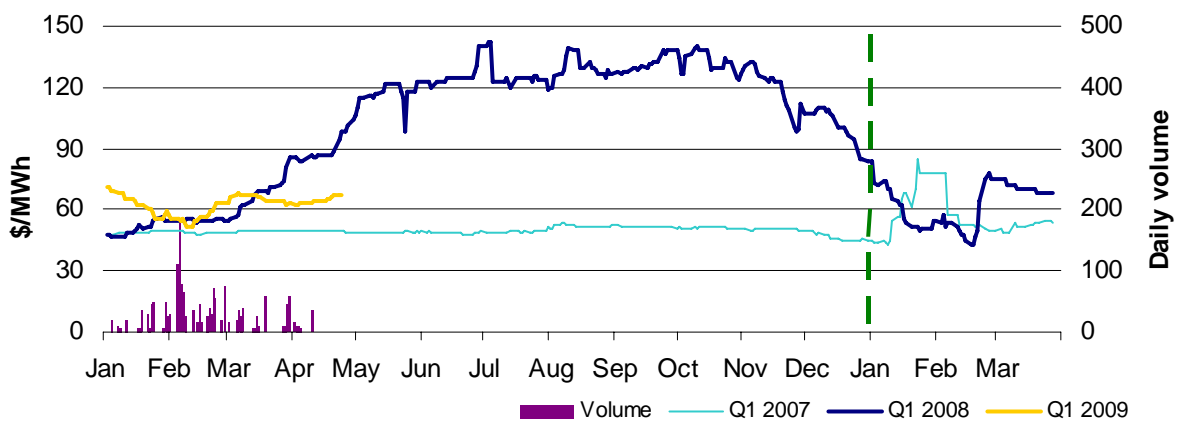
Figure 6: Quarterly base future prices 2008 - 2011



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

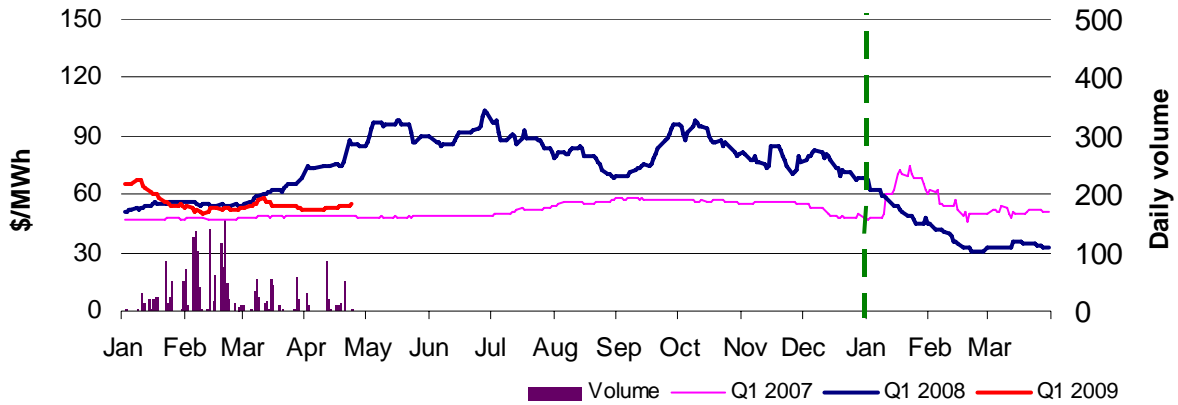
Figure 7-10 compares for each region the closing daily base contract price for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 09 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



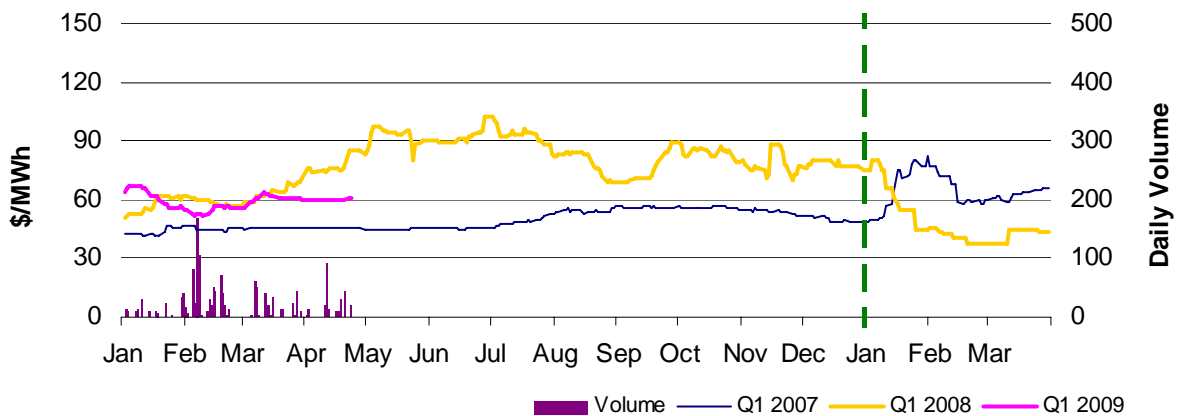
Source: d-cyphaTrade www.d-cyphatrade.com.au

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



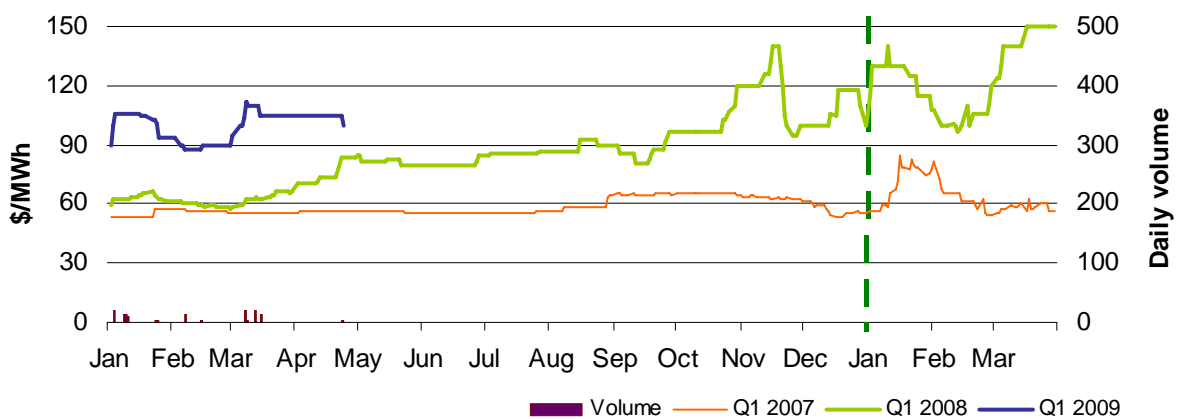
Source: d-cyphaTrade www.d-cyphatrade.com.au

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 68 trading intervals where actual prices significantly varied from forecasts. Reasons for these variances are summarised in Figure 11.

Figure 11: Reasons for variations between forecast and actual prices

| | Availability | Demand | Network | Combination |
|-------------------------------|--------------|--------|---------|-------------|
| Price is higher than forecast | 15% | 35% | 0% | 35% |
| Price is lower than forecast | 0% | 13% | 0% | 2% |

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 only². For example, in Queensland 226 MW less 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.

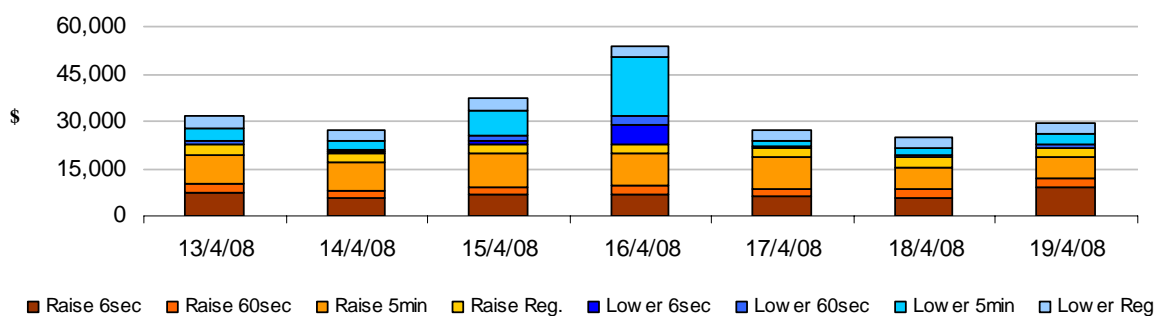
Figure 12: Changes in available generation compared to the previous week during peak times

| \$/MWh | <20 | Between 20 and 50 | Total availability | Change in average demand |
|-----------------|------|-------------------|--------------------|--------------------------|
| Queensland | -226 | 25 | -350 | 64 |
| New South Wales | -214 | 39 | -42 | 20 |
| Victoria | -491 | 303 | -412 | -24 |
| South Australia | -64 | -220 | -76 | -58 |
| Tasmania | 13 | 0 | -18 | -10 |
| Snowy | -4 | 77 | -49 | 0 |
| Total | -985 | 225 | -947 | -8 |

Ancillary services market

The total cost of ancillary services on the mainland for the week was \$181 000 or 0.1 per cent of turnover in the energy market. The total cost of ancillary services in Tasmania for the week was \$50 000 or 0.4 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



² Peak periods is defined as between trading intervals ending 7.30 am and 10 pm on weekdays, which aligns with the SFE contract definition.

Appendix A: 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 | 62 | 44 | 31 | 51 | 114 | 55 |
| 2006-07 (\$/MWh) YTD | 39 | 43 | 29 | 49 | 52 | 44 |
| Change (YTD) | 58% | 2% | 7% | 4% | 120% | 24% |
| 2006-07 (\$/MWh) | 57 | 67 | 38 | 61 | 59 | 51 |

Table 2: NEM turnover

| Financial year | NEM Turnover* (\$, billion) | Energy (TWh) |
|-----------------------------|-----------------------------|--------------|
| 2007-08 YTD | \$9.2 | 167 |
| 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) |
|----------------------------------|-----|------|-------|------|------|-----|------------------------|
| Dec-07 | 41 | 43 | 32 | 50 | 54 | 52 | 0.78 |
| Jan-08 | 52 | 36 | 28 | 45 | 186 | 48 | 0.94 |
| Feb-08 | 161 | 28 | 24 | 41 | 207 | 58 | 1.30 |
| Mar-08 | 31 | 37 | 29 | 65 | 325 | 57 | 1.12 |
| Apr-08 | 28 | 31 | 27 | 39 | 42 | 55 | 0.36 |
| 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 14 April

| | QLD | | NSW | | VIC | | SA | |
|--------------------------------|------|------|------|------|------|------|------|------|
| | Base | Peak | Base | Peak | Base | Peak | Base | Peak |
| Q1 2009 | | | | | | | | |
| Price on 14 Apr (\$/MW) | 65 | 113 | 53 | 89 | 60 | 102 | 105 | 160 |
| Price on 21 Apr (\$/MW) | 68 | 119 | 55 | 89 | 60 | 102 | 100 | 160 |
| Open interest on 21 Apr | 1783 | 95 | 1485 | 66 | 1203 | 382 | 145 | 0 |
| Traded in the last week (MW) | 125 | 55 | 70 | 0 | 95 | 45 | 5 | 0 |
| Traded since 1 Jan 08 | 1969 | 177 | 2143 | 68 | 1540 | 340 | 155 | 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 |
|------------------------------|-------|-------|-------|------|------|-----|-------|
| February 08 with February 07 | | | | | | | |
| MW Priced <\$20 | -243 | -732 | 4 | -221 | -44 | -94 | -1331 |
| MW Priced \$20 to \$50 | 318 | 1,387 | 282 | -38 | 0 | -66 | 1883 |
| March 08 with March 07 | | | | | | | |
| MW Priced <\$20 | 134 | -130 | 27 | -59 | 46 | -19 | -1 |
| MW Priced \$20 to \$50 | 7 | 1,087 | 463 | -100 | -51 | 27 | 1434 |
| April 08 with April 07 | | | | | | | |
| MW Priced <\$20 | 1,021 | 1,010 | 0 | -165 | -172 | 28 | 1721 |
| MW Priced \$20 to \$50 | -44 | 877 | 549 | -134 | 183 | 50 | 1481 |

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