

# WEEKLY MARKET ANALYSIS



AUSTRALIAN ENERGY  
REGULATOR

17 February – 23 February 2008

## Summary

High demand led to higher than average spot prices in all regions except New South Wales.<sup>1</sup>

In South Australia and Queensland the spot price exceeded \$5000/MWh on a number of occasions leading to weekly volume weighted average prices of \$669/MWh and \$542/MWh respectively and driving a significant increase in the financial year-to-date averages. These prices resulted from a combination of near record demand in Queensland and South Australia and significant generation capacity offered at prices above \$5000/MWh by AGL in South Australia and Tarong Energy, CS Energy, Stanwell and Millmerran Energy Trader in Queensland. The cumulative price reached close to the Cumulative Price Threshold<sup>2</sup> in both Queensland and South Australia during the week. In accordance with the requirements of the National Electricity Rules, the AER will be issuing a report into the circumstances that led to the spot price exceeding \$5000/MWh.

Exchange traded base Queensland contracts increased across the board but particularly at the front of the curve following the extreme spot market outcomes. Quarter 1 2008 base prices increased by 73 per cent to \$75/MWh, with a 22 per cent increase in the calendar 2008 price. Calendar 2009 and 2010 also increased, by eight per cent and two per cent respectively. Across the other regions, base contracts prices were steady.

Low reserves were forecast for South Australia on Monday afternoon.

## 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 |
|------------------------------------|-------|-----|-----|-------|-----|
| Average price for 17 – 23 February | 542   | 28  | 52  | 669   | 59  |
| Financial year to 23 February      | 70    | 47  | 51  | 91    | 55  |
| % change from previous week*       | 2109% | 8%  | 20% | 1316% | 1%  |
| % change from year to date**       | 100%  | 19% | 9%  | 80%   | 31% |

\*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. In addition, a report is prepared if the spot price exceeds \$5000/MWh.

Three regions recorded prices greater than three times the weekly average. Queensland, Victoria and South Australia exceeded three times the weekly average on 21, five and 13

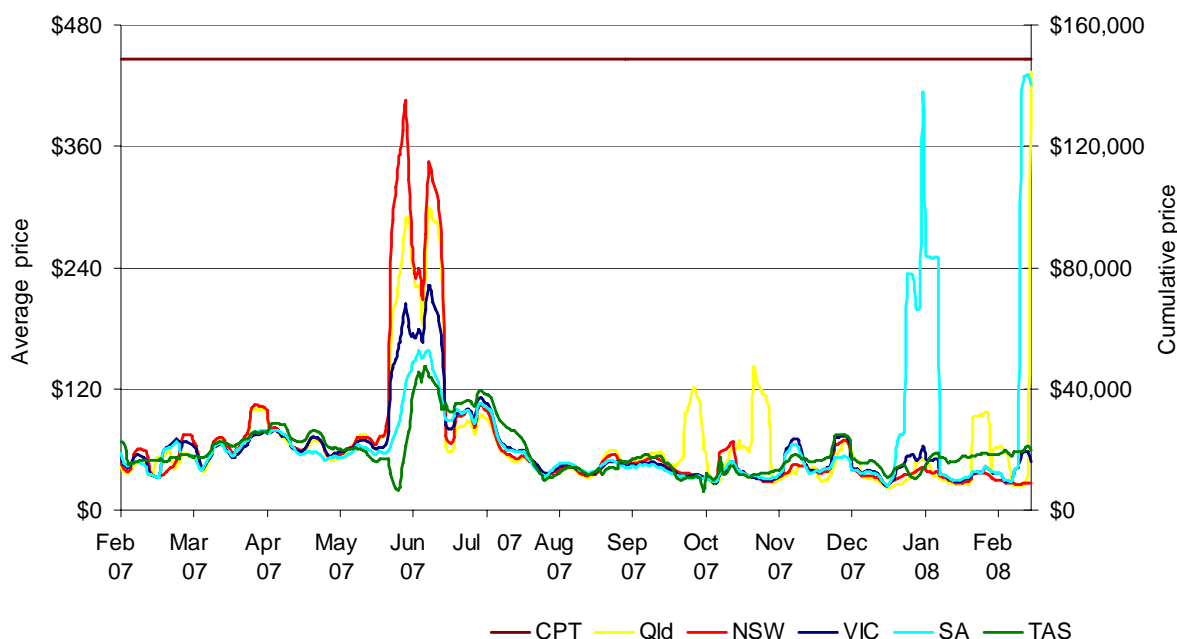
<sup>1</sup> Long term statistics are available at <http://www.aer.gov.au>

<sup>2</sup> The CPT or Cumulative Price Threshold is the trigger for the commencement of administered pricing and occurs when the rolling sum of spot prices exceeds \$150 000.

occasions respectively. Details of these events are attached in the 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).

**Figure 2: 7 day rolling cumulative price and CPT**



### Financial market

Figures 3 to 10 show futures contract<sup>3</sup> prices traded on the Sydney Futures Exchange as at close of trade on Monday 25 February. Figure 3 shows the calendar 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 calendar futures contract prices (\$/MWh)**

|                    | QLD |     | NSW |     | VIC |     | SA |     |
|--------------------|-----|-----|-----|-----|-----|-----|----|-----|
| Calendar 2008      | 50  | 22% | 40  | -2% | 42  | -1% | 65 | -1% |
| Calendar 2009      | 44  | 8%  | 45  | -2% | 45  | 1%  | 58 | 3%  |
| Calendar 2010      | 44  | 2%  | 51  | 1%  | 49  | 0%  | 50 | 0%  |
| Three year average | 46  | 11% | 46  | -1% | 45  | 0%  | 58 | 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)**

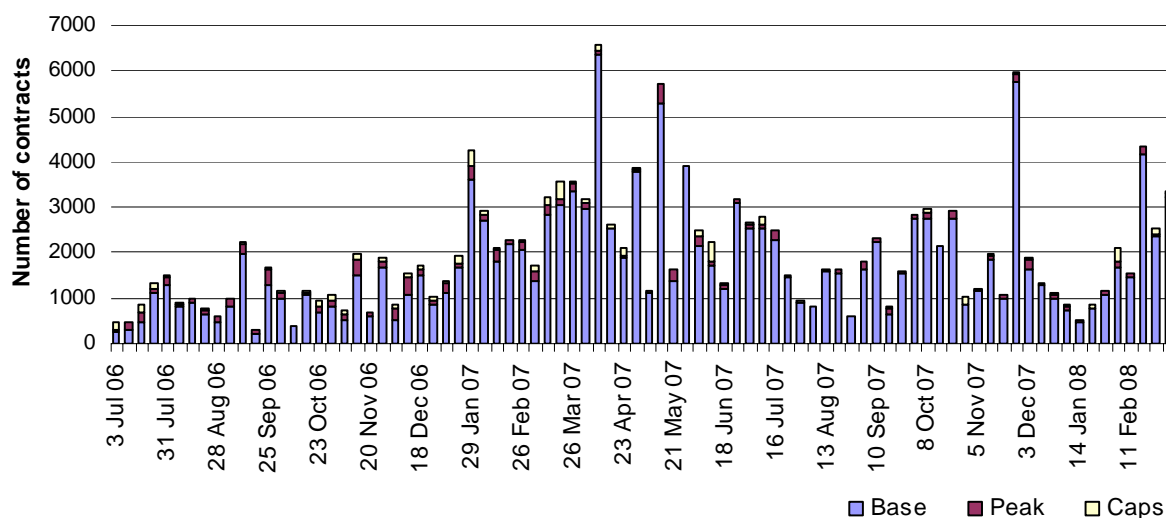
|               | QLD |      | NSW |      | VIC |      | SA |     |
|---------------|-----|------|-----|------|-----|------|----|-----|
| Q1 2008 price | 36  | 179% | 1   | -82% | 4   | -27% | 61 | 8%  |
| Calendar 2008 | 15  | 99%  | 5   | -21% | 6   | -10% | 21 | 16% |

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

<sup>3</sup> 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 7am to 10pm Monday to Friday (excluding Public holidays) over the duration of the contract quarter.

Figure 5 shows the weekly trading volumes for base, peak and cap contracts.

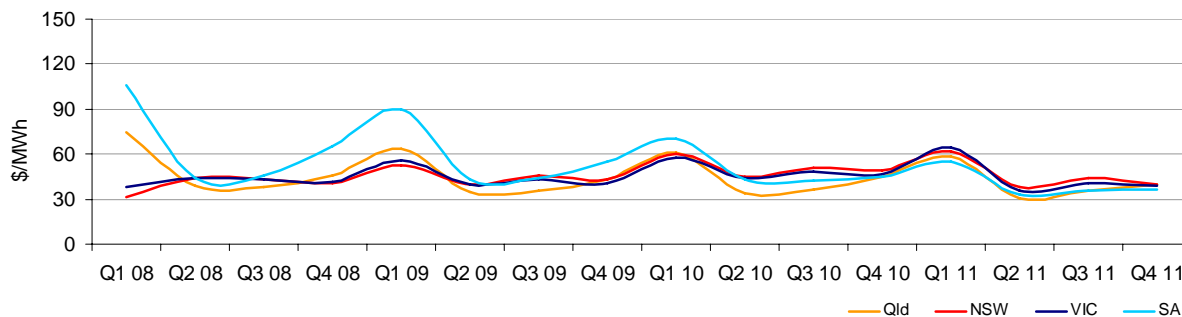
**Figure 5: Number of exchange traded contracts per week**



Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

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

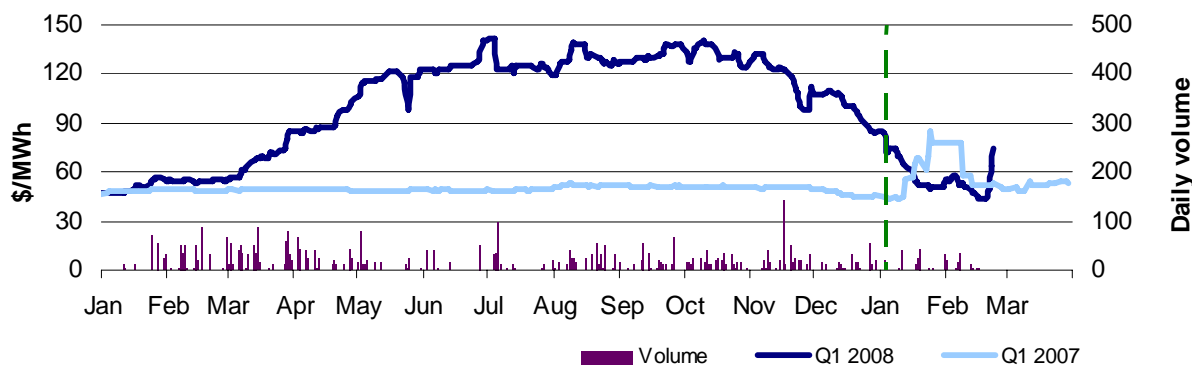
**Figure 6: quarterly base future prices 2008 - 2011**



Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

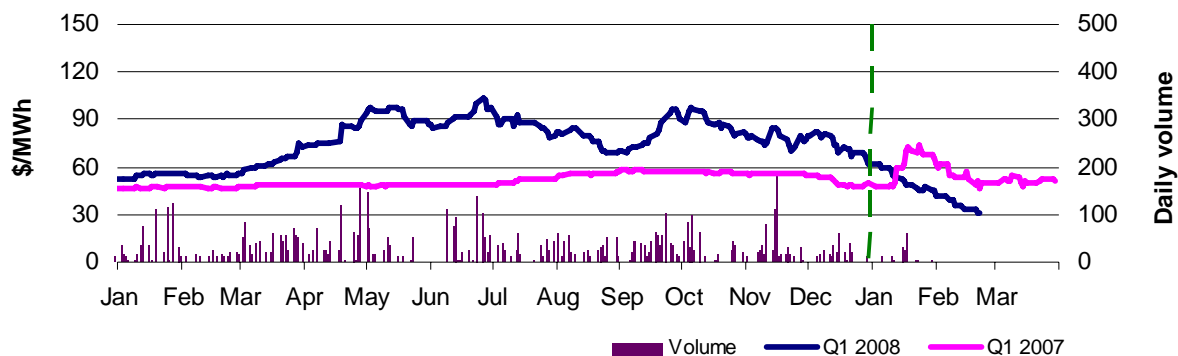
Figure 7-10 compares for each region the closing daily base contract price for the first quarter of 2007 against 2008 and also shows the daily volume of Q1 08 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

**Figure 7: Queensland**



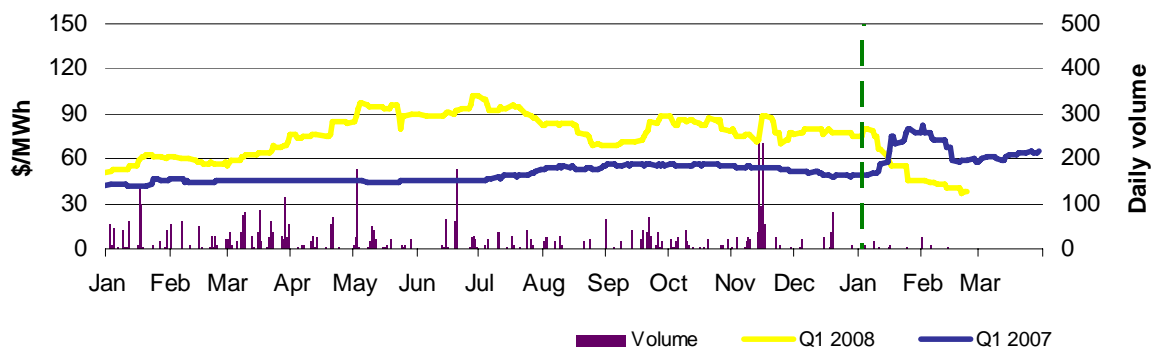
Source: d-cyphaTrade [www.d-cyphatrade.com.au](http://www.d-cyphatrade.com.au)

**Figure 8: New South Wales**



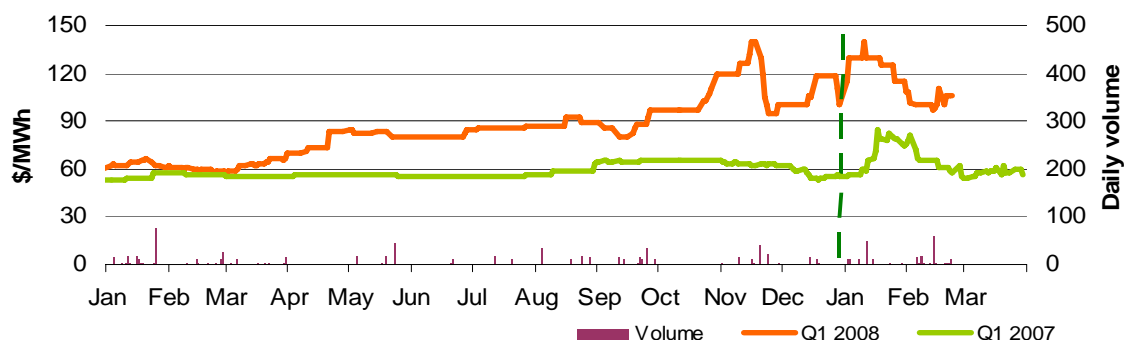
Source: d-cyphaTrade www.d-cyphatrade.com.au

**Figure 9: Victoria**



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

**Figure 10: South Australia**



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 119 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 | 10%          | 45%    | 0%      | 6%          |
| Price is lower than forecast  | 2%           | 25%    | 0%      | 12%         |

## 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 only<sup>4</sup>. For example, in Queensland 309 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.

Availability in Queensland was down from the previous week. Unplanned outages of Callide Power Trading's Callide C unit 3 for four days and CS Energy's Swanbank B unit 3 for the week were the main contributors to this reduction.

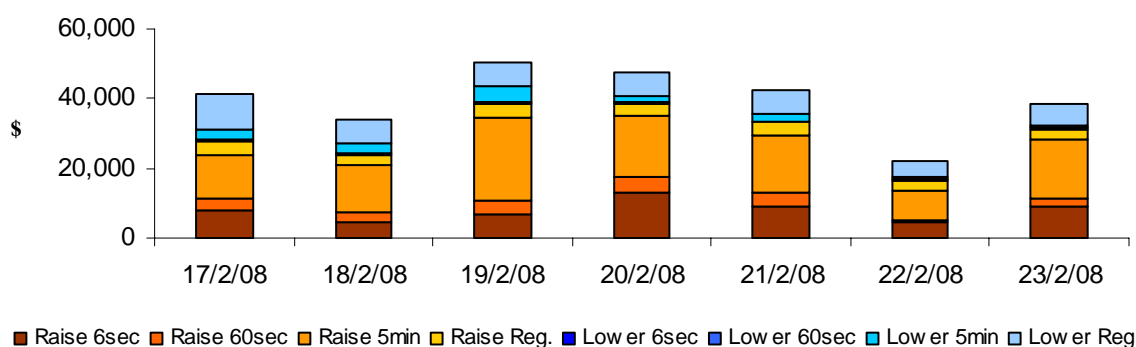
**Figure 12: Changes in available generation compared to the previous week during peak times**

| \$/MWh          | <20  | Between 20 and 50 | Total availability | Change in average demand |
|-----------------|------|-------------------|--------------------|--------------------------|
| Queensland      | -309 | 58                | -219               | 218                      |
| New South Wales | 403  | -411              | 460                | 482                      |
| Victoria        | 478  | 25                | 588                | 654                      |
| South Australia | 125  | -161              | 147                | 283                      |
| Tasmania        | 201  | -1                | -8                 | -17                      |
| Snowy           | 19   | 291               | -35                | -3                       |
| Total           | 918  | -199              | 933                | 1,618                    |

## Ancillary services market

The total cost of ancillary services on the mainland for the week was \$193 000 or less than 0.1 per cent of turnover in the energy market. The total cost of ancillary services in Tasmania for the week was \$83 000 or 0.8 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 February 2008

<sup>4</sup> Peak periods is defined as between trading intervals ending 7.30 am and 10 pm on weekdays, which aligns with the SFE contract definition.

# DETAILED MARKET ANALYSIS



AUSTRALIAN ENERGY  
REGULATOR

17 February – 23 February 2008

**Queensland:** There were 21 occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of \$542/MWh.

## Friday, 22 February

|                         |               |                      |                       |
|-------------------------|---------------|----------------------|-----------------------|
| <b>11:30 am</b>         | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 2523.14       | 54.89                | 250.79                |
| Demand (MW)             | 7719          | 7466                 | 7310                  |
| Available capacity (MW) | 9788          | 9918                 | 9912                  |
| <b>12:30 pm</b>         | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 1720.64       | 250.79               | 250.79                |
| Demand (MW)             | 7815          | 7572                 | 7399                  |
| Available capacity (MW) | 9707          | 9969                 | 10 015                |
| <b>1:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 7169.02       | 290.79               | 250.79                |
| Demand (MW)             | 7865          | 7654                 | 7423                  |
| Available capacity (MW) | 9707          | 9936                 | 10 015                |
| <b>1:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 6347.90       | 120.78               | 250.79                |
| Demand (MW)             | 7923          | 7679                 | 7485                  |
| Available capacity (MW) | 9865          | 10 044               | 10 015                |
| <b>2:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 8811.93       | 101.00               | 250.79                |
| Demand (MW)             | 7957          | 7708                 | 7508                  |
| Available capacity (MW) | 9867          | 10 036               | 10 015                |
| <b>2:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 8743.92       | 101.00               | 250.79                |
| Demand (MW)             | 7994          | 7758                 | 7535                  |
| Available capacity (MW) | 9984          | 10 036               | 10 015                |
| <b>3:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 6421.40       | 101.00               | 250.79                |
| Demand (MW)             | 8023          | 7740                 | 7521                  |
| Available capacity (MW) | 10 110        | 10 032               | 10 015                |
| <b>3:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9561.42       | 101.02               | 290.79                |
| Demand (MW)             | 8013          | 7817                 | 7514                  |
| Available capacity (MW) | 10 122        | 10 034               | 10 015                |

**Friday, 22 February (cont)**

| <b>4:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
|-------------------------|---------------|----------------------|-----------------------|
| Price (\$/MWh)          | 9494.95       | 54.89                | 290.79                |
| Demand (MW)             | 8055          | 7832                 | 7512                  |
| Available capacity (MW) | 10 136        | 10 046               | 10 015                |
| <b>4:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 4333.45       | 43.51                | 44.23                 |
| Demand (MW)             | 8083          | 7802                 | 7468                  |
| Available capacity (MW) | 10 144        | 10 223               | 10 191                |
| <b>5:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 3274.93       | 38.61                | 42.07                 |
| Demand (MW)             | 8023          | 7754                 | 7443                  |
| Available capacity (MW) | 10 140        | 10 126               | 10 194                |

Conditions at the time saw demand up to 300 MW higher than that forecast four hours ahead. Available capacity was up to 260 MW lower than forecast four hours ahead.

Up to 2290 MW of the 10 140 MW of capacity presented to the market in Queensland was priced above \$9000/MWh. The combined import capability across QNI and Terranora interconnectors was limited to around 200 MW.

The AER will be issuing a detailed report into the circumstances of the day that led to the spot price exceeding \$5000/MWh in accordance with clause 3.13.7 of the Rules.

**Saturday, 23 February**

| <b>11:30 am</b>         | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
|-------------------------|---------------|----------------------|-----------------------|
| Price (\$/MWh)          | 2472.15       | 34.65                | 31.92                 |
| Demand (MW)             | 7619          | 7224                 | 7106                  |
| Available capacity (MW) | 10 062        | 10 385               | 10 449                |
| <b>12:00 pm</b>         | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 3804.91       | 38.61                | 32.98                 |
| Demand (MW)             | 7695          | 7265                 | 7151                  |
| Available capacity (MW) | 10 089        | 10 329               | 10 446                |
| <b>12:30 pm</b>         | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 8177.45       | 33.00                | 32.98                 |
| Demand (MW)             | 7800          | 7314                 | 7195                  |
| Available capacity (MW) | 10 115        | 10 353               | 10 446                |
| <b>1:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 8471.44       | 34.65                | 36.11                 |
| Demand (MW)             | 7901          | 7439                 | 7256                  |
| Available capacity (MW) | 10 051        | 10 190               | 10 446                |
| <b>1:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 8811.24       | 43.51                | 38.61                 |
| Demand (MW)             | 7928          | 7504                 | 7309                  |
| Available capacity (MW) | 10 059        | 10 188               | 10 446                |
| <b>2:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9153.61       | 38.61                | 250.79                |
| Demand (MW)             | 7968          | 7547                 | 7478                  |
| Available capacity (MW) | 10 060        | 10 123               | 10 446                |

**Saturday, 23 February (cont)**

| <b>2:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
|-------------------------|---------------|----------------------|-----------------------|
| Price (\$/MWh)          | 7065.39       | 36.11                | 250.79                |
| Demand (MW)             | 7978          | 7578                 | 7513                  |
| Available capacity (MW) | 10 059        | 10 268               | 10 446                |
| <b>3:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 7065.33       | 54.86                | 250.79                |
| Demand (MW)             | 7952          | 7704                 | 7522                  |
| Available capacity (MW) | 10 059        | 10 238               | 10 446                |
| <b>3:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 6000.01       | 101.00               | 250.79                |
| Demand (MW)             | 7843          | 7682                 | 7509                  |
| Available capacity (MW) | 10 114        | 10 238               | 10 446                |
| <b>4:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 2056.58       | 120.78               | 54.89                 |
| Demand (MW)             | 7715          | 7850                 | 7488                  |
| Available capacity (MW) | 10 108        | 10 320               | 10 446                |

Conditions at the time saw demand up to 480 MW higher than that forecast four hours ahead. Available capacity was up to 320 MW lower than forecast four hours ahead.

Up to 2620 MW of the 10 105 MW of capacity presented to the market in Queensland was priced above \$5000/MWh. The import capacity across QNI and Terranora interconnectors was limited to around 150 MW.

The AER will be issuing a detailed report into the circumstances of the day that led to the spot price exceeding \$5000/MWh in accordance with clause 3.13.7 of the Rules.

**Victoria:** There were four occasions where the spot price in Victoria was greater than three times the Victoria weekly average price of \$52/MWh.

**Monday, 18 February**

| <b>3:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
|-------------------------|---------------|----------------------|-----------------------|
| Price (\$/MWh)          | 194.58        | 1385.88              | 7798.04               |
| Demand (MW)             | 8522          | 8518                 | 8515                  |
| Available capacity (MW) | 8081          | 8141                 | 8179                  |
| <b>3:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 465.97        | 1385.98              | 9300.73               |
| Demand (MW)             | 8686          | 8545                 | 8433                  |
| Available capacity (MW) | 8084          | 8131                 | 8174                  |
| <b>4:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 1582.57       | 280.49               | 9268.74               |
| Demand (MW)             | 8684          | 8487                 | 8500                  |
| Available capacity (MW) | 8053          | 8141                 | 8179                  |
| <b>4:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 1392.20       | 84.52                | 9050.70               |
| Demand (MW)             | 8694          | 8311                 | 8312                  |
| Available capacity (MW) | 8051          | 8151                 | 8179                  |

Conditions at the time saw demand up to 380 MW above that forecast four hours ahead. Available capacity was close to that forecast four hours ahead.



Prices were well below the forecasts made 12 hours ahead. At 11.10 am, to manage the security implications of the planned outages of the Wagga to Yanco and Wagga to Uranquinty lines, Trangrid’s network in south western New South Wales was reconfigured. Constraints, which had previously been invoked to manage these outages, were no longer required. This resulted in an increase of around 400 MW in the import capability across the Snowy interconnector into Victoria, compared to that forecast.

Two price spikes over the afternoon, at 3.45 pm and 4.20 pm resulted from step changes in the network constraint managing flows through the Snowy region. This network constraint was unrelated to the network outages. These changes saw reductions in exports from New South Wales of more than 660 MW from one dispatch interval to the next. At the same time, capacity at Snowy Hydro’s Upper and Lower Tumut power stations was constrained off. A total of 406 MW of capacity at Murray had been shifted from prices of less than \$500/MWh over two rebids at 10.42 am and the previous night at 7.39 pm. The reasons given were “Vic \$ higher than prev fcast SN-V flow lower:Realco to” and “Manage Vic/Sn Tx const: reallocate gen”. As a result all of the capacity at Murray was offered at \$9999/MWh and set the price at 3.45 pm.

The price at 4.20 pm was set by LYMMCO which had 140 MW offered at around \$7700/MWh. This capacity was shifted from prices below \$20/MWh the previous night. The reason given was “Dem expectd higher than fc” or “demand expected higher than forecast”.

Most rebidding in Victoria on the day shifted capacity into lower prices. In the 12 hours leading up to dispatch, more than 800 MW of capacity was rebid from prices above \$5000/MWh to below \$200/MWh.

**South Australia:** There were 13 occasions where the spot price in South Australia was greater than three times the South Australia weekly average price of \$669/MWh.

**Monday, 18 February**

| <b>1:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
|-------------------------|---------------|----------------------|-----------------------|
| Price (\$/MWh)          | 9999.72       | 8999.72              | 8999.72               |
| Demand (MW)             | 2650          | 2541                 | 2565                  |
| Available capacity (MW) | 2971          | 3007                 | 3007                  |
| <b>1:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9999.59       | 9999.72              | 9037.35               |
| Demand (MW)             | 2694          | 2662                 | 2622                  |
| Available capacity (MW) | 2960          | 3004                 | 3002                  |
| <b>2:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9999.72       | 9999.72              | 9950.74               |
| Demand (MW)             | 2735          | 2698                 | 2697                  |
| Available capacity (MW) | 2980          | 3001                 | 2999                  |
| <b>2:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9999.72       | 9999.72              | 9950.74               |
| Demand (MW)             | 2770          | 2746                 | 2754                  |
| Available capacity (MW) | 2988          | 3001                 | 2999                  |
| <b>3:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9999.72       | 9999.72              | 9999.72               |
| Demand (MW)             | 2799          | 2842                 | 2792                  |
| Available capacity (MW) | 3030          | 3003                 | 2999                  |

## Monday, 18 February (cont)

| <b>3:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
|-------------------------|---------------|----------------------|-----------------------|
| Price (\$/MWh)          | 9999.72       | 9999.72              | 9999.72               |
| Demand (MW)             | 2832          | 2872                 | 2824                  |
| Available capacity (MW) | 3030          | 3003                 | 2999                  |
| <b>4:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9999.72       | 9999.72              | 9999.72               |
| Demand (MW)             | 2883          | 2886                 | 2886                  |
| Available capacity (MW) | 3038          | 3023                 | 2999                  |
| <b>4:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9999.72       | 9999.72              | 9999.72               |
| Demand (MW)             | 2897          | 2904                 | 2909                  |
| Available capacity (MW) | 3058          | 3015                 | 2999                  |
| <b>5:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9999.72       | 9999.72              | 9999.72               |
| Demand (MW)             | 2871          | 2872                 | 2884                  |
| Available capacity (MW) | 3075          | 2999                 | 3002                  |
| <b>5:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9999.72       | 9999.72              | 9999.72               |
| Demand (MW)             | 2835          | 2833                 | 2834                  |
| Available capacity (MW) | 3078          | 2999                 | 3003                  |
| <b>6:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9999.72       | 9950.74              | 9999.72               |
| Demand (MW)             | 2749          | 2773                 | 2773                  |
| Available capacity (MW) | 3059          | 3006                 | 3007                  |
| <b>6:30 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
| Price (\$/MWh)          | 9991.56       | 9950.73              | 9037.45               |
| Demand (MW)             | 2713          | 2700                 | 2705                  |
| Available capacity (MW) | 3035          | 3029                 | 3005                  |

Conditions at the time saw demand at near record levels and close to forecast as were the prices.

The AER will be issuing a detailed report into the circumstances of the day that led to the spot price exceeding \$5000/MWh in accordance with clause 3.13.7 of the Rules.

## Tuesday, 19 February

| <b>6:00 pm</b>          | <b>Actual</b> | <b>4 hr forecast</b> | <b>12 hr forecast</b> |
|-------------------------|---------------|----------------------|-----------------------|
| Price (\$/MWh)          | 6087.21       | 74.24                | 82.56                 |
| Demand (MW)             | 2724          | 2518                 | 2545                  |
| Available capacity (MW) | 3014          | 3082                 | 3240                  |

Conditions at the time saw demand 200 MW higher than that forecast four hours ahead and available capacity close to that forecast.

At 5.30 pm, first effective from 5.40 pm and only for the remainder of the trading interval AGL rebid 820 MW of capacity at Torrens Island from prices below \$150/MWh to above \$8900/MWh. The reason given was “Portfolio optimisation::price/volume trade off”. The price increased from \$60/MWh at 5.35 pm to \$9000/MWh by 5.45 pm and stayed at this level for the remainder of the trading interval.

The AER will be issuing a detailed report into the circumstances of the day that led to the spot price exceeding \$5000/MWh in accordance with clause 3.13.7 of the Rules.

## 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 | 70   | 47  | 32    | 51  | 91  | 55  |
| 2006-07 (\$/MWh) YTD | 35   | 39  | 27    | 47  | 51  | 42  |
| Change (YTD)         | 100% | 19% | 21%   | 9%  | 80% | 31% |
| 2006-07 (\$/MWh)     | 57   | 67  | 38    | 61  | 59  | 51  |

**Table 2: NEM turnover**

| Financial year              | NEM TURNOVER* (\$, billion) | ENERGY (TWh) |
|-----------------------------|-----------------------------|--------------|
| 2007-08 YTD                 | \$7.7                       | 135          |
| 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) |
|----------------------------------|------|-----|-------|-----|-----|-----|------------------------|
| Oct-07                           | 68   | 43  | 27    | 37  | 36  | 36  | 0.80                   |
| Nov-07                           | 58   | 38  | 29    | 46  | 47  | 45  | 0.77                   |
| Dec-07                           | 41   | 43  | 32    | 50  | 54  | 52  | 0.78                   |
| Jan-08                           | 52   | 36  | 28    | 45  | 186 | 48  | 0.94                   |
| Feb-08                           | 181  | 28  | 24    | 42  | 231 | 57  | 1.24                   |
| Q4 2006                          | 23   | 27  | 22    | 29  | 40  | 37  | 1.40                   |
| Q4 2007                          | 56   | 41  | 30    | 44  | 46  | 44  | 2.35                   |
| Change                           | 142% | 51% | 37%   | 52% | 15% | 20% |                        |

**Table 4: ASX energy futures contract prices (and compared with settled price for Q1 2007) at 25 February**

| Q1 2008                                | QLD  |      | NSW  |      | VIC  |      | SA   |      |
|--|------|------|------|------|------|------|------|------|
|  | Base | Peak | Base | Peak | Base | Peak | Base | Peak |
| Price on 18 Feb (\$/MW)                | 43   | 90   | 33   | 52   | 41   | 62   | 110  | 205  |
| Price on 25 Feb (\$/MW)                | 75   | 105  | 31   | 45   | 38   | 62   | 106  | 210  |
| % increase since 1 March               | 36%  | 7%   | -43% | -52% | -32% | -38% | 86%  | 108% |
| Contracts traded in the last week (MW) | 85   | 0    | 1    | 0    | 0    | 0    | 30   | 0    |
| Contracts traded since 1 March         | 3614 | 383  | 5673 | 382  | 3908 | 631  | 764  | 142  |
| Settled price for Q1 07 (\$/MW)        | 53   | 85   | 51   | 74   | 65   | 109  | 56   | 88   |

**Table 5: Changes to availability of low priced generation capacity offered to the market**

| Comparison:                  |      |        |       |      |      |      |        |
|------------------------------|------|--------|-------|------|------|------|--------|
| December 07 with December 06 | QLD  | NSW    | SNOWY | VIC  | SA   | TAS  | NEM    |
| MW Priced <\$20              | -575 | -1,685 | 25    | -807 | 182  | -41  | -2,901 |
| MW Priced \$20 to \$50       | -58  | 1,741  | -519  | 134  | -127 | -175 | 996    |
| January 08 with January 07   | QLD  | NSW    | SNOWY | VIC  | SA   | TAS  | NEM    |
| MW Priced <\$20              | -8   | -409   | 22    | -83  | 84   | 13   | -381   |
| MW Priced \$20 to \$50       | 79   | 989    | -260  | 116  | -178 | 1    | 747    |
| February 08 with February 07 | QLD  | NSW    | SNOWY | VIC  | SA   | TAS  | NEM    |
| MW Priced <\$20              | -251 | -747   | 5     | -220 | -29  | -91  | -1,334 |
| MW Priced \$20 to \$50       | 340  | 1,363  | 244   | -35  | -15  | -60  | 1,836  |