

Electricity Pricing Event Report – Monday 21 March 2016*

Market Outcomes: Queensland spot price reached \$727.01/MWh for trading interval (TI) ending 0900 hrs.

FCAS prices in all regions and Energy prices for the other NEM regions were not affected by this event.

Detailed Analysis: 5-Minute dispatch price in Queensland reached \$1,399.70/MWh between dispatch intervals (DI) ending 0845 hrs and 0855 hrs. The high prices can be attributed to rebidding and withdrawal of generation capacity and limited interconnector support.

- Demand increased by approximately 142 MW for DI ending 0845 hrs.
- Between DIs ending ending 0845 hrs and 0850 hrs, Stanwell, CS Energy and Millmerran rebid 320 MW of generation capacity from bands priced below \$61/MWh to bands priced at or above \$1,399.70/MWh.
- For DI ending 0850 hrs, 160 MW of generation capacity was withdrawn from Braemar 2 PS unit 5, from bands priced at \$345.71/MWh, with the reason '0840A QLD PRICE HIGHER THAN FORECAST: AVOID UNECONOMIC START SL'.
- During the high priced DIs, target flow on the QNI interconnector was limited up to 390 MW towards Queensland by the system normal constraint equation $N^Q_NIL_A$. The $N^Q_NIL_A$ constraint equation prevents voltage collapse in New South Wales for the loss of Liddell – Muswellbrook no. 83 330kV transmission line. For the same DIs, target flow on the Terranora was limited to 25 MW towards Queensland by the same constraint equation.
- Cheaper priced generation was available during the high priced intervals but was limited due to ramp rates (Braemar PS units 2 and 3, Callide PP unit 4, Millmerran PP unit 2 and Oakey PS unit 1), or required more than one DI to synchronise (Braemar PS units 5 and 6), or constrained off by the system normal constraint equation $Q > NIL_BI_FB$ (Gladstone PS units 3 and 4). This constraint equation prevents overloading of feeder bushings at Boyne Island for the contingent loss of one Calliope River to Boyne Island 132 kV line.

For DI ending 0900 hrs, Queensland dispatch price reduced to \$45.70/MWh when:

- 38 MW of generation capacity was rebid from bands priced at \$1400.70/MWh to the Market Floor Price (MFP) of -\$1000/MWh.
- The constraint equation $N^Q_NIL_A$ was no longer binding and the QNI and Terranora interconnectors were no longer limited.

** A summary was prepared as the maximum daily spot price was between \$500/MWh and \$2,000/MWh.*