

Electricity Pricing Event Report – Sunday 15 January 2017

Market Outcomes: Spot price in Queensland (QLD) reached \$2,609.08/MWh for trading interval (TI) ending 1230 hrs on 15 January 2017.

Energy prices in other regions were not affected by this event. FCAS prices in all regions were not affected by this event.

Detailed Analysis: The 5-Minute dispatch Energy price in Queensland reached \$13,800/MWh at dispatch interval (DI) ending 1215 hrs. This high price can mainly be attributed to an increase in demand while interconnector support was constrained and limited lower priced generation was available in the region.

Demand in QLD was high, reaching 7,416 MW during the high priced TI. This high demand coincided with high temperatures in QLD, with a daily peak of 33.0 degrees (Archerfield Airport).

Between DI ending 1210 hrs and 1215 hrs, demand in Queensland increased by 50 MW. For DI ending 1215 hrs, flow was constrained on both the Queensland – New South Wales interconnector (QNI) and Terranora interconnector by the constraint equations $N^{Q_NIL_B1}$ and $N>LSDU_LSDU$, respectively. The $N^{Q_NIL_B1}$ system normal constraint equation avoids voltage collapse for the loss of Kogan Creek PS. The thermal constraint equation $N>LSDU_LSDU$ avoids the overload of the Lismore No. 9U7/L 132 kV line for the trip of the parallel Lismore - Dunoon No. 9U6/L 132 kV line.

For DI ending 1210 hrs, InterGen rebid 50 MW from the Market Floor Price (MFP) of -\$1,000/MWh to the Market Price Cap (MPC) of \$14,000/MWh.

For DI ending 1215 hrs, Callide Power rebid 18 MW from the MFP to band priced at \$13,999.99/MWh. Callide B unit 1 withdrew 5 MW of capacity from bands priced at \$16.80/MWh with the reason "1206P AMBIENT CONDITIONS-VACUUM UNLOADING-SL".

Lower priced generation was available but required more than one DI to synchronise (Mt Stuart GT unit 1), limited by ramp rates (Oakey GT unit 1) or was constrained off by the constraint equation $Q>NIL_BI_FB$ binding (Gladstone PS unit 3, 4, 5 and 6). This constraint equation avoids overloading the Boyne Island feeder bushing on Calliope River – Boyne Island 132 kV lines, for the loss of a single Calliope River – Boyne Island 132 kV line.

The 5-minute price reduced to \$59.99/MWh for DI ending 1220 hrs, when demand in the region reduced by 48 MW. ERM Power and Arrow Energy rebid 375 MW from bands priced at \$1,405.69/MWh or above to bands priced at MFP and lower priced capacity became available.

The high 30-minute spot price for Queensland was forecast in the latest pre-dispatch schedules.