Electricity Pricing Event Report – Friday 29 January 2016

Market Outcomes: Queensland spot prices were $2,126.06/MWh and $2,472.01/MWh for trading intervals (TIs) ending 1330 hrs and 1430 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 $11,530.80/MWh and $13,799.98/MWh for dispatch intervals (DIs) ending 1330 hrs and 1425 hrs. The high prices can be attributed to high demand and rebidding.

Queensland demand peaked at 8,701 MW for TI ending 1430 hrs.

Between DIs ending 1315 hrs and 1330 hrs, CS Energy rebid 375 MW of generation capacity from Callide PS and Gladstone PS from bands priced at less than $300/MWh to the Market Price Cap (MPC) of $13,800/MWh. For DI ending 1425 hrs, CS Energy and Millmerran Energy rebid 360 MW of generation capacity from Callide PS, Gladstone PS and Millmerran unit 2 from bands priced at less than $300/MWh to the MPC.

Cheaper priced generation was available but limited due to ramp rates (Kogan Creek, Millmerran unit 1 and Stanwell unit 3), FCAS profiles (Stanwell unit 1, unit 2 and 4, and Tarong unit 1, and 3), or required more than one DI to synchronise (Braemar unit 5 and Townsville GT unit 1).

The target flow on the QNI interconnector was limited up to 186 MW towards Queensland during the high priced intervals by the voltage stability constraint equation, N^^Q_NIL_B1. This system normal constraint equation prevents voltage collapse in New South Wales for tripping of Kogan Creek PS. The target flow on the Terranora interconnector was limited up to 23 MW towards Queensland by the same voltage stability constraint equation and the thermal constraint equation, N>LSDU_LSDU. This constraint equation manages the post-contingent flow on a Lismore – Dunoon 132 kV line for the trip of the parallel line.

The 5-minute price reduced to below $50/MWh in the subsequent DIs to the high priced intervals with a decrease in Queensland demand and rebidding of capacity from higher priced bands to bands priced at -$1,000/MWh.

The high 30-minute spot price for Queensland was not forecast in the predispatch schedules as it was a result of rebidding of generation capacity within the affected trading interval.