Electricity Pricing Event Report – Sunday 28 February 2016

Market Outcomes: Queensland spot price reached $2,155.04/MWh for trading interval (TI) ending 2230 hrs.

Queensland FCAS prices and energy and FCAS prices in the other NEM regions were not affected.

Counter price flows caused negative settlement residues of approximately $487,000 to accumulate on the Queensland to New South Wales directional interconnector between TIs ending 2230 hrs and 2300 hrs. AEMO managed negative settlement residues from 2220 hrs to 2315 hrs (Market Notices No. 52080 and 52089).

Detailed Analysis: 5-Minute dispatch prices reached $12,888.69/MWh for dispatch interval (DI) ending 2205 hrs. This high price can be attributed to rebidding of generation capacity.

For the DI ending 2205 hrs, Alinta, CS Energy, ERM Power and Stanwell shifted or rebid a total generation capacity of 1,218 MW from bands priced below $1,400.00/MWh to bands priced at or above $12,499.11/MWh or the Market Price Cap (MPC) of $13,800.00/MWh.

Cheaper priced generation was available but limited due to ramp rates (Condamine PS unit A, Darling Downs PS unit 1, Oakey PS Unit 2) or required more than one DI to synchronise (Braemar 2 PS unit 6).

The target flow on the QNI interconnector was limited to 297 MW towards Queensland by the voltage stability constraint equation, N^^Q_NIL_B1. This system normal constraint equation prevents voltage collapse in New South Wales for the loss of Kogan Creek PS. The target flow on the Terranora interconnector was limited to 43 MW towards Queensland by the outage constraint equation, N>N-BAMB_132_OPEN_A. The N>N-BAMB_132_OPEN_A constraint equation prevents the overload of a Lismore – Dunoon 132 kV transmission line for the trip of the parallel Lismore – Dunoon 132 kV transmission line during the outage of the Ballina – Lennox Head 132 kV transmission line.

The negative settlement residue management constraint equation, NRM_QLD1_NSW1, was invoked for 11 DIs between DIs ending 2225 hrs and 2315 hrs. Rebidding of generation capacity in Queensland during this period caused the flows on QNI to change direction rapidly, resulting in intervals when negative residues accumulated.

The 5-minute prices in Queensland reduced to $18.41/MWh in the DI subsequent to the high priced interval, when demand reduced by 365 MW and 650 MW of generation capacity was rebid from bands priced above $12,888.00/MWh or the MPC to bands priced at or below $0.00/MWh.

The high Queensland spot prices for TI ending 2230 hrs was not forecast in the pre-dispatch schedules as it was a result of rebidding of generation capacity.