Electricity Pricing Event Report – Tuesday 15 March 2016*

Market Outcomes: Queensland spot price reached $1977.85/MWh for TI ending 0630 hrs.

Counter price flows caused negative settlement residues of approximately $528,000 to accumulate on the Queensland to New South Wales directional interconnector for TI ending 0630 hrs. AEMO managed these from 0615 hrs and 0645 hrs (Market Notices 52355 and 52356).

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 $13,799.50/MWh for dispatch interval (DI) ending 0605 hrs. The high price can be attributed to rebidding of generation capacity during a planned outage.

- For DI ending 0605 hrs, demand increased by 122 MW.
- Planned outage of Armidale – Tamworth no. 85 330 kV line was scheduled to commence at 0630 hrs. Various ramping constraint equations were invoked to prepare for the line outage. The ramping constraint equations violated between DIs ending 0600 hrs and 0605 hrs.
- During the high priced DI, the ramping constraints reduced target flow towards Queensland across the QNI and Terranora interconnectors. The combined target flow across QNI and Terranora Interconnectors decreased from 150 MW to 29 MW towards Queensland between DIs ending 0555 hrs and 0605 hrs.
- For DI ending 0605 hrs, CS Energy rebid 80 MW of generation capacity from bands priced at or below $27.40/MWh to the Market Price Cap (MPC) of $13,800/MWh.
- Cheaper priced generation was available but limited due to ramp rates (Callide PP unit 4, Condamine PS A, Darling Downs PS unit 1, Millmerran PP unit 2, Oakey PS unit 1, Stanwell PS units 1, 2, 3 and 4 and Tarong PS units 2, 3 and 4), or required more than one DI to synchronise (Braemar PS unit 1).
- The negative settlement residue management (NRM) constraint equation, NRM_QLD1_NSW1, was invoked for DI ending 0620 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.

Between DIs ending 0620 hrs and 0625 hrs, Queensland dispatch price collapsed to the Market Floor Price (MFP) of -$1000/MWh, when:

- For DI ending 0620 hrs, demand decreased by approximately 76 MW.
- Between DIs ending 0610 hrs and 0625 hrs, 1926 MW of generation capacity was rebid from higher priced bands priced to at or below -$971.05/MWh.

Queensland dispatch price increased to $6.96/MWh for DI ending 0630 hrs when:

- Demand increased by approximately 97 MW.

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