## Electricity Pricing Event Report – Monday 14 November 2016

**Market Outcomes:** Spot price in South Australia reached \$2,342.76/MWh at TI ending 1400 hrs on 14 November 2016.

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 South Australia reached the Market Price Cap (MPC) of \$14,000/MWh for dispatch interval (DI) ending 1335 hrs on 14 November 2016. This high price can mainly be attributed to constrained wind generation and shifting of capacity to higher price bands.

Between DI ending 1330 hrs and 1335 hrs demand in SA increased by 29 MW to 1,256.36 MW.

At DI ending 1335 hrs Quarantine PS unit 1 shifted 24 MW of capacity from bands priced at \$0.01/MWh and below to bands priced at the MPC.

During DI ending 1335 hrs, 89.46 MW of wind generation was constrained down (North Brown Hill WF, The Bluff WF, Hallet 1 and 2 WF) by the voltage stability constraint equation V^S\_NIL\_SA\_RECLASS. This constraint equation limits generation in SA to prevent flow on the Heywood interconnector exceeding 600 MW following the reduction in MW output from multiple generating units in SA.

The Monash to Murraylink Berri 132 kV line was on a planned outage between 1834 hrs on 11 November to 2130 hrs on 16 November. Constraint set I-ML\_ZERO was invoked for the duration of the outage to limit Murraylink flow to zero in either direction.

Between DI ending 1330 hrs and 1335 hrs flow on the Heywood interconnector towards South Australia increased by 19 MW to 581 MW and limited by the upper limit set by the constraint equation V\_S\_NIL\_ROCOF. This is a Rate of Change of Frequency (RoCoF) constraint equation which limits VIC to SA flow on the Heywood interconnector to prevent RoCoF exceeding 3 Hz/sec in SA immediately following the loss of the Heywood interconnector.

Lower priced generation was available but was limited by ramping rates (Osborne PS and Torrens Island PS B unit 1, 2 and 3) or required more than one DI to synchronise (Hallet PS).

The 5-minute price reduced to \$70.24/MWh for DI ending 1340 hrs when 443 MW of capacity was rebid from bands priced at or above \$484.99/MWh to the Market Floor Price (MFP) of - \$1,000/MWh.

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