Electricity Pricing Event Report – Monday 21 November 2016

Market Outcomes: Queensland spot price reached -$155.28/MWh for trading interval (TI) ending 0530 hrs on 21 November 2016.

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

Detailed Analysis: The 5-Minute Energy price in Queensland reached the Market Floor Price (MFP) of -$1,000/MWh for dispatch interval (DI) ending 0505 hrs on 21 November 2016. These prices can be attributed to a reduction in scheduled load and excess generation in the region coincident with the planned outage of Armidale - Tamworth (85) 330 kV line.

The Armidale to Tamworth (85) 330 kV line was on a planned outage between 0403 hrs and 0521 hrs on 21 November 2016. This outage increased the risk of electrical separation of Queensland from the rest of the NEM. The outage constraint sets N-ARTW_85, N-MOREESF1_ZERO and F-N-ARTW_85 were invoked between 0400 hrs and 0520 hrs on 21 November 2016.

In Queensland between DIs ending 0500 hrs and 0505 hrs demand decreased by 17 MW to 5,234 MW and scheduled load decreased by 177 MW to 59 MW.

Generators in the region reduced output but were limited by ramp down rates (Callide Unit 1, Condamine CCGT, Kogan Creek, Millmerran Unit 1 and 2 and Townsville GT (Yabulu) Unit 1) resulting in an excess of cheaper priced generation in Queensland.

Between DI ending 0500 hrs and 0505 hrs, flow on the Queensland – New South Wales Interconnector (QNI) increased by 97 MW to reach 378 MW towards New South Wales but was limited by the constraint equation F_Q++ARTW_L5. At DI ending 0500 hrs, Terranora flow was 57 MW towards New South Wales. For the next DI, Terranora reversed directions flowing 22 MW towards Queensland by the F_Q++ARTW_L5 constraint equation. This constraint equation specifies the Delayed Lower FCAS requirement for Queensland for the loss of the other Armidale - Tamworth (85 or 86) line when the Armidale - Tamworth (85 or 86) 330 kV line is out of service.

The 5-minute energy price increased to -$0.05/MWh when demand in the region increased by 109 MW to 5,343 MW.

The low spot price for Queensland were not forecast in the latest pre-dispatch schedule.