Electricity Pricing Event Report – Sunday 4 September 2016 (TI ending 0000 on 5 September 2016)

Market Outcomes: South Australia spot price reached $2,361.27/MWh for trading interval (TI) ending 0000 hrs.

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

Detailed Analysis: The 5-Minute dispatch price reached $14,000/MWh in South Australia for dispatch interval (DI) ending 2335 hrs. This high price can be mainly attributed to a spike in South Australian demand due to hot water load management, low wind and limited interconnector support.

Between DIs ending 2330 hrs and 2335 hrs, South Australian demand increased by 212 MW to reach 1,646 MW. This increase in demand was as a result of a spike in hot water load.

The target flow towards South Australia on the Heywood interconnector increased from 480 MW for DI ending 2330 hrs to 600 MW for DI ending 2335 hrs and was limited by the upper transfer limit constraint equation V:S_600_HY_TEST and oscillatory stability constraint equation V:S_PA_SVC_600. The V:S_PA_SVC_600 constraint equation prevents oscillatory instability by limiting Heywood interconnector to an upper transfer limit of 600 MW from VIC to SA, during the outage of one Para SVC.

The target flow towards South Australia on the Murraylink interconnector increased from 0 MW for DI ending 2330 hrs to 80 MW for DI ending 2335 hrs and was limited by the constraint equation VSML_ROC_80. This constraint equation limits the rate of change of flow towards South Australia across the Murraylink interconnector to 80 MW per 5 minutes.

Wind generation in South Australia was low at approximately 126 MW for DI ending 2335 hrs.

Cheaper priced generation was available but limited due to fast start inflexibility profiles (Hallet PS).

The 5-minute price reduced to $48.02/MWh for DI ending 2340 hrs, when AGL, Origin Energy and Lumo Generation rebid 253 MW of generation capacity from bands priced at $589.95/MWh or above to bands priced at -$0.01/MWh or below.

The high 30-minute spot price for South Australia was not forecast in the pre-dispatch schedules, as they occurred as a result of a spike in 5-minute demand in South Australia during the affected TI.