

Electricity Pricing Event Report – Thursday 19 January 2017

Market Outcomes: Spot price in South Australia (SA) reached \$2,399.21/MWh for trading interval (TI) ending 1700 hrs on 19 January 2017.

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 Energy price in South Australia reached \$13,998.99/MWh for dispatch interval (DI) ending 1635 hrs on 19 January 2017. This high price can mainly be attributed to constrained interconnector flow during times of limited lower priced generation capacity.

At DI ending 1630 hrs, the target on the Heywood interconnector was 600 MW towards South Australia. However at 1635 hrs, the actual flow was 638 MW. The interconnector exceedance was caused by actual demand being higher than forecast in SA and a number of generators in SA not reaching their targets. This resulted in the target flow on the Heywood interconnector being limited to 562 MW towards South Australia by the oscillatory stability constraint equation V:S_600_HY_TEST_DYN. This constraint equation limits the dynamic headroom for the upper transfer limit on the VIC to SA Heywood interconnector to 600 MW. Once the 600 MW flow limit is exceeded by more than 10 MW, the limit is temporarily reduced by the amount of exceedance.

Between DIs ending 1630 hrs and 1635 hrs, flow on Murraylink towards SA increased by 13 MW and was limited to 179 MW by the upper transfer limit constraint equation V^SML_NSWRB_2. This constraint equation is a voltage stability constraint equation which avoids voltage collapse in Victoria for the loss of the Darlington Point - Buronga (X5) 220 kV line when NSW runback scheme is disabled.

Lower priced generation was available but required more than one DI to synchronise (Quarantine PS unit 5) or was limited by their Fast Start Profile (Dry Creek GT unit 3).

For DI ending 1640 hrs, the 5-minute price reduced to \$108.03/MWh when 106 MW of generation capacity in SA was rebid from bands priced at or above \$13,998.99/MWh to the Market Floor Price (MFP) of -\$1,000/MWh.

The high 30-minute spot price for South Australia was not forecast in the latest pre-dispatch schedules. This was due to a lower demand and increased flow across Heywood interconnector forecast in pre-dispatch as compared to dispatch.