

Electricity Pricing Event Report – Monday 12 December 2016

Market Outcomes: Spot price in South Australia reached \$2,493.61/MWh for trading interval (TI) ending 1800 hrs on 12 December 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 \$13,181.82/MWh for dispatch interval (DI) ending 1800 hrs. This high price can mainly be attributed to constrained interconnector flow during times of low wind conditions and high demand.

South Australian demand was high reaching 2,240 MW during the high priced TI. This was coincident with high temperatures reaching a maximum of 34°C at Adelaide Airport.

During this high priced DI, wind generation was low at 167 MW.

At DI ending 1755 hrs, the target on the Heywood interconnector was 600 MW towards South Australia. At the end of this DI however, the flow was 656 MW. The interconnector exceedance was caused by actual demand being higher than forecast in SA and a number of generators in SA generating under their targets. This resulted in the target flow on the Heywood interconnector for DI ending 1800 hrs being limited to 544 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. With this constraint, if 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 1755 hrs and 1800 hrs, flow on Murraylink towards South Australia was limited to 127 MW by the upper transfer limit set by the constraint equation V^SML_NSWRB_2. V^SML_NSWRB_2 is a system normal voltage stability constraint equation which avoids voltage collapse in Victoria for the loss of the Darlington Point to Buronga (X5) 220 kV line.

Lower priced capacity was available but required more than one DI to synchronise (Snuggery).

The 5-minute price reduced to \$300.30/MWh for DI ending 1805 hrs when flow on the Heywood interconnector towards South Australia increased to 600 MW and lower priced capacity became available.

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.