

Electricity Pricing Event Report – Tuesday 1 November 2016

Market Outcomes: Spot price in South Australia reached \$2,298.56/MWh for trading interval (TI) ending 0730 hrs on 1 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 \$13,461.60/MWh for dispatch interval (DI) ending 0720 hrs 1 November 2016. This high price can mainly be attributed to a reduction of wind generation and limited availability of lower priced generation, during the morning peak demand period.

Between DIs ending 0715 hrs and 0720 hrs, South Australia demand increased by 14 MW to 1,507 MW reaching the morning peak demand. Between these DIs wind generation in the region decreased by 40 MW to 264 MW at DI ending 0720 hrs.

At DI ending 0715 hrs, target flow on the Heywood interconnector was at the upper limit of 416 MW, set by the constraint equation V_S_NIL_ROCOF. This Rate of Change of Frequency (RoCoF) constraint equation limited flow on the Heywood interconnector from Victoria to South Australia to prevent the RoCoF exceeding 3 Hz/sec in South Australia following the loss of the Heywood interconnector. During the high priced DI, the target flow on the Heywood interconnector increased to 445 MW towards South Australia, violating the upper limit of 421.44 MW set by V_S_NIL_ROCOF constraint equation.

The target flow on the Murraylink interconnector remained at the upper limit of 220 MW towards South Australia for DIs ending 0715 hrs and 0720 hrs.

For DI ending 0720 hrs, Synergen Power rebid 46 MW of capacity from Dry Creek GT unit 3 from bands priced at \$1,498.20/MWh and above to bands priced at \$300.20/MWh or below. However, the generating unit required more than one DI to synchronise.

The 5-minute price reduced to \$55.66/MWh for DI ending 0725 hrs when 548 MW of generation capacity in South Australia was rebid from bands priced at or above \$59.99/MWh to 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 as it was a result of a spike in 5-minute demand and a reduction in wind generation during the affected TI.