

Electricity Pricing Event Report – Saturday 10 December 2016 (TI ending 0000 on 11 December 2016)

Market Outcomes: South Australia spot price reached \$2,347.55/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 intervals (DIs) ending 2335 hrs on Saturday 10 December 2016. This high price can be mainly attributed to a spike in South Australian demand due to hot water load management, limited interconnector support and shift in capacity to higher price bands.

Between DIs ending 2330 hrs and 2335 hrs, South Australian demand increased by 124 MW to reach 1,365 MW. This increase in demand was as a result of a spike in hot water load.

At DI ending 2335 hrs AGL shifted 70 MW of capacity from \$484.99/MWh to \$14,000/MWh.

The target flow towards South Australia on the Heywood interconnector was forced to remain at 338 MW between DI ending 2330 hrs and 2335 hrs. This was limited by the upper transfer limit of set by the constraint equation $V_S_NIL_ROCOF$. This is a Rate of Change of Frequency (RoCoF) constraint that limits the flow on the Heywood interconnector from VIC to SA to prevent the RoCoF exceeding 3Hz/sec in SA following the loss of the Heywood interconnector.

The flow on Murraylink at DI ending 2330 hrs was 84 MW towards Victoria. At DI ending 2335 hrs this flow was reduced to 1 MW towards Victoria and 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.

During this high priced DI lower priced generation was available but required more than one DI to synchronise (Hallet PS) or limited by their ramp up rate (Torrens Island B unit 4).

The 5-minute price reduced to \$23.86/MWh for DI ending 2340 hrs when 387 MW of capacity was rebid from bands priced at \$578.81/MWh and above to the Market Floor Price (MFP) of - \$1,000/MWh and demand decreased by 16 MW.

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.