

Electricity Pricing Event Report – Friday 17 September 2015

Market Outcomes: South Australian spot price reached \$2,080.36/MWh for trading interval (TI) ending 1530 hrs.

Frequency Control Ancillary Services (FCAS) prices in South Australia, and energy and FCAS prices for the other NEM regions were not affected by this event.

An Over-constrained Dispatch (OCD) Interval existed for dispatch interval (DI) ending 1515 hrs when the published prices were not firm. A manual OCD run was performed to resolve the violated constraints and the firm prices were published by 1253 hrs on 18 September 2015 (Market Notice 49832).

Detailed Analysis: 5-Minute dispatch price reached \$12,301.3/MWh in South Australia for dispatch interval (DI) ending 1515 hrs. The high price can be attributed to a tight supply-demand situation in South Australia following the unplanned outage of a transmission line and SVC.

South Australian demand was 1,280 MW for TI ending 1530 hrs. During the same TI, wind generation in South Australia was low at 177 MW.

At 1501 hrs, the South East - Taillem Bend No.1 275 kV line and South East No. 1 SVC tripped (Market Notice 49822) due to maloperation of a circuit breaker. Following the unplanned outage, constraint sets S-SE_VC_1 and S-TBSE were invoked from DI ending 1515 hrs to maintain transient and voltage stability, and prevent thermal overloads in the parallel 132 kV network.

A number of constraint equations in the invoked sets violated for DIs ending 1510 hrs and 1515 hrs. They include some constraint equations that manage the Heywood interconnector flow. The target flow on Heywood towards South Australia reduced from 460 MW for DI ending 1505 hrs to 163 MW for DI ending 1515 hrs. Murraylink interconnector was on a planned outage between 0500 hrs and 1930 hrs.

Cheaper priced generation was limited due to ramp up rates (Northern PS Unit 1, Torrens Island Units B1,B2,B4) or fast-start profiles (Hallett GT, Ladbroke PS Units 1 and 2, Dry Creek Units 2 and 3).

With the significant reduction in support from Victoria and limited cheaper generation within South Australia, the energy price in South Australia reached \$12,301.3/MWh for DI ending 1515 hrs.

The 5-minute price reduced to \$32.63/MWh for the next interval when the demand reduced by 106 MW while 84 MW of non-scheduled generation came online. A total of 690 MW of generation capacity was also rebid from higher priced bands to bands priced at or below \$0/MWh.

The high 30-minute spot price for South Australia was not forecast in the pre-dispatch schedules, as it was the result of a tight supply-demand situation due to unplanned outages.