

## Electricity Pricing Event Report – Thursday 28 April 2016

**Market Outcomes:** South Australia had a negative spot price of  $-\$126.12/\text{MWh}$  for trading interval (TI) ending 1430 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 decreased to the Market Floor Price (MFP) of  $-\$1000/\text{MWh}$  in South Australia for dispatch interval (DI) ending 1415 hrs. The negative price can be attributed to excess cheaper priced generation in South Australia due to increased interconnector flow from Victoria to South Australia across the Heywood interconnector.

Between DIs ending 1410 hrs and 1415 hrs, demand in South Australia decreased by 26 MW to 1429 MW and wind generation increased by 65 MW to 356 MW.

During the same period, flow across the South Morang F2 500/330kV transformer increased from 916 MVA to 1163 MVA. The increased loading on the transformer caused the thermal constraint equation  $V > V_{\text{NIL\_2A\_R}}$  to bind. This constraint equation prevents the overload of South Morang F2 500/330 kV transformer under system normal conditions. The binding constraint equation resulted in the target flow towards South Australia on the Heywood Interconnector to increase from 86 MW to 492 MW between DIs ending 1410 hrs and 1415 hrs.

With excess cheaper priced generation available from Victoria during the low demand period, the South Australia price decreased to the MFP for DI ending 1415 hrs.

The 5-minute price increased to  $\$35.70/\text{MWh}$  for DI ending 1420 hrs when the flow across the South Morang F2 500/330kV transformer reduced by 342 MVA. Demand in South Australia increased by 49 MW and 74 MW of generation capacity was rebid from the MFP to the Market Price Cap (MPC) of  $\$13,800/\text{MW}$ .

The negative spot price was not forecast in the latest pre-dispatch schedule, as it was a result of increased flow on the South Morang F2 500/330kV transformer within the affected TI.