

Electricity Pricing Event Report - Tuesday 7 March 2017

Market Outcomes: The South Australia (SA) Raise and Lower Regulation Frequency Control Ancillary Service (FCAS) prices reached between \$2,395.83/MWh and \$2,563.91/MWh for trading intervals (TIs) ending 0500 hrs and 0630 hrs.

The SA energy price was low (reaching -\$45/MWh for TI ending 0500 hrs), but did not reach the price threshold for reporting purposes. Other energy prices and FCAS prices across all regions were not affected by this event.

Detailed Analysis: The 5-minute dispatch Raise and Lower Regulation Frequency Control Ancillary Service (FCAS) price in SA reached either \$13,802.45/MWh or the Market Price Cap (MPC) of \$14,000/MWh for dispatch intervals (DIs) ending 0435 hrs and 0625 hrs. These high prices can mainly be attributed to local Regulation FCAS requirements within SA during a planned outage and limited availability of cheaply priced Regulation FCAS capacity.

The Moorabool – Tarrone 500 kV line had a planned outage between 0430 hrs and 1525 hrs on 7 March 2017. This outage increased the risk of separation between SA and Victoria, and the associated outage constraint sets F-V-MLTR, S-X_BC_CP, V-MACARTHUR_ZERO and V-MLTR were invoked between 0430 hrs and 1535 hrs. The constraint equations F_S+LREG_0035 and F_S+RREG_0035 contained within the F-V-MLTR constraint set required 35 MW of Lower and Raise Regulation FCAS capacity to be sourced from within SA.

Lower and Raise Regulation FCAS in SA during the outage period was provided by Torrens Island B, Quarantine PS and Pelican Point PS.

For both high priced DIs, cheaper priced Lower and Raise Regulation FCAS was available through Torrens Island B units 1 & 2, but was limited by its FCAS trapezium.

The 5-minute Raise and Lower Regulation FCAS prices in SA reduced to between \$75/MWh and \$276.69/MWh when cheaper priced Lower and Raise Regulation FCAS was no longer limited by generator FCAS trapezium limits.

The high 30-minute Lower and Raise Regulation 30-min FCAS prices for SA were not forecast in the pre-dispatch schedules as they were due to limited FCAS capacity restricted by FCAS trapezium limits.