

Electricity Pricing Event Report – Thursday 29 September 2016

Market Outcomes: Queensland, New South Wales and Victoria had high Frequency Control Ancillary Service (FCAS) prices for trading interval (TI) ending 2330 hrs. For this TI, Lower Regulation, Raise Regulation, Fast Raise and Slow Raise FCAS prices reached \$63.80/MWh, \$33.88/MWh, \$25.81/MWh, and \$45.18/MWh, respectively.

FCAS prices in Tasmania and energy prices for all regions were not affected by this event.

Detailed Analysis: The 5-minute Lower Regulation FCAS prices in the three regions ranged between \$20.80/MWh and \$99.99/MWh between dispatch intervals (DIs) ending 2305 hrs and 2330 hrs. The 5-minute Raise Regulation, Fast Raise and Slow Raise FCAS prices ranged between \$20.08/MWh and \$51.00/MWh over the same period. These high FCAS prices can be mainly attributed to increased Lower Regulation FCAS requirements, stranding of some units that typically provide lower priced FCAS services during a period when Basslink was unable to transfer FCAS.

The South Australia Energy and FCAS markets were suspended between 1625 hrs on 28 September 2016 until 2230 hrs on 11 October 2016, following a black system in the South Australia region between 1618 hrs on 28 September 2016 and 1825 hrs on 29 September 2016. During the period of market suspension, FCAS services were only procured from NSW, QLD, VIC and TAS. No FCAS was procured from SA generators during this period.

During the high priced TI, flow on the Basslink interconnector was in the no-go-zone and Basslink was unable to transfer FCAS from Tasmania to the mainland.

The accumulated time error in the NEM was above +1.5 seconds for 56 minutes between 2310 hrs on 29 September 2016 and 0006 hrs on 30 September 2016. The maximum time error reached was +3.47 seconds at 2328 hrs. To manage the time error, the requirement for Lower Regulation services in the Mainland increased from 120 MW for DI ending 2315 hrs to 222 MW (maximum) for DI ending 2335 hrs.

5-minute Raise Regulation, Fast Raise and Slow Raise FCAS prices had been elevated since DI ending 2205 hrs. Between DI ending 2205 hrs and 2225 hrs the FCAS enablement maximum from multiple generating units for these Raise FCAS services were rebid from between 175 MW and 240 MW down to between 150 MW to 175 MW. For most DIs within the high priced TI, at least one of the Gladstone PS units 1, 3 and 4 were unavailable (stranded) for FCAS services as their output fell below their FCAS trapezium minimum enablement limit (120 MW). As a result, FCAS capacity had to be sourced from other generators at more expensive price bands.

For DI ending 2340 hrs, 5-minute Lower Regulation, Raise Regulation, Fast Raise and Slow Raise FCAS prices reduced to \$47/MWh, \$10/MWh, \$6.8/MWh and \$2.39/MWh, respectively, when flow on the Basslink interconnector was outside the no-go zone and thus able to transfer FCAS to the mainland. The Lower Regulation FCAS requirement also reduced, as the time error had recovered to below 3 seconds.

The high FCAS prices were forecast in the latest pre-dispatch schedules.