## Electricity Pricing Event Report – Monday 11 January 2016

**Market Outcomes:** The sum of all mainland (Queensland, New South Wales, Victoria and South Australia) Frequency Control Ancillary Service (FCAS) price was between \$74.60/MWh and \$187.61/MWh for trading intervals (TI) ending 1400 hrs, 1500 hrs, 1530 hrs and 1600 hrs.

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

Further information is provided below.

**Detailed Analysis:** The FCAS prices for raise services in all regions of the mainland was above \$150/MWh for 9 dispatch intervals (DI) between DIs ending 1335 hrs and 1600 hrs. The high FCAS prices can be attributed to limited cheaper priced raise regulation services during a period of increasing demand and non-compliance with generator targets.

Mainland regions experienced a hot temperature day of above 35 degrees in Sydney, Melbourne and Adelaide. As the NEM demand increased in the afternoon, the accumulated time error in the mainland increased from -1.0 sec at 1226 hrs to -4.26 sec at 1342 hrs. The exacerbation of the time error can be attributed to non-compliance with National Electricity Market Dispatch Engine (NEMDE) targets by a number of generators.

To manage the time error, the amount of raise regulation services enabled in the mainland increased from 137 MW for DI ending 1230 hrs to 250 MW (maximum) for DI ending 1345 hrs. The additional raise regulation had to be sourced from more expensive units by reducing their generation in the energy market.

Between the high price DIs ending 1335 hrs and 1600 hrs, a number of generators were limited by their FCAS profiles. CS Energy, Delta Electricity and AGL also rebid a total of 224 MW of raise regulation from lower priced bands to bands priced at or above \$200/MWh. FCAS support from Tasmania was unavailable due to the outage of Basslink interconnector from 20 December 2015.

The mainland FCAS prices for raise services reduced to \$20.80/MWh for DI ending 1545 hrs when the time error in the mainland had recovered and raise service requirements reduced.

The high 30-minute FCAS prices for mainland were not forecast in the pre-dispatch schedules, as the FCAS requirements in Pre-dispatch were much lesser than Dispatch.