Electricity Pricing Event Report – Tuesday 01 March 2016

Market Outcomes: Spot price reached $2,125.74/MWh in South Australia and $1,905.34 in Victoria for Trading Interval (TI) ending 1500 hrs.

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

Counter price flows caused negative settlement residues of approximately $390,000 to accumulate on the Victoria to New South Wales directional interconnector between 1430 hrs and 1830 hrs. AEMO managed these from 1455 hrs to 1540 hrs (Market Notices 52122 and 52124) and 1545 hrs to 1600 hrs (Market Notices 52125 to 52126).

Further information is provided below.

Detailed Analysis: The 5-Minute prices reached $13,329.95/MWh in South Australia and $12,199.55/MWh in Victoria for Dispatch Interval (DI) ending 1455 hrs. These high prices can be attributed to a steep supply curve during a high demand period in Victoria, low wind generation, and limited interconnector availability.

Victorian demand peaked at 7,714 MW for TI ending 1630 hrs and the demand increased by 210 MW for DI ending 1455 hrs. Melbourne Airport reached a maximum temperature of 32.6°C. South Australian demand peaked at 2,049 MW in TI ending 1630 hrs and Adelaide Airport reached a maximum temperature of 34.5°C. During the high priced DI, wind generation in South Australia was low, at 127 MW.

A planned outage of the Jindera – Wagga no. 62 330 kV line was scheduled between 0610 hrs on 01 March 2016 and 1231 hrs on 03 March 2016. The thermal outage constraint equation V>>V-JNWG_RADIAL_1A was invoked to manage the overload of the Murray to Dederang No.1 330kV line during the outage of Jindera to Wagga no. 62 330kV line. For DI ending 1455 hrs, constraint equation V>>V-JNWG_RADIAL_1A was binding and the constraint forced the VIC-NSW interconnector to flow towards New South Wales during the high priced period.

The target flow on the VIC-NSW interconnector was 350 MW towards New South Wales. Due to the counter-price flow on the VIC-NSW interconnector, the Negative Settlement Residue management (NRM) constraint equation NRM_VIC1_NSW1 was invoked for 12 DIs between DIs ending 1500hrs and 1600 hrs. The negative settlement residue management constraint equation reduced the interconnector flow towards New South Wales, but was violated for 8 DIs between DIs ending 1515 hrs and DI ending 1600 hrs. Cheaper priced generation was available but limited due to ramp rates (Newport PS and Hallett GT), or FCAS profiles (Yallourn W PS unit 1 and 3), or required more than one DI to synchronise (Bairnsdale GT unit 2).

For DI ending 1500 hrs, the 5-minute prices in South Australia and Victoria collapsed to negative prices of -$1000/MWh and -$940.96/MWh, respectively. This was due to a total of 1086 MW in South Australia and 1823 MW in Victoria rebid to at or below -$991.08/MWh or the Market Floor Price (MFP) of -$1,000/MWh.

The 5-minute price in South Australia and Victoria increased to $64.99/MWh and $43.22/MWh respectively for DI ending 1505 hrs. The price increase is due to 620 MW of generation capacity in South Australia and 1,403 MW of generation capacity in Victoria rebid or shifted from negative priced bands to band priced at or above $0/MWh.

The high 30-minute spot price for Victoria was not forecast in the latest pre-dispatch schedule, as the forecast demand was approximately 277 MW lower in the pre-dispatch schedule for Victoria.