

## Electricity Pricing Event Report – Wednesday 4 May 2016

**Market Outcomes:** South Australia spot price reached \$1,083.81/MWh for trading interval (TI) ending 0000 hrs.

Victorian spot price was negative for the affected TI, but did not reach the price threshold for reporting purposes. FCAS prices in all regions and Energy prices for the other NEM regions were not affected by this event.

**Detailed Analysis:** 5-Minute dispatch price in South Australia reached \$6,426.40/MWh for dispatch interval (DI) ending 2335 hrs. The high price can be attributed to an increase in demand, during a period of limited interconnector support.

- Between DIs ending 2330 hrs and 2335 hrs, South Australian demand increased by 176MW to 1,526MW, due to hot water load management.
- Low wind generation of 416 MW for TI ending 0000 hrs.
- For DI ending 2335 hrs, target flow on the Heywood interconnector was limited to 346 MW towards South Australia by the voltage stability constraint equation  $V^{\wedge}S\_TBCPTX\_MAXG$ . This constraint equation manages voltage stability across the Victoria – South Australia cutset for the loss of the largest generator in South Australia, during an outage of the Tailem Bend 275/132kV transformer and Tailem Bend Capacitor Bank.
- Target flow on the Murraylink interconnector was limited to 57 MW towards Victoria by the  $V \gg SML\_NIL\_CONT\_7B$  system normal constraint equation. The constraint equation prevents overload of the Buangor – Arrarat 66 kV transmission line for the loss of the Ballarat – Waubra – Horsham 220 kV transmission line.
- Cheaper priced generation was available during the high priced DI, but was constrained off by the binding constraint equation  $V^{\wedge}S\_TBCPTX\_MAXG$  (Lake Bonney Wind Farms 2 and 3), required more than one DI to synchronise (Quarantine PS unit 5), was limited by ramp rates (Torrens Island A units 1 and 3, Torrens Island B units 2 and 4) or was limited by FCAS profiles (Northern PS unit 1).

The 5-minute price in South Australia reduced to \$25.94/MWh, for DI ending 2340 hrs, when:

- 322 MW of generation capacity was rebid from bands priced at or above \$54.99/MWh to the Market Floor Price (MFP) of -\$1,000/MWh.
- Demand decreased by 21MW.

The high 30-minute spot price for South Australia was not forecast in the latest pre-dispatch schedule, as it was a result of a spike in 5-minute demand during the affected TI.

*\* A summary was prepared as the maximum daily spot price was between \$500/MWh and \$2,000/MWh.*

## Version Control

VERSION	DATE	REVISION DESCRIPTION	AUTHOR	CHECKED	RESPONSIBLE MANAGER	APPROVED
v1	06/05/2016	Original Document	Elise Harmer	Eloise Taylor Abraham Yohannan	Nathan White	