

Electricity Pricing Event Report – Sunday 20 December 2015*

Market Outcomes: Tasmania spot price reached \$1,993.58/MWh for trading interval (TI) ending 1430 hrs.

FCAS prices in Tasmania were elevated but did not exceed the reporting threshold (\$3,000/MWh). Energy and FCAS prices for the other NEM regions were not affected by this event.

Detailed Analysis: 5-Minute dispatch price in Tasmania reached \$11,707.37/MWh for dispatch interval (DI) ending 1425 hrs. The high price can be attributed to a tight supply and demand situation, and limited ramp rates during the unplanned outage of the Basslink interconnector.

- At 1403 hrs, the Basslink interconnector flow tripped from 250 MW when flowing towards Tasmania.
- The trip of the Basslink interconnector triggered the Frequency Control Special Protection Scheme (FCSPS) and reduced several Tasmania loads. The FCSPS is designed to disconnect pre-determined loads for the trip of Basslink when it is importing into Tasmania. This operation is required to ensure power system frequency in Tasmania does not fall below the minimum operating standard following the trip of Basslink.
- Target flow on the Basslink interconnector was constrained to 0 MW from DI ending 1425 hrs.
- Between DIs ending 1420 hrs and 1425 hrs, Tasmania demand increased by 132 MW.
- For DI ending 1425 hrs, Tasmania had a steep supply curve where generation capacity were offered either at below \$84.80/MWh or above \$11,707/MWh.
- For DI ending 1425 hrs, cheaper priced generation was available but limited due to ramp rates (Gordon, Liapootah-Catagunya-Wayatinah, Poatina units 1 and 2) and FCAS profile (Poatina units 3, 4, 5 and 6). Ramp rates for most units were limited to 1 MW per minute as the Automatic Generation Control (AGC) for these units were temporarily suspended for one DI due to a frequency event.

Tasmania energy price reduced to \$84.72/MWh for DI ending 1430 hrs when:

- Generation capacity from Poatina units 3, 4, 5, and 6 was no longer limited by its FCAS profile.
- Ramp rates for Gordon, Liapootah-Catagunya-Wayatinah, Poatina units 1 and 2 increased when AGC was no longer suspended.
- Increased wind generation from Musselroe wind farm.

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