Electricity Pricing Event Report – Thursday 20 August 2015

Market Outcomes: Queensland spot price reached $2,333.90/MWh for trading interval (TI) ending 0700 hrs.

Queensland Frequency Control Ancillary Services (FCAS) prices and energy and FCAS prices for the other NEM regions were not affected by this event.

Detailed Analysis: 5-Minute dispatch price reached the Market Price Cap (MPC) of $13,800/MWh for dispatch interval (DI) ending 0700 hrs. The high price can be attributed to shifting and rebidding of generation capacity when interconnector flow was limited.

For DI ending 0635 hrs, CS Energy and Stanwell shifted a total of 470 MW of generation capacity from bands priced at below $42/MWh to the MPC. Between DIs ending 0645 hrs and 0700 hrs, CS Energy and Millmerran rebid a total of 698 MW of generation capacity from bands priced at below $17/MWh to either $13,799.99/MWh or the MPC. Cheaper priced generation was available but limited due to ramp rates (Callide C), required more than one DI to synchronise (Braemar unit 7) and constrained off by thermal constraint equation Q>NIL_MRTA_A (Oakey PS). The constraint equation limits Oakey PS to the emergency rating of the Middle Ridge to Tangkam 110 kV line.

During the affected DI, the target flow on the QNI interconnector towards Queensland was limited to 47 MW by an outage constraint equation, N^^Q_AR_VC_B1. This constraint equation prevents voltage collapse in New South Wales for the loss of the Kogan Creek PS during the outage of the Armidale 330 kV SVC. The target flow on the Terranora interconnector towards Queensland was limited to 63 MW by constraint equations N^^Q_AR_VC_B1 and NQTE_ROC. The later constraint equation limits the rate of change on the interconnector to 80 MW per 5 minutes.

The 5-minute price reduced to $35.24/MWh in the subsequent DI to the high priced intervals when 1,962 MW of generation capacity was shifted from bands priced at above $12,947/MWh to the lower priced bands.

The high 30-minute spot price for Queensland was not forecast in the pre-dispatch schedules, as it was a result of rebidding of generation capacity within the affected trading interval.