

Electricity Pricing Event Reports

OCTOBER 2015

TABLE OF CONTENTS

Sunday 11 October to Tuesday 13 October 2015 – High FCAS price SA.....	2
Thursday 15 October 2015 to Monday 26 October 2015 – High FCAS price SA.....	3



Sunday 11 October to Tuesday 13 October 2015 – High FCAS price SA

Market Outcomes: South Australian Frequency Control Ancillary Service (FCAS) price (sum of all services) was above \$300/MWh for 91 trading intervals (TI) between TIs ending 1200 hrs on 11 October 2015 and 1800 hrs on 13 October 2015. The maximum price reached was \$26,650.11/MWh for TI ending 2300 hrs on 11 October 2015.

South Australian energy and FCAS prices in the other NEM regions were not affected.

At 0400 hrs on 12 October 2015, the rolling sum of the Lower Regulation FCAS price for the South Australia region over the previous 2016 Dispatch Intervals (seven days) exceeded six times the cumulative price threshold of \$207,000. As a result, an administered price cap of \$300/MWh was applied for all FCAS services commencing at dispatch interval (DI) ending 0405 hrs on 12 October 2015 (Market Notice no.49997).

Actual Lack of Reserve Level 2 (LOR2) condition had been declared for the South Australia region between 1055 hrs on 11 October 2015 and 1745 hrs on 13 October 2015 (Market Notice no. 49986 and 50030).

Further information is provided below.

Detailed Analysis: The South East – Heywood no.2 275 kV transmission line was on a planned outage from 1045 hrs on 11 October 2015 to 1739 hrs on 13 October 2015. This outage increased the risk of electrical separation between South Australia and Victoria. The risk of separation increased the FCAS requirements for South Australia, and were managed by invoking the constraint sets F-I-HYSE, F-S_LREG_0035 and F-S_RREG_0035. The F-S_LREG_0035 and F-S_RREG_0035 constraint sets ensure sufficient Lower and Raise Regulation FCAS is available in South Australia within a period of 30 minutes in the event of electrical separation (Market notice no. 50003).

For DI ending 2025 hrs on 11 October 2015, AGL rebid a total of 140 MW of Lower and Raise Regulation FCAS from Torrens Island A units from bands priced below \$20/MWh to bands priced at \$13,100/MWh.

The Lower and Raise Regulation FCAS prices increased to \$13,100/MWh from TI ending 2100 hrs on 11 October 2015 and continued so till 0400 hrs on 12 October 2015. The Lower and Raise Regulation FCAS prices were elevated due to the increased requirements, predominantly during low demand periods in late evening or early morning.

The prolonged high prices caused the rolling sum of Lower Regulation FCAS price in the South Australia region to exceed six times the Cumulative price threshold, resulting in an Administered price period. An administered price cap (APC) of \$300/MWh was applied for all FCAS services from DI ending 0405 hrs on 12 October 2015.

The flow towards South Australia on the Heywood interconnector was limited up to 113 MW during the planned outage period. The flow on the Murraylink interconnector was limited to 27 MW towards Victoria during the outage period.

The Lower and Raise Regulation price reduced to \$13.80/MWh and \$1.80/MWh respectively, for DI ending 1535 hrs on 13 October 2015 due to step changes in bids submitted by AGL. A total of 98 MW of Lower and Raise Regulation capacity from Torrens Island PS was transferred from bands priced above \$299/MWh to lower priced bands.



The high FCAS prices were forecast in pre-dispatch schedules published from 1300 hrs on 10 October 2015.

Thursday 15 October 2015 to Monday 26 October 2015 – High FCAS price SA

Market Outcomes: South Australian Frequency Control Ancillary Service (FCAS) price (sum of all services) was above \$150/MWh for 387 trading intervals (TIs) between TIs ending 0800 hrs on 15 October 2015 and 1100 hrs on 26 October 2015. The maximum sum of all FCAS service prices reached was \$26,275.95/MWh for TI ending 1600 hrs on 25 October 2015 – with major contributions from Lower Regulation (\$13,111), and Raise Regulation (\$13,107).

South Australian energy and FCAS prices in the other NEM regions were not affected.

At 1610 hrs on 25 October 2015, the rolling sum of Raise Regulation FCAS price for the South Australia region exceeded six times the cumulative price threshold (CPT) of \$207,000. As a result, an administered price cap (APC) of \$300/MWh was applied for all FCAS services in South Australia between DIs ending 1615 hrs on 25 October 2015 and 0400 hrs on 27 October 2015 (Market Notices no. 50172 and no. 50201). APC was also applied during an earlier period between DIs ending 0405 hrs on 12 October 2015 and 0400 hrs on 19 October 2015 due to the rolling sum of Lower Regulation FCAS price exceeding six times the CPT.

Actual Lack of Reserve Level 2 (LOR2) condition had been declared for the South Australia region during most of the period while the South East – Heywood no.1 275 kV transmission line was on a planned outage.

Further information is provided below.

Detailed Analysis: The South East – Heywood no.1 275 kV transmission line was on a planned outage from 0730 hrs on 15 October 2015 to 1039 hrs on 26 October 2015. This outage increased the risk of electrical separation between South Australia and Victoria. The risk of separation created local regulation FCAS requirements for South Australia which had to be sourced from within the region. The FCAS regulation requirements were managed by invoking the constraint sets F-I-HYSE, F-S_LREG_0035 and F-S_RREG_0035. The F-S_LREG_0035 and F-S_RREG_0035 constraint sets ensure sufficient Lower and Raise Regulation FCAS is available within South Australia immediately following a separation event so that AEMO can secure the power system within a period of 30 minutes (Market notice no. 50003).

Between TIs ending 1330 hrs and 1630 hrs on 25 October 2015, the sum of FCAS prices in South Australia were between \$14,154.66/MWh and \$26,275.95/MWh. For DI ending 1310 hrs, Alinta Energy rebid a total of 20 MW of Raise and Lower Regulation capacity from Northern PS Unit 2 from bands priced at \$1,526.35/MWh to \$12,619.37/MWh. Northern PS Unit 2 returned to service from 0200 hrs on 25 October 2015, after an outage spanning 23 days commencing on 03 October 2015. Pelican Point PS was unavailable during the high price period on 25 October 2015.

The high FCAS prices on 25 October 2015 reduced when AGL rebid a total of 136 MW of Raise and Lower Regulation capacity from Torrens Island PS from higher priced bands to bands priced at or below \$299.44/MWh. The rebid to the lower priced bands were submitted for DI ending 1620 hrs.



The prolonged high regulation prices and rebidding caused the rolling sum of Raise Regulation FCAS prices in the South Australia region to exceed six times the CPT, resulting in an Administered price period. An APC of \$300/MWh was applied for all FCAS services between DI ending 1615 hrs on 25 October 2015 and 0400 hrs on 27 October 2015.

The flow on the Heywood interconnector was limited up to 135 MW towards Victoria during the planned outage period. The flow on the Murraylink interconnector was limited to 169 MW towards Victoria during the outage period.

The high FCAS prices were forecast in pre-dispatch schedules.