

## £1.16m Energy Imbalance Positive Reserve (Op Res + STOR + BM Start Up) £0.35m Negative Reserve (Footroom) £0.70m £0.09m Frequency Control (Response + Fast Reserve) 0.58m Constraints (BM & Trades only) Other (Reactive + Black Start + BM + AS General) £0.63m 1500 **BM Volume** 1000 500 0 4 -500 -1000 -1500 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 Settlement Period Frequency Control Negative Reserve Other Positive Reserve Constraints

## SBP/SSP Vs NIV 01-Jan-2018 700 80 600 М S 500 70 а h 400 r 300 0 60 k **4**<sup>200</sup> **M**<sup>100</sup> **0** r e 50 t 0 t 40 **MM/3** -100 -200 -300 Μ -400 Lа -500 20 o r -600 n k -700 10 g e -800 -900 0 t 19 23 25 29 3 33 35 37 39 4 43 45 Э 5 NIV -SBP/SBP

19 21 23 25 27 29

Settlement Period

Negative Reserve

31 33 35 37 39 41 43 45 47

Constraints

11 13 15 17

Positive Reserve

£0 -£20,000

1 3 5 7 9

Frequency Control

## Commentary

Other

Wind shortfall during the morning pick up required up to 350MW of STOR to be utilised. Some large demand forecast errors (up to 2GW) were seen throughout day and night, making system conditions challenging. Trades were required on the interconnectors for Negative Reserve reasons from early to late morning. Additional Dynamic response was utilised over the darkness peak. Falling demand caused frequency to exceed 50.2Hz just before 20:00, then a TV pick up caused the frequency to drop to 49.8Hz six mins later. Constraint costs were mainly Voltage and ROCOF issues. Both were largely resolved via trades on interconnectors (ROCOF) and conventional generation (Voltage and ROCOF). Additional BM actions were required for some Voltage regions and minimal ROCOF areas. Constraint costs were incurred in South Wales for a large part of the afternoon and evening.

Date:

01/01/2018