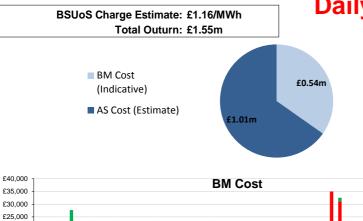


Date:

09/02/2018



£20,000

£15,000

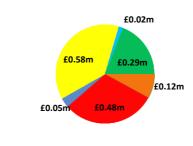
£10,000

£5,000

£0 -£5,000

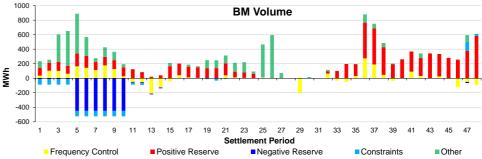
1 3 5

79



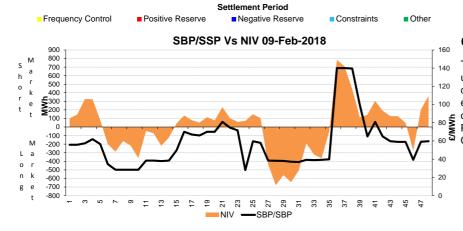
## Energy Imbalance

- Positive Reserve (Op Res + STOR + BM Start Up)
- Negative Reserve (Footroom)
- Frequency Control (Response + Fast Reserve)
- Constraints (BM & Trades only)
- Other (Reactive + Black Start + BM + AS General)



## Commentary

Tight margins were experienced during early morning due to large (>1,000MW) wind shortfalls. Additional units held on LF response, and HF reponse levels were also increased. Up to 700MW of STOR was required during the morning pick up to cover wind shortfall, however demand forecast error led to two frequency excursions (both at 50.22Hz). Later, for the darkness peak, 400MW of STOR was required, numerous optional SpinGen units were enacted for three hours and dynamic reponse levels were increased for Primary, Secondary and High. This was all to cover wind and demand uncertainty. Overnight trades were enacted on interconnectors for ROCOF and Negative Reserve reasons.



11 13 15 17 19 21 23 25 27 29 31

33 35 37 39

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43 45 47