

BSC OPERATIONS HEADLINE REPORT

In this report you will find commentary on BSC market operation, identification of key events and reporting of key data.

The <u>Trading Operations Report</u>
publishes key market data
graphically, giving a performance
indicator for the Balancing and
Settlement arrangements.

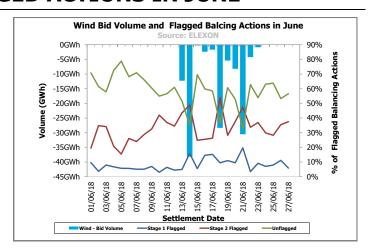
Trading Operations
Report <u>Data</u>. The graphs
and backing data are
available in Excel format
on the ELEXON website.

WIND BID VOLUME AND FLAGGED ACTIONS IN JUNE

A total of -132GWh of Wind Bid volume was accepted in June. This volume was all accepted during an 11-day period between 13 and 23 June. June 14, 18 and 21 had the highest proportion of the accepted Wind Bid volume, accounting for 73% of the total in June.

The average price of an accepted Wind Bid in June was -£72.09/MWh; 98.3% of these were Flagged as system balancing in June. Flagged actions are potentially re-priced in the System Price calculation.

The highest percentage of Second-Stage Flagged actions, across all fuel types, were taken on 14, 18 and 21 June. 53% of balancing actions on 18 June were Second-Stage Flagged and therefore re-priced.



TRADING CHARGES IN MAY1

Gross Party Imbalance cashflows were £108m in May 2018, a 6% decrease from £115m in April. Credits for being long, and debits for being short, decreased by £3m and £4m respectively between April and May.

Energy Imbalance Volumes for Parties that were long decreased by 2%, but increased by 10% for Parties that were short.

The **Offer** cashflow increased by 9% in May, with the volume of Offers also increasing by 9%. The average price per MWh of Offer volume decreased by 0.3% to £71.48/MWh.

Net **Bid** cashflow was -£11.8m in May, compared to -£9.3m in April. Bid cashflow decreased by 5% for positive Bids, and by 45% for negative Bids, compared to last month.

| Total Cashflow | May-18 | Apr-18 | Mar-18 | Feb-18 |
|-----------------------------------|--------|--------|--------|--------|
| Long Imbalance Charge (Credit) | -56.30 | -58.97 | -87.11 | -46.09 |
| Short Imbalance Charge (Debit) | 51.67 | 55.78 | 102.24 | 45.87 |
| RCRC Credit | 6.72 | 8.65 | 27.78 | 10.97 |
| RCRC Debit | -11.35 | -11.84 | -12.64 | -11.20 |
| Offer Cashflow | 37.38 | 34.23 | 59.45 | 36.49 |
| Bid Cashflow (Positive Bids) | -15.92 | -16.69 | -23.34 | -22.02 |
| Bid Cashflow (Negative Bids) | 4.08 | 7.39 | 3.52 | 2.12 |

Rid Volume

BALANCING MECHANISM VOLUMES IN MAY¹

The total volume of balancing actions taken in the Balancing Mechanism for May was 1,051GWh, a 4% decrease from April 2018. The majority (83%) of balancing volume came from Gas BMUs.

Accepted **Bid** volume decreased by 15% from last month. Wind volumes decreased by 49%, whilst Pumped Storage Bids decreased by 70%. In contrast, Biomass Bid volume increased by 67%. 81% of total Bid volume came from Gas, whilst Wind accounted for 10%.

Accepted **Offer** volume increased by 9% from April. Coal and Gas Offer volumes increased by 80% and 11% respectively, whilst Pumped Storage Offers decreased by 28%. In May, Coal and Pumped Storage accounted for a combined 13% of total Offers, with Gas Offers accounting for 84%.

| | (MWh) | | (MWh) | |
|-------------------|----------|----------|---------|---------|
| Fuel Type | May-18 | Apr-18 | May-18 | Apr-18 |
| Coal | -7,586 | -22,630 | 38,001 | 21,165 |
| Gas | -427,616 | -434,057 | 441,655 | 397,773 |
| Hydro | -4,296 | -8,713 | 4,021 | 4,765 |
| OCGT | 0 | 0 | 0 | 153 |
| Pumped Storage | -10,767 | -35,413 | 27,800 | 38,357 |
| Wind | -52,448 | -102,298 | 58 | 1,624 |
| Biomass | -25,455 | -15,221 | 11,371 | 13,792 |
| Grand Total | -528,168 | -618,332 | 522,906 | 477,630 |

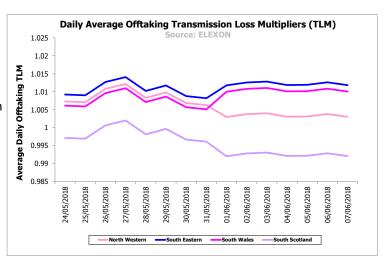
 $^{^{1}}$ Balancing volumes and trading charges appear as per the latest month with Initial Settlement (SF) run data available.

SEASONAL CHANGES IN OFFTAKING TLMS

This graph is an adaptation of "Daily Average Offtaking Transmission Loss Multiplier (TLM)" from the Trading Operations Report, with a number of GSP Groups removed. Following implementation of P350 'Introduction of a seasonal Zonal Transmission Losses

scheme' on 1 April 2018, TLMs vary by region and season. The change in Transmission Loss Factors (TLF) on 1 June, due to the change in season from Spring to Summer, has impacted TLMs in some regions more than others.

South Scotland and North Western regions have changed the most, showing a daily decrease of 0.41% and 0.33% in their average daily Offtaking TLMs (from 31 May to 1 June). Summer TLFs in these regions remain negative, so Suppliers should benefit from the lower TLMs. In contrast, TLMs in the South Eastern and South Wales regions have increased, by 0.36% and 0.49% respectively. The TLF for South Wales, which was negative in Spring, is now positive, increasing this region's average daily Offtaking TLMs.

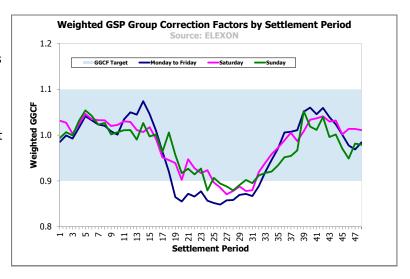


LOW GGCFS DURING DAYTIME SETTLEMENT PERIODS

This graph is an adaptation of "GSP Group Correction Factor (GGCF) by Settlement Period" from the Trading Operations Report. GGCF values usually range between 0.9 and 1.1, while values outside of this range may indicate an issue with metered volumes.

Lower than usual GGCFs can be seen in daytime Settlement Periods on weekdays and weekends in the last month. The data includes May and June Settlement Dates at the SF Settlement Run. ELEXON has investigated the lower than usual GGCFs and no issue has been seen with metered volumes.

Increased solar generation not accounted for by Non-Half Hourly profiles can lead to an overestimate of consumption. Lower GGCFs in daytime Settlement Periods therefore scale down suppliers volumes to match the GSP Group Take.



SYSTEM PRICES IN JUNE²

Monthly average System Prices for June were lower when short (4.3%), but higher when long (11.4%), compared to May 2018. The average System Price regardless of length was **£52.00/MWh**, which was 5% higher than last month. In June 2018, the market was long in 58%, and short in 42% of Settlement Periods.

System Prices exceeded £100/MWh a total of six times (over two Settlement Dates) in June 2018, compared to 37 times in May. The highest System Price of the month, £148.50/MWh, occurred in Settlement Period 34 on 4 June 2018. The price was set by an Offer from a Gas BMU priced at £148.50/MWh. The six prices exceeding £100/MWh in June occurred between Settlement Periods 33 and 37.

There was three Settlement Periods where the System Price was $\pounds 0/MWh$, and eight negative System Prices, in June.

The lowest System Price, **-£61.47/MWh**, occurred during Settlement Period 7 on 14 June. This price was set by a weighted average of negatively priced Bids from three Wind BMUs priced at -£63.51/MWh, and a Bid from a Biomass BMU priced at -£50/MWh.

| | Average | Average (£/MWh) | | Peak 07:00-19:00 | |
|--------------|-----------------|-----------------|-----------------|------------------|--|
| Period | Short System | Long System | Short System | Long System | |
| Jun-18 | 67.41 | 41.00 | 68.64 | 42.14 | |
| May-18 | 70.45 | 36.80 | 75.78 | 36.86 | |
| Apr-18 | 73.39 | 35.53 | 79.96 | 36.00 | |
| Summer 18 | 67.41 | 41.00 | 68.64 | 42.14 | |
| Spring 18 | 83.53 | 37.68 | 92.59 | 37.97 | |
| Winter 17/18 | 71.99 | 38.08 | 77.94 | 39.31 | |
| Autumn 17 | 67.00 | 32.68 | 72.19 | 34.44 | |
| Summer 17 | 65.87 | 25.10 | 72.67 | 25.42 | |
| Jun-17 | 66.01 | 22.81 | 73.06 | 23.35 | |

Average (£/MWh)

² System prices are based on the previous month's Interim Information (II) run data.