



BSC OPERATIONS HEADLINE REPORT

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

2 The [Trading Operations Report](#) publishes key market data graphically, giving a performance indicator for the Balancing and Settlement arrangements.

3 Trading Operations Report [Data](#). The graphs and backing data are available in Excel format on the ELEXON website.

REPORTING ON IMBALANCE VOLUME AND CASHFLOW¹

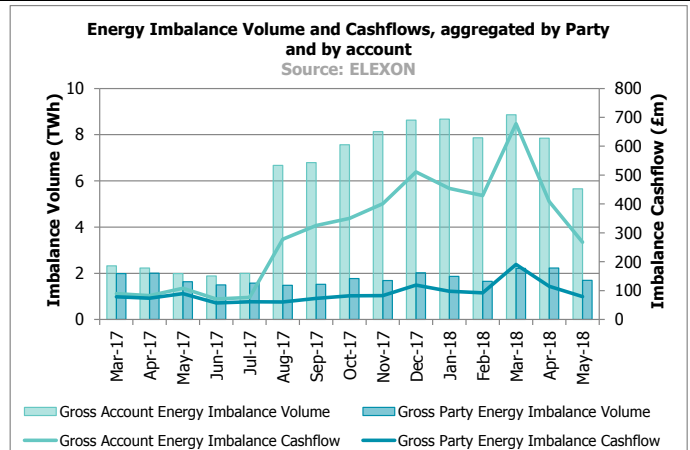
ELEXON is improving how Imbalance Volume and Cashflow are reported in the [Trading Operations Report](#) (TOR) from June 2018 onwards, in response to changes in BSC Parties trading behaviours since the implementation of [BSC Modification P305](#) in November 2015. Imbalance Volumes and Cashflow are reported in graphs 4.01, 5.01 and 5.02 of the TOR.

This graph shows the difference in Volume and Cashflow when an absolute sum of the data is taken on an Account and a Party level. The increase in account volumes from August 2017 is due to one vertically integrated Party no longer balancing energy in the same account. This was reported in the [BSC Operations Headline Report](#) produced in September 2017.

All BSC Parties have a [Production account and a Consumption account](#). Since the implementation of BSC Modification P305, System Buy and Sell Prices are identical. Parties no longer need to balance their volumes in the same Energy Account to avoid Imbalance Cashflow. Trading Charges are calculated at Party level, so any account level imbalances will net off, leaving any remaining overall imbalance.

Imbalance Volume and Cashflows were previously aggregated as an absolute sum of Energy Imbalance Volume/Cashflow in each account, for every Settlement Period (referred to as Gross Account Energy Imbalance Volumes/Cashflows). In future, the TOR will report Imbalance Volumes and Cashflows that are calculated at a Party level, by taking the net position in the two accounts for each Party, in a Settlement Period, before calculating the absolute sum across all Parties.

The gross Account Imbalance Cashflow in April is 406.97MWh, compared to 114.75MWh for the gross Party Imbalance Cashflow. Compared to March, this is a 39.5% reduction in Account Imbalance Cashflow and a 39.4% reduction in Party Imbalance Cashflow. The reporting of Bid and Offer Cashflow is unchanged, with Offer Cashflow decreased by 42% while Offer volume decreased by 14%. Net Bid Cashflow was -£9.3m in April 2018, a 53% decrease from March.



Total Cashflow (£m)	Apr-18	Mar-18	Feb-18	Jan-18
Gross Party Imbalance Cashflow	114.75	189.35	91.96	97.29
Gross Account Imbalance Cashflow	406.97	672.99	428.17	449.05
RCRC Credit	8.65	27.78	10.97	11.43
RCRC Debit	-11.84	-12.64	-11.20	-10.49
Offer Cashflow	34.23	59.45	36.49	53.65
Bid Cashflow (Positive Bids)	-16.69	-23.34	-22.02	-23.14
Bid Cashflow (Negative Bids)	7.39	3.52	2.12	6.61

BALANCING MECHANISM VOLUMES IN APRIL¹

The total volume of balancing actions taken in the Balancing Mechanism for April was 1,096GWh, a 9% decrease from March 2018. The majority (76%) of balancing volume came from Gas BMUs.

Accepted **Bid** volume decreased by 5% from last month. Wind volumes more than doubled, increasing by 104%, whilst Gas Bid rose by 10%. In contrast, Coal Bid volume decreased by 86%. 70% of total Bid volume came from Gas, whilst Wind accounted for 17%.

Accepted **Offer** volume decreased by 14% from March. Coal and Gas Offer volumes decreased by 76% and 6% respectively, whilst Pumped Storage Offers increased by 0.6%. In April, Pumped Storage accounted for 8% of total Offers, with Gas Offers accounting for 83%.

Fuel Type	Bid Volume (MWh)		Offer Volume (MWh)	
	Apr-18	Mar-18	Apr-18	Mar-18
Coal	-22,630	-163,791	21,165	87,290
Gas	-434,057	-396,277	397,773	423,824
Hydro	-8,713	-5,774	4,765	2,394
OCGT	0	0	153	1,989
Pumped Storage	-35,413	-37,378	38,357	38,122
Wind	-102,298	-50,220	1,624	548
Biomass	-15,221	-614	13,792	0
Grand Total	-618,332	-654,054	477,630	554,167

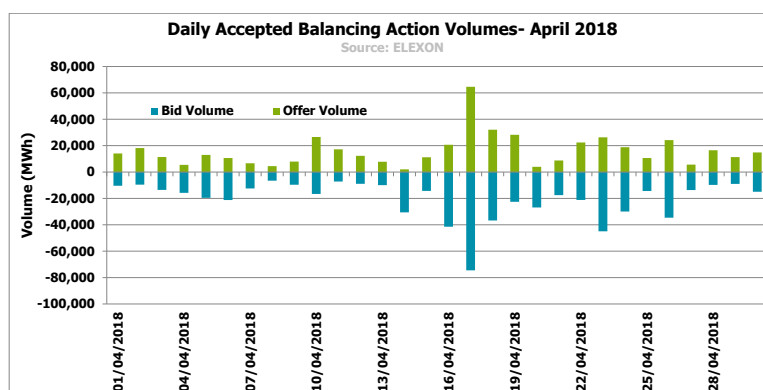
¹ Balancing volumes and trading charges appear as per the latest month with Initial Settlement (SF) run data available.

HIGH VOLUME OF BALANCING ACTIONS – 17 APRIL 2018

17 April 2018 had the highest level of Accepted Offer volumes for Gas this month, and also had the highest Accepted Bid volumes for Hydro, Wind and Pumped Storage BM Units. Of the 1,096GWh of total balancing actions in April, 13% were taken on 17 April. The highest System Price on this day was £76.95/MWh in Settlement Periods 41 and 42, and the lowest System Price was £12.27/MWh in Settlement Period 48.

47% of balancing actions on 17 April were Second-Stage Flagged, and therefore were re-priced in the System Price calculation. This was the highest percentage of Second-Stage Flagged actions on any day in April.

If all of the actions in the price stack are unpriced, then the Replacement Price will be set by the Market Index Price (MIP), and consequently the System Price would be set by the MIP. This occurred in 31 Settlement Periods in April 2018, with the MIP setting the System Price in 13 Settlement Periods on 17 April.



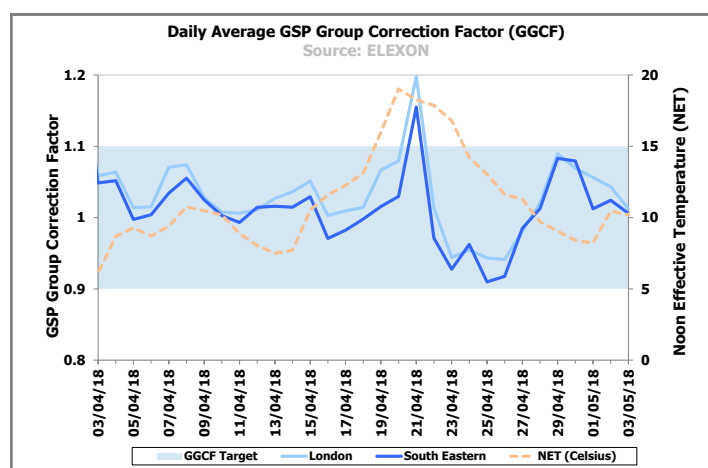
HIGH GSP GROUP CORRECTION FACTORS

This graph is an adaptation of "Daily Average GSP Group Correction Factor (GGCF)" from the TOR (graph 9.03).

GGCF values usually range between 0.9 and 1.1, while values outside of this range may indicate an issue with metered volumes. In addition, extreme temperatures may also affect GGCFs.

With Noon Effective Temperature (NET) rising up to 18°C on 21 April 2018 (5.4°C higher than the 10-year average for this date), GGCFs in London and South Eastern areas spiked at 1.19 and 1.15 respectively (as shown in the graph).

ELEXON believes that high temperatures led to less accurate profile coefficients, and as such, incorrect estimation of total GSP Group consumption. Due to the higher temperature, the estimated consumption was under accounted by approximately 5GWh in London and 4GWh in the South East.



SYSTEM PRICES IN MAY²

Monthly average System Prices for May were lower when short (4.0%), but higher when long (3.6%), compared to April 2018.

The average System Price regardless of length was **£49.51/MWh**, which was 2% lower than last month. In May 2018, the market was long in 62%, and short in 38% of Settlement Periods.

System Prices exceeded £100/MWh 37 times in May 2018 compared to 49 times in April) across 15 different days. The highest System Price of the month, **£158/MWh**, occurred in Settlement Periods 42 and 43 on 20 May 2018. These prices were set by an Offer from a Gas BMU priced at £158/MWh.

There was one Settlement Period where the System Price was £0/MWh, and four negative System Prices, in May.

The lowest System Price, **-£71.33/MWh**, occurred during Settlement Period 17 on 4 May. This price was set by negatively priced Bids from two Wind BMUs and a Balancing Services Adjustment Action.

Period	Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
	Short System	Long System	Short System	Long System
May-18	70.45	36.80	75.78	36.86
Apr-18	73.39	35.53	79.96	36.00
Mar-18	102.98	41.02	114.55	41.52
Spring 18	83.53	37.68	92.59	37.97
Winter 17/18	72.05	38.01	77.97	39.14
Autumn 17	67.00	32.68	72.19	34.44
Summer 17	65.87	25.10	72.67	25.42
Spring 17	69.15	28.58	80.98	28.12
May-17	67.38	29.48	81.94	29.10

² System prices are based on the previous month's Interim Information (II) run data. Where no II data exists for the Settlement Day indicative data have been used.