

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.

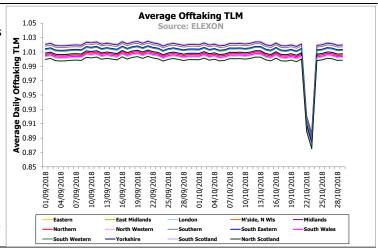
Trading Operations
Report <u>Data</u>. The graphs
and backing data are
available in Excel format
on the ELEXON website.

INCORRECT TLMS AT THE INTERIM INFORMATION (II) RUN

On the 22 and 23 October 2018, an issue with the collection of Metered Volumes for a number of BM Units has affected the accuracy of the Transmission Loss Multipliers (TLM). The TLM data used in the Interim Information (II) Settlement Runs for these dates is less accurate than normal for Parties with Non-Interconnector BM Units. Note that the II Settlement Run has no financial Settlement and is for information only.

All outstanding Metered data has been retrospectively collected by the Central Data Collection Agent. The Metered Volumes and TLMs will be corrected in the next Settlement Run, the Initial Settlement Run (SF).

For more information, please see ELEXON Circular <u>EL02903</u>.

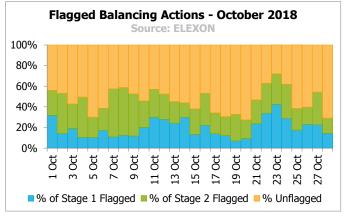


FLAGGED BALANCING ACTIONS ON 23 OCTOBER 2018

72% of balancing actions were Flagged in the System Price calculation on 23 October 2018. This is the highest percentage of Flagged balancing actions on a day in the past three years. A total of 134GWh of balancing actions were taken on this date.

42% of actions were Stage 1 Flagged and retained their initial price. 30% of balancing actions were Stage 2 Flagged and lost their initial price. Note these are all accepted balancing actions – only a proportion of these will feed through to the final price.

91% of Sell actions (Bids and Sell Balancing Services Adjustment Actions) were Stage 1 Flagged; 45% of these were from Wind BMUs. The average initial price of a Flagged Wind Sell action was -£70.50/MWh.



TRADING CHARGES IN SEPTEMBER¹

Gross Party Imbalance cashflows were £122m in September 2018, a 16% increase from £105m in August. Credits for being long increased by £6.5m and debits for being short increased by £10.3m between August and September.

Energy Imbalance Volumes increased by 8% for Parties for that were long in September, and by 9% for those that were short.

Offer cashflow rose by 109% in September, with the volume of Offers increasing by 88% compared to August. The average price per MWh of Offer volume increased by 11% to £89.57/MWh.

Net **Bid** cashflow was £8.7m in September, compared to -£7.1m in August. Bid cashflow increased by 245% for negative Bids compared to last month.

Total Cashflow (£m)	Sep-18	Aug-18	Jul-18	Jun-18
Long Imbalance Charge (Credit)	-60.16	-53.64	-51.79	-45.55
Short Imbal- ance Charge	61.84	51.49	51.65	43.67
RCRC Credit	13.19	8.63	9.02	6.64
RCRC Debit	-11.51	-10.78	-9.16	-8.51
Offer Cashflow	92.82	44.44	48.56	47.00
Bid Cashflow (Positive Bids)	-20.39	-15.49	-15.35	-16.78
Bid Cashflow (Negative Bids)	29.09	8.43	9.56	9.51

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

BALANCING MECHANISM VOLUMES IN SEPTEMBER¹

The total volume of balancing actions taken in the Balancing Mechanism for September was 2,023GWh, a 90% increase from August 2018. This represented the highest total volume since the winter of 2015/16. The majority (64%) of balancing volume in September came from Gas BMUs.

Accepted **Bid** volume increased by 91% from last month. Gas, Pumped Storage and Wind Bid volumes increased by 24%, 78% and 281% respectively. Gas Bid volume accounted for 43% of total Bid volume, compared to 67% last month.

The graph displays the monthly volumes of balancing actions since 2017. The 2,023GWh of balancing actions seen in September was the highest across this time period.

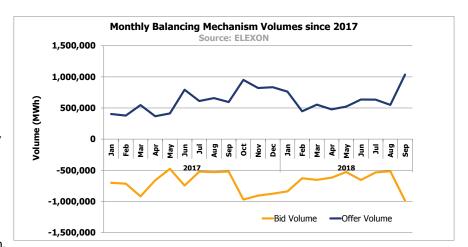
	Bid Volume (MWh)		Offer Volume (MWh)	
Fuel Type	Sep-18	Aug-18	Sep-18	Aug-18
Coal	-52,675	-12,823	113,857	14,248
Gas	-428,268	-346,721	870,794	473,654
Hydro	-47,088	-7,699	1,499	5,627
OCGT	0	0	582	4,468
Pumped Storage	-57,406	-32,170	35,192	47,155
Wind	-386,514	-101,382	1,547	606
Biomass	-15,242	-15,460	12,818	4,573
Grand Total	-987,193	-516,255	1,036,290	550,331

The high total volume of balancing actions in September were driven by the highest volume of accepted Wind Bid volume in a month, with -386,514MWh in September 2018. Since January 2017, an average of -109,857MWh Bid volume is accepted each

month. Wind represented 39% of total accepted Bid volume in September, compared to an average of 16% since January 2017.

Accepted **Offer** volume increased by 88% from August 2018. Gas Offer volumes increased by 84%, whilst Coal Offer volumes increased by 699%. In September, Coal and Pumped Storage accounted for a combined 14% of total Offers, with Gas Offers accounting for 84%.

870,794MWh of Gas Offer volume was accepted in September 2018. The monthly average since January 2017 is 462,716MWh.



SYSTEM PRICES IN OCTOBER²

Monthly average System Prices for September were higher when short (1.5%), but lower when long (1.2%), compared to September 2018. The average System Price regardless of length was **£63.25/MWh**, which was 1% higher than last month. In October 2018 the market was long in 54%, and short in 46%, of Settlement Periods.

System Prices exceeded £100/MWh a total of 69 times in October 2018, compared to 45 times in September. The highest System Price of the month, £170.73/MWh, occurred in Settlement Period 21 on 14 October 2018. The price in this Settlement Period was set by Offers from a Pumped Storage and CCGT BMU, priced at £175/MWh and £158/MWh respectively.

There were three Settlement Periods where the System Price was £0/MWh, and 13 negative System Prices, in October. The 13 negative System Prices occurred across four different days.

The lowest System Price, **-£64.66/MWh**, occurred during Settlement Period 10 on 12 October. This was set by Bids from six Wind BMUs all priced at -£64.66/MWh.

Three elements of the System Price Calculation will change from November 2018 with the implementation of the final part of Approved BSC Modification P305.

The parameter changes are: Price Average Reference (PAR) reducing from 50MWh to 1MWh, Value of Lost Load (VoLL) increasing from £3,000/MWh to £6,000/MWh and Loss of Load Probability (LoLP) calculation changing from a 'static' function to a 'dynamic' function.

	Average	Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
Period	Short System	Long System	Short System	Long System	
Oct-18	83.92	45.61	87.77	49.07	
Sep-18	82.71	46.15	85.63	48.07	
Aug-18	78.68	42.85	83.14	43.46	
Autumn 18	83.34	45.88	86.87	48.53	
Summer 18	73.46	42.02	76.60	42.52	
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	
Oct-17	67.41	29.45	72.26	31.21	