



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.

HIGHEST COAL BID VOLUME OF 2019

Bids are balancing actions taken by the National Electricity Transmission System Operator (NETSO) to reduce the amount electricity being generated on the GB network. Around 66% of Bid volume in 2019 has come from Gas BMUs, with Wind BMUs providing 21%. In contrast, Coal BMUs have provided, on average, just 3% of total Bid volume this year so far.

On 22 October, Coal BMUs contributed 15% of Bid volume, with 10GWh of coal Bids accepted; the highest volume seen in 2019. The table to the right shows the five days this year where Coal Bid volumes were highest. The average initial price of the 122 Coal Bids accepted on 22 October were £20.97/MWh, with all accepted Bids relating to just two BM Units.

Of the Coal Bids accepted on this day, 58 (48%) were taken for system rather than energy balancing reasons and were therefore System Operator (SO) Flagged.

On the same day, 1,161 Wind BMU Bids were accepted, all of which were SO Flagged. All these accepted Bids had a negative initial price, with the an average price of -£72.27/MWh. A negative Bid price means Wind BMUs were paid to decrease output.

Five Highest Daily Coal Bid Volumes in 2019

Settlement Date	Coal Bid Volume (MWh)
22-Oct-19	10,107
18-Jan-19	8,591
11-Jan-19	8,180
21-Jan-19	6,641
03-Jan-19	6,492

Fuel	Total Bid Volume (MWh)	Average Bid Price (£/MWh)	% SO flagged
CCGT	40,665	15.27	8%
Wind	14,982	-72.27	100%
Coal	10,107	20.97	48%
Pumped Storage	3,203	-1.22	80%
BSAA	2,714	-4.26	100%
Hydro	563	-32.35	100%
Other	282	-71.69	84%

Only 8% and 48% of accepted Bids from CCGT and Coal BMUs were SO Flagged, compared to 100% for Wind, BSAA and Hydro. When a Bid is SO Flagged, it may be repriced.

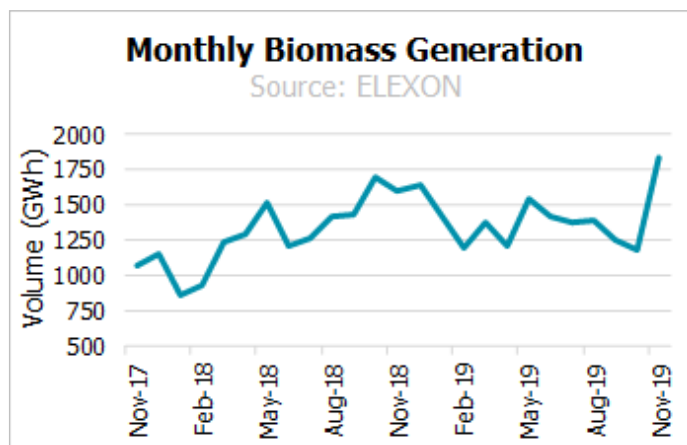
This means the more expensive actions from Wind BM Units were more likely to be repriced at a lower price for the Imbalance Price calculation, dampening their effect. As such, the average Imbalance Price on 22 October (R1 run) was £29.90/MWh.

HIGHEST MONTHLY BIOMASS GENERATION IN NOVEMBER¹

[BSC Modification P336](#) was raised by Drax Power Limited in February 2016, resulting in Biomass being recognised as a separate fuel type category by ELEXON from 2 November 2017. This change also allowed the Panel to approve further fuel types without needing to raise a modification. Since Biomass has been categorised as its own fuel type, generation output has grown each year; this year it has the fourth highest level of generation output after CCGT, Nuclear and Wind.

In November 2019, transmission connected Biomass BMUs generated 1,841GWh of electricity; the highest monthly Biomass generation volume on record. The previous Biomass generation record, set in October 2018, was almost 200GWh lower at 1,643GWh.

The higher Biomass generation seen in November 2019 offsets the lower Wind generation seen, as this fell to 4,025GWh this month - almost 800GWh lower than the same month last year (4,817GWh).



¹ Generation data is taken from the ELEXON Portal from the [Historic Fuel HH](#) webpage.

SYSTEM PRICES IN NOVEMBER 2019²

Monthly average System Prices for November 2019 were higher when the market was short (14%) and long (40%), compared to October 2019. The average System Price regardless of length was **£43.88/MWh**; 20% higher than last month and the highest since February 2019.

System Prices exceeded £100.00/MWh on 11 occasions in November, compared to two occasions in October. The highest System Price of the month, **£142.53/MWh**, occurred in Settlement Periods 35, 36 and 37 on 6 November. The price was set by Offers from an OCGT BM Unit at a price of £123.00/MWh with a Buy Price Price Adjuster (BPA) of £19.53/MWh. The BPA is a reflection of the costs to the System Operator of regulating reserve and BM start-up.

There were two negative System Prices in November, compared to seven in October. The lowest System Price, **-£25.00/MWh**, occurred in Settlement Period 2 on 11 November 2019. The price was set by 11 Bids from a single Pumped Storage BM Unit.

Period	Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
	Short Sys-tem	Long Sys-tem	Short Sys-tem	Long Sys-tem
Nov-19	60.32	24.19	65.41	27.62
Oct-19	52.93	17.33	54.88	19.80
Sep-19	53.33	16.38	55.64	17.52
Autumn 19	55.53	19.30	58.64	21.65
Summer 19	56.72	24.94	59.81	26.71
Spring 19	59.77	28.26	62.85	28.22
Winter 18/19	79.64	42.31	85.94	44.31
Autumn 18	82.75	45.80	86.62	48.39
Nov-18	81.59	45.63	86.16	48.07

BALANCING MECHANISM VOLUMES IN OCTOBER 2019³

The total volume of balancing actions taken in the Balancing Mechanism (BM) for October 2019 was 2,231GWh, a 32% increase from September 2019. The majority (76%) of balancing volume in October came from Gas BMUs. The total volume of balancing actions was 55% higher than the same month in 2018.

Accepted **Bid** volume in October increased by 45% from last month. 64% of total Bid volume came from Gas BMUs, with 23% coming from Wind and 6% from Pumped Storage. Coal Bid volume in October increased by 33.3GWh (4,097%) compared to September, and accounted for 3% of Bid volume this month. This is the highest level of Bid Volume contribution from Coal generation since February 2019, when it accounted for 5%.

Accepted **Offer** volume in October increased by 22% compared to the previous month. Gas accounted for 88% of all Offer volume, with Pumped Storage responsible for a further 9%. Coal Offer volume decreased by 35% compared to September 2019, and accounted for 1% of total Offer volume.

Fuel Type	Bid Volume (MWh)		Offer Volume (MWh)	
	Oct-19	Sep-19	Oct-19	Sep-19
Coal	-34,131	-813	13,110	20,156
Gas	-722,310	-538,927	973,253	845,734
Hydro	-29,719	-25,555	3,994	5,350
OCGT	0	0	5,188	1,204
Pumped Storage	-64,392	-54,979	100,921	28,233
Wind	-264,921	-147,761	1,398	467
Biomass	-13,637	-13,677	722	3,024
Other	-1,928	-338	1,734	288
Grand Total	-1,131,039	-782,050	1,100,320	904,456

TRADING CHARGES IN OCTOBER 2019³

Gross Party Imbalance cashflows were £86m in October 2019, an increase of 19% from September. Debits for being short increased by £9.3m, and credits for being long increased by £4.5m, between September and October 2019.

Gross Party Imbalance Volumes increased by 4% from September to October 2019. Energy Imbalance Volumes for Parties that were long increased by 10% this month, compared to September, whilst Energy Imbalance Volumes for Parties that were short fell by 1%.

October **Offer** volume and cashflow increased by 22% and 30% respectively compared to the previous month. The average price of Offers increased by £3.97/MWh to £65.24/MWh this month.

Net **Bid** cashflow in October was £11.67m, compared to £5.33m in September. This means payment received by Parties for negative Bids were higher than payments received for positive Bids.

Total Cashflow (£m)	Oct-19	Sep-19	Aug-19	Jul-19
Long Imbalance Charge (Credit)	-38.45	-33.99	-36.55	-41.18
Short Imbalance Charge (Debit)	47.10	37.78	37.75	41.64
RCRC Credit	11.55	7.10	6.04	6.25
RCRC Debit	-2.89	-3.30	-4.84	-5.79
Offer Cashflow	71.78	55.41	59.67	37.17
Bid Cashflow (Positive Bids)	-10.15	-7.53	-9.10	-12.74
Bid Cashflow (Negative Bids)	21.82	12.86	12.27	3.90

² System prices are based on the previous month's latest Initial Settlement (SF) & Interim Information (II) run data available.
³ Balancing volumes and trading charges appear as per the latest month with Initial Settlement (SF) run data available.