



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.

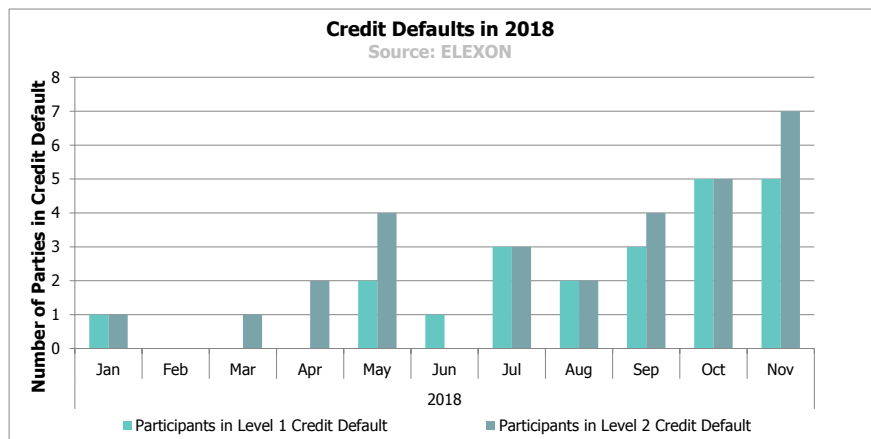
3 Trading Operations Report [Data](#). The graphs and backing data are available in Excel format on the ELEXON website.

HIGH NUMBER OF PARTIES IN CREDIT DEFAULT

In November, five BSC Parties were in both Level 1 and Level 2 Credit Default. Four of these had been in Level 1 and Level 2 Credit Default for a period of time in October. An additional two BSC Parties entered Level 2 Credit Default this month. Credit Default Notices are posted on the BM Reports website and alerts can be set up via the ELEXON Portal.

The Credit Default processes are triggered when a Party's Credit Cover Percentage (CCP) exceeds a given threshold. The Level 1 Credit Default process is triggered when the CCP exceeds 80% and the Level 2 Credit Default process is triggered when the CCP exceeds 90%. Parties always receive a consequence free period of at least 24 hours to resolve their Credit Default once the process is initially triggered.

In total there have been 30 instances of Credit Default for 20 different BSC Parties in 2018, compared to eight instances for seven different BSC Parties in 2017.



If a BSC Party is in Level 2 Credit Default with a CCP which exceeds 100%, and is unable to exit Level 2 Credit Default after two working days, they will be in Default under BSC Section H. This occurred on three occasions during November.

Section H Defaults are reported to the BSC Panel who, in the event of a Default, are able to set resolutions to limit the impact on other BSC Parties. If the BSC Panel resolves to notify other BSC Parties of a Section H Default, an ELEXON Circular will be issued.

SYSTEM PRICES IN NOVEMBER¹

Monthly average System Prices for November were lower when short (2.8%), but similar when long, compared to October 2018. The average System Price regardless of length was **£62.14/MWh**, which was 2% lower than last month. In November 2018 the market was long in 54%, and short in 46%, of Settlement Periods.

System Prices exceeded £100/MWh a total of 48 times in November 2018, compared to 69 times in October. The highest System Price of the month, **£191.37/MWh**, occurred in Settlement Periods 35 and 36 on 26 November 2018. The price in these Settlement Periods were set by Buy Balancing Services Adjustment Actions (BSAAs) priced at £191.37/MWh.

There were three Settlement Periods where the System Price was £0/MWh, and four negative System Prices, in November.

The lowest System Price, **-£50/MWh**, occurred during Settlement Periods 8 and 26 on 19 November, and in Settlement Period 48 on 29 November. These prices were set by Bids from CCGT or Pumped Storage BMUs all priced at -£50/MWh.

Three parameters in the System Price Calculation changed from November 2018 with the implementation of the final part of [Approved BSC Modification P305](#). These were: 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.

Period	Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
	Short System	Long System	Short System	Long System
Nov-18	81.59	45.63	86.16	48.07
Oct-18	83.92	45.61	87.77	49.07
Sep-18	82.71	46.15	85.63	48.07
Autumn 18	82.75	45.80	86.62	48.39
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
Nov-17	64.79	37.04	70.61	38.36

¹ System prices are based on the previous month's Interim Information (II) run data.

HIGHEST WIND GENERATION ON RECORD IN NOVEMBER 2018

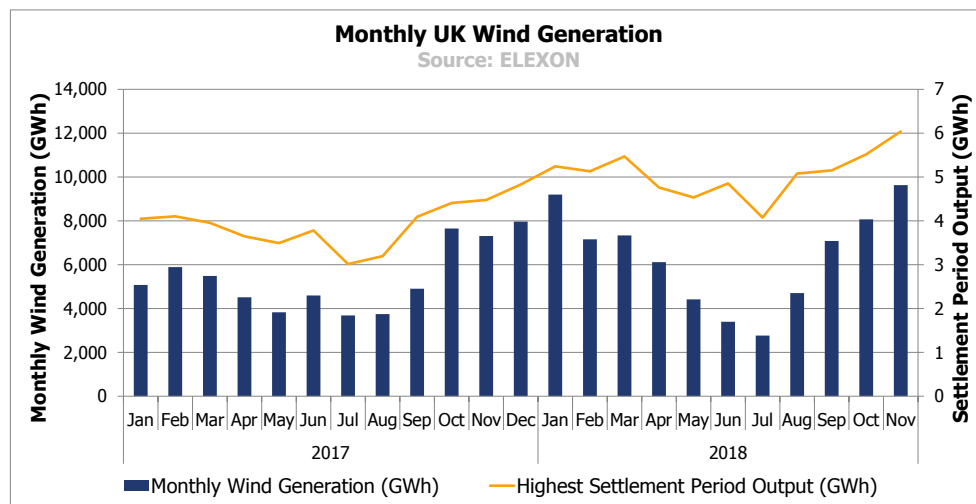
UK wind generation hit a record high in November 2018, with total monthly generation reaching 9,634GWh². This surpassed the previous highest generation total of 9,196GWh in January 2018 by 4.8%, and is 31.8% higher than November 2017.

Output in a Settlement Period also hit an all-time record reaching 6.0GWh in Settlement Period 23 on 28 November 2018. In this Settlement Period, wind accounted for 30.7% of total generation, and was the highest generation type in the UK fuel mix. The system was short, with a System Price of £78/MWh set by an Offer from a Gas BM Unit.

On six days throughout November (3, 9, 14, 28, 29 and 30) wind was the highest generation type. November was the first month of 2018 that wind generation became the second highest generation type after gas, overtaking nuclear.

Wind accounted for 19.6% of total generation in the UK fuel mix this month, with gas accounting for 38.3% and nuclear 18.0%.

Between January and October 2018, wind generation averaged 13.2% of monthly total generation.



BALANCING MECHANISM VOLUMES IN OCTOBER³

The total volume of balancing actions taken in the Balancing Mechanism for October was 1,438GWh, a 29% decrease from September 2018. The majority (72%) of balancing volume in October came from Gas BMUs.

Accepted **Bid** volume decreased by 21% from last month. Wind Bid volumes decreased by 73%, whilst Gas and Coal Bid volume increased by 12% and 147% respectively. Gas Bid volume accounted for 61% of total Bid volume, compared to 43% last month.

Accepted **Offer** volume decreased by 36% from September 2018. Gas, Coal and Pumped Storage Offer volumes decreased by 37%, 38% and 10% respectively. In October, Coal and Pumped Storage accounted for a combined 16% of total Offers, with Gas Offers accounting for 84%.

Fuel Type	Bid Volume (MWh)		Offer Volume (MWh)	
	Oct-18	Sep-18	Oct-18	Sep-18
Coal	-129,931	-52,675	70,896	113,857
Gas	-478,930	-428,268	552,594	870,794
Hydro	-21,362	-47,088	1,364	1,499
OCGT	0	0	1,173	582
Pumped Storage	-33,704	-57,406	31,600	35,192
Wind	-105,729	-386,514	316	1,547
Biomass	-10,020	-15,242	833	12,818
Grand Total	-779,674	-987,193	658,776	1,036,290

TRADING CHARGES IN OCTOBER³

Gross Party Imbalance cashflows were £152m in October 2018, a 25% increase from £122m in September. Credits for being long and debits for being short both increased by £15m between September and October.

Energy Imbalance Volumes increased by 24% for Parties for that were long in October, and by 15% for those that were short.

Offer cashflow fell by 6% in October, with the volume of Offers decreasing by 4% compared to September. The average price per MWh of Offer volume decreased by 2% to £87.87/MWh.

Net **Bid** cashflow was £0.5m in October, compared to £8.7m in September. Bid cashflow for negative Bids decreased by 10% compared to last month.

Total Cashflow	Oct-18	Sep-18	Aug-18	Jul-18
Long Imbalance Charge (Credit)	-75.27	-60.16	-53.64	-51.79
Short Imbalance Charge (Debit)	77.02	61.84	51.49	51.65
RCRC Credit	13.81	13.19	8.63	9.02
RCRC Debit	-12.07	-11.51	-10.78	-9.16
Offer Cashflow	87.58	92.82	44.44	48.56
Bid Cashflow (Positive Bids)	-25.68	-20.39	-15.49	-15.35
Bid Cashflow (Negative Bids)	26.19	29.09	8.43	9.56

² Wind generation volumes are based on operational metered data, which currently has a total wind capacity of 12.1GW.

³ Balancing volumes and trading charges appear as per the latest month with Initial Settlement (SF) run data available.