



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.

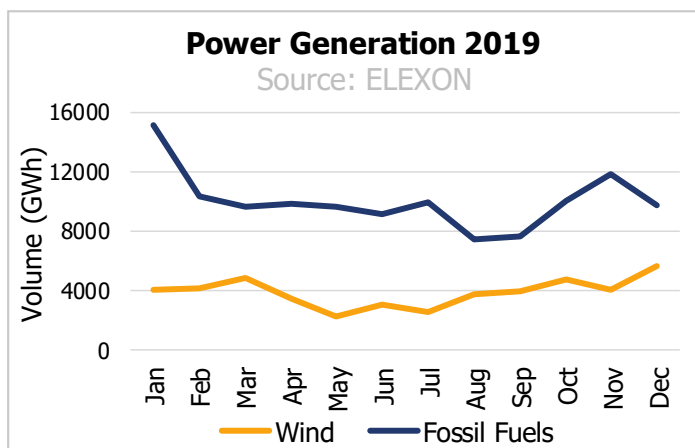
3 Trading Operations Report [Data](#). The graphs and backing data are available in Excel format on the ELEXON website.

WIND GENERATION RECORD AS FOSSIL FUELS DECLINE¹

In December 2019, Wind generated produced a monthly total of 5,613GWh for the GB Market; the largest monthly total for Wind in 2019. Wind contributed 23% of GB electricity on average throughout December 2019, and exceeded 40% of total generation on 8 days in the month.

As Wind generation increased, GB dependency on electricity from fossil fuels decreased. Fossil fuels produced 9,729GWh of electricity in December 2019, and had its lowest average share of GB electricity generation (37%) on record. December 2019 fossil fuel electricity production was 2,081GWh less than November 2019, and 2,146GWh less than December 2018.

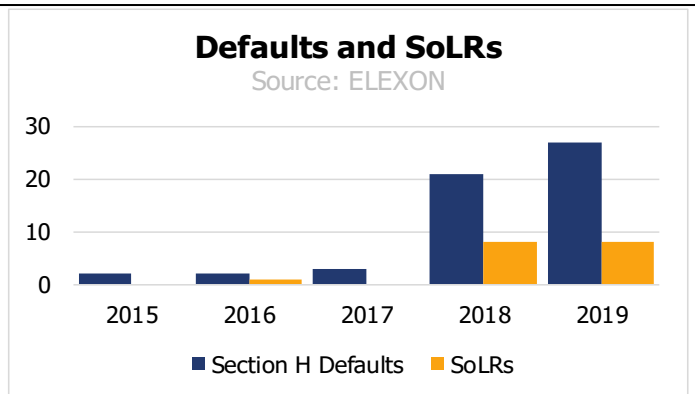
The curtailment of wind contributes 82% of negatively priced Bid volume. With generation being so high during December, it is unsurprising there was a new record set for the longest continuous period of negatively priced System Prices between the 7 and 8 December. You can read more about this in the [ELEXON Insight: Sub-zero electricity prices in December](#) article.



SUPPLIER OF LAST RESORT APPOINTED IN DECEMBER

On the 19 December 2019, the BSC Panel agreed to suspend Breeze Energy Supply Ltd (Party ID BREEZE) regarding the objectives under BSC Section B1.2.1 (see circular [EL03086](#) for further details). Two days later on the 21 December 2019, Ofgem confirmed that British Gas Trading Ltd (Party ID BRITGAS) had been chosen as the Supplier of Last Resort (SoLR) for Breeze Energy's 18,000 customers.

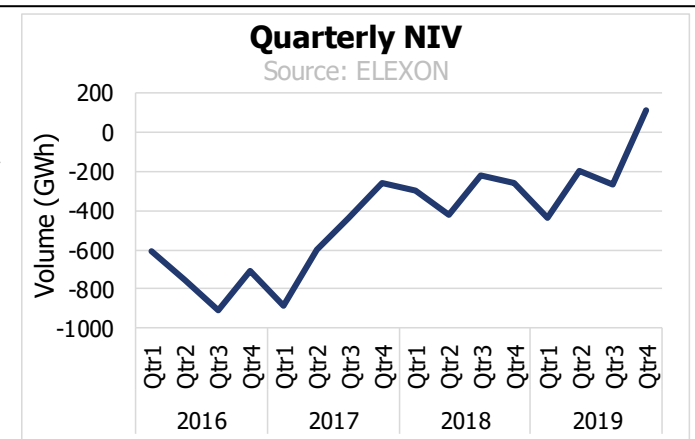
The suspension of Breeze Energy in December brought the total number of SoLR assigned in 2019 to eight; the same number of SoLRs as were assigned in 2018. 27 Section H Defaults occurred in 2019, the highest annual total ever seen.



SHORTEST NIV QUARTER SINCE P305 IMPLEMENTATION²

The Net Imbalance Volume (NIV) is the volume of the overall System energy imbalance, as a net of all system and energy balancing actions (including BSAD) taken by the Transmission Company for the Settlement Period. During Q4 2019, the volume of Offers taken to increase the energy on the system outweighed the volume of Bids to reduce the amount of energy on the System by 115GWh; the shortest quarterly NIV since P305 was implemented on 5 November 2015.

The quarterly NIV has not been positive (short) since the implementation of BSC Modification P305, which changed various aspects of the Imbalance Price calculation. This is consistent with the shift in NIV from negative to positive. The average quarterly NIV in 2019 was -195GWh compared to average quarterly NIVs of -742GWh, -544GWh and -299GWh seen in 2016, 2017 and 2018 respectively.



¹ Generation data is taken from the ELEXON Portal from the [Historic Fuel HH](#) webpage.
² Net Imbalance Volume data is taken from the ELEXON Portal from the [SSP/SBP/NIV](#) file.

SYSTEM PRICES IN DECEMBER 2019³

Monthly average System Prices for December 2019 were lower when the market was both short (4%) and long (41%), compared to November 2019. The average System Price regardless of length was **£38.48/MWh**; 12% lower than last month.

System Prices exceeded £100.00/MWh on 10 occasions in December, compared to 11 occasions in November. The highest System Price of the month, **£160.00/MWh**, occurred in Settlement Period 34 on 9 December. The price was set by eight Offers from a Pumped Storage BM Unit at a price of £160.00/MWh.

There were 28 negative System Prices in December, compared to two in November. December 2019 had the highest monthly total of negative System Prices since the implementation of [BSC Modification P305](#), which introduced a single Imbalance Price. 26 of the negative System Prices in December occurred in the period from Settlement Period 47 on 7 December to Settlement Period 25 on 8 December. This included 22 consecutive Settlement Periods with a negative System Price; the longest continuous period (11 hours) with negative System Prices seen since [BSC Modification P305](#) was introduced in November 2015.

You can read more about this in the [ELEXON Insight: Sub-zero electricity prices in December](#) article on our website.

The lowest System Price, **-£88.00/MWh**, occurred in Settlement Periods 9 and 10 on 8 December 2019. The price was set by ten Bids in each Settlement Period, all priced at -£88.00/MWh.

Period	Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
	Short System	Long System	Short System	Long System
Dec-19	57.74	14.33	62.29	16.91
Nov-19	60.32	24.19	65.41	27.62
Oct-19	52.93	17.33	54.88	19.80
Winter 19/20	57.74	14.33	62.29	16.91
Autumn 19	55.53	19.30	58.64	21.65
Summer 19	56.72	24.94	59.81	25.06
Spring 19	59.77	28.26	62.85	28.22
Winter 18/19	79.64	42.31	85.94	44.31
Dec-18	83.95	45.39	89.01	49.38

BALANCING MECHANISM VOLUMES IN NOVEMBER 2019⁴

The total volume of balancing actions taken in the Balancing Mechanism (BM) for November 2019 was 1,638GWh, a 27% decrease from October 2019. The majority (88%) of balancing volume in November came from Gas BMUs. The total volume of balancing actions was 7% higher than the same month in 2018.

Accepted **Bid** volume in November decreased by 24% from last month. 84% of total Bid volume came from Gas BMUs, with 7% coming from Wind and 5% from Coal. Coal Bid volume in November increased by 5.2GWh (15%) compared to October. This is the highest level of Bid Volume contribution from Coal generation since January 2019, when it accounted for 17%.

Accepted **Offer** volume in November decreased by 29% compared to the previous month. Gas accounted for 92% of all Offer volume, with Pumped Storage responsible for a further 2%. Coal Offer volume increased by 21GWh (163%) compared to October 2019, and accounted for 4% of total Offer volume. Once again this was the highest contribution of Coal to Offer volume since January 2019.

Fuel Type	Bid Volume (MWh)		Offer Volume (MWh)	
	Nov-19	Oct-19	Nov-19	Oct-19
Coal	-39,313	-34,131	34,444	13,110
Gas	-719,701	-722,310	719,886	973,253
Hydro	-6,106	-29,719	4,114	3,994
OCGT	-97	0	3,027	5,188
Pumped Storage	-20,777	-64,392	18,662	100,921
Wind	-57,782	-264,921	59	1,398
Biomass	-11,228	-13,637	12	722
Other	-1,728	-1,928	1,290	1,734
Grand Total	-856,733	-1,131,039	781,494	1,100,320

TRADING CHARGES IN NOVEMBER 2019⁴

Gross Party Imbalance cashflows were £103m in November 2019, an increase of 20% from October. Debits for being short increased by £7.8m, and credits for being long increased by £9.4m, between October and November 2019.

Gross Party Imbalance Volumes decreased by 9% from October to November 2019. Energy Imbalance Volumes for Parties that were long decreased by 7% this month, compared to October, whilst Energy Imbalance Volumes for Parties that were short fell by 11%.

November **Offer** volume and cashflow increased by 29% and 28% respectively compared to the previous month. The average price of Offers increased by £0.75/MWh to £65.99/MWh this month.

Net **Bid** cashflow in November was -£8.03m, compared to £11.67m in October. This means payment received by Parties for negative Bids were lower than payments from Parties for positive Bids. This aligns with the higher number of positive Winds Bids accepted in November mentioned in the article on the previous page.

Total Cashflow (£m)	Nov-19	Oct-19	Sep-19	Aug-19
Long Imbalance Charge (Credit)	-47.80	-38.45	-33.99	-36.55
Short Imbalance Charge (Debit)	54.90	47.10	37.78	37.75
RCRC Credit	10.16	11.55	7.10	6.04
RCRC Debit	-3.05	-2.89	-3.30	-4.84
Offer Cashflow	51.57	71.78	55.41	59.67
Bid Cashflow (Positive Bids)	-13.59	-10.15	-7.53	-9.10
Bid Cashflow (Negative Bids)	5.55	21.82	12.86	12.27

³ System prices are based on the previous month's latest Initial Settlement (SF) & Interim Information (II) run data available.
⁴ Balancing volumes and trading charges appear as per the latest month with Initial Settlement (SF) run data available.