



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.

SYSTEM LONG IN MOST SETTLEMENT PERIODS SINCE JULY 17

Market length is determined by the Net Imbalance Volume (NIV) of Balancing Actions taken in each Settlement Period. The market was long for 65.3% of Settlement Periods in February 2019, the highest amount since July 2017 and the fifth highest percentage of Long NIV periods in the past two years.

The longest NIV, of -1,508MWh, occurred on 21 February 2019 in Settlement Period 26. This was the Longest NIV value of 2019 so far, and the fourth Longest NIV in the past year. In this Settlement Period, the System Operator (National Grid), took 1,551MWh of Bids, with 96% coming from CCGT plants and 4% from Coal fired power stations. Only two Offer actions were taken, and both came from a single CCGT plant.

Five months with highest percentage of Long Settlement Periods in last two year

Settlement Month	Short	Long
Mar-17	20.7%	79.3%
Apr-17	28.0%	72.0%
Jun-17	30.3%	69.7%
Jul-17	32.2%	67.8%
Feb-19	34.7%	65.3%

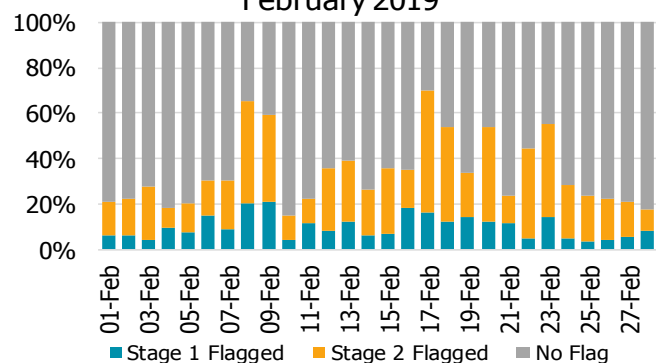
FLAGGED BALANCING ACTIONS IN FEBRUARY

In February 2019, 78,017 balancing actions were taken. Of these, 28,920 were First Stage Flagged and 20,360 went on to be Second Stage Flagged.

Two of the three days with the highest percentage of Flagged Actions, 8 and 9 February (66% and 60% respectively), were followed by the day with the lowest percentage of Flagged Actions, 10 February (15%).

On 8 February, Wind generation peaked for the month at 250GWh. Wind accounted for 29% of Balancing Actions, with 92% of these actions being System Operator (SO) or Continuous Acceptance Duration Limit (CADL) flagged.

Flagged Balancing Actions
February 2019



SYSTEM PRICES IN FEBRUARY¹

Monthly average System Prices for February 2019 were lower when short (-17.2%) and long (-16.6%), compared to January 2019. The average System Price regardless of length was **£48.60/MWh**; 19% lower than last month.

System Prices exceeded £100/MWh a total of 19 times this month, compared to 79 times in January. The highest System Price of the month, **£145.00/MWh**, occurred in Settlement Period 16 on 11 February 2019. This price was set by four Buy Actions from a CCGT BMU, all priced at £145.00/MWh.

The lowest System Price, **£0/MWh**, occurred in three Settlement Periods in February; Settlement Periods 35, 4 and 31 on the 4, 5 and 25 February respectively. Since Modification P305 was implemented in November 2015, this is only the fifth month where the minimum system price has been not been negative.

Period	Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
	Short System	Long System	Short System	Long System
Feb-19	70.21	37.09	76.89	37.31
Jan-19	84.77	44.46	91.92	46.26
Dec-18	83.95	45.39	89.01	49.38
Winter 18/19	79.64	42.31	85.94	44.31
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
Feb-18	72.65	39.28	78.42	39.58

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

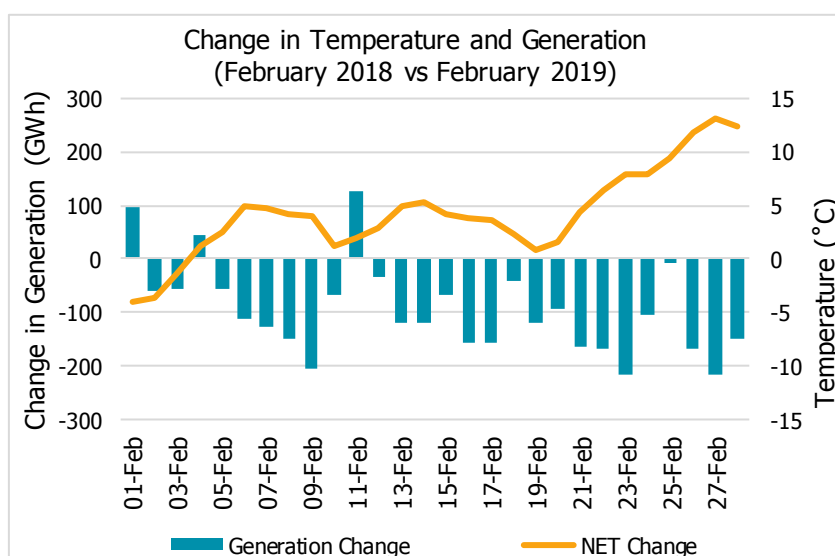
HOTTEST FEBRUARY ON SINCE 2002²

February 2019 had the highest daily average Noon Effective Temperature (NET) since 2002. The highest February NETs exceeded 14°C on 26 and 27 February 2019. The graph below shows how NET and Generation (GWh) have varied between February 2018 and February 2019.

At the beginning of February 2019, temperatures were colder than last year. However, by the end of the month, temperatures were as much as 13°C higher than last year.

In total, the UK generated 2,664GWh less in February 2019 than this time last year. There were only three days where generation this year exceeded 2018. Two days were due to comparing a weekend day from 2018 to a weekday in 2019; the third was 1 February 2019, where the NET was 4°C lower than last year.

The peak temperature difference of 13°C seen on 27 February coincided with the largest drop of 217GWh in year-on-year generation. The large change in temperature at the end of February is due to comparing cold temperatures from the "Beast from the East" in 2018 with the warmest February temperatures seen since 2002 in 2019.



BALANCING MECHANISM VOLUMES IN JANUARY³

The total volume of balancing actions taken in the Balancing Mechanism for January 2019 was 1,240GWh, a 23% decrease from December 2018. The majority (62%) of balancing volume in January came from Gas BMUs.

Accepted **Bid** volume decreased by 18% from last month. Gas and Hydro Bid volumes decreased by 26% and 22% respectively, whilst Biomass Bid volume increased by 163%. Gas Bid volume accounted for 58%, and Wind 19%, of all Bid volume.

Accepted **Offer** volume decreased by 29% from December 2018. Coal and Gas Offer volumes decreased by 47% and 32% respectively. Hydro Offer volume increased by 143%, but still only accounted for 1.4% of total Offer volume. In January, Gas accounted for 76% of Offer volumes, whilst Coal accounted for 11% of Offer volumes.

Fuel Type	Bid Volume (MWh)		Offer Volume (MWh)	
	Jan-19	Dec-18	Jan-19	Dec-18
Coal	-125,982	-146,151	56,451	106,557
Gas	-383,832	-517,183	391,298	575,527
Hydro	-21,577	-27,635	7,458	3,068
OCGT	0	0	176	576
Pumped Storage	-28,207	-35,507	45,463	32,257
Wind	-139,004	-151,567	969	896
Biomass	-25,805	-9,820	14,030	8,583
Grand Total	-724,484	-887,862	515,877	727,464

TRADING CHARGES IN JANUARY³

Gross Party Imbalance cashflows were £143m in January 2019, an increase of £6m from December Gross Party Imbalance cashflows. Credits for being long increased by £4.78m, and debits for being short increased by £1.15m, between December 2018 and January 2019.

Energy Imbalance Volumes increased by 6% for Parties for that were long in December, and by 3% for those that were short.

January **Offer** cashflow decreased by 31% and the volume of Offers decreased by 29%, compared to the month before. The average price per MWh of Offer volume decreased by 3% to £80.49/MWh.

Net **Bid** cashflow was -£14.20m in January, compared to -£19.23m in December. January Bid cashflow decreased by 22% for negative Bids, and 16% for positive Bids, compared to the month before.

Total Cashflow	Jan-19	Dec-18	Nov-18	Oct-18
Long Imbalance Charge (Credit)	-73.40	-68.62	-67.67	-75.27
Short Imbalance Charge (Debit)	70.06	68.91	70.54	77.02
RCRC Credit	9.02	12.84	14.03	13.81
RCRC Debit	-12.36	-12.55	-11.17	-12.07
Offer Cashflow	41.52	60.18	58.76	87.58
Bid Cashflow (Positive Bids)	-24.16	-31.15	-27.88	-25.68
Bid Cashflow (Negative Bids)	9.96	11.92	10.60	26.19

² NET is a weighted average temperature using the noon temperature from last three days. It is calculated using the following equation: $NETH = 0.57THT + 0.28THT^{-1} + 0.15THT^{-2}$.

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