

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.

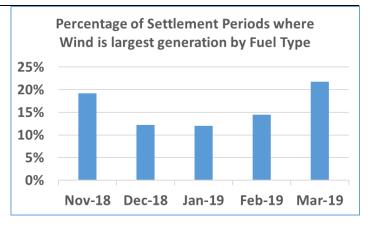
Trading Operations
Report <u>Data</u>. The graphs
and backing data are
available in Excel format
on the ELEXON website.

WIND GENERATION AT RECORD LEVELS

Wind was the highest generation by fuel type for 22% of Settlement Periods in March 2019. This is the highest proportion recorded after November 2018 in which this was 19% of Settlement Periods. By volume, Wind contributed 17% of generation for the month. In 32 Settlement Periods, Wind delivered over 40% of the generation and on a daily basis exceeded 200GWh on seven days in the month.

Balancing Mechanism actions taken to reduce the amount of energy on the system totalled 145,717MWh which was 17.6% of total Bid volume in the month.

Balancing Mechanism actions or 'Bids and Offers' are used in the calculation of the System Price. Whilst there has been high



wind generation in the month, this has also led to a series of negative system prices. This is because Bids related to the wind fuel type tend to have a negative price, representing a payment to the wind BM Unit to reduce generation. On 24 March 2019, a negative System Price occurred in 13 consecutive Settlement Periods (from Settlement Period 21 to 33). The lowest of these negative System Prices was -£70.24/MWh which occurred in Settlement Periods 28 and 29. The System Prices in these Settlement Periods was set by two sets of two Sell actions from Wind BMUs all priced at -£70.24/MWh.

You can find more analysis of negative System Price's in ELEXON's recent Insight article.

SYSTEM PRICES IN MARCH1

Monthly average System Prices for March 2019 were lower when short (-11.3%) and long (-21.6%), compared to February 2019. The average System Price regardless of length was £43.25/MWh; 11% lower than last month.

System Prices exceeded £100/MWh a total of six times this month, compared to 19 times in February. The highest System Price of the month, £152.30/MWh, occurred in Settlement Periods 35, 37 and 38 on 18 March 2019. This price was set by four Buy Actions from a CCGT BMU in Settlement Period 35 and 37. In Settlement Period 38 the System Price was set by a Coal BMU. The Buy Price Price Adjuster (BPA) in these periods was £42.30/MWh.

The lowest System Price, -**£70.24/MWh**, occurred in Settlement Periods 28 and 29 on 24 February. This was set by two Sell actions from one Wind BMU in each Settlement Period.

Period Short System Long System Short System Long System Mar-19 62.28 29.08 64.11 29.03 Feb-19 70.21 37.09 76.89 37.31 Jan-19 84.77 44.46 91.92 46.26 Spring 19 62.28 29.08 64.11 29.03 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 Mar-18 72.65 39.28 78.42 39.58		Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
Feb-19 70.21 37.09 76.89 37.31 Jan-19 84.77 44.46 91.92 46.26 Spring 19 62.28 29.08 64.11 29.03 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	Period				
Jan-19 84.77 44.46 91.92 46.26 Spring 19 62.28 29.08 64.11 29.03 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	Mar-19	62.28	29.08	64.11	29.03
Spring 19 62.28 29.08 64.11 29.03 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	Feb-19	70.21	37.09	76.89	37.31
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	Jan-19	84.77	44.46	91.92	46.26
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	Spring 19	62.28	29.08	64.11	29.03
Summer 18 73.46 42.02 76.60 42.52 Spring 18 83.53 37.68 92.59 37.97	Winter 18/19	79.64	42.31	85.94	44.31
Spring 18 83.53 37.68 92.59 37.97	Autumn 18	82.75	45.80	86.62	48.39
	Summer 18	73.46	42.02	76.60	42.52
Mar-18 72.65 39.28 78.42 39.58	Spring 18	83.53	37.68	92.59	37.97
	Mar-18	72.65	39.28	78.42	39.58

NORTH SCOTLAND EXPORTING GSP GROUP

North Scotland saw a minimum daily energy take of –348MWh on 12 March 2019, the lowest since 8 December 2018. This is also the second lowest minimum daily GSP Group Take in the past year.

A negative GSP Group Take/minimum daily average consumption means the GSP group was a net exporter and generated more energy than it consumed.

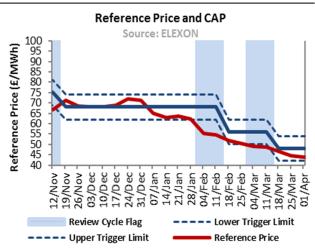
CAP BREACH ON 4 MARCH 2019

The Credit Assessment Price (CAP) was reduced from £68/MWh to £56/MWh on 6 March 2019.

A further review was triggered as the Credit Assessment Price (CAP) reference price was calculated at more than £6/MWh (the trigger level) below the CAP value. The falling CAP and reference price is following normal seasonal trends in falling towards the Summer.

A consultation was issued to recommend a new CAP value of £48/MWh with an implementation date of 9 April 2019. There has been no change to the trigger level, remaining +/- £6/MWh.

To help keep BSC Parties informed of the latest CAP information the data has been published using <u>interactive CAP graphs</u> to allow customers to explore this data.



BALANCING MECHANISM VOLUMES IN FEBRUARY²

The total volume of balancing actions taken in the Balancing Mechanism for February 2019 was 1,575GWh, a 27% decrease from January 2019. The majority (79%) of balancing volume in February came from Gas BMUs.

Accepted **Bid** volume increased by 14% from last month. Biomass and Coal Bid volumes decreased by 79% and 70% respectively, whilst Bid volume from other sources (Usually Battery BMUs) increased by 200%. Gas Bid volume accounted for 68%, and Wind 18%, of all Bid volume.

Accepted **Offer** volume increased by 45% from January 2019. Coal and Hydro Offer volumes decreased by 6

3% and 60% respectively. Gas and Wind Offer volume increased by 76% and 61% respectively. In February, Gas accounted for 92% of Offer volumes, whilst Pumped Storage accounted for 4% of Offer volumes.

	Bid Volume (MWh)		Offer Volume (MWh)		
Fuel Type	Feb-19	Jan-19	Feb-19	Jan-19	
Coal	-37,915	-125,982	20,801	56,451	
Gas	-563,870	-383,832	688,097	391,298	
Hydro	-30,662	-21,577	2,969	7,458	
OCGT	0	0	157	176	
Pumped Storage	-44,306	-28,207	27,738	45,463	
Wind	-145,717	-139,004	1,557	969	
Biomass	-5,351	-25,805	5,330	14,030	
Other	-227	-76	509	33	
Grand Total	-828,049	-724,484	747,156	515,877	

TRADING CHARGES IN FEBRUARY²

Gross Party Imbalance cashflows were £105.5m in February 2019, an decrease of £38m from January Gross Party Imbalance cashflows. Credits for being long decreased by £19m, and debits for being short decreased by £19m, between January and February 2019.

Energy Imbalance Volumes decreased by 14% for Parties for that were long in February, and by 5% for those that were short.

February **Offer** cashflow increased by 27% and the volume of Offers increased by 45%, compared to the month before. The average price per MWh of Offer volume decreased by 12% to £70.65/MWh.

Net **Bid** cashflow was -£9.85m in February, compared to -£14.20m in January. February Bid cashflow decreased by 16% for negative Bids, and increased by 31% for positive Bids, compared to the month before.

Total Cashflow (£m)	Feb-19	Jan-19	Dec-18	Nov-18
Long Imbalance Charge (Credit)	-54.34	-73.40	-68.62	-67.67
Short Imbalance Charge (Debit)	51.19	70.06	68.91	70.54
RCRC Credit	6.95	9.02	12.84	14.03
RCRC Debit	-10.11	-12.36	-12.55	-11.17
Offer Cashflow	52.79	41.52	60.18	58.76
Bid Cashflow (Positive Bids)	-20.29	-24.16	-31.15	-27.88
Bid Cashflow (Negative Bids)	10.44	9.96	11.92	10.60