



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 Operation 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 PRICES IN APRIL¹

Monthly average System Prices for April were lower when both short (17.3%) and long (19%) when compared to March 2017. The average System Price regardless of length was **£38.02/MWh**, which is 3% lower than in March 2017.

System Prices **exceeded £100/MWh** 39 times in April 2017 (compared to 57 times in March). The highest System Price was **£231.60/MWh** in Settlement Period 43 on 26 April 2017. The price was set by an Offer from a Coal BMU priced at £225/MWh, the Buy Price Price Adjuster (BPA) was £6.60/MWh in this Settlement Period.

There were three **negative System Prices** in April, these occurred on 1 April during Settlement Periods 33 and 34 and 6 April Settlement Period 31. The prices were set by negatively priced Bids from Biomass and Coal BMUs and positively priced Bids from Combined Cycle Gas Turbine (CCGT) BMUs. The lowest System Price was **-£59.75/MWh** which occurred for two Settlement Periods (33 and 34) on 1 April 2017.

For two Settlement Periods the System Price was **£0/MWh**; these occurred on 3 April for Settlement Periods 23 and 24. Zero priced offers from a CCGT BMU set the System Price in these Settlement Periods.

Average (£/MWh) Average (£/MWh)
Peak 07:00-19:00

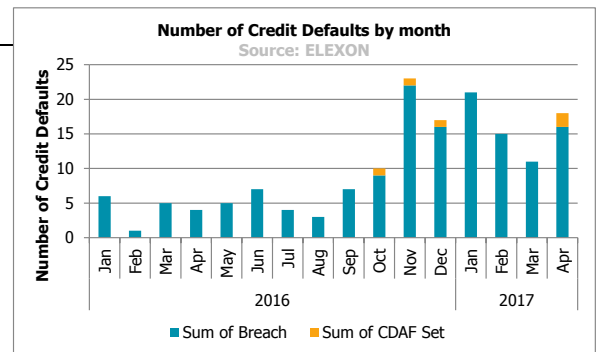
Period	Short	Long	Short	Long
Apr-17	65.82	27.22	71.40	25.95
Mar-17	78.17	29.25	89.85	29.49
Feb-17	81.38	35.02	90.38	36.80
Winter 16/17	82.60	35.93	92.90	37.27
Autumn 16	99.05	28.49	126.25	29.66
Summer 16	67.32	24.41	81.19	24.87
Spring 16	63.43	25.74	80.33	21.94
Winter 15/16	55.23	25.90	61.53	27.50
Apr-16	59.20	22.33	71.52	22.74

HIGH NUMBER OF CREDIT DEFAULTS

18 Credit Cover breaches from 11 BSC Parties occurred in April 2017. There have been a total of 63 breaches in the first four months of 2017, for the same period in 2016 there were a total of 16 breaches.

The higher volume of defaults reflects a behavioural change for BSC Parties that are now more willing to use the Query Period given that it guarantees five consecutive Business Hours to resolve the default.

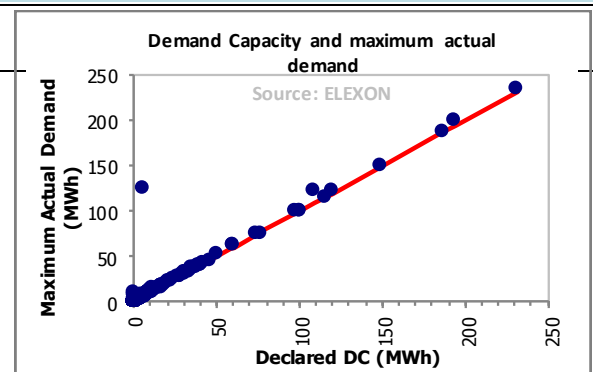
Two Parties were unable to resolve their Credit Defaults by the end of the Query Period. The defaults were posted on the www.bmreports.com website. Following zero instances in 2015, we have now seen three in 2016 and two in 2017.



DEMAND CAPACITY BREACHES

This graph shows 575 incidences of maximum demand of a BMU being greater than declared Demand Capacity (DC) during the first Spring BSC Season check. This covers the period 1 March 2017 to 14 March. In this period 66 BMUs exceeded their DC by more than the permitted tolerances specified in the BSC. The relevant BSC Parties have been contacted to request re-declaration of the values.

This graph shows an incidence of one BMU exceeding their DC by 120MWh. This was due to a data error that has since been rectified.



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

TRADING CHARGES

Gross imbalance cash flows were £91m in March 2017, a 7% decrease from £97m in February 2017. Credits for being long decreased by £3m, and debits for being short decreased by £4m between February and March.

The imbalance volumes for Parties that were long increased by 18% and short imbalance volumes increased by 22%. The decreases in System Price between February and March resulted in lower imbalance cash flows, despite increases in imbalance volumes.

The **Offer** cash flow increased by 37% in March. The volume of Offers increased by 45% and the average price per MWh of Offer Volume decreased by 5% to £77/MWh.

Net **Bid** cash flow increased compared with February, from -£12m to -£18m in March.

Total Cash Flow (£m)	Mar-17	Feb-17	Jan-17	Dec-16
Long Imbalance Charge (Credit)	-49.37	-51.94	-76.97	-51.01
Short Imbalance Charge (Debit)	41.35	45.23	74.76	45.60
RCRC Credit	6.64	6.28	10.00	7.35
RCRC Debit	-14.66	-12.99	-12.21	-12.76
Offer Cash Flow	41.86	30.52	35.49	36.75
Bid Cash Flow (Positive Bids)	-22.85	-19.95	-24.62	-21.53
Bid Cash Flow (Negative Bids)	4.88	8.03	3.08	10.62

ENERGY BALANCING VOLUMES²

The total volume of balancing actions for March was 1,466GWh, a 34% increase from February 2017.

Accepted **Offer** volume increased by 45% from February. The volume of Gas Offers increased by 38%, and the volume of Coal Offers increased by 87%.

Gas accounted for 75% of Offers in March, and Coal accounted for 20%. Pumped Storage delivered 5% of Offer Volume.

Accepted **Bid** volume increased by 29% from February, due to increases in the volume of Bids from Gas, Hydro, Pumped Storage and Biomass BMUs. There were decreases in the volume of accepted Bids from Coal and Wind BMUs.

In March 75% of Bid volume came from Gas, 11% from Coal and 8% from Wind.

Fuel Type	Bid Volume (MWh)		Offer Volume (MWh)	
	Mar-17	Feb-17	Mar-17	Feb-17
Coal	-99,336	-158,981	108,111	57,776
Gas	-686,963	-385,035	409,167	295,753
Hydro	-29,746	-25,293	2,057	1,476
OCGT	0	0	519	0
Pumped Storage	-31,268	-27,215	26,257	22,681
Wind	-68,794	-116,429	341	357
Biomass	-3,354	-2,350	34	0
Other	-8	0	173	112
Grand Total	-919,470	-715,304	546,659	378,155

SETTLEMENT DAY WITHOUT COAL GENERATION

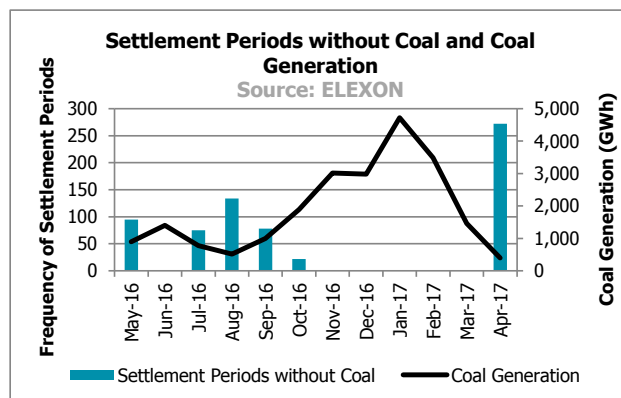
No electricity was generated from Coal Balancing Mechanism Units (BMUs) on 21 April 2017. This was the first 24 hour period without Coal generation in Great Britain since the introduction on the BSC.

The majority of the GB fuel mix on the 21 April 2017 comprised of generation from these BMU fuel types; Gas (50%), Nuclear (21%) and Wind (12%). While Coal BMUs provided no energy to the Balancing Mechanism, CCGT BMUs provided 90% of Bid and Offer volume.

The first Settlement Period in which no Coal BMUs generated electricity was a year ago on 10 May 2016. Between this date and 30 April 2017 there have been 676 Settlement Periods without Coal generation. The majority (272) of these Settlement Periods occurred in April 2017.

April 2017 has had the lowest Coal generation in the 12 month period shown in the graph, with 395GWh generated from Coal BMUs. However looking at the energy balancing volumes in the table above, for March and February 2017, Coal BMUs provided the second highest volumes in these months.

Between November 2016 and March 2017 at least one Coal BMU was generating in every Settlement Period. This led to a total of 15.7TWh of electricity generated from Coal BMUs in this period.



² Balancing volumes appear as per the latest month with Initial Settlement (SF) run data available.