



## 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 JUNE<sup>1</sup>

Monthly average System Prices for June were lower when both short (1.8%) and long (23.4%) when compared to May 2017. The average System Price regardless of length was **£35.75/MWh**, which is 28% lower than in May 2017. In June 2017 the market has been long in 70% of Settlement Periods compared to 46% in the previous month.

System Prices **exceeded £100/MWh** 27 times in June 2017 (compared to 85 times in May). 52% of the System Prices which exceeded £100/MWh occurred on 21 June 2017, 44% occurred on 19 June 2017.

The highest System Price for the month was **£380.04/MWh** on 21 June 2017 in Settlement Period 36. This price was set by two accepted Offers from CCGT BMUs priced at £167/MWh and £495/MWh.

There were 19 **negative System Prices** in June. 10 consecutive negative prices occurred during Settlement Periods 3 to 12 on 7 June 2017. The prices were set by Balancing Services Adjustment Actions which got re-priced during the System Price calculation.

The lowest System Price for the month was **-£69.10/MWh** on 6 June 2017 in Settlement Period 46. This price was set by five accepted Bids by Wind BMUs priced at -£69.13/MWh and -£68.17/MWh.

For seven Settlement Periods the System Price was **£0/MWh**; five of which occurred on 23 June 2017. The System Price was £0/MWh during the evening peak, in Settlement Period 36, on 25 June 2017. This price was set by accepted Bids of £0/MWh for a Hydro and a CCGT BMU.

Period	Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
	Short System	Long System	Short System	Long System
Jun-17	66.20	22.64	73.52	23.19
May-17	67.41	29.56	81.94	29.08
Apr-17	65.82	27.22	71.40	25.95
Summer 17	66.20	22.64	73.52	23.19
Spring 17	69.15	28.58	80.98	28.12
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
Jun-16	68.31	26.20	86.12	26.68

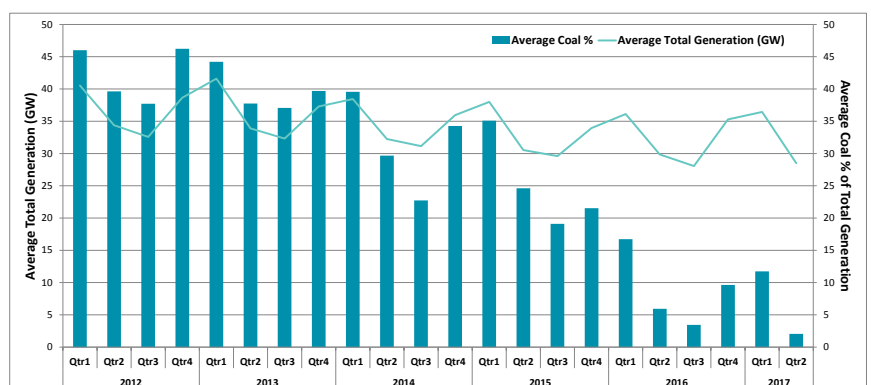
### AVERAGE COAL GENERATION REACHES QUARTERLY LOW<sup>2</sup>

In the three months to the end of June 2017 (Q2), coal averaged 2% of total generation per Settlement Period. This represented a quarterly low when analysing coal's share of the UK's generation fuel mix since 2012.

When comparing with previous Q2 average coal percentages, 2017 represented a 4% decrease from 2016. Q2 average coal generation per Settlement Period had a high of 40% in 2012 and has declined every year since.

The Q2 average coal generation low highlights the continuing trend of declining coal and increasing renewable generation in the UK. Record breaking events which have contributed to the quarterly low have been seen in previous [BSC Operations Headline Reports](#), with no coal generation on 21 April and the highest recorded solar generation on 22 May.

The previous quarterly low was Q3 (July to September) 2016, with just under 3.5% average coal generation per Settlement Period. Since 2012, Q3 has always seen the lowest average coal percentage per Settlement Period every year, so it shall be seen if this continues in 2017.



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

<sup>2</sup> Generation by Fuel Type data is based on operational metering and is available on BM Reports and the ELEXON Portal.

## TRADING CHARGES

Gross imbalance cash flows were £107m in May 2017, a 28% increase from £83m in April 2017. Credits for being long increased by £7m, and debits for being short increased by £16.5m between April and May.

The imbalance volumes for Parties that were long decreased by 20% and short imbalance volumes decreased by 4%. Despite decreases in imbalance volumes, the increases in System Price between April and May resulted in higher imbalance cash flows.

The **Offer** cash flow increased by 28% in May. The volume of Offers increased by 12% and the average price per MWh of Offer Volume increased by 14% to £81/MWh.

Net **Bid** cash flow decreased compared with April, from -£11m to -£8m in May.

Total Cash Flow (£m)	May-17	Apr-17	Mar-17	Feb-17
<b>Long Imbalance Charge (Credit)</b>	-51.30	-44.53	-49.37	-51.94
<b>Short Imbalance Charge (Debit)</b>	55.36	38.85	41.35	45.23
<b>RCRC Credit</b>	11.90	4.65	6.64	6.28
<b>RCRC Debit</b>	-7.84	-10.33	-14.66	-12.99
<b>Offer Cash Flow</b>	33.40	26.07	41.86	30.52
<b>Bid Cash Flow (Positive Bids)</b>	-11.71	-15.57	-22.85	-19.95
<b>Bid Cash Flow (Negative Bids)</b>	3.82	4.89	4.88	8.03

## ENERGY BALANCING VOLUMES<sup>3</sup>

The total volume of balancing actions for April was 891GWh, a 13% decrease from April 2017.

Accepted **Offer** volume increased by 12% from April. The volume of Coal Offers decreased by 60%, and the volume of Wind Offers decreased by 44%. In contrast, the volume of Gas Offers increased by 27%. Gas accounted for 86% of total Offers in May, an increase from 76% of the total in April. Coal and Pumped Storage each accounted for 6% of the total Offer volume.

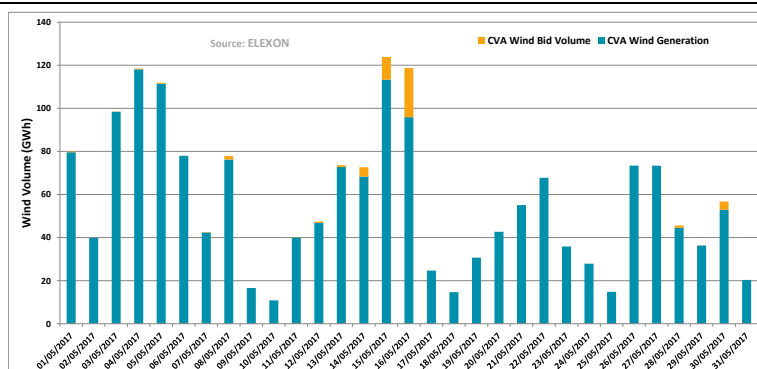
Accepted **Bid** volume decreased by 28% from April, with decreases in the volume of Bids from all fuel types. Coal Bid volumes decreased by 51% and Gas Bid volumes decreased by 25%. In May, 83% of Bid volume came from Gas and 10% came from Wind.

Fuel Type	Bid Volume (MWh)		Offer Volume (MWh)	
	May-17	Apr-17	May-17	Apr-17
<b>Coal</b>	-14,164	-28,951	22,708	56,535
<b>Gas</b>	-394,654	-527,055	355,022	280,134
<b>Hydro</b>	-1,967	-5,908	3,516	2,859
<b>OCGT</b>	0	0	2,320	0
<b>Pumped Storage</b>	-17,032	-24,483	25,874	27,473
<b>Wind</b>	-47,116	-65,865	277	497
<b>Biomass</b>	-2,950	-9,083	3,249	99
<b>Other</b>	0	-1	0	106
<b>Grand Total</b>	<b>-477,884</b>	<b>-661,346</b>	<b>412,965</b>	<b>367,702</b>

## HIGH WIND VOLUME TURNDOWN

On 16 May 2017, 22.8GWh of Wind Bid volume was accepted representing 48.4% of total Wind Bid volume for May. With CVA wind generation of 95.9GWh, the Bid volume reflected a wind capacity turndown of 19.2%. This was the second highest wind capacity turndown day of 2017, after a 19.6% turndown on 14 March. Wind Bids were accepted at an average price of -£84.79/MWh.

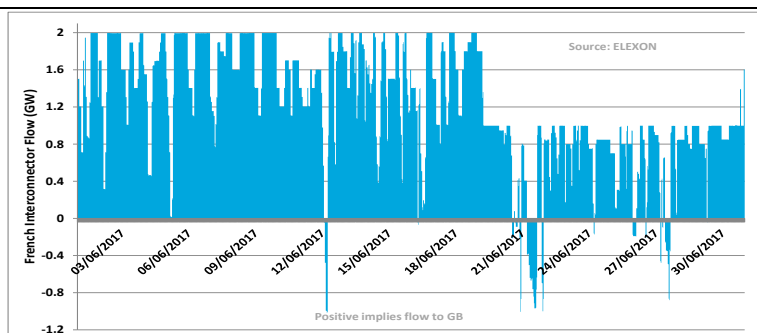
The highest accepted volume of Gas Offers in 2017 also occurred on 16 May. Gas Offers were accepted at an average price of £70.31/MWh.



## FRENCH INTERCONNECTOR AT HALF CAPACITY

Due to a planned outage the 2GW capacity French Interconnector has been operating at a reduced capacity of 1GW from 19 June 2017 to 30 June 2017.

Through June the French interconnector was importing in 94.4% of Settlement Periods. This represented a decrease from May when the GB was importing from France in 97.6% of Settlement Periods. The interconnector is now back operating at full capacity.



<sup>3</sup> Balancing volumes appear as per the latest month with Initial Settlement (SF) run data available.