



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 AUGUST¹

Monthly average System Prices for August were higher when both short (0.9%) and long (9%) compared to July 2017. The average System Price regardless of length was **£40.90/MWh**, which is 7% higher than in July 2017. In August 2017 the market has been long in 65%, and short in 35% of Settlement Periods.

System Prices **exceeded £100/MWh** 39 times in August 2017 (compared to 42 times in July). The 39 System Prices which exceeded £100/MWh occurred across 13 different days. Settlement Period 19 was the most frequent of those exceeding £100/MWh, with five occurrences in the month.

The highest System Price for August was **£130/MWh**, occurring in nine Settlement Periods across four different days. Four of the Settlement Periods were on 17 August, with the System Price set by accepted Offers from two Pumped Storage BMUs, priced at £130/MWh. Three of the nine Settlement Periods were on 20 August, with the System Price in these Settlement Periods also set by accepted Offers from a Pumped Storage BMU.

There were **two negative** System Prices in August. The lowest System Price was **-£3.50/MWh** on 18 August in Settlement Period 8, set by a Bid from a Pumped Storage BMU.

For four Settlement Periods in August the System Price was **£0/MWh**.

Period	Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
	Short System	Long System	Short System	Long System
Aug-17	66.11	27.43	72.60	27.88
Jul-17	65.50	25.14	72.39	24.93
Jun-17	66.01	22.81	73.06	23.35
Summer 17	65.87	25.10	72.67	25.42
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
Aug-16	66.19	22.38	76.61	22.85

DAILY ENERGY IMBALANCE VOLUME INCREASE

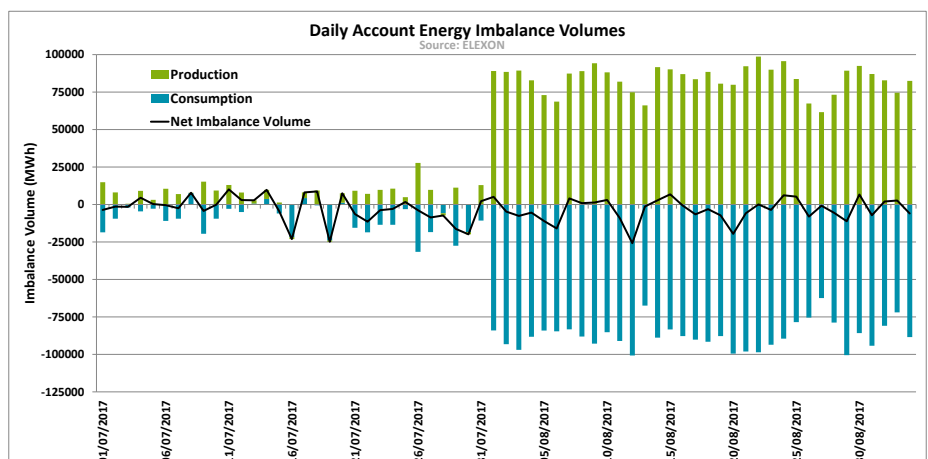
From 1 August 2017 there has been a significant increase in the total daily Account Energy Imbalance Volumes. Typical daily net Energy Imbalance Volumes for Production and Consumption Accounts in July are around 10,000MWh and -10,000MWh respectively. Since 1 August these daily Energy Imbalance Volume totals have increased to around 85,000MWh and -85,000MWh.

The increase is largely due to a single Party using the energy in one Account to balance their position in the other. This is a behavioural change that is financially viable with the single Energy Imbalance Price calculation.

Following Ofgem's Electricity Balancing Significant Code Review (EBSCR), BSC Modification P305 was implemented in November 2015. One of the changes from P305 to the Energy Imbalance Price calculation was a single imbalance price, so that System Sell Price and System Buy Price are equal to each other in a Settlement Period.

The single imbalance price allows Trading Parties to have an overall net balanced position, despite their individual Production and Consumption Accounts being imbalanced. The graph shows that despite the increased Production and Consumption Energy Imbalance Volumes, the net for all Parties has remained stable.

The increase from 1 August for a single Party represents the first major behavioural change seen in daily Energy Imbalance Volumes since P305 was implemented.



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

TRADING CHARGES

Gross imbalance cashflows were £77m in July 2017, an 11% increase from £69m in June 2017. Credits for being long, and debits for being short, both increased by £4m between June and July.

The Energy Imbalance Volumes for Parties that were long increased by 5% and short Energy Imbalance Volumes increased by 9%.

The **Offer** cashflow decreased by 22% in July. The volume of Offers decreased by 23%, and the average price per MWh of Offer volume increased by less than 1% to £68.50/MWh.

Net **Bid** cashflow decreased compared with June, from £11m to -£0.2m in July. Bid cashflow from negative Bids was £7.41m in July, a 62% decrease from June. This reduction led to a net Bid cashflow payment for July rather than the pay-out seen in June.

Total Cashflow (£m)	Jul-17	Jun-17	May-17	Apr-17
Long Imbalance Charge (Credit)	-39.23	-35.18	-51.30	-44.53
Short Imbalance Charge (Debit)	37.82	34.31	55.36	38.85
RCRC Credit	5.74	5.66	11.90	4.65
RCRC Debit	-7.14	-6.53	-7.84	-10.33
Offer Cashflow	41.96	54.04	33.40	26.07
Bid Cashflow (Positive Bids)	-7.61	-7.93	-11.71	-15.57
Bid Cashflow (Negative Bids)	7.41	19.38	3.82	4.89

ENERGY BALANCING VOLUMES²

The total volume of balancing actions for July was 1,135GWh, a 26% decrease from June 2017.

Accepted **Offer** volume decreased by 23% from June. The volume of Coal Offers decreased by 18%, Gas Offers decreased by 20% and Wind Offers decreased by 70%. Gas accounted for 83% of total Offers in July, an increase from 80% of the total in June. Coal accounted for 12% of the total Offer volume.

Accepted **Bid** volume decreased by 30% from June. Decreases were seen in the volume of Bids from all fuel types. Wind and Pumped Storage Bid volumes decreased by 62% and 38% respectively. In July, 19% of Bid volume came from Wind compared to 35% in June. Gas accounted for 67% of total Bid volume.

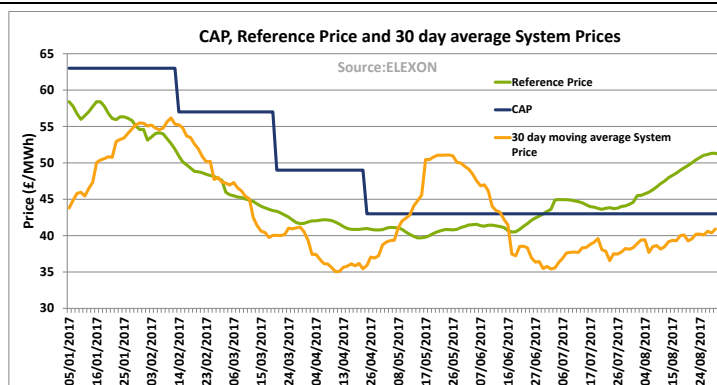
Fuel Type	Bid Volume (MWh)		Offer Volume (MWh)	
	Jul-17	Jun-17	Jul-17	Jun-17
Coal	-8,114	-8,630	73,372	89,533
Gas	-349,963	-383,596	508,753	637,662
Hydro	-13,636	-17,493	3,031	2,561
OCGT	-13	0	548	195
Pumped Storage	-37,048	-59,847	23,202	20,266
Wind	-100,334	-261,598	373	1,261
Biomass	-12,710	-14,277	3,419	41,265
Other	0	0	0	0
Grand Total	-521,819	-745,440	612,698	792,744

CREDIT ASSESSMENT PRICE (CAP) TO INCREASE TO £55/MWh

The Credit Committee decided on 5 September 2017 to increase the CAP from £43/MWh to £55/MWh, effective from 26 September 2017. The trigger level was increased from +/-£5/MWh to +/-£6/MWh.

The Credit Assessment Price (CAP) is changed when forward prices³, used to calculate a reference price, move outside a specified trigger level. The reference price breached the upper trigger level of £48/MWh on 21 August 2017, which was the first breach since March 2017.

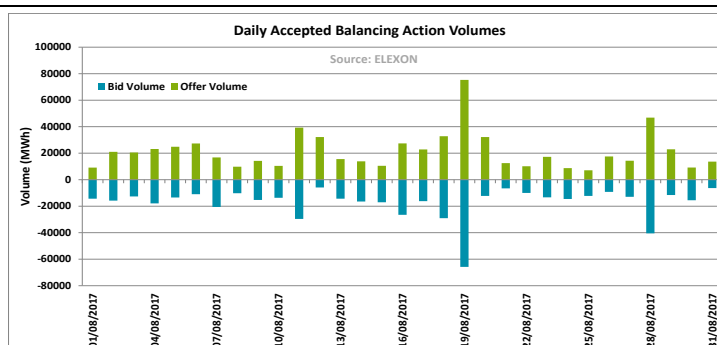
CAP is considered a proxy for out-turn System Prices.



HIGH VOLUME OF BALANCING ACTIONS – 19 AUGUST 2017

On 19 August 2017 there was a high volume of balancing actions taken. 19 August represented the highest day of the month for Coal and CCGT Accepted Offer volumes. It was also the highest day for Accepted Bid volumes for Hydro, Wind and Pumped Storage BMUs.

Of the 1,190GWh of total balancing actions in August, 12% were taken on 19 August. The highest System Price on the day was £60/MWh in Settlement Periods 19 and 20 and the lowest System Price was -£1.14/MWh in Settlement Period 4.



² Balancing volumes appear as per the latest month with Initial Settlement (SF) run data available.
³ Forward prices from ICIS Heren