Average (£/MWh)



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.

SYSTEM PRICES IN SEPTEMBER 2019¹

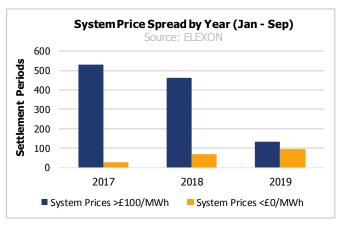
Monthly average System Prices for September 2019 were lower when the market was both short (-1.8%) and long (-25.9%), compared to August 2019. The average System Price regardless of length was £32.08/MWh; 12% lower than last month and the lowest System Price since the May 2016.

System Prices did not exceed £100/MWh in September, compared to once in August. The highest System Price of the month, **£100/MWh**, occurred in Settlement Period 41 on 5 September and Settlement Period 27 on 30 September 2019. The price in both Settlement Periods was set by Offers from a Pumped Storage BMU, all priced at £100/MWh.

There were 24 negative System Prices in September, compared to 17 in August. This is the second highest number of monthly negative System Prices, following May 2019 (27), since the Single Imbalance Price was introduced on 5 November 2015. The lowest System Price, -£65.82/MWh, occurred in Settlement Period 45 on 2 September 2019. The price was set by three Bids from a single Wind BMU all priced at -£65.82/MWh.

Negative System Prices contributed to September 2019 having the lowest monthly average System Price since May 2016. Since the introduction of the Single Imbalance Price, 2019 has had the highest number of negative System Prices (96) and the lowest number of System Prices over £100/MWh (133) in the first three quarters of the year.

	Average	(£/MWh)	Peak 07:00-19:00		
Period	Short System	Long System	Short System	Long System	
Sep-19	53.33	16.38	55.64	17.52	
Aug-19	54.30	22.11	55.69	22.30	
Jul-19	57.66	24.67	62.51	26.71	
Autumn 19	53.33	16.38	55.64	17.52	
Summer 19	56.72	24.94	59.81	26.71	
Spring 19	59.77	28.26	62.85	28.22	
Winter 18/19	79.64	42.31	85.94	44.31	
Autumn 18	82.75	45.80	86.62	48.39	
Sep-18	82.71	46.15	85.63	48.07	

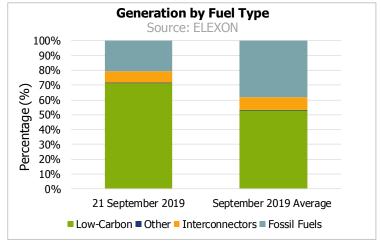


LOW CARBON GENERATION EXCEEDS 50% IN SEPTEMBER²

In September 2019, Low Carbon generation exceeded 52% of total generation. This was driven by higher Wind and Nuclear output, with Nuclear plants generating more electricity this month than in any month so far this year.

On 21 September 2019, Low Carbon generation contributed more than 70% of total generation. Whilst Interconnector volumes were lower compared to the average for September 2019 (7.6% vs. 8.6%), generation from Fossil Fuel plants (mainly CCGTs) only accounted for 21% of total generation on this day.

The percentage of Low Carbon generation was also likely to have been helped by the low demand seen on 21 September, as this was the second lowest in the month.



¹ System prices are based on the previous month's latest Initial Settlement (SF) & Interim Information (II) run data available.
² Low Carbon generation contains Nuclear, Wind, Pump Storage, Hydro and Biomass; Fossil Fuel generation contains CCGT, OCGT, Coal and Oil. Generation data is taken from the ELEXON Portal from the <u>Historic Fuel HH</u> webpage.

SEASONAL CHANGES IN OFFTAKING TLMS

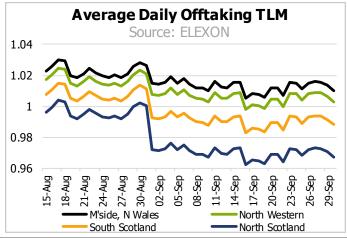
This graph is an adaptation of "Daily Average Offtaking Transmission Loss Multiplier (TLM)" from the Trading Operations Report, with a number of GSP Groups removed. Following implementation of P350 'Introduction of a seasonal Zonal Transmission Losses scheme' on 1 April 2018, TLMs vary by region and season. The change in Transmission Loss Factors (TLF) on 1 September, due to the change in season from Summer to Autumn, has impact-

to the change in season from Summer to Autumn, has impacted TLMs in some regions more than others.

North Scotland Offtaking saw the largest change. Average Offtaking TLMs were 0.991 during August, but decreased to 0.970 in September. South Scotland average Offtaking TLMs also decreased following the inclusion of the new seasonal TLFs, from 1.007 to 0.991. The change in average Offtaking TLMs between August and September was less than 0.007 for all other GSP Groups not featured in the graph.

The drop in Offtaking TLMs seen on 16 September is due to the change in Settlement Run data, as the run type moves from the Interim Information (II) to the Settlement Final (SF) Run.

<u>Historic TLM</u> and Seasonal TLF data is available on the ELEXON Portal.



BALANCING MECHANISM VOLUMES IN AUGUST 2019³

The total volume of balancing actions taken in the Balancing Mechanism (BM) for July 2019 was 1,717GWh, an 44% increase from August 2019. The majority (84%) of balancing volume in August came from Gas BMUs. The total volume of balancing actions was 61% higher than the same month in 2018.

Accepted **Bid** volume increased by 26% from July. 70% of total Bid volume came from Gas BMUs, with 16% coming from Wind and 8% from Pumped Storage BMUs. Coal Bid volume in August decreased by 98% compared to July, whilst Bid volume from Biomass and Wind rose by 562% and 202% respectively.

Accepted **Offer** volume in August increased by 63% from July 2019. Gas accounted for 95% of all Offer volume, with Pumped Storage responsible for a further 3%. Coal Offer volume in August more than doubled since last month from 6,553MWh to 13,574MWh; however Coal still only accounted for 1.4% of total Offer volume.

	Bid Volume (MWh)		Offer Volume (MWh)	
Fuel Type	Aug-19	Jul-19	Aug-19	Jul-19
Coal	-26	-1,283	13,574	6,553
Gas	-519,750	-506,060	922,698	548,589
Hydro	-19,830	-7,848	6,710	6,245
OCGT	-65	-102	2,279	4,250
Pumped Storage	-62,094	-31,307	27,985	31,462
Wind	-118,024	-39,119	145	92
Biomass	-19,568	-2,957	467	626
Other	-1,748	-1,115	1,616	1,131
Grand Total	-741,105	-589,791	975,475	598,949

TRADING CHARGES IN AUGUST 2019³

Gross Party Imbalance cashflows were £74m in August 2019, a decrease of 10% from July. Credits for being short decreased by £3.9m, and credits for being long decreased by £4.6m, between July and August 2019.

Gross Party Imbalance Volumes increased by 11%. Energy Imbalance Volumes for Parties for that were long increased by just 14,158MWh (1.22%). Energy Imbalance Volumes for short Parties increased by 20%.

August **Offer** volume increase by 63% and Offer cashflow increased by 61%, compared to the previous month. The average price of Offers decreased by 1.4%, to £61.17/MWh.

Net **Bid** cashflow in August was £3.17m, compared to -£8.84 in July. This means payment received by Parties for negative Bids were higher what they paid for positive Bids. This is the first time the net Bid cashflow has been positive since March 2019 (£17.02m).

Total Cashflow (£m)	Aug-19	Jul-19	Jun-19	May-19
Long Imbalance Charge (Credit)	-36.55	-41.18	-44.27	-41.62
Short Imbalance Charge (Debit)	37.75	41.64	47.80	43.66
RCRC Credit	6.04	6.25	8.18	7.90
RCRC Debit	-4.84	-5.79	-4.66	-5.85
Offer Cashflow	59.67	37.17	47.65	35.23
Bid Cashflow (Positive Bids)	-9.10	-12.74	-9.84	-11.59
Bid Cashflow (Negative Bids)	12.27	3.90	9.16	5.27

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