BSC Panel 309: December 2020 www.elexon.co.uk

#### ELEXON

# **BSC OPERATIONS HEADLINE REPOR**

In this report you will find commentary on BSC market operation, identification of key events and reporting of key data.

The Trading Operations Report publishes key market data graphically, giving a performance indicator for the Balancing and Settlement arrangements.

**Trading Operations** Report Data. The graphs and backing data are available in Excel format on the Elexon website.

#### England Lockdown had less impact on electricity demand

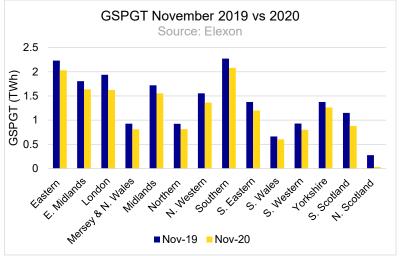
Grid Supply Point Group Take (GSPGT)<sup>1</sup> is a measure of the net demand across the 14 distributional zones in the Great Britain (GB) electricity market. The November lockdown lasted from 5 November to 2 December 2020 and only affected England. Scotland and Wales had their own, different restrictions during November. This article looks at the latest GSPGT data from 5 November to 30 November for all of the 14 GSP Groups in GB.

In comparison to November 2019, the GSPGT for all areas dropped by an average of 13%. The largest percentage drop came in North Scotland, where GSPGT fell by 88%. The actual drop in GSPGT volumes was 0.25TWh, which was the third highest

volume drop in all GSP regions. The GSPGT in North Scotland differs to other regions due to the high generation and low demand in the region. As a result, a small difference in North Scotland demand volume can affect the GSPGT by a significant percentage. The largest decrease in GSPGT volumes was seen in the London GSP region, where there was a 0.31TWh (16%) decrease in GSPGT volumes.

In comparison to the weekdays in November 2018 and 2019, the total GSPGT during weekdays in November 2020 fell by an average of 23% and 21% respectively.

In comparison to October 2020, there was an increase in demand all areas except for the North Scotland and Northern region. In the 12 other GSP groups, there was an average 4% increase in average daily GSPGT.



## **Balancing Mechanism Volumes in October 2020<sup>2</sup>**

The total volume of balancing actions taken in the Balancing Mechanism (BM) for October 2020 was 2.3TWh, a 11% increase from September 2020. The majority (79%) of balancing volume in October came from Gas BMUs.

Accepted Bid volume in October increased by 4% from the previous month. 57% of total Bid volume came from Gas BMUs, with 30% coming from Wind and 8% from Pumped Storage BMUs. Wind Bid volume increased by 90% from September to October 2020.

Accepted Offer volume in October increased by 17% compared to the previous month. Gas accounted for 94% of all Offer volume, with Pumped Storage BMUs responsible for a further 3%.

In this report, the 'Other' seen in previous reports Fuel Type category has been split between Battery Storage and Other. Battery Storage volumes relate to solely Battery Storage BMUs. The new Other category relates to Virtual Lead Parties (VLPs) and Supplier BMUs where the Fuel Type of the generating units is unknown. This follows a request from the BSC Panel to identify the contribution of Battery Storage BMUs to BOA volumes. The request stemmed from BOA volumes associated with the 'Other' Fuel Type reaching their highest in September 2020.

	Bid Volume (MWh)		Offer Volu	me (MWh)
Fuel Type	Oct-20	Sep-20	Oct-20	Sep-20
Battery Storage	-108	-17,115	157	16,612
Biomass	-10,036	-2,093	8,686	4,782
Coal	-9,464	-10,044	13,177	37,188
Gas	-572,724	-657,698	1,223,315	961,625
Hydro	-24,966	-17,904	5,821	8,309
Pumped Storage	-80,212	-66,414	32,815	29,820
Wind	-300,930	-158,163	1,782	1,011
Other	-13,434	-47,237	14,357	50,713
Grand Total	-1,011,874	-976,668	1,300,110	1,110,060

In October, 1% BOA volume previously categorised as 'Other' Fuel Type was from BMUs with Battery Storage.

# System Prices in November 2020<sup>3</sup>

Monthly average System Prices for November 2020 were lower when the market was both short (0.2%) and long (21%), compared to October 2020. The average System Price regardless of length was £40.08/MWh; £2.94/MWh lower than October 2020.

There were 50 negative System Prices in November 2020, after 25 in October. This is the highest amount of negative prices since May 2020 (75).

The lowest System Price, -£63.93/MWh, occurred in Settlement Period 44 on 29 November. The price was set by three Bids from three different Wind BMUs in the South Scotland GSP all priced at -£63.93/MWh.

System Prices exceeded £100/MWh on 18 occasions during November 2020; the second highest number of System Prices exceeding £100/MWh in the past year. September 2020 had the highest count of 31.

The highest System Price this month, £240.77/MWh, occurred in Settlement Period 35 on 9 November 2020. The price was set by Offers from three Short Term Operating Reserve (STOR) providers. During this Settlement Period, the Reserve Scarcity Price (RSP) was applied to STOR flagged actions. The Reserve Scarcity Price is is the product of the Loss of Load

	Average	(£/MWh)	Average (£/MWh) Peak 07:00-19:00		
Period	Short	Long	Short	Long	
Period	System	System	System	System	
Nov-20	62.44	16.40	66.89	17.35	
Oct-20	62.59	20.87	64.35	23.94	
Sep-20	59.38	20.64	64.59	23.28	
Autumn 20	61.40	19.27	65.25	21.61	
Summer 20	42.92	13.61	44.79	14.03	
Spring 20	41.47	8.06	44.68	6.87	
Winter 19-20	51.85	13.25	55.00	14.85	
Autumn 19	55.66	19.04	58.81	21.20	
Nov-19	60.32	24.19	65.41	27.62	

Probability (LoLP) and the Value of Lost Load (VoLL). In this Settlement Period, the LoLP was 0.0354 and the VoLL is a defined parameter with a value of £6,000/MWh. The RSP, and therefore the price of STOR actions with a price less than the RSP, was £212.36/MWh in the System Price calculation for this Settlement Period. This price then had the addition of a Buy Price Price

Adjuster (BPA) of £28.41/MWh to create the System Price of £240.77/MWh.

During the night of 3 November, the National Electricity Transmission System Operator (NETSO) issued an 'Electricity Margin Notice' for Settlement Periods 34 to 37 on 4 November 2020. An Electricity Margin Notice highlights periods of time where available generation capacity may not meet the electricity demands of the System. The purpose of the notice is to encourage generators to create more available capacity and avoid a shortfall of generation. The De-Rated Margin (DRM) measures the amount of excess supply above peak demand. Despite the Electricity Margin Notice being cancelled around 13:12 GMT on 4 November, the DRM for Settlement Period 35 was the third lowest of the month (1.3GW).

The notice and low DRM did not translate to higher System Prices in the four Settlement Periods

System Price and DRM on 4 November 2020 Source: Elexon 70 25 60 20 System Price (£/MWh) 50 40 30 20 5 10 0 0 10 13 16 19 22 25 28 31 34 37 40 43 46 System Price DRM (GW)

concerned. The average price across Settlement Periods 34 to 37 was £1.93/MWh and all Settlement Periods had a long Net Imbalance Volume (the NETSO sold more volume off the Balancing Mechanism than bought on). The 4 November 2020 had a daily average System Price of £26.68/MWh, the third lowest of the month.

### Trading Charges in October 2020<sup>2</sup>

Gross Party Imbalance cashflows were £114m in October 2020, an increase of 8% from September 2020. Debits for being short increased by £3.8m, and credits for being long rose by £4.2m, between September and October 2020.

Gross Party Imbalance Volumes increased by 2% from September to October 2020. Energy Imbalance Volumes for Parties that were long decreased by 4% in October, compared to the previous month. Energy Imbalance Volumes for Parties that were short increased by 7%.

October **Offer** volume increased by 21% and cashflow increased by 34%, compared to September. The average price of Offers increased by £6.00/MWh to £65.99/MWh.

Net **Bid** cashflow in October 2020 was £18.7m, £11.5m higher than last month (£7.2m in September 2020). A positive net Bid cashflow means payment received by Parties for negative Bids were higher than payments from Parties for positive Bids.

Total Cashflow (£m)	Oct-20	Sep-20	Aug-20	Jul-20
Long Imbalance Charge (Credit)	-51.10	-46.95	-38.01	-30.34
Short Imbalance Charge (Debit)	62.49	58.70	45.48	36.55
RCRC Credit	14.82	14.40	9.63	7.98
RCRC Debit	-3.43	-2.65	-2.16	-1.77
Offer Cashflow	84.85	63.54	52.79	48.90
Bid Cashflow (Positive Bids)	-8.05	-6.81	-2.61	-4.59
Bid Cashflow (Negative Bids)	26.73	14.01	10.61	21.12

<sup>&</sup>lt;sup>2</sup> Balancing volumes and trading charges appear as per the latest month with Initial Settlement (SF) run data available.
<sup>3</sup> System prices are based on the previous month's latest Initial Settlement (SF) & Interim Information (II) run data available