BSC Panel 313: April 2021 www.elexon.co.uk

ELEXON

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.

The System Price
Analysis Report
provides data and
analysis specific to
System Prices and the
Balancing Mechanism.

System Prices in March 2021¹

Monthly average System Prices for March 2021 were 5% higher when the market was short and 0.3% lower when long compared to February. The average System Price regardless of length was £54.57/MWh; £2.19/MWh higher than February 2021 and the third highest average System Price in the past year.

System Prices exceeded £100/MWh on 46 occasions during March 2021 compared to 31 the previous month. The highest System Price this month, £900.00/MWh, occurred in Settlement Period 36 on 3 March 2021. The price was set by two Offers from a CCGT BMU.

There were 17 negative System Prices in March 2021, after 17 in February. The lowest System Price, **-£61.00/MWh**, occurred in Settlement Periods 4, 5 and 46 on 11 March, Settlement Period 44 on 28 March and Settlement Period 31 on 29 March. Settlement Period 31 on 29 March was a peak period whereas the three other Settlement Periods were off-peak.

The Reserve Scarcity Price (RSVP) repriced 27 balancing actions from STOR providers in three Settlement Periods during March 2021. The RSVP reprices actions from STOR provides if it exceeds the utilisation price of the action. The

	Average (£/MWh)		Average (£/MWh) Peak 07:00-19:00	
Period	Short	Long	Short	Long
	System	System	System	System
Mar-21	80.33	27.09	89.82	25.09
Feb-21	76.56	27.16	81.56	29.00
Jan-21	110.71	34.64	124.20	37.78
Spring 21	83.50	29.71	92.88	29.01
Winter 20-21	90.62	27.99	100.89	31.28
Autumn 20	61.33	19.21	65.13	21.46
Summer 20	42.92	13.61	44.79	14.03
Spring 20	41.47	8.06	44.68	6.87
Mar-20	52.23	11.29	59.55	10.60

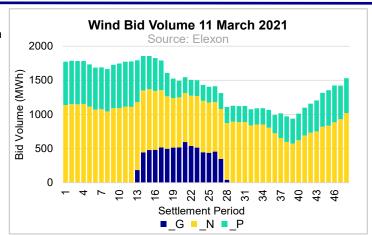
RSVP is the product of the Loss of Load Probability (LoLP) and the Value of Lost Load (VoLL)(currently set at £6,000/MWh). The RSVP reached £1,461.01/MWh in Settlement Period 37 on 6 March 2021. Despite repricing two actions in the System Price calculation, these actions were not included in the Price Average Reference (PAR) volume, so did not directly set the System Price for this Settlement Period.

The RSVP was introduced as part of the Electricity Balancing SCR via P305 'Electricity Balancing Significant Code Review Developments' in November 2015. Due to significant changes in the way the GB system is balanced since the implementation of P305, notably the increased use of renewables, Elexon has raised an Issue Group to discuss the functionality of the RSVP on the current system. Please see the Issue 92 webpage for details.

High Wind Bid Volumes 11 March 2021

Wind BMUs contributed 73% of daily Bid volume on 11 March 2021, the highest proportion of daily Bid volume from Wind since 23 May 2020. In total, 69,243MWh of Wind power was Bid down, over six times more than Balancing Services Adjustment Actions (10,364MWh) and over 11 times more than Gas (5,822MWh).

90% of wind Bid volume on this day came from the North Scotland (_P) and South Scotland (_N) GSP Groups, with the remaining 10% coming from the North West ern (_G) GSP Group. The Western Link, a HVDC cable from West Scotland to North Wales was suffering an outage covering the 11 March, lasting from 15 February to 13 March 2021. This limits the transportation of Wind power to southern areas of the UK.



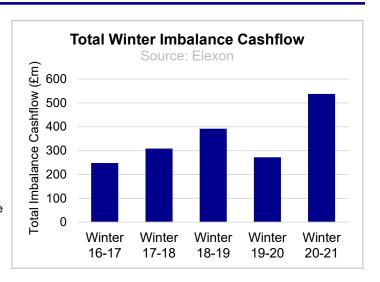
The average price of a Bid from a Wind BMU was -£77.25/MWh. All of the Bid volume from Wind BMUs on 11 March received a System Operator (SO) Flag. An SO Flag is applied to balancing actions when they are taken for system management reasons including, but not limited to, locational constraints.

Highest Winter Party Imbalance Cashflow in the past Five Years

The BSC Winter Season stretched from the beginning of December to the end of February. Winter 2020-2021 had a total Party Imbalance Cashflow of £538m, the highest Party Imbalance Cashflow of the past five years and nearly double Winter 2019-2020 (£272m).

Party Imbalance Cashflow is calculated from the Imbalance Charges for each BSC Party. The Imbalance Charge is the product of the Imbalance Price and Imbalance Volume. Imbalance Volumes for BSC Parties only increased by 7% from Winter 2019-2020 to Winter 2020-2021 despite the Party Imbalance Cashflow nearly doubling.

Spikes in Imbalance Prices through Winter 2020-2021 are likely to have caused the increase in Imbalance Cashflow. The highest price in each month of Winter 2020-2021 was greater than any previous Winter month since the single Imbalance Price implemented in BSC Modification P305 on 5 November 2015.



Balancing Volumes in February 2021²

The total volume of balancing actions taken in February 2021 was 2.87TWh, a 66% increase from January. The majority (61%) of balancing volume in February 2021 came from Gas BMUs.

Accepted **Bid** volume in February increased by 74% from the previous month. 37% of total Bid volume came from Gas BMUs, with 30% coming from Wind and 23% from Balancing Services Adjustment Actions (BSAAs).

Increases in Bid volume were seen across all Fuel Types except Coal, Gas and Biomass. The greatest increase was from Wind BMUs, which increased 761% from January. Bid volume from Hydroelectric BMUs increased by 374%.

Accepted **Offer** volume in February increased by 59% compared to the previous month. Gas accounted for 85% of all Offer volume, with BSAAs responsible for a further 7%.

Offer volume February from Gas BMUs increased by 65% compared to the previous month. Coal Offer volume doubled compared to the previous month and contributed 2% of total Offer volume in February.

	Bid Volun	Bid Volume (MWh)		me (MWh)
Fuel Type	Feb-21	Jan-21	Feb-21	Jan-21
Battery Storage	-385	-150	4	33
Biomass	-10,624	-15,339	33,258	5,851
Coal	-16,915	-24,569	24,708	12,380
Gas	-528,906	-539,833	1,227,141	742,208
Hydro	-34,268	-7,237	1,987	5,673
Other	-17,020	-4,855	19,836	22,832
Pumped Storage	-66,527	-26,865	32,453	37,341
Wind	-434,725	-50,510	2,183	854
BSAA	-323,192	-153,297	93,700	78,066
Grand Total	-1,432,561	-822,655	1,435,269	905,238

Trading Charges in February 2021²

Gross Party Imbalance Cashflows were £132m in February 2021, a decrease of 43% from January 2021. Debits for being short decreased by £54m, and credits for being long decreased by £47m, between January and February.

Gross Party Imbalance Volumes decreased by 6% from the previous month. Energy Imbalance Volumes for Parties that were long decreased by 10% and 3% lower for Parties that were short in February.

February **Offer** volume increased by 64% but cashflow decreased by 2%, compared to January. The average price of Offers decreased by £55.99/MWh to £82.92/MWh from January to February. The large drop in average Offer price has caused the cashflow to decrease slightly whilst volume increased substantially.

Net **Bid** cashflow in February was £25.3m, £35.5m more than the previous month (-£10.3m in January 2021). 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)	Jan-21	Dec-20	Nov-20	Oct-20
Long Imbalance Charge (Credit)	-60.75	-107.70	-74.61	-46.71
Short Imbalance Charge (Debit)	70.99	125.05	95.22	56.10
RCRC Credit	14.86	22.79	23.51	12.07
RCRC Debit	-4.62	-5.44	-2.90	-2.68
Offer Cashflow	109.60	111.73	95.48	100.60
Bid Cashflow (Positive Bids)	-8.77	-14.43	-8.38	-5.46
Bid Cashflow (Negative Bids)	34.04	4.15	23.68	53.12