PUBLIC

TRADING OPERATIONS REPORT

JUNE 2019

Version 1.0

JUNE 2019

ELEXON

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TRADING OPERATIONS REPORT

INTRODUCTION

What is the Trading Operations Report?

The Trading Operations Report provides information on the state of the BSC market; including issues and incidents and a summary of the key events that may have had an impact on BSC Parties. The report contains various statistics for a range of key metrics and charts to provide an understanding of any underlying trends.

When is the report produced?

The Trading Operations Report is produced on a calendar month basis to meet the schedule of BSC Panel meetings as published on the ELEXON website. It is also circulated to the Imbalance Settlement Group (ISG) and the Supplier Volume Allocation Group (SVG).

What period does the report cover?

The reporting month is the one prior to the current month. Most of the charts and tables in the report use data relating to the reporting month. However, some of the charts and tables are dependent on data from later Settlement Runs and in these cases the statistics will be based on the latest data available. Consequently, the reporting period differs for certain charts. More specific information on which dates are used in reporting can be found next to each individual graph.

Where does the data come from?

The data used to compile the Trading Operations Report is acquired from BSC Agents and from ELEXON's internal monitoring systems. Data is continually submitted to ELEXON from the BSC Agents and inputted to the Trading Operation Monitoring Analysis System (TOMAS) database. Consequently, this database holds data derived directly from the BSC Agent settlement reports and flows. It holds Balancing Mechanism (BM) Unit details, contract volumes, metered volumes and other data items.

ELEXON runs various queries and software applications in order to compile the Trading Operations Report. This happens when the TOMAS database (and other data sources also used for producing the Trading Operations Report), are fully refreshed with a full set of data for the reporting month.

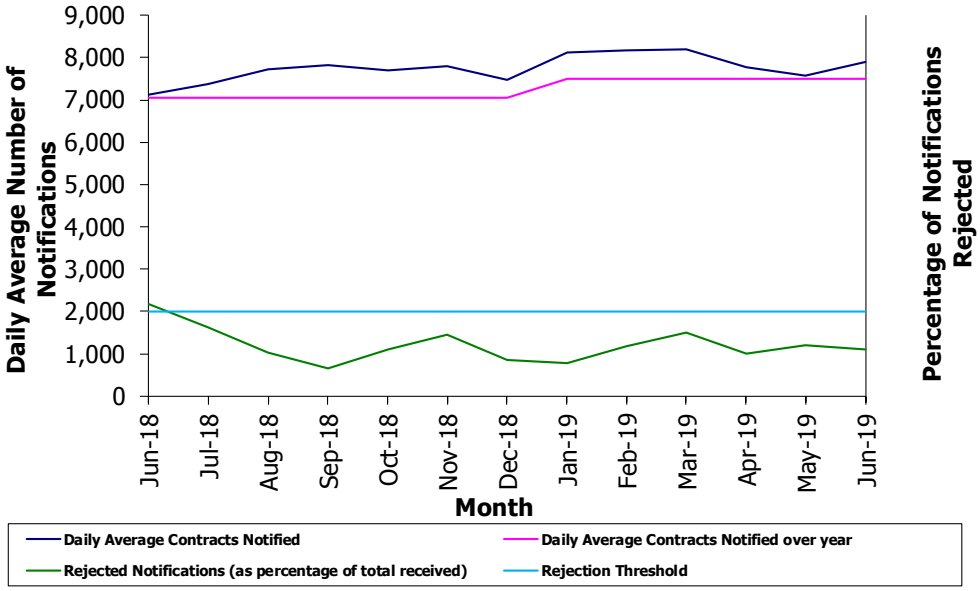
1 SYSTEM PERFORMANCE

Energy Contract Volume Notification (ECVN) - A contract between two BSC Parties which notifies the ECVAA of the volumes of energy bought and sold between two Energy Accounts. These Energy Accounts could belong to separate Parties or could both belong to the same Party. For further details on ECVNs, please refer to the Volume Notifications guidance on the ELEXON website.

Key Performance Indicators - A set of quantifiable measures that ELEXON uses to gauge or compare performance of BSC agents in terms of meeting stated strategic and operational goals. The level of performance is measured by Service Levels.

Service Level – The required level of performance on a KPI to be considered as fulfilled in the month.

BSC Agents - BSC Agents provide services under the BSC arrangements. Section E of the BSC defines the roles and responsibilities. ELEXON manages contracts with the service providers to ensure they meet agreed service levels. For further details, please refer to the BSC Agents guidance on the ELEXON website.



1.01 Daily Average Submitted Notifications and % of Notifications Rejected

This graph shows daily average ECVN submissions and rejections for the period of one year. It compares the data to last year's average.

The 2% rejection threshold is an internal performance measure. If the number of rejections goes above the threshold, ELEXON will provide additional commentary into the cause.

BSC Section P covers these notifications and validation. BSCP71 'Submission of ECVNs and MVRNs' covers the process in detail.

Commentary: The 2% threshold for rejected notifications was breached in June 2018. There are a number of reasons why notifications can be rejected. The majority of rejections occur where participants submit ECVAA trade notifications out of sequence, resulting in subsequent notifications being rejected. In June 2018 there was a higher volume rejected following the planned downtime overnight on 27/28 June. Some Parties continued to notify during the downtime resulting in notifications being rejected.

1.02 Central Systems Availability

ELEXON has appointed a number of external agents to deliver BSC Services outlined in the BSC Service Descriptions. The services are delivered by 'BSC Agents'.

This table details the performance of the BSC Central Services Agent in meeting five Key Performance Indicators through the Service Levels over the most recent three months. These are only a representative sample of a more complete and detailed set of Key Performance Indicators that are reported by the BSC Agents in a Monthly Report to ELEXON. The table also provides an indication of the performance of the BSC Central Systems including service losses that are not under the direct control of the BSC Central Services. The column headers in the table above indicate the following:

Achieved (excluding all planned outages) refers to the performance of the systems operated by the Central Services Agent including the impact of service losses outside the Agent's direct control (e.g. NG unplanned outages, TIBCO Flooding)

Achieved (including all factors) refers to the performance of the systems operated by the Central Services Agent including all the impacts of services losses outside the Agent's direct control (as above) as well as any service losses within the Agents control.

Service	Key Performance Indicator	*Service Level*	Jun-19		May-19		Apr-19	
			Achieved excluding all planned outages	Achieved including all factors	Achieved excluding all planned outages	Achieved including all factors	Achieved excluding all planned outages	Achieved including all factors
BMRA	% availability of BMRA over the period	99.90%	99.59%	99.59%	98.12%	98.12%	99.80%	99.80%
	% of estimated SSP and SBP calculated within 5 minutes of CADL + 15 minutes with the client and publish the results on the BMRA service	100.00%	100.00%	99.24%	100.00%	98.11%	99.93%	99.03%
CDCA	% of outstations interrogated for each calendar day	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
CRA	% of valid new registration data received before 14.00 processed the same working day	100.00%	100.00%	100.00%	100.00%	100.00%	95.24%	95.24%
ECVAA	% of Energy Contract Volume Notifications and Metered Volume Reallocation Notifications processed within 15 minutes of receipt	100.00%	99.93%	99.93%	100.00%	100.00%	100.00%	100.00%
SAA	% of scheduled Interim Information Runs, Initial Settlement Runs, Reconciliation Runs, Final Reconciliation Run and Dispute Final Settlement Runs completed correctly	100.00%	99.00%	99.00%	95.24%	95.24%	100.00%	100.00%

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Commentary:

ECVAA
The system could not process data for one hour on 8 June 2019. The incident was resolved with no impact to customers
BMRA
The system was not able to process one report for on the evening of 18 June 2019. Although this resulted in failure of the availability SLA, all other reports were available.
SAA
The Settlement Report (SAA-IO14) were not released in accordance with the Settlement Calendar for two Settlement Dates.

	Number of new BSC Parties	Number of exited BSC Parties
July 2018	1	0
August 2018	2	0
September 2018	5	0
October 2018	4	0
November 2018	1	5
December 2018	3	0
January 2019	5	0
February 2019	1	0
March 2019	3	0
April 2019	2	1
May 2019	6	0
June 2019	2	1
Total acceded in the last 12 months		**35**
Total exited in the last 12 months		**7**

1.03 Accession and Withdrawal from the BSC in the last 12 months.

The table details the number of Party accessions the market has seen in the last 12 months. It also provides the data of the total number of Parties that exited the market in the same period.

This information helps to monitor the activity in the market.

Commentary: On 30 June 2019, the current number of BSC Signatories was 470.

2 PRICES

Length of the system – The Transmission System is 'short' when there is less generation than demand on the system. The Transmission System is 'long' when there is more generation than demand on the system.

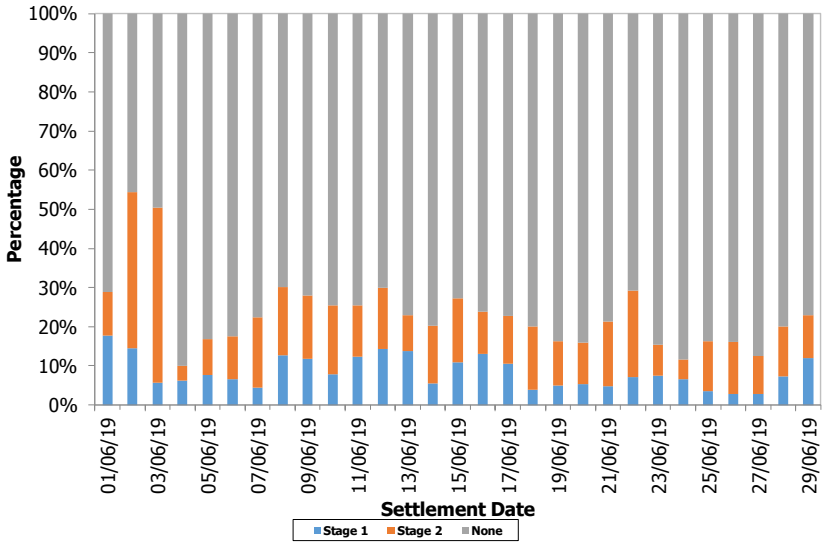
The Net Imbalance Volume (NIV) - The volume of the overall system energy imbalance, as a net of all system and energy balancing actions taken by the System Operator for a Settlement Period and it indicates whether the system was long or short in a that Settlement Period. Positive NIV denotes a short system and vice versa.

System Price - The energy imbalance price for a Settlement Period is calculated using the accepted bids and offers and Balancing Service Adjustment Action (BSAA) that are taken by the SO for energy balancing purpose for that Settlement Period.

Balancing Service Adjustment Action (BSAA) – Any balancing service action taken by National Grid (System Operator) outside the Balancing Mechanism.

Continuous Acceptance Duration Limit (CADL) - Used to flag short duration Bid-Offer acceptances and BSAA that are associated with system balancing actions in the system price calculation.

System Operator (SO) Flagging – Used by the System Operator to flag system balancing actions in the system price calculation.



2.01 Flagged Balancing Actions in System Price Calculations

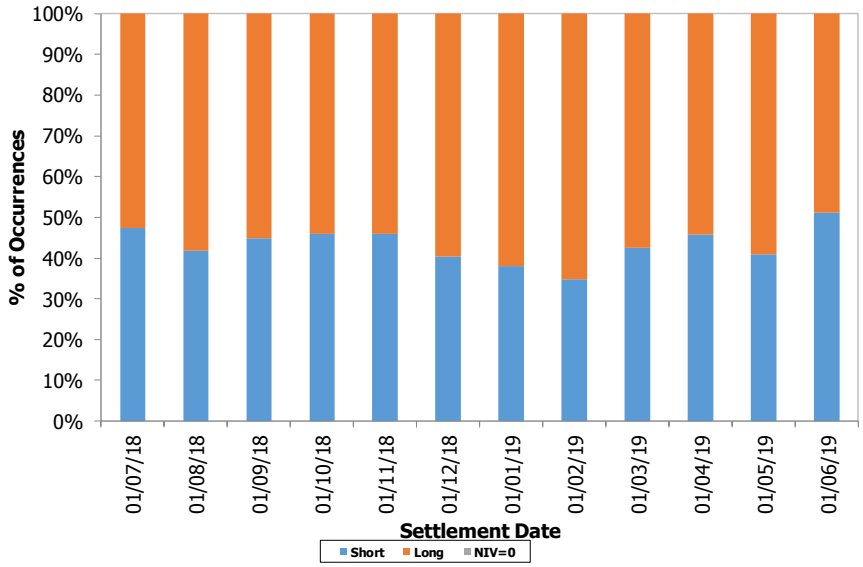
The purpose of this chart is to monitor price calculations. The chart shows the ratio of system balancing actions (Stage 1 and 2) to energy balancing actions (none).

A Stage 1 flagged action is an action that was either:

- Flagged by the System Operator (SO) as one taken for system balancing reasons; or
- Was Continuous Acceptance Duration Limit (CADL) flagged, and so deemed to be a system balancing action.

A Stage 2 flagged action may be subject to a Replacement Price if it is NIV adjusted, and is a Stage 1 flagged action that is more expensive that the most expensive Stage 1 unflagged action.

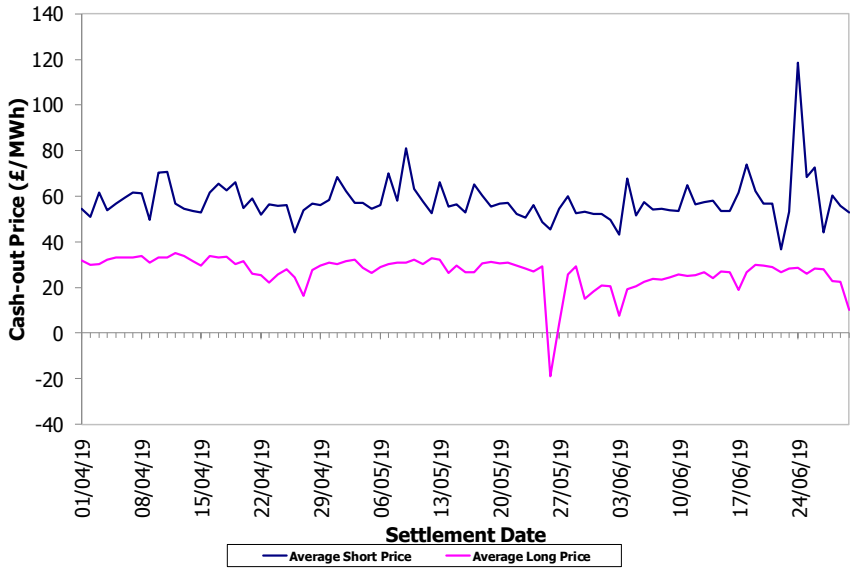
Commentary: In June 2019, an average of 23% of balancing actions were Stage 1 Flagged; of these 62% went on to receive a Stage 2 flag. On 2 June, an average of 54% of actions were flagged. On this day, Wind BM Units accounted for 11% of all balancing volume, but 32% of all SO or CADL Flagged volume. In contrast, CCGT BM Units accounted for 45% of balancing volume, but only 19% of SO and CADL Flagged volume.



2.02 Long vs Short Market

The chart shows how often in the previous year the market was either long or short. Although the actions are separate, together they make up full movements in the market.

Commentary: The market was short for 51% of Settlement Periods in June 2019, the shortest month since December 2017.



2.03 Daily Average System Prices (£/MWh)

The definitions of System Prices can be found in the glossary, at the beginning of the section.

The graph gives an overview of what has happened in the market in the past month. The graph should be analysed together with Balancing action and Short versus Long market.

Gaps in the in the Long/ Short prices are due to the System being constantly long/short on the affected days.

Commentary: On 24 June 2019 the highest System Price (£375.00/MWh) since 1 March 2018 occurred. The average daily System Price on this day was £118.59/MWh.

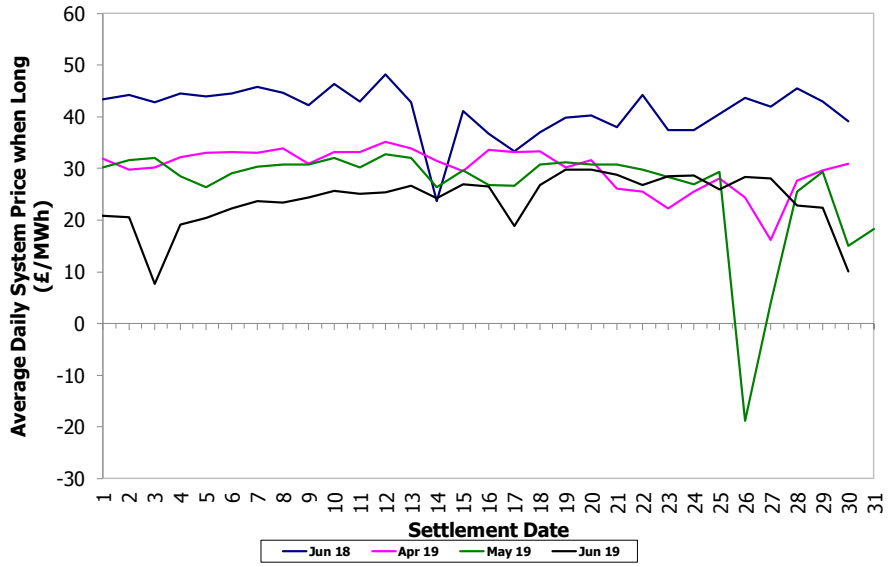
2.04 System Prices

System Prices when System is Long (£)					
	Min	Max	Median	Mean	Std Dev.
June 2019	-60.00	45.00	27.13	24.67	7.39
May 2019	-71.26	45.00	30.11	25.77	15.04
April 2019	-61.00	50.35	31.04	30.01	6.81
March 2019	-70.24	55.50	32.75	29.08	14.80

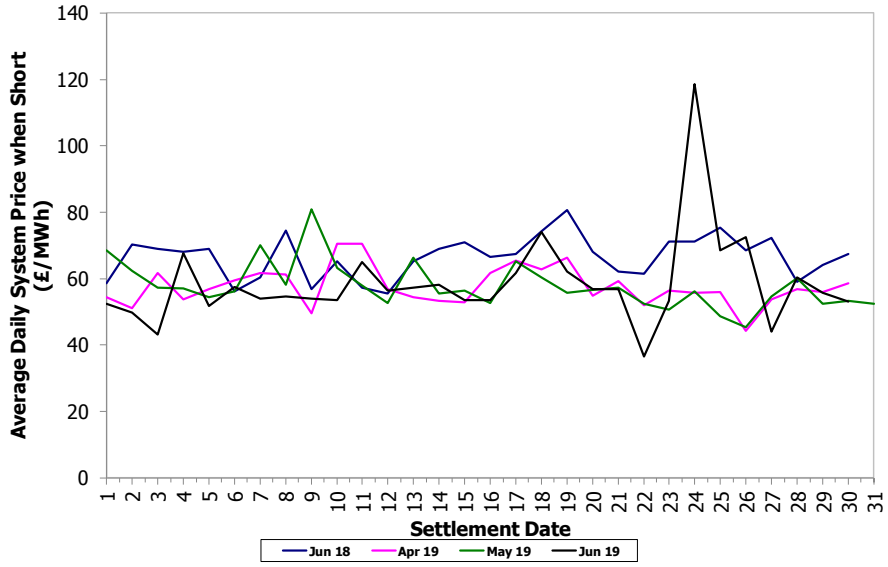
System Prices when System is Short (£)					
	Min	Max	Median	Mean	Std Dev.
June 2019	0.00	375.00	54.00	57.66	24.86
May 2019	32.80	157.38	55.00	59.16	15.14
April 2019	30.95	100.00	55.00	57.97	11.31
March 2019	36.80	152.30	59.94	61.94	10.47

Commentary:
The highest System Price of the month, £375.00/MWh, occurred on the 24 June 2019 during Settlement Periods 23, 24 and 25 when the system was short. This price was set by Buy actions from a Coal BM Unit.
The lowest System Price, -£60.00/MWh, occurred in Settlement Period 22 on 3 June. This was set by five Sell actions from one Biomass BM Unit.

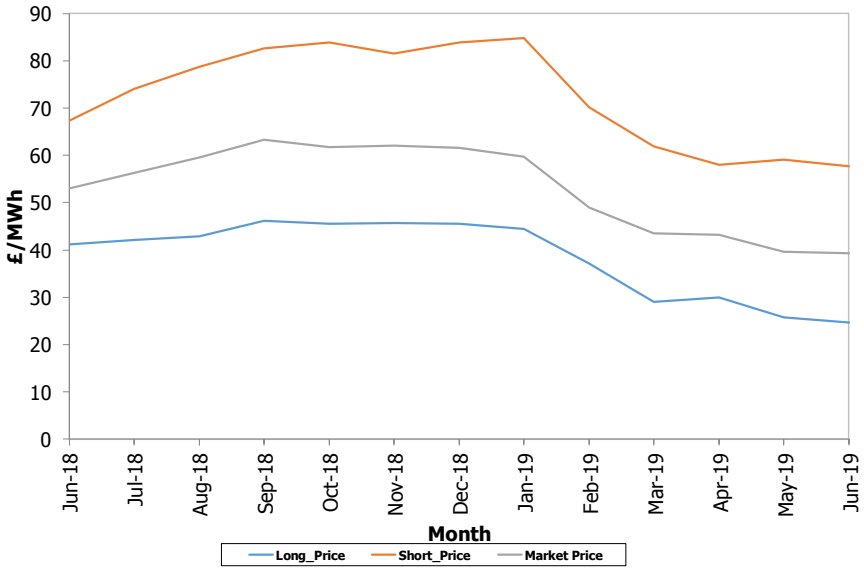
2.05 Average Daily System Price when Long per Settlement Day (£/MWh)



2.06 Average Daily System Price when Short per Settlement Day (£/MWh)



Commentary: In June 2019, the highest average daily long System Price of £118.89/MWh was 67% higher than the same day last year and 111% higher than the same day last month.

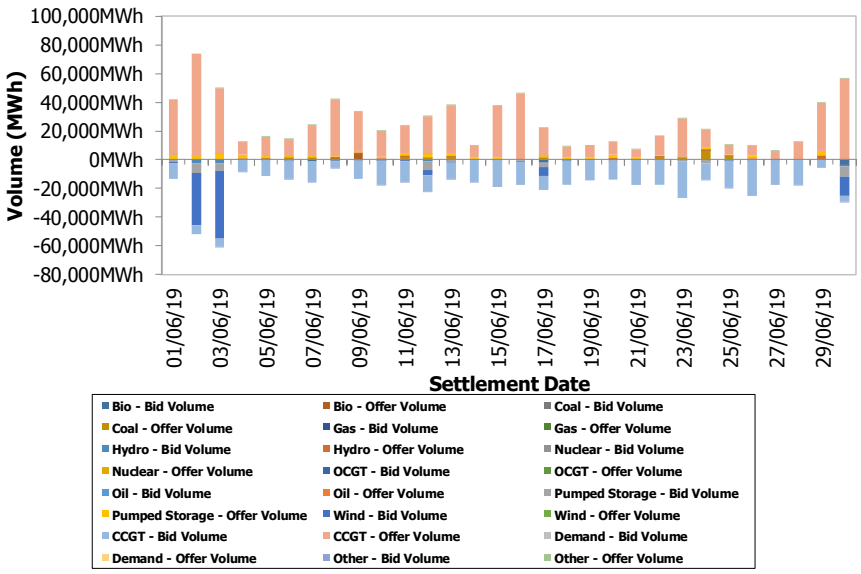


2.07 Monthly Average System Long Price (£/MWh), System Short Price (£/MWh) and Market Price

The definitions on Prices can be found in the glossary at the beginning of the section. The calculations were outlined in previous charts.

Indicative System Price can be found on BMReports.com and once the data is finalised it is published on the ELEXON Portal.

Commentary: In June 2019, we saw the lowest monthly average Long Price (£24.67/MWh) and Market Price (£39.32/MWh) since June 2017. Despite the high prices on 24 June 2019, the monthly average Short Price was at its lowest (£57.66/MWh) since February 2016.



2.08 Accepted Volume by Day and Fuel Type

This chart shows the daily total of Accepted Bid volume and Accepted Offer volume in MWh, broken down by Fuel Type. Bid volume is shown as negative and Offer volume as positive.

Commentary: Wind contributed 58GWh of bid volume on 3 June 2019. On this day in Settlement Period 22, the lowest System Price of the month (-£60.00/MWh) occurred, although this price was set by a Biomass rather than a Wind BMU.

3 CREDIT

Credit Assessment Price (CAP) - A price expressed in £/MWh and provided by ELEXON for the purpose of calculating Actual Energy Indebtedness. It is intended to be a future estimate of System Buy Price (SBP). The Reference Price is a derived figure, intended to be indicative of future electricity prices, that is weighted on quarterly forward prices (as explained in the CAP Review Guidance document). These forward prices are currently provided by ICIS Heren Energy Limited. The Reference Price is calculated on a weekly basis and compared to the current value of CAP. When the difference exceeds the trigger level then a CAP review will begin.

The meaning to the term is outlined in Section M1.4.1.

Credit Cover - Collateral provided by a Trading Party, in accordance with Section M, as cash or letter of credit to the FAA to cover its Energy Indebtedness.

Credit Default - A status and process which a Trading Party may enter should its Credit Cover Percentage (CCP) exceed thresholds specified in the BSC. Level 1 Credit Default is triggered when a party exceeds a CCP of 80% and Level 2 Credit Default is triggered when a party exceeds a CCP of 90%. More information can be found on a guidance note on the ELEXON website.

Excess Credit – The amount of Credit which exceeds that required to cover Total Energy Indebtedness. If a Party has positive indebtedness then that indebtedness is divided by 0.8 (to account for the Level 1 Default threshold). This value is then subtracted from the Party's actual Credit Cover. Where the indebtedness is zero or negative the Party's total Credit Cover is excess credit.

Indebtedness - The difference between a Party's contract position and their actual position.

Indebtedness Error – The difference between the Calculated Energy Indebtedness (as per credit calculation) and the Actual Indebtedness using the Interim Information Run based actual value of the charges accrued.

Indebtedness Exposure – The Indebtedness that is not covered by Credit Cover or by the Credit Cover calculation. This is the value of potential market exposure from inaccuracy of the credit cover percentage should the Party default.

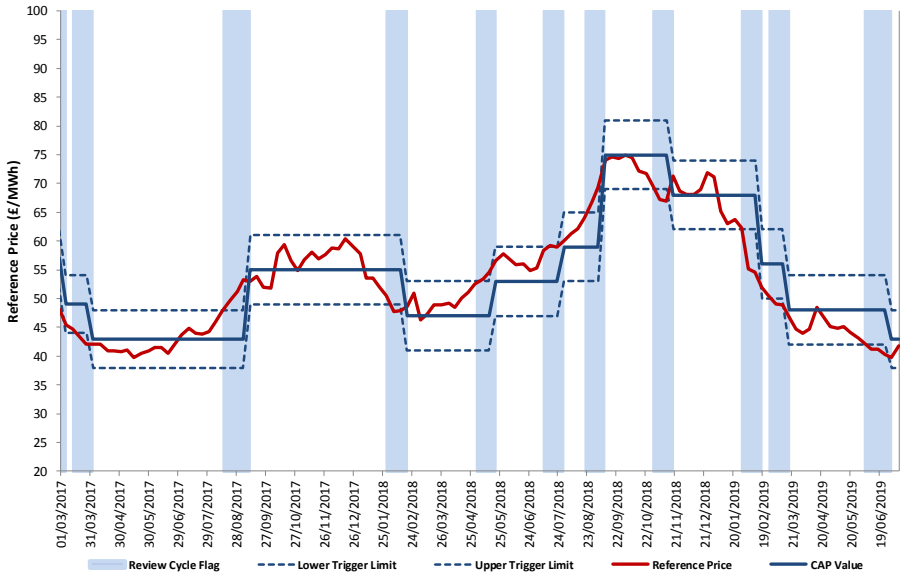
Demand Capacity (DC) - The maximum expected net Demand for that BM Unit in a BSC Season.

Generation Capacity (GC) - The maximum expected net Generation for that BM Unit in a BSC Season. More details on GC/DC can be found under Technical Operations on the ELEXON website.

Final Physical Notification (FPN) - The level of Import or Export that the Party expects to Import or Export from BM Unit, in Settlement Period, that is not Balancing Mechanism Acceptances from the System Operator (i.e. the volume that the Party expects itself, not as requested by the System Operator). The quantity established in accordance with Section T3.2.1.

Credit Assessment Load Factor (CALF) - A measure of the average generation/demand as a ratio of their maximum for a BSC Season. For further definition, please refer to the CALF Guidance on the ELEXON website.

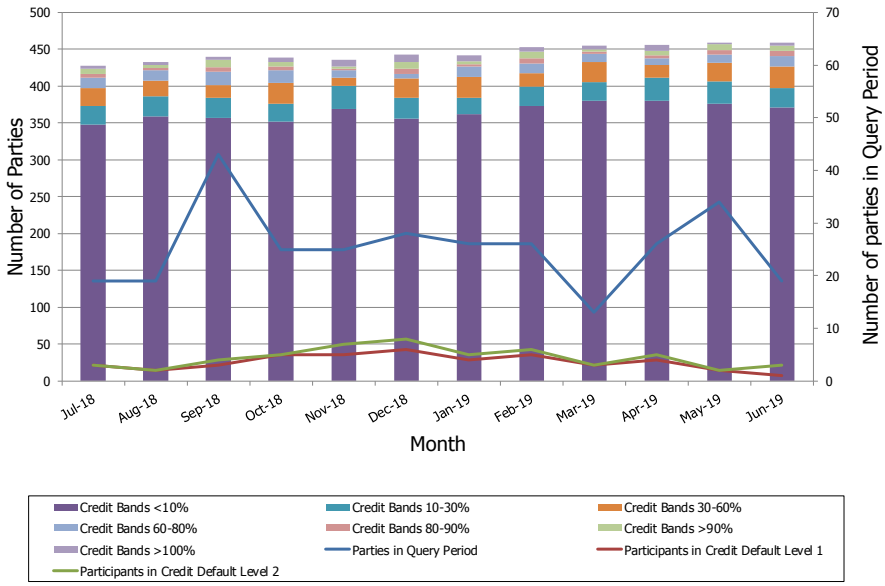
Credit Qualifying BM Unit - The definition of Credit Qualifying BM Units is provided in Section K3.7 of the BSC. Credit Qualifying BM Units are predominantly large generating units. Although, some of the FPNs displayed in the chart are negative as under the Trading Unit methodology demand BM Units can have Production Status and therefore be Credit Qualifying.



3.01 Weekly Credit Assessment Price (CAP) trigger Checks

The Credit Committee sets the trigger level and reviews this level from time to time.
The CAP value currently is £68/MWh, effective from 4 December 2018.

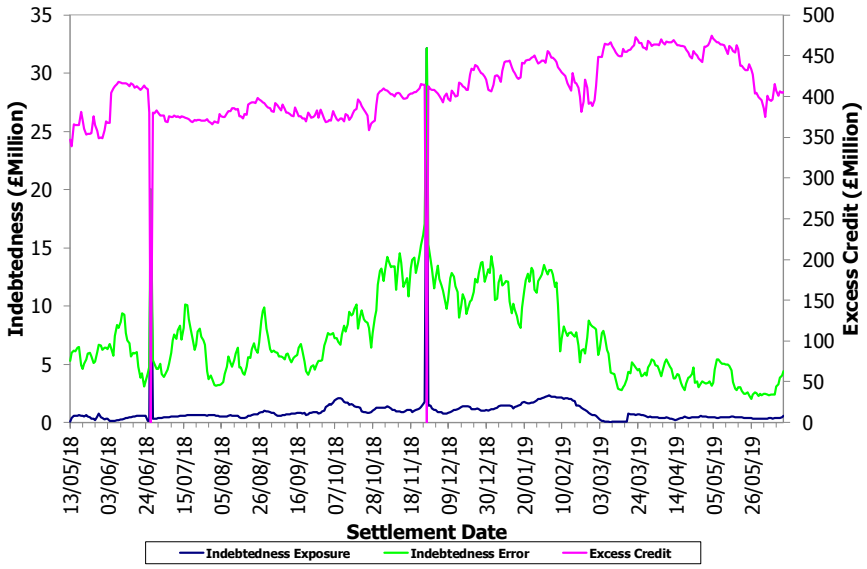
Commentary: Following a trigger event on 10 June 2019, The Credit Committee met on 24 June to discuss revising the CAP values. It was agreed to reduce the CAP to £43/MWh, and the trigger level to +/-£5/MWh, effective from 16 July 2019.



3.02 Credit Defaults/Credit Cover Percentages

For Parties that enter the Credit Default Query Period, the data has been adjusted so that it is a true reflection of maximum indebtedness at any time during the month. The chart covers credit cover and credit default information for a period of one year. The two lines indicate the two thresholds for entering a query period.

Commentary: In June 2019, 19 Credit Default notices were sent to 12 different Parties, compared to 34 notices sent to 13 Parties in May 2019. A Credit Default notice is issued for a Credit Cover Percentage over 80%.
In June, one BSC Party was in Level 1, and three BSC Parties were in Level 2 Credit Default. One Party had been in Level 1 and Level 2 Credit Default for a period of time in May.

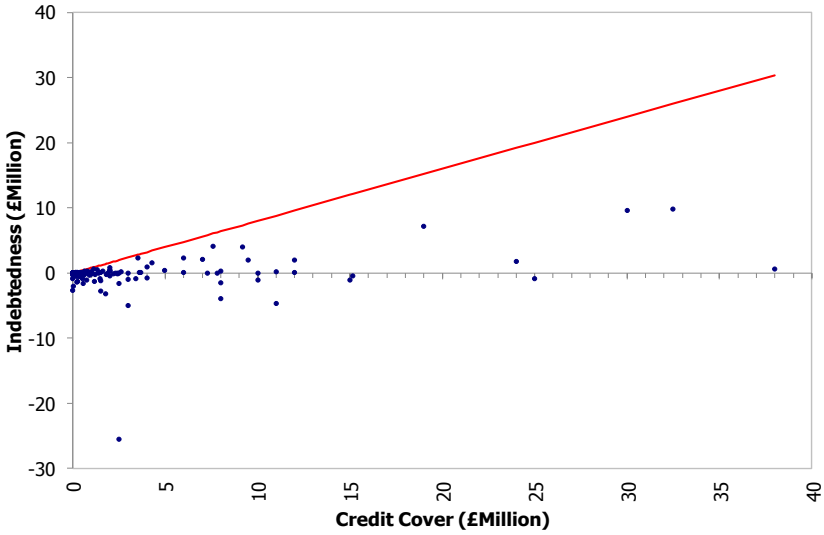


3.03 Excess Credit and Indebtedness

The difference between the Actual and Calculated Indebtedness is determined for each Settlement Day and for each Trading Party. This calculation is only undertaken when the Actual value is greater than the Calculated value and for the purpose of this exercise any negative values are assumed to be zero. The Indebtedness Error is this calculation summed across all Trading Parties. It provides an indication of the level of Indebtedness that has not been covered by the Credit Cover calculation.

For each Settlement Day and for each Trading Party, the difference between the Actual Indebtedness and the Credit Cover lodged is determined whenever the Calculated Indebtedness is less than the Credit Cover. In the event that the Calculated Indebtedness is greater than the Credit Cover and the Actual Indebtedness is greater than the Calculated Indebtedness then the difference between these two latter items is determined.

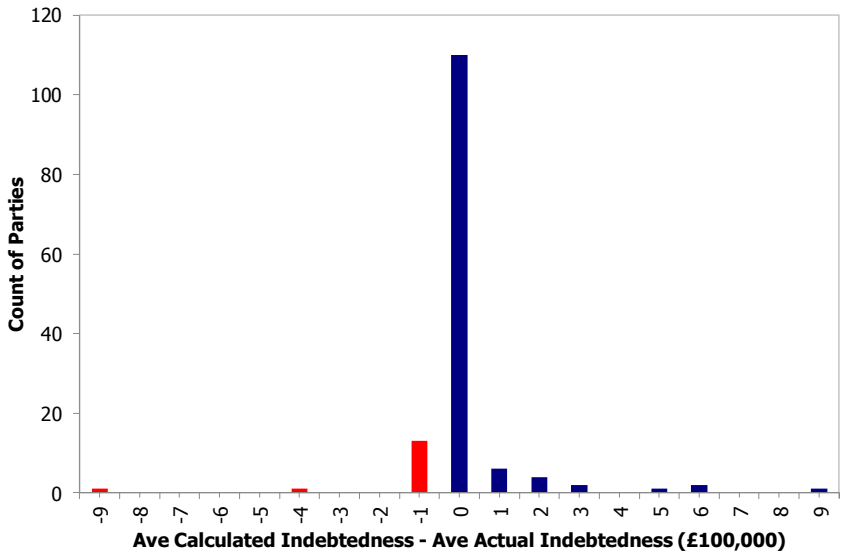
Commentary: On 1 June 2019, ELEXON held £471m of Credit Cover. 18 BSC Parties added collateral throughout May totalling ~£2.7m, and 12 Parties withdrew collateral totalling ~£34.7m.
The zero data shown at the end of June 2018 and end of November 2018 are due to System outages.



3.04 Average Indebtedness and Average Credit Cover over the Reporting Month

This chart displays for each Party (represented by a point on the chart) the relationship between a Party's Credit Cover and the associated Indebtedness calculated in the BSC Central Systems. The values are an average of the Settlement Period 48 values over a month. The straight line plot represents the situation where Parties level of indebtedness would be 80% of their Credit Cover. If the Party reaches 80% it would trigger a Credit Default warning.

Commentary:
On 1 June 2019, 20% of Parties had a negative average indebtedness. This represents a net credit in Trading Charges over the 29 day period before payment. 20% of Parties had a positive average indebtedness, whilst the Remainder had zero average indebtedness.
267 Parties do not have any indebtedness. These are Parties that have no Credited Energy, new entrants that have yet to incur any indebtedness, Non-Physical Traders that can balance out their position perfectly by the submission deadline, or Parties that reallocate 100% of their volumes to another Party Account using MVRNs.



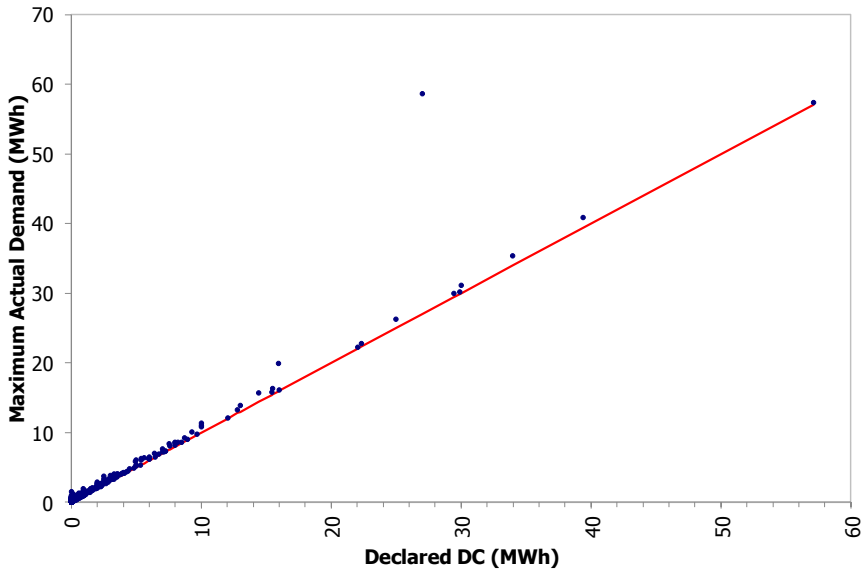
3.05 Comparison of Actual and Calculated Indebtedness

The chart shows the difference between the average Calculated Indebtedness held and the average Total Energy Indebtedness (TEI) incurred (as billed at SF) in that month is determined. The differences are grouped in £100,000 blocks and a count is made of the number of Trading Parties that fall in to each block.

Negative values on the x-axis of the chart show the number of Parties with average TEI exceeding their average Credit Cover and hence an indication of the potential material exposure of the market to unsecured trading charges.

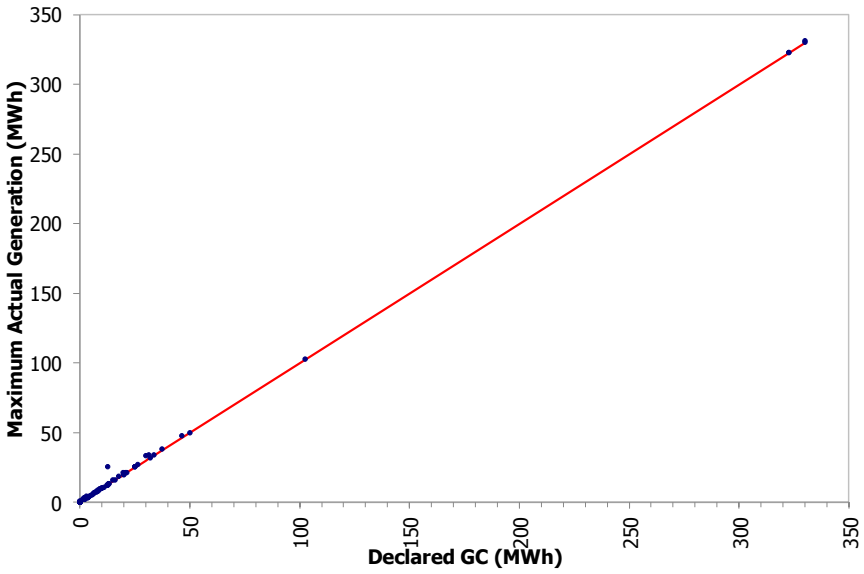
Commentary: There are no comments on this chart.

In both chart 3.06 and 3.07, any value above the red line denotes a BM Unit whose maximum demand or generation have breached the limits set out in the BSC Section K3.4.3. ELEXON monitors the values on a regular basis and requires a re-declaration for any breach. The values are also re-declared prior to the start of each BSC Season.



3.06 Declared DC and Monthly Maximum Demand (based on SF data)

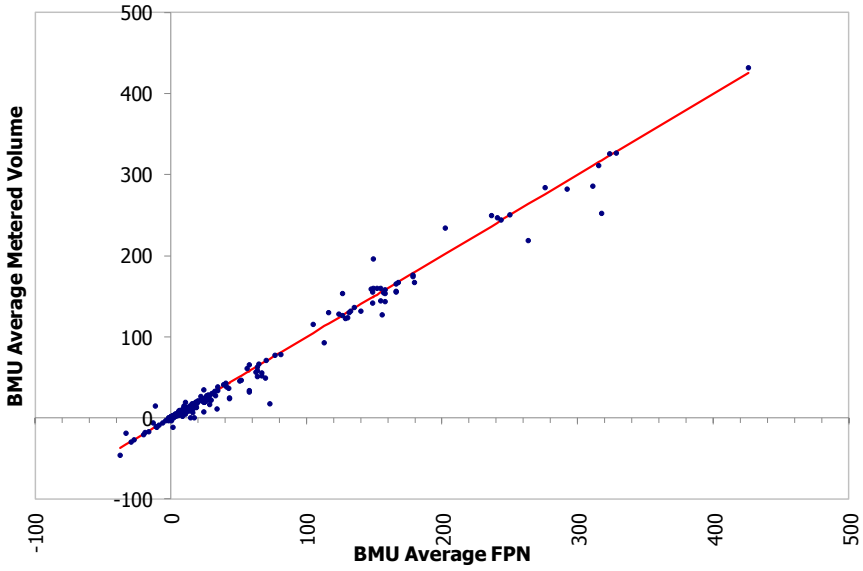
In general, breaches of DC indicate that the DC needs to be increased (in magnitude) by the Trading Party to avoid the Energy Indebtedness being underestimated. This would result in the Trading Party not having to lodge sufficient Credit Cover to cover its potential Actual Indebtedness to the market.



3.07 Comparison between Declared GC and Monthly Maximum Generation (based on SF data)

The majority of Production BM Units are now Credit Qualifying and the GC is used to determine the Production/Consumption status only. Where the GC is used in the Credit Cover Percentage calculation an inaccurate value could result in Trading Parties not lodging enough Credit Cover.

Commentary: There was a metering issue for a Supplier BM Unit at the SF Settlement Run, which has caused the outlier in Graph 3.06. This will be corrected at the R1 Settlement Run.



3.08 Monthly Average Final Physical Notification (FPN) and Average Metered Volume for Credit Qualifying BM Units

This chart shows the average Final Physical Notification (FPN) of each Credit Qualifying BM Unit against its average metered volume over the reporting month.

The purpose of this chart is to demonstrate the accuracy of the FPNs submitted by the Credit Qualifying BM Units relative to their metered volume. FPN is used as an estimate for metered volume in the credit cover percentage calculations until metered data is collected and available two working days after the Settlement Date.

The FPN that is above average meter volume might indicate higher bid/offer volumes, which can happen to facilitate settlement and do not result in any non-compliance.

Commentary: A FPN that is above average meter volume can indicate higher Bid/Offer Acceptance volumes, which can happen to facilitate Settlement and do not result in any non-compliance.

Different types of Credit Qualifying BM Unit will be less accurate than others due to the nature of the generation. For example, a wind farm is less predictable compared to a nuclear power plant.

4 CASH FLOWS

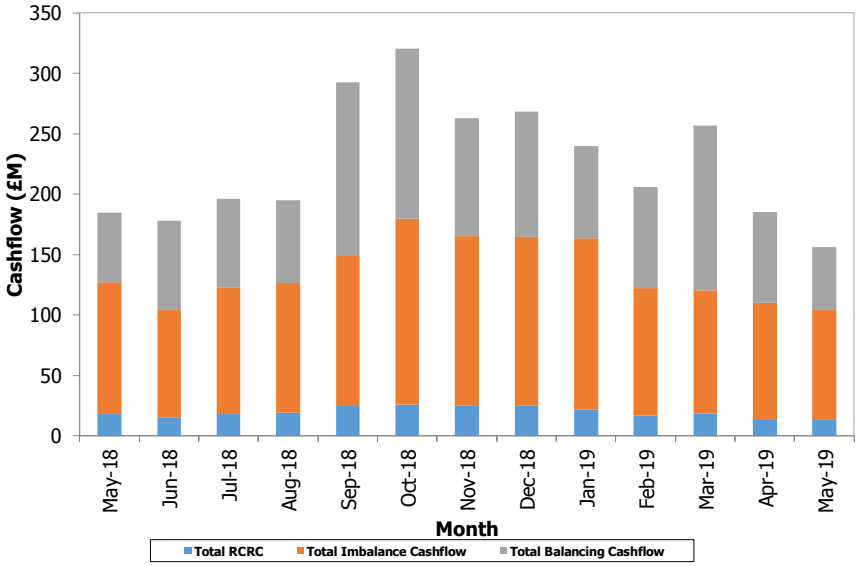
Total Energy Imbalance Cashflow - (marked Total Imbalance Cashflow on the chart) – The total of Energy Imbalance payments to and from Parties in the imbalance market. The value displayed on the chart for each month is the gross value summed overall Settlement Periods in that month.

Total Residual Cashflow Reallocation Cashflow (RCRC) - The Residual Cashflow is calculated to either recover or pay back the net Energy Imbalance from/to BSC Parties depending on whether the market is long or short. The value displayed on the chart for each month is the gross value summed overall Settlement Periods in that month. For more details on RCRC, please see the RCRC guidance on the ELEXON website.

Total Balancing Cashflow – The total of payments to and from BSC Parties in the Balancing Mechanism for Accepted Bids and Offers. The value displayed on the chart for each month is the gross value summed overall Settlement Periods in that month.

Gross Cashflow - The total gross cashflow within settlement is the sum of the Total Imbalance, Residual and Balancing Cashflows.

Bids and Offers - The Balancing Mechanism allows BSC Parties (if they wish) to submit Offers to sell energy (by increasing generation or decreasing consumption) to the system and Bids to buy energy (by decreasing generation or increasing consumption) from the system, at prices of the BSC Party's choosing. National Grid accepts Bids and Offers as required to balance the electricity on the Transmission System. Accepted Bids and Offers for individual BSC Parties are reported on the Balancing Mechanism Reporting Service (BMRS) at BMReports.com.

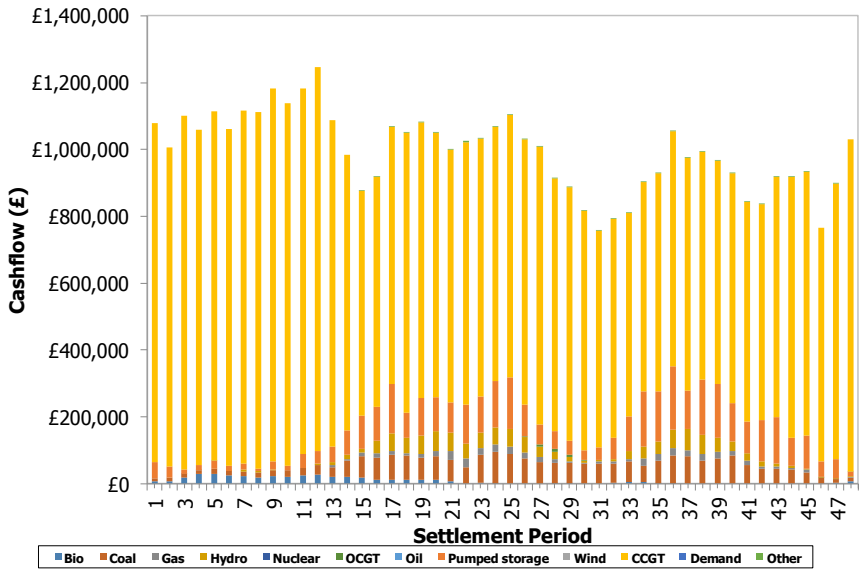


4.01 Party Cashflows in the Settlement System

This chart shows an absolute sum of Settlement Cashflow aggregated by Party.

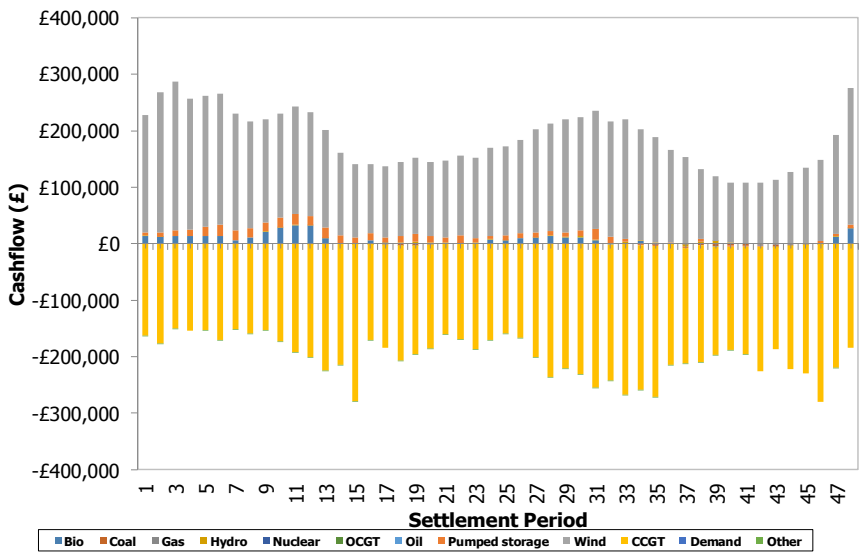
Commentary: Total balancing cashflow in May 2019 was £52m; the lowest total balancing cashflow since May 2018 (£49m).

The two graphs 4.02 and 4.03 below depict the cash flow associated with accepted bids and offers by Period and Fuel Type. It provides an insight into how much balancing actions cost and how the amount is influenced by the time of day and type of BMU used for balancing. Positive values on either graph reflect cost to the system (i.e. payments made to BSC Parties). Negative values show payments made by BSC Parties.



4.02 Accepted Offer Cashflow by Period and Fuel Type

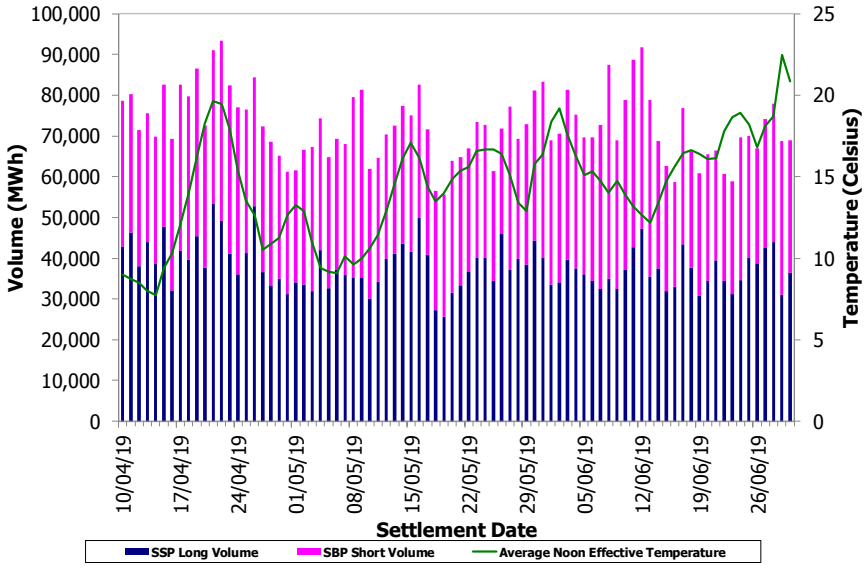
4.03 Accepted Bid Cashflow by Period and Fuel Type



Commentary: The positive Bid cashflows are due to negative Bids placed by BM Units, generally wind farms and pumped storage. The Parties with these BM Units are paid to reduce their output through negative Bids. Wind accounted for an average of 91% of the positive Bid cashflow across the month, but only 44% of all accepted Bid cashflow.

5 IMBALANCE VOLUMES

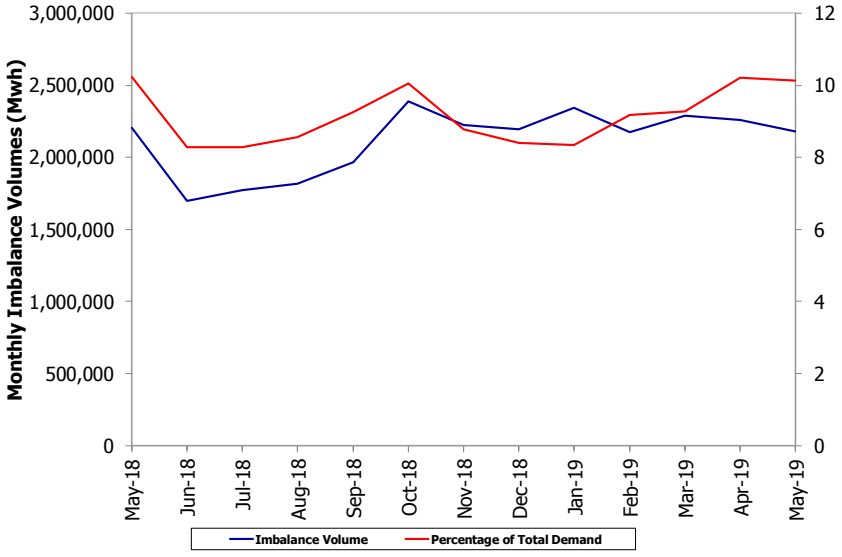
SBP Short Volume - Daily sum across the BSC market of energy imbalance bought at System Buy Price.
SSP Long Volume - Daily sum across the BSC market of energy imbalance sold at System Sell Price.
Weekly average temperature - Daily noon effective temperature, which is a three day weighted average, calculated across all GSP Groups.



5.01 Daily Party Imbalance Volumes

This chart shows the daily totals of energy bought from the system (at System Buy Price) by Parties who were "Short", and the energy sold to the system (at System Sell Price) by Parties who were "Long".
It also shows the average Noon-Effective Temperature to highlight any potential correlation with market conditions and imbalance volumes throughout the period.

Commentary: The highest imbalance volume in June (91,805MWh) occurred on 12 June 2019. This was the day before the lowest Noon Effective Temperature of the month (12.19°C).



5.02 Gross Monthly Party Imbalance Volume and Percentage of Total Demand

This chart plots the monthly gross Party Imbalance Volumes. A second plot shows Party Energy Imbalance Volumes as a percentage of total demand. The chart uses latest run type data.

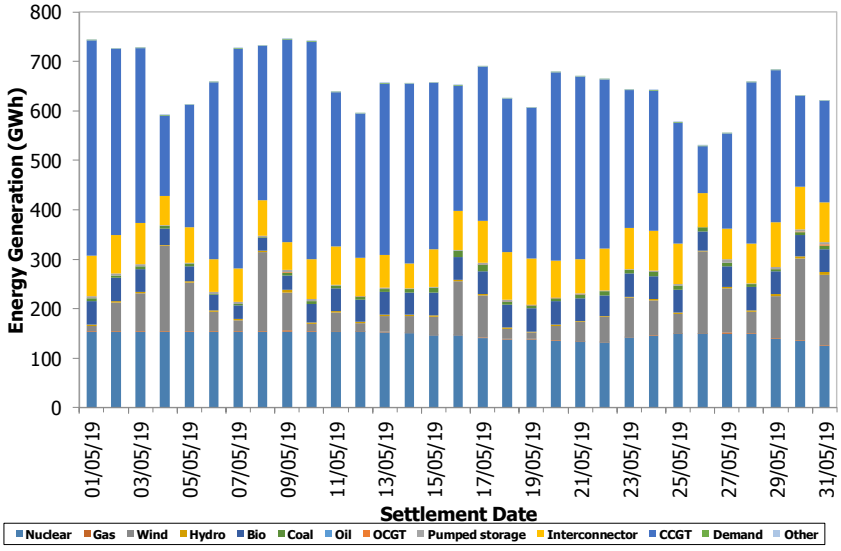
Commentary: There are no comments on this chart.

6 GENERATION

Effective Maximum Export Limit (MEL) - A series of MW figures and associated times, making up a profile of the maximum level at which the BM Unit may be exporting (in MW) to the GB Transmission System at the Grid Supply Point, as appropriate.

GSP Group Take - The net energy measured going from/to a particular Local Distribution System (i.e. a GSP Group) in a Settlement Period. The calculation is available in the Glossary on the ELEXON website.

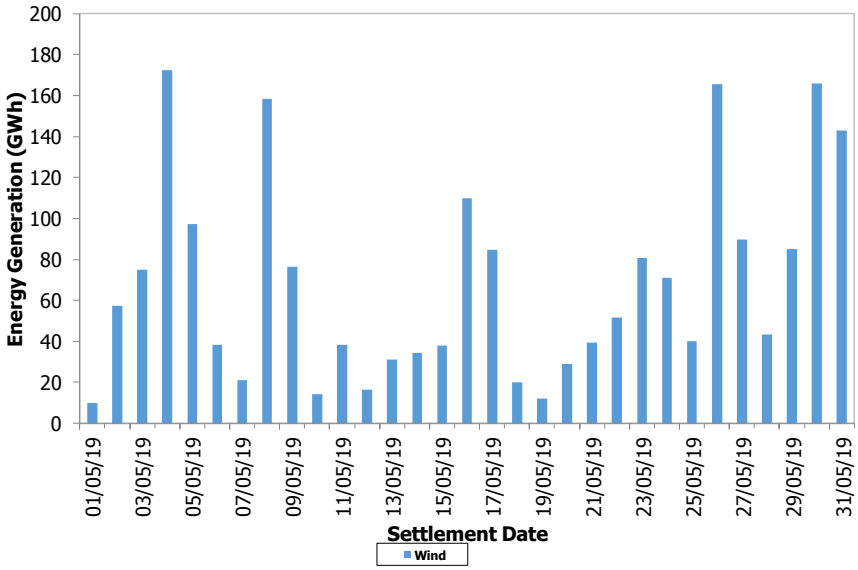
SVA registered Embedded Generation - Embedded generation is the generation from a power station that is embedded in a Distribution Network. The Distribution Network carries electricity from the Transmission Network and embedded generators to homes and businesses. For more information, please refer to the Embedded Generation guidance on the ELEXON website.



6.01 Sum of CVA Generation by Fuel Type per Settlement Date

BM Units that are registered in the Central Volume Allocation arrangements rather than through the Supplier Volume Allocation Arrangements have their metered data collected centrally by the Central Data Collection Agent. A single fuel type is assigned to each BM Unit and the sum of metered volume by fuel type is displayed by Settlement Day.

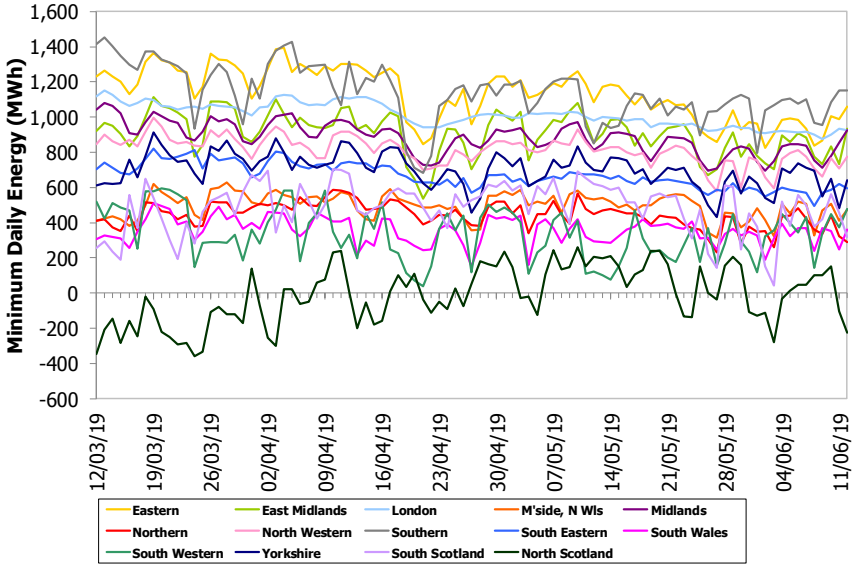
Commentary: CCGT accounted for 47% of May 2019 CVA generation, followed by Nuclear (22%), Interconnectors (12%) and Wind (10%).



6.02 Sum of CVA Wind Generation per Settlement Date

GB wind generation can be registered in the Central Volume Allocation (CVA) arrangements, the Supplier Volume Allocation Arrangements or may not register at all. The graph displays the wind generation that is registered in CVA only. The sum of metered volume is displayed by Settlement Day.

Commentary: On 26 May 2019, Wind BM Units were the main contributor of power. Wind accounted for 31% of generation on this day.

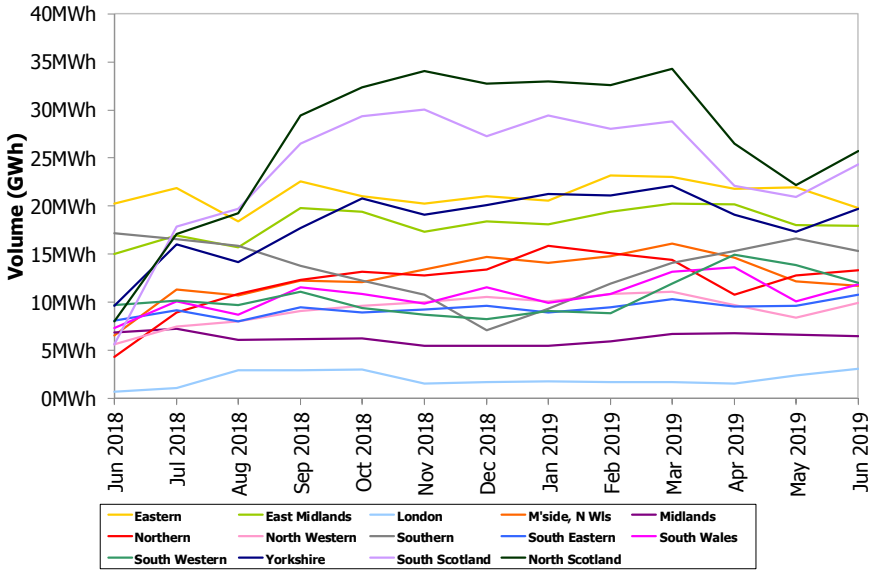


6.03 Minimum GSP Group Take based on SF Run

The aim of the charts is to provide timely notification of any GSP Group that could become a net exporting GSP Group. The concern is that the underlying rules in the BSC implicitly assume that GSP Groups will import energy. Any deviation from this assumption results in the rules becoming unstable.

This chart provides a plot of the minimum value of GSP Group Take, (i.e. consumption) at the (Initial Settlement) SF run for each of the GSP Groups in each Settlement Day over the last 3 months. The lower the value, the closer the GSP Group is to becoming a net exporter.

Commentary: There are no comments on this graph.



6.04 Maximum GSP Group metered Volume Supplied by SVA Registered Embedded Generation for each GSP Group

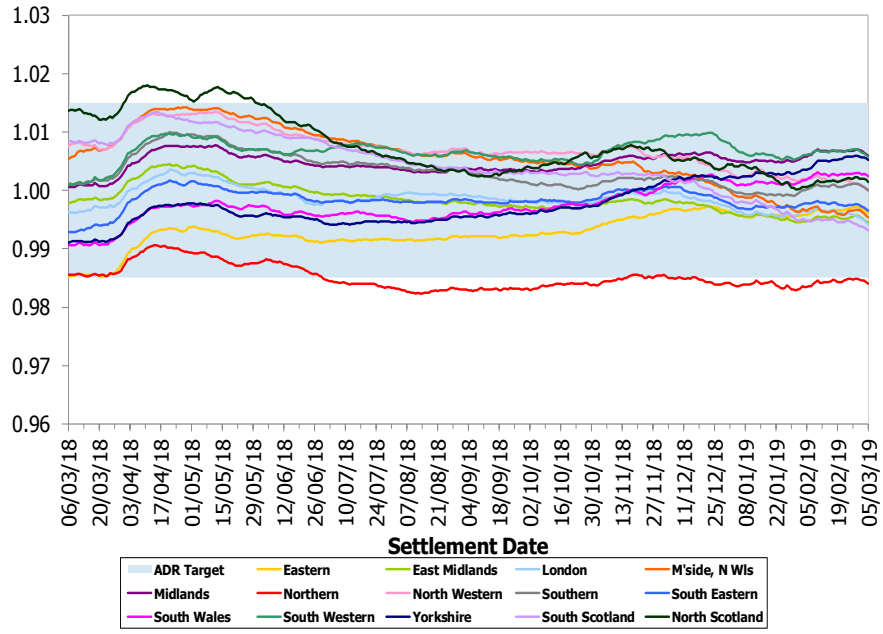
The aim of this graph is to show the total volume of embedded generation. This chart shows the daily sum of the SVA Registered Embedded Generation volume for each GSP Group.

Commentary: There are no comments on this chart.

7 DEMAND

Annual Demand Ratio (ADR) – This is a measure of the variation between the total annual profiled Non-Half Hourly (NHH) consumption and the total annual metered NHH consumption (as deduced from GSP Group Takes and HH consumption). ADR is (annual GSP Group Take minus annual HH consumption) / (total annual profiled NHH consumption) or equivalently; annual corrected/annual uncorrected consumption, which equates to average annual GSP Group Correction Factor.

ADR provides a high-level understanding of the overall performance of the NHH SVA market and identifies any significant under-/over-accounting of energy. Whilst the theoretical 'ideal' value of ADR is 1, variations of +/- 1.5% are to be expected due to inaccuracies in line loss estimates and a small usage of estimates at Final Reconciliation (RF) run. Values of less than 1 may result from the over-accounting of import energy in SVA, the under-accounting of export energy in SVA or under-accounting of Grid Supply Point (GSP) metering. Values of greater than 1 may result from the under-accounting of import energy in SVA, the over-accounting of export energy in SVA or over-accounting of GSP metering.



7.01 Annual Demand Ratio Values based on Settlement Run Type R2 or later

Chart shows the ADR values for each GSP Group on a daily basis. ADR values have been calculated for the year ending on the dates indicated. To achieve the best trade-off between up to date information and accuracy the chart is based on Second Reconciliation (R2) Settlement Run data or from later Settlement Runs if these are available. Trends in the pattern of ADR may indicate issues with metering data within the GSP Groups.

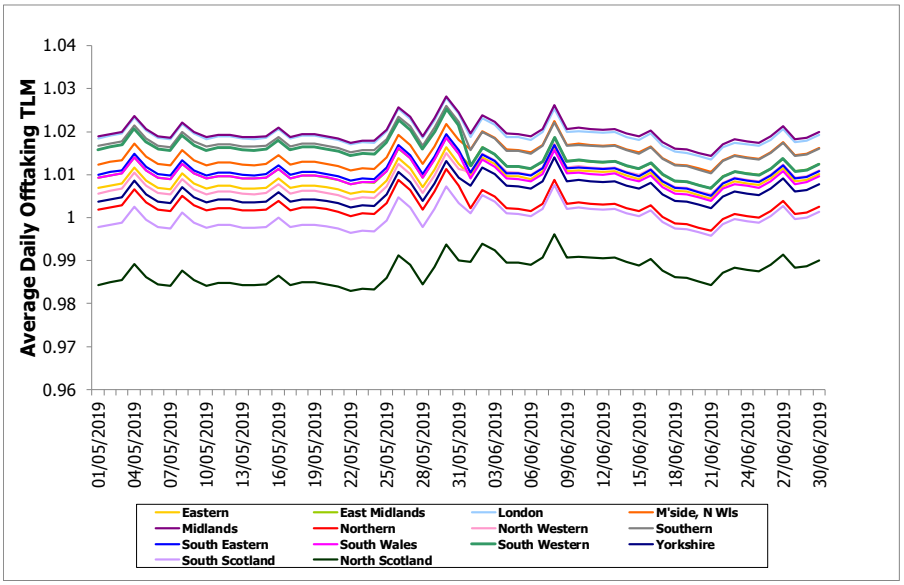
Commentary: ELEXON continue to investigate the drop in the Northern GSP Group below the ADR lower target of 0.985, but an issue has yet to be identified.

8 TRANSMISSION LOSSES

Transmission Losses - The difference between the energy exported to the Transmission System and the energy taken off the Transmission System at Grid Supply Points. The total losses are apportioned across each non-Interconnector BM Unit by applying a "Transmission Loss multiplier" to the BM Unit Metered volume. Currently, 55% of the transmission losses are allocated to Offtaking BM Units and the remaining 45% of losses are allocated to delivering BM Units.

Transmission Loss Multiplier (TLM) - The Transmission Loss Multiplier is the factor applied to a BM Unit, calculated for each Settlement Period in order to adjust for Transmission Losses. The multiplier calculated in accordance with BSC Section T2.3.1 (a) or (b).

Offtaking TLM - Offtaking Transmission Loss Multipliers are applied to the metered volumes of all BM Units in offtaking Trading Units. This adjusts the (demand) volumes to pay for a proportion (currently 55%) of the total aggregate transmission losses. An equivalent 'Delivering Transmission Loss Multiplier' is applied to the metered volumes of all BM Units in delivering Trading Units to pay for the remainder of the aggregate transmission losses. These Multipliers are calculated for each Settlement Period separately.

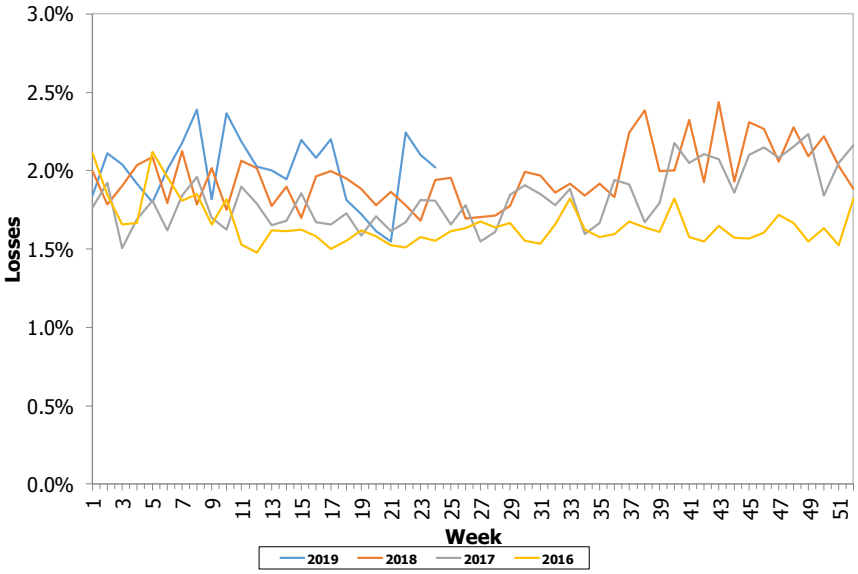


8.01 Daily Average Offtaking Transmission Loss Multiplier (TLM)

The chart shows the daily average Offtaking TLM based on the II Run or later. Following the implementation of BSC Modification P350 'Introduction of a seasonal Zonal Transmission Losses scheme' on 1 April 2018, TLMs vary on a regional basis.

Spikes in TLM can display anomalies in the Settlement data and are investigated by ELEXON on a daily basis.

Commentary: There are no comments on this chart.



8.02 Average Weekly Transmission Losses

This chart shows the average weekly transmission losses for the current calendar year (to date) and the previous three calendar years. "Week 1" shown on the x-axis refers to the first week of January; "Week 2" refers to the second week and so on. The chart uses data from the latest run type available, from SF onwards.

This chart shows the trend of transmission losses and enables a comparison against the last three years for identification of any patterns, increases or decreases that may require investigation.

Commentary: The unusual spike seen at week 22-23 has been investigated, but no issues have been found.

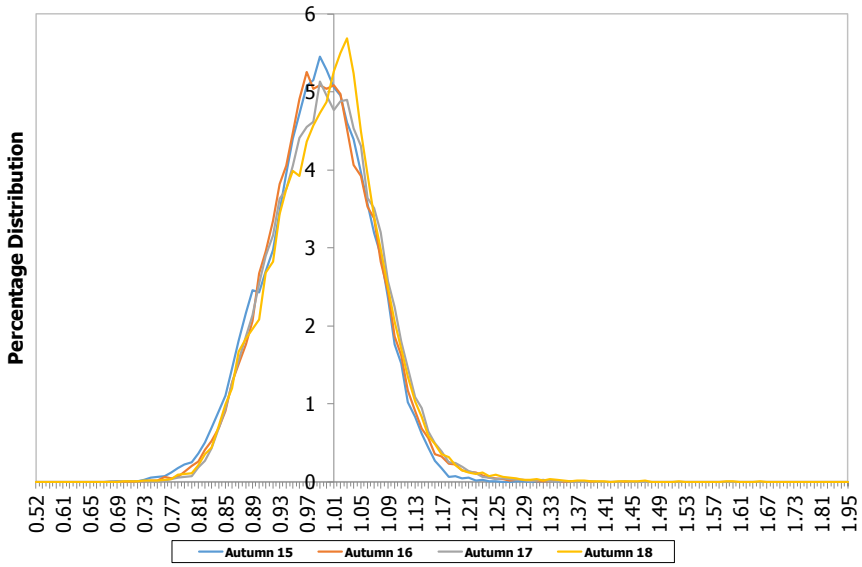
9 GSP GROUP CORRECTION FACTORS

GCF - GSP Group Correction Factors (GGCFs) are used to ensure that the total energy allocated to Suppliers in each Settlement Period in each GSP Group matches the energy entering the GSP Groups from the transmission system, adjoining GSP Groups and through embedded generation. In every Settlement Period this difference between total demand in a GSP Group (adjusted to losses) and GSP Group Take is dealt with by applying a correction factor (the GSP Group Correction Factor, GGCF) to the demand of all non-half hourly metering systems. The factor is such as to make the total demand in the GSP Group (which is the aggregate of the volumes that will enter Settlement) equal to GSP Group Take. The GGCF is calculated separately for each GSP Group and applied to all NHH metered volumes in the GSP Group. GGCF data is available on ELEXON Portal.

In a perfect world the demand would match the GSP Group Take and GGCF would equal 1.0. In practice, a GGCF between 0.9 and 1.1 is considered acceptable (for full calculation of GGCFs, please refer to the GSP Calculation guidance on the ELEXON website). The same profiling technique is used in all GSP Groups, so movements in the GGCF which are the same in all GSP Groups generally arise from the profiling process, whereas a movement in one GSP Group generally arises from errors or anomalies in the metered volumes.

Annualised Advance (AA) - The rate of consumption for a Settlement Register over the period between two meter readings. The value is nominally expressed as kWh/Year.

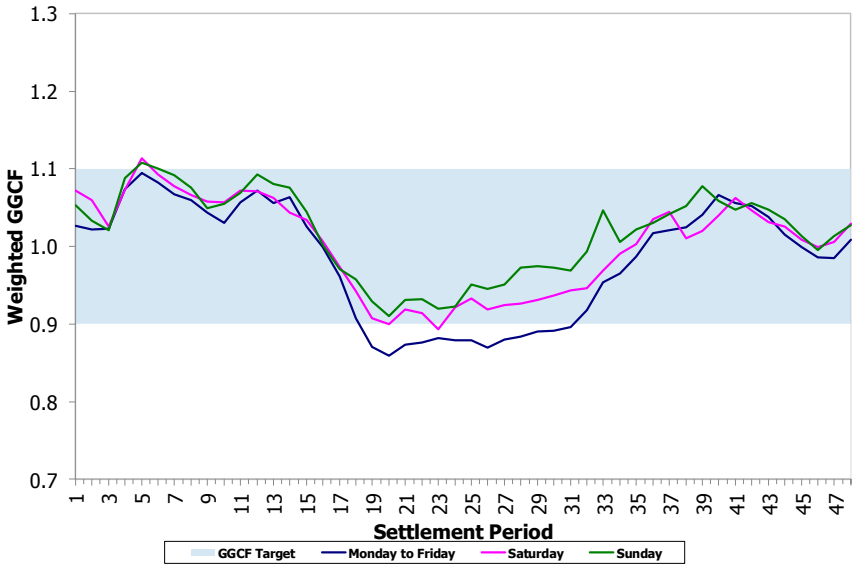
Estimated Annual Consumption (EAC) - An estimated rate of consumption, nominally expressed in kWh/Year, that is used in settlement until an AA is calculated



9.01 Distribution of Half-Hour GSP Group Correction Factors across all GSP Groups

This chart shows the distribution of GSP Group Correction Factors (GGCFs), as per the latest run type data, for each Settlement Period in the last complete season and the latest three complete years. Again it shows the effectiveness of profiling, with the ideal being a narrow distribution centred on 1.

Commentary: There are no comments on this chart.



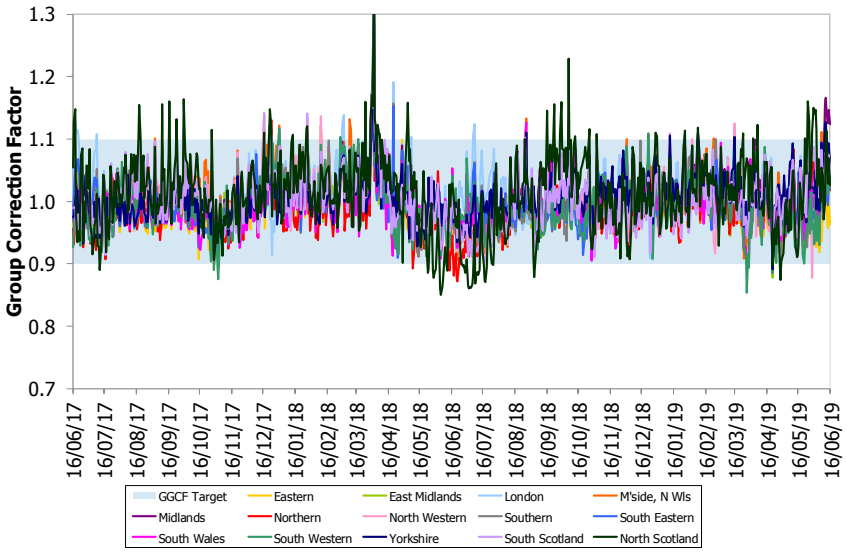
9.02 Half-Hour Correction factors by Settlement Period volume weighted across all GSP Groups (based on SF Run for the latest month)

This chart shows, for each of the day types used in profiling, a volume weighted average, i.e. adjusted to reflect the relative sizes of each GSP Group (in terms of total daily energy consumption), of the GGCFs across all GSP Groups by Settlement Period.

The source data are GGCFs from the Initial Settlement (SF) Run taken over the latest month for which SF data is available. The average is taken, for each Settlement Period, over the one month interval to create plots of volume-weighted GGCFs for the periods from Monday to Friday, for Saturdays and for Sundays included in the data set. It allows comparison of profiling for different day types and shows intra-day profiling effects. Anything between 0.9 and 1.1 is considered reasonable. Values outside this range may indicate issues with load profiling or metering data.

For more information on profiling, please refer to the Load Profiles on ELEXON website.

Commentary: There are no comments on this graph.



9.03 Daily Average GSP Group Correction Factor by GSP Group (based on the latest Settlement Run for the last two years)

This chart shows the daily average GGCF using the latest Settlement Run data for each GSP Group for the last two years. It shows both profiling and metering effects, as per the earlier explanation on the effects of profiling and metered volumes.

Commentary: GGCFs tend to range between 0.9 and 1.1. ELEXON monitors GGCFs as values outside this range may indicate issues with load profiling or metering data.

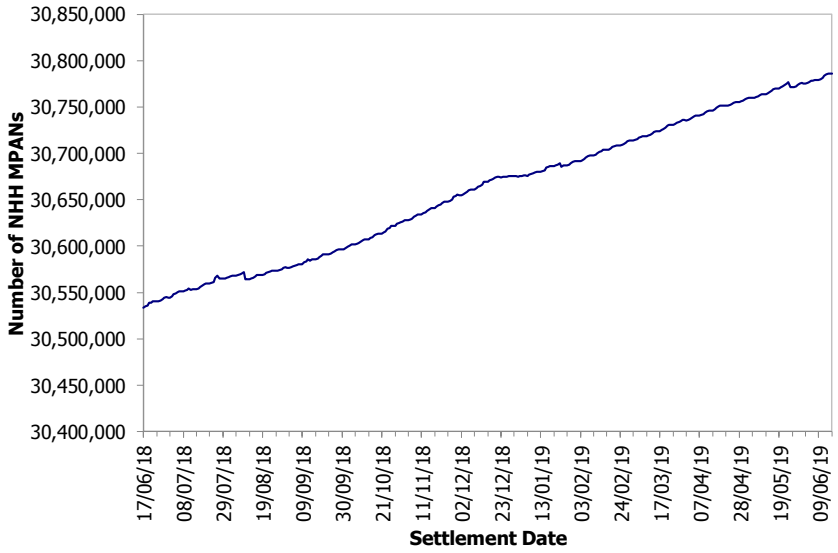
GGCFs exceeded 1.1 in mid-May for the East Midlands region. ELEXON investigated this, but no issues were found.

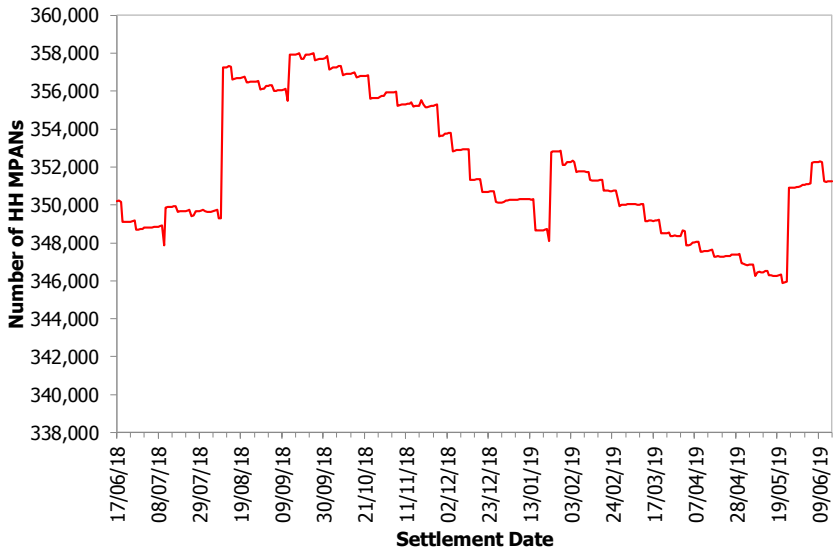
10 METERING

Metering System – A Metering System is made up of items of Metering Equipment; voltage transformers, current transformers, Meters and Outstations, the wires and connections between each item and connections required to transfer metered data to the outside world (e.g. modems and communication lines). There are two types of Metering System; those which measure and record electrical energy flow for each half hour for Settlement (Half Hourly Metering Systems) and those which measure and record over longer periods of time, from which energy flows in each half hour can be estimated (Non Half Hourly Metering Systems).

Metering Point Administration Number (MPAN) - Each point of entry and exit onto a Distribution System Operator's Distribution System has an associated Metering Point, and each Metering Point has an associated Administration Number (MPAN) and Metering System Identifier (MSID). MPAN is the term used in the Master Registration Agreement (MRA), while the BSC uses the term MSID. However, as the two terms describe the same entity, they can be used interchangeably. For further definition, please refer to the MSID/MPAN guidance on the ELEXON website.

Microgeneration - The small-scale generation of heat and electric power by individuals, small businesses and communities to meet their own needs, as alternatives or supplements to traditional centralized grid-connected power. Microgeneration can refer to a number of different types of equipment, such as photovoltaic, wind and combined heat and power systems. All of them have installed capacity of less than 30 kW. Under the BSC the export from these systems can be settled using profile class 8 and some assumed times at which the equipment will be exporting. Not all microgeneration schemes are registered in BSC settlement; hence, many microgeneration schemes are not visible in the Settlement data. This was noted by the Authority (Ofgem) in its decision letter regarding Modification Proposal P218 "Facilitating Microgeneration within the BSC" (May 2008).





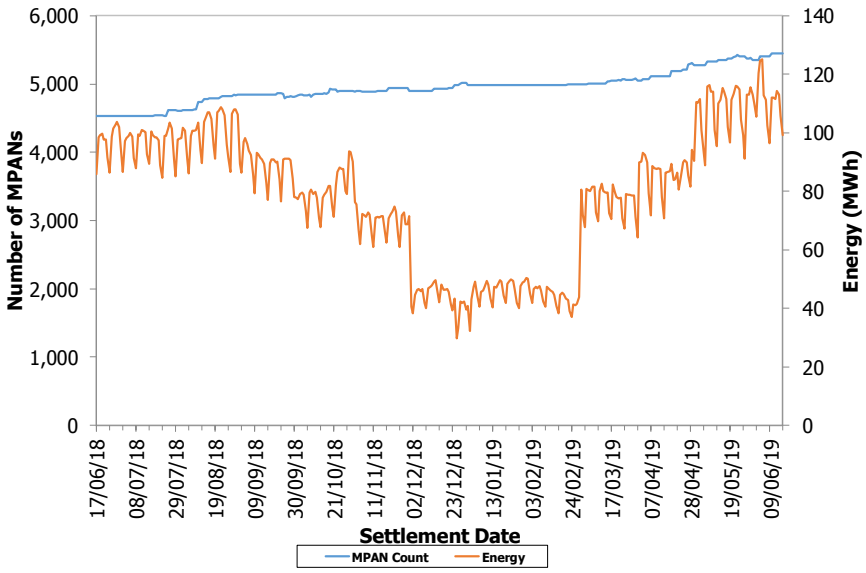
10.01 Number of Metering Systems in the Half Hourly and Non-Half Hourly Markets

These charts show the rolling annual change in HH and NHH Metering Point Administration Numbers (MPANs). Generally there is an MPAN assigned for each separate metered supply to premises settled through SVA (see above). The chart therefore provides a high level overview of the growth (or otherwise) in the Half-Hourly and Non-Half Hourly SVA markets.

The data on the chart is taken from the Initial Settlement run (SF run) only, i.e. the count of MPANs in that SF run in respect of that Settlement Date.

Peaks and troughs in the data may indicate metering systems moving between HH and NHH Settlement or other issues that need to be investigated.

Commentary: There are no comments on this chart.



10.02 Microgeneration: Number of Metering Systems and Energy Exported

This chart shows the number of MPANs associated with microgeneration schemes registered in SVA settlements and the energy in MWh exported by these schemes into the Non-Half Hourly Market.

The data is summed from the number of MPANs associated with Consumption Component Classes 32 and 33 (metered NHH Active Export) and the daily total energy that those MPANs export to the system (Actual (33) and Estimates (32)).

The up and down nature of the settled energy reflects the weekday/weekend pattern of Profile Class 8 and the monthly step changes in the energy volumes reflect changes in the assumed times at which the equipment is exporting.

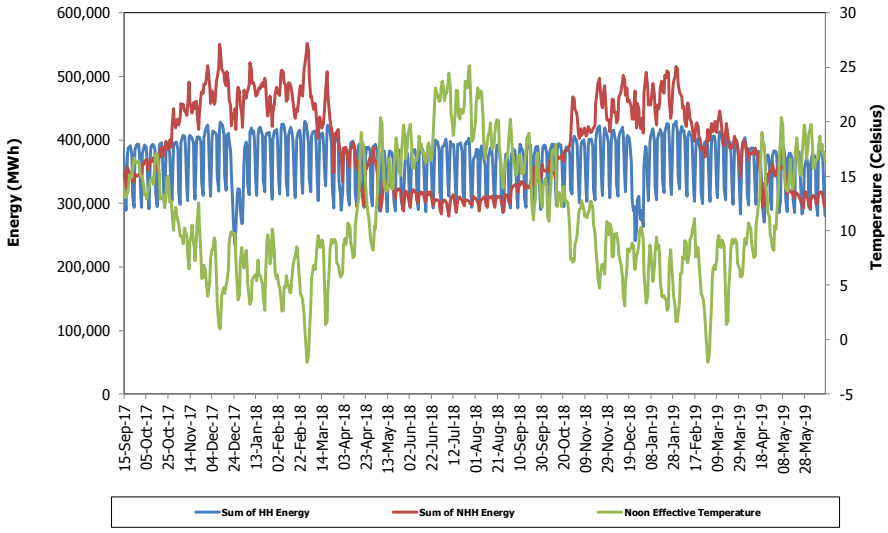
Commentary: The low energy from December 2018 to January 2019 is caused by the monthly profile shape for PV sites, as these change across the year. Settlement assumes that PV generates less energy in Winter. Over these months it reduces to the extent that almost all generation is consumed on site, and export is assumed to be negligible.

11 ENERGY SETTLED ON METERED DATA

Consumption Component Classes (CCCs) - Supplier consumption is split by Consumption Component Class (CCC). It enables SVA energy volumes to be grouped by its characteristics, e.g. Half Hourly/Non-Half Hourly, metered/unmetered, Import/Export, Actual/Estimated and losses/Metered Volumes. Full list of CCCs is available in BSC Section X, Annex X-2.

Meter Advance – The difference between new and previous NHH meter read.

Meter Advance Period (MAP) – The period between two NHH meter reads, i.e. the period across which a particular Meter Advance is in place.



11.01 Energy Settled on the HH/NHH Market based on SF Run

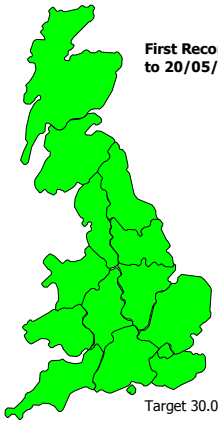
The purpose of this chart is to provide an indication of the amount of energy being supplied in the Supplier Volume Allocation (SVA) part of the Settlement System. SVA comprises distribution connected demand. It also includes smaller generation connected to the distribution system but not registered in Central Volume Allocation (CVA).

The chart shows the split of energy in the SVA part of the market: energy measured via meters that record half hourly (HH) consumption (the half hourly market) and via the non-half hourly (NHH, i.e. profiled) consumption. Noon Effective Temperature averaged over all GSP Groups is also included in the table because temperature data are used to determine the profiled volumes of electricity consumed (or generated) for each non half hourly metering system on each day. This table should demonstrate any link between temperature and non-half hourly volumes, seasonally.

More on Supplier Volume Allocation can be found in BSC Section S Annex S-2.

Commentary: A drop in the Sum of HH Energy can be seen at the end of December 2018 and 2019, due to a reduction in energy consumption over the Christmas Period.

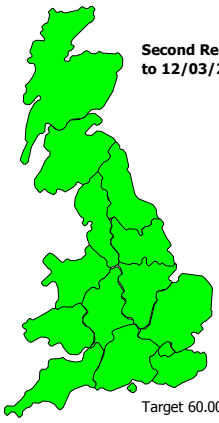
Note: There are no targets applicable to Initial Settlement Runs



First Reconciliation to 20/05/2019

GSP Group	%
Eastern	45.97%
East Midlands	49.91%
London	39.34%
Mersey&N.Wales	48.52%
Midlands	47.00%
Northern	49.47%
North Western	48.60%
Southern	43.56%
S.Eastern	43.24%
S.Wales	46.17%
S.Western	45.31%
Yorkshire	48.40%
South Scotland	47.15%
North Scotland	41.85%

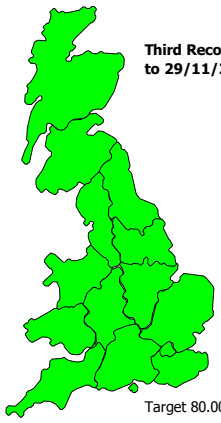
Target 30.00%Average 46.04%



Second Reconciliation to 12/03/2019

GSP Group	%
Eastern	74.94%
East Midlands	77.25%
London	68.35%
Mersey&N.Wales	77.24%
Midlands	77.08%
Northern	77.86%
North Western	76.63%
Southern	74.81%
S.Eastern	73.23%
S.Wales	75.88%
S.Western	75.76%
Yorkshire	76.85%
South Scotland	76.86%
North Scotland	73.22%

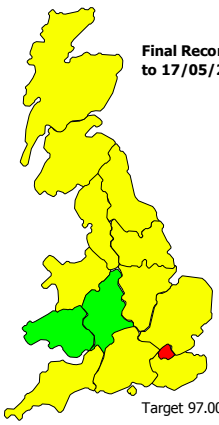
Target 60.00%, Average 75.43%



Third Reconciliation to 29/11/2018

GSP Group	%
Eastern	88.21%
East Midlands	89.57%
London	84.26%
Mersey&N.Wales	89.27%
Midlands	90.24%
Northern	90.57%
North Western	89.39%
Southern	89.32%
S.Eastern	87.73%
S.Wales	90.56%
S.Western	89.87%
Yorkshire	89.92%
South Scotland	89.53%
North Scotland	88.71%

Target 80.00%,Average 89.08%



Final Reconciliation to 17/05/2018

GSP Group	%
Eastern	96.52%
East Midlands	96.79%
London	94.47%
Mersey&N.Wales	96.45%
Midlands	97.03%
Northern	96.89%
North Western	96.62%
Southern	96.77%
S.Eastern	96.04%
S.Wales	97.05%
S.Western	96.92%
Yorkshire	96.89%
South Scotland	96.59%
North Scotland	96.43%

Target 97.00%,Average 96.53%

On target
Between 99 and 100% of target
Between 98 and 99% of target
Below 98% of target

All deviations from the required performance will be addressed by the Performance Assurance Board

11.02 Percentage Non Half Hourly Energy Settled on Metered Data by GSP Group

Although settlement takes place each half hour Settlement Period, Non Half Hourly (NHH) meters are read at varying intervals. Therefore, to accommodate settlement, meter advance is divided up and a portion is allocated to each Settlement Period in the Meter Advance Period (MAP). The HH apportionment of NHH volumes is accomplished through the use of AAs and EACs.

The maps of Great Britain show how each GSP Group has performed at each Settlement Run, for Settlement Dates in the reporting month of the Trading Operations Report, with respect to the target for each run type. For information, the average achieved performance across all GSP Groups for each run type is also provided. The figures quoted represent the percentage NHH energy settled on metered data for each GSP Group. The colours indicate the level of compliance/non-compliance with respect to the relevant target.

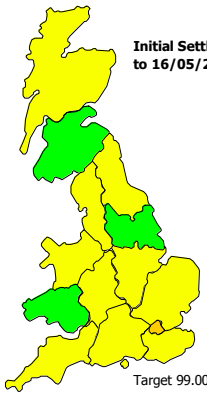
The target for each run type is outlined below each map.

Commentary: Twelve GSP Groups are below target at RF. Performance is being monitored on a monthly basis, and is reported to the Performance Assurance Board (PAB). The main contributors are being managed through the Error and Failure Resolution (EFR) process.

11.03 Percentage Half Hourly Energy Settled on Metered Data by GSP Group (Measurement Class C)

The maps of Great Britain show how each GSP Group has performed at each Settlement Run, for settlement dates in the reporting month of the Trading Operations Report. The performance is reported with respect to the 99% target for each run type. This section also includes the average achieved performance across all GSP Groups for each run type. The figures quoted for each GSP Group represent the percentage HH energy settled on metered data for each GSP Group. The colours indicate the level of compliance/non-compliance with the 99% target.

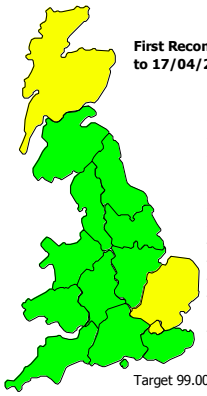
As with NHH energy, the BSC requires Suppliers to meet Performance Levels and settle a set percentage of HH energy with actual data. Unlike the NHH market, HH has the same Performance Level at all Settlement Run types. The performance level is set just below 100% (99%) to account for failures due to metering errors, data link failures, access issues and other such factors that cannot be completely mitigated.



Initial Settlement to 16/05/2019

GSP Group	%
Eastern	98.28%
East Midlands	98.88%
London	97.82%
Mersey&N.Wales	98.86%
Midlands	98.97%
Northern	98.96%
North Western	98.63%
Southern	98.76%
S.Eastern	98.84%
S.Wales	99.57%
S.Western	98.98%
Yorkshire	99.29%
South Scotland	99.20%
North Scotland	98.47%

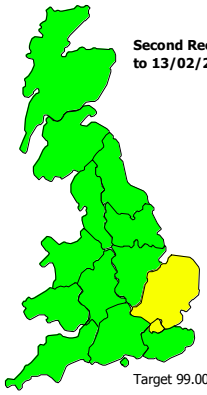
Target 99.00%, Average 98.82%



First Reconciliation to 17/04/2019

GSP Group	%
Eastern	98.80%
East Midlands	99.26%
London	98.63%
Mersey&N.Wales	99.58%
Midlands	99.43%
Northern	99.41%
North Western	99.08%
Southern	99.20%
S.Eastern	99.05%
S.Wales	99.74%
S.Western	99.32%
Yorkshire	99.59%
South Scotland	99.55%
North Scotland	98.61%

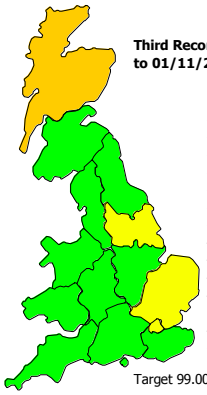
Target 99.00%Average 99.23%



Second Reconciliation to 13/02/2019

GSP Group	%
Eastern	98.78%
East Midlands	99.34%
London	98.86%
Mersey&N.Wales	99.58%
Midlands	99.47%
Northern	99.55%
North Western	99.43%
Southern	99.31%
S.Eastern	99.29%
S.Wales	99.70%
S.Western	99.42%
Yorkshire	99.60%
South Scotland	99.63%
North Scotland	99.29%

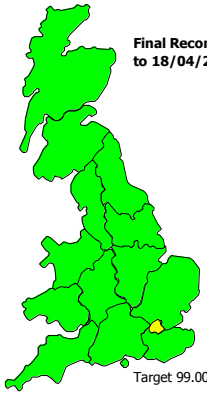
Target 99.00%, Average 99.37%



Third Reconciliation to 01/11/2018

GSP Group	%
Eastern	98.98%
East Midlands	99.38%
London	98.63%
Mersey&N.Wales	99.16%
Midlands	99.34%
Northern	99.50%
North Western	99.33%
Southern	99.26%
S.Eastern	99.05%
S.Wales	99.61%
S.Western	99.34%
Yorkshire	98.69%
South Scotland	99.69%
North Scotland	97.82%

Target 99.00%,Average 99.13%



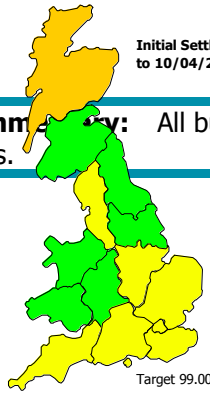
Final Reconciliation to 18/04/2018

GSP Group	%
Eastern	99.32%
East Midlands	99.51%
London	98.55%
Mersey&N.Wales	99.06%
Midlands	99.24%
Northern	99.35%
North Western	99.37%
Southern	99.14%
S.Eastern	99.10%
S.Wales	99.53%
S.Western	99.46%
Yorkshire	99.58%
South Scotland	99.57%
North Scotland	99.21%

Target 99.00%,Average 99.29%

On target
Between 99 and 100% of target
Between 98 and 99% of target
Below 98% of target

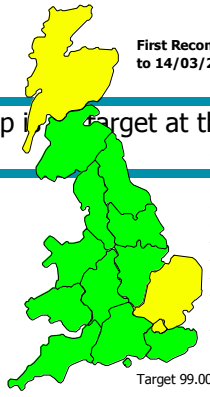
All deviations from the required performance will be addressed by the Performance Assurance Board



Initial Settlement to 10/04/2019

GSP Group	%
Eastern	98.98%
East Midlands	98.88%
London	98.06%
Mersey&N.Wales	99.27%
Midlands	99.06%
Northern	99.23%
North Western	98.77%
Southern	98.95%
S.Eastern	98.75%
S.Wales	99.43%
S.Western	98.93%
Yorkshire	99.30%
South Scotland	99.29%
North Scotland	97.98%

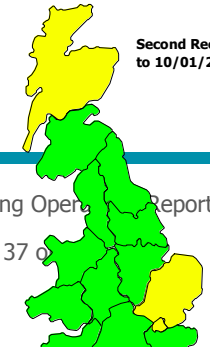
Target 99.00%, Average 98.88%



First Reconciliation to 14/03/2019

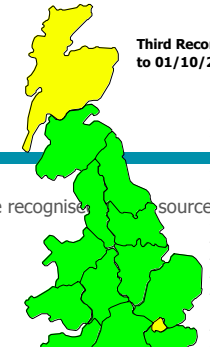
GSP Group	%
Eastern	98.53%
East Midlands	99.35%
London	98.74%
Mersey&N.Wales	99.50%
Midlands	99.50%
Northern	99.50%
North Western	99.32%
Southern	99.25%
S.Eastern	99.17%
S.Wales	99.68%
S.Western	99.42%
Yorkshire	99.53%
South Scotland	99.60%
North Scotland	98.56%

Target 99.00%Average 99.26%



Second Reconciliation to 10/01/2019

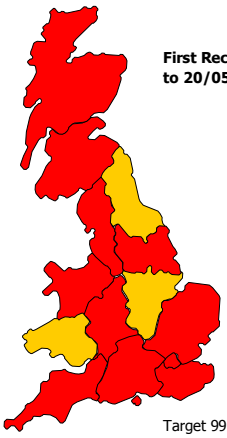
GSP Group	%
Eastern	98.99%
East Midlands	99.25%
London	98.78%
Mersey&N.Wales	99.57%
Midlands	99.45%
Northern	99.40%
North Western	99.29%
Southern	99.22%
S.Eastern	99.07%
S.Wales	99.68%
S.Western	99.38%
Yorkshire	99.33%
South Scotland	99.62%
North Scotland	98.40%



Third Reconciliation to 01/10/2018

GSP Group	%
Eastern	99.15%
East Midlands	99.44%
London	98.62%
Mersey&N.Wales	99.57%
Midlands	99.33%
Northern	99.40%
North Western	99.31%
Southern	99.24%
S.Eastern	99.07%
S.Wales	99.41%
S.Western	99.43%
Yorkshire	99.58%
South Scotland	99.74%
North Scotland	98.68%

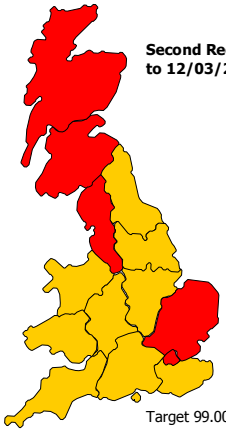
Comm[illegible]ary: All but one GSP Group i[illegible] target at the RF Run. Performance is being monitored on a monthly basis.



First Reconciliation to 20/05/2019

GSP Group	%
Eastern	96.40%
East Midlands	97.26%
London	95.00%
Mersey&N.Wales	96.95%
Midlands	96.54%
Northern	97.07%
North Western	96.06%
Southern	96.30%
S.Eastern	96.66%
S.Wales	97.14%
S.Western	96.62%
Yorkshire	96.91%
South Scotland	96.42%
North Scotland	95.90%

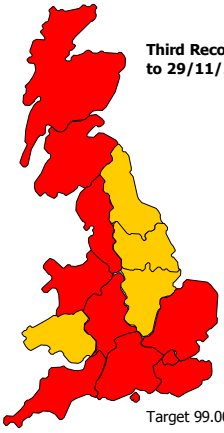
Target 99.00%Average 96.52%



Second Reconciliation to 12/03/2019

GSP Group	%
Eastern	96.73%
East Midlands	97.85%
London	95.86%
Mersey&N.Wales	97.17%
Midlands	97.05%
Northern	97.55%
North Western	96.01%
Southern	97.34%
S.Eastern	97.20%
S.Wales	97.37%
S.Western	97.03%
Yorkshire	97.53%
South Scotland	96.75%
North Scotland	96.68%

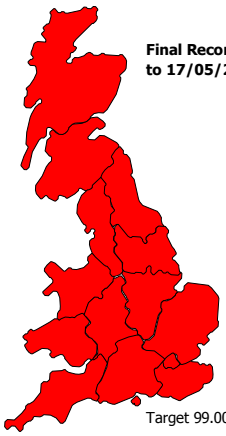
Target 99.00%, Average 97.01%



Third Reconciliation to 29/11/2018

GSP Group	%
Eastern	96.33%
East Midlands	97.54%
London	95.56%
Mersey&N.Wales	96.23%
Midlands	96.89%
Northern	97.18%
North Western	95.95%
Southern	96.83%
S.Eastern	96.81%
S.Wales	97.07%
S.Western	96.85%
Yorkshire	97.17%
South Scotland	96.97%
North Scotland	96.39%

Target 99.00%,Average 96.70%



Final Reconciliation to 17/05/2018

GSP Group	%
Eastern	95.35%
East Midlands	96.42%
London	94.11%
Mersey&N.Wales	95.06%
Midlands	95.20%
Northern	96.50%
North Western	94.15%
Southern	96.34%
S.Eastern	95.93%
S.Wales	94.54%
S.Western	95.33%
Yorkshire	96.75%
South Scotland	96.62%
North Scotland	96.53%

Target 99.00%,Average 95.63%

On target
Between 99 and 100% of target
Between 98 and 99% of target
Below 98% of target

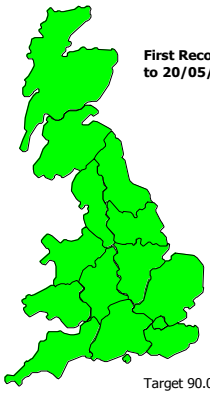
All deviations from the required performance will be addressed by the Performance Assurance Board

11.04 Percentage Half Hourly Energy Settled on Metered Data by GSP Group (Measurement Class E)

The maps of Great Britain show how each GSP Group has performed at each Settlement Run, for settlement dates in the reporting month of the Trading Operations Report. The performance is reported with respect to the 99% target from R1 to RF. This section also includes the average achieved performance across all GSP Groups for each run type. The figures quoted for each GSP Group represent the percentage HH energy settled on metered data for each GSP Group. The colours indicate the level of compliance/non-compliance with the 99% target.

As with NHH energy, the BSC requires Suppliers to meet Performance Levels and settle a set percentage of HH energy with actual data. Unlike the NHH market, HH has the same Performance Level at all Settlement Run types. The performance level is set just below 100% (99%) to account for failures due to metering errors, data link failures, access issues and other such factors that cannot be completely mitigated.

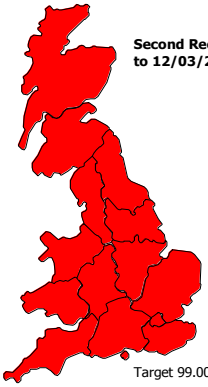
Commentary: No GSP Groups are on target at the RF Run. It was agreed by the Performance Assurance Board (PAB) that 'ELEXON will not introduce new reporting for MC E, F and G before the PAF Review delivers the new Risk Register'. See PAB Paper PAB217/11 on Measurement Classes E, F and G Performance Review. The new Risk Register came into effect on 1 April 2019.



First Reconciliation to 20/05/2019

GSP Group	%
Eastern	94.78%
East Midlands	96.66%
London	92.73%
Mersey&N.Wales	93.97%
Midlands	95.34%
Northern	95.24%
North Western	94.13%
Southern	94.98%
S.Eastern	94.66%
S.Wales	95.86%
S.Western	95.36%
Yorkshire	94.44%
South Scotland	95.27%
North Scotland	95.02%

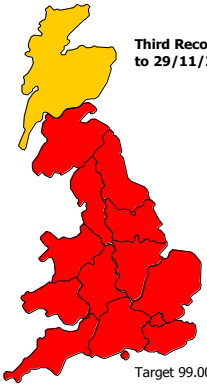
Target 90.00%Average 94.89%



Second Reconciliation to 12/03/2019

GSP Group	%
Eastern	95.10%
East Midlands	96.97%
London	93.98%
Mersey&N.Wales	94.73%
Midlands	95.88%
Northern	95.59%
North Western	94.30%
Southern	95.03%
S.Eastern	95.38%
S.Wales	96.97%
S.Western	95.74%
Yorkshire	94.88%
South Scotland	96.20%
North Scotland	95.86%

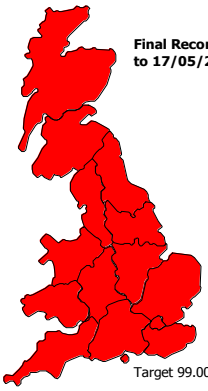
Target 99.00%, Average 95.47%



Third Reconciliation to 29/11/2018

GSP Group	%
Eastern	94.70%
East Midlands	96.03%
London	93.24%
Mersey&N.Wales	93.73%
Midlands	95.72%
Northern	94.65%
North Western	93.81%
Southern	94.35%
S.Eastern	94.94%
S.Wales	95.07%
S.Western	95.52%
Yorkshire	94.23%
South Scotland	95.47%
North Scotland	97.03%

Target 99.00%,Average 94.89%



Final Reconciliation to 17/05/2018

GSP Group	%
Eastern	93.87%
East Midlands	95.00%
London	92.43%
Mersey&N.Wales	93.02%
Midlands	94.51%
Northern	94.99%
North Western	93.14%
Southern	94.49%
S.Eastern	93.69%
S.Wales	89.81%
S.Western	94.67%
Yorkshire	93.83%
South Scotland	95.13%
North Scotland	95.09%

Target 99.00%,Average 93.83%

On target
Between 99 and 100% of target
Between 98 and 99% of target
Below 98% of target

All deviations from the required performance will be addressed by the Performance Assurance Board

11.05 Percentage Half Hourly Energy Settled on Metered Data by GSP Group (Measurement Classes F and G)

The maps of Great Britain show how each GSP Group has performed at each Settlement Run, for settlement dates in the reporting month of the Trading Operations Report. The performance is reported with respect to the 99% target from R1 to RF. This section also includes the average achieved performance across all GSP Groups for each run type. The figures quoted for each GSP Group represent the percentage HH energy settled on metered data for each GSP Group. The colours indicate the level of compliance/non-compliance with the 99% target.

As with NHH energy, the BSC requires Suppliers to meet Performance Levels and settle a set percentage of HH energy with actual data. Unlike the NHH market, HH has the same Performance Level at all Settlement Run types. The performance level is set just below 100% (99%) to account for failures due to metering errors, data link failures, access issues and other such factors that cannot be completely mitigated.

Commentary: No GSP Groups are on target at the RF Run. See PAB Paper PAB217/11 on Measurement Classes E, F and G Performance Review.