RATE CARD: ESTIMATION INACCURACY

Summary

Estimated consumption data has an impact on the accuracy of Settlement as it will not exactly match actual consumption. Estimated data can be caused by different factors, such as failure to retrieve Meter reads (whether by remote means or site visits) or other issues whereby a read is available but it cannot be used, e.g. missing Meter Technical Details.

For Settlement Risks that have the potential to result in estimated consumption, we wish to understand the average inaccuracy associated with estimated data in the Supplier Volume Allocation (SVA) and Central Volume Allocation (CVA) markets. To provide a view of this, we assessed estimation on a Metering System level and compared the difference in volume with the subsequent actual consumption value (if available).

In acknowledgement of the potential for estimation accuracy to be different for sites with varying consumption volumes and patterns, we split the market into segments. The following table provides our assessment of the average daily inaccuracy when estimating consumption for the different markets and segments.

Market	Segment	Avg. daily estimation inaccuracy (kWh)
SVA NHH	PC 1	1.813
SVA NHH	PC 2	3.132
SVA NHH	PC 1 (default)	3.591
SVA NHH	PC 2 (default)	6.110
SVA NHH	PC 3	8.128
SVA NHH	PC 4	13.081
SVA NHH	PC 3 (default)	14.000
SVA NHH	PC 4 (default)	30.720
SVA HH	MC G (import)	48.913
SVA HH	MC E (import)	99.061
SVA HH	MC C (import)	326.917
CVA	BMU	59,792
CVA	GSP	178,553

Supplier Volume Allocation

For routine estimation in the Non-Half Hourly (NHH) and Half Hourly (HH) markets, we assessed consumption flows sent over the Data Transfer Network (DTN). This assessment compared the differences between the initial estimation and subsequent actual consumption data on a Metering System Identifier (MSID) level.

A slightly different approach was taken when assessing default estimation (EAC) inaccuracy in the NHH market as default estimation is generally applied at the time of aggregation for Settlement purposes. For this type of estimation, we assessed a one off extract from NHH Data Aggregator systems for a single Settlement Day for each Reconciliation Settlement Run and identified all the MSIDs that were subject to default EACs. We then assessed when an actual consumption value was submitted through DTN extracts and compared the difference.

Key assumptions and items to note are as follows:

- DTN extracts provide insights into market performance but not a complete view
- We took a random sample of MSIDs from each market and assessed the inaccuracy of any estimated consumption

RATE CARD: ESTIMATION INACCURACY

- To assess the difference between an estimate and an actual, an actual consumption value needs to be available, i.e. this does not include where a Metering System is currently being estimated
- An estimate can either over or understate consumption on a MSID level. When assessing inaccuracy we looked at the gross difference, i.e. ignoring the direction
- This rate card is being applied at a market level. We did not assess differences in estimation accuracy at a participant level
- We aggregated estimated consumption to a daily MSID level and compared it to the subsequent actual consumption aggregated at the same level
- We noted instances of extremely large consumption differences in the dataset that can be attributed to issues such as erroneously large estimates/actuals or as a result of corrective actions, e.g. Gross Volume Correction. We removed these outliers using a standard approach
- In the HH market, an additional check was applied as to whether the estimated consumption was replaced by actual consumption prior to the Initial Settlement Run (SF). This was to account for Meters being frequently read through remote means
- This assessment does not take into account the age of the estimate
- In the NHH market, we assessed Settlement Days within an annual period prior to the latest Final Reconciliation Settlement Run (RF) date. This is due to reasonable amounts of estimation being entered in later runs in this market
- In the HH market, we assessed Settlement Days in the most recent year, as there are high proportions of actual consumption data at all Settlement Runs
- Due to fundamental differences between estimating in the HH and NHH market (i.e. at a Settlement Period level or a forward looking estimate (EAC)), the differences in inaccuracies should not be compared like for like

Central Volume Allocation

For estimation inaccuracy in the CVA market, we assessed metered volumes from BSC central systems at a Grid Supply Point (GSP) and Balancing Mechanism Unit (BMU) level. As with the assessment in the SVA market, we compared the differences between the initial estimation and subsequent actual consumption data.

Key assumptions and items to note are as follows:

- Data from central systems provide a complete view of registered GSPs and BMUs
- To assess the difference between an estimate and an actual, an actual consumption value needs to be available, i.e. this does not include where a Metering System is currently being estimated
- An estimate can either over or understate consumption on a aggregation unit level. When assessing inaccuracy we looked at the gross difference, i.e. ignoring the direction
- We aggregated estimated consumption to a daily aggregation unit level and compared it to the subsequent actual consumption aggregated at the same level
- We did not remove outliers from this dataset, as we felt they reflected actual impacts of estimation inaccuracy, as opposed to erroneous consumption values or corrective actions
- This assessment does not take into account the age of the estimate
- As we only hold metered data across all Settlement Runs on live systems up to RF, we assessed an annual period
- The high average impact can be attributed to the large consumption volumes associated with each aggregation unit type and the obligation to estimate consumption at zero under certain circumstances