

RETRIEVAL AND PROCESSING OF METERED DATA

This document outlines the methodology used to assess the Settlement Risk related to retrieval and processing of metered data. We are not seeking to exhaustively outline all aspects considered during this assessment; our aim is to draw out the main data items considered and any key assumptions when estimating a future impact range.

The risk that... CVA Metered Data is not retrieved, or processed correctly, or at all, by the CDCA **resulting in...** erroneous or estimated data in Settlement

Category: Data retrieval and processing

Sub category: Retrieval and processing of metered data

Covers: Collection of active energy metered data whether done by remote means or manual downloads on site

Does not cover: Collection and processing of reactive energy metered data for non-Settlement processes. Also does not include application of metered data to Aggregation Rules

Estimated impact in 2020/21

Lower	Middle	Upper
£19.3m	£59.3m	£145.7m

Please note: This assessment has focused on the data collection aspect of the risk, as this is where the primary impact is understood to occur.

At risk population

As part of this assessment, we seek to understand the population at risk in the upcoming period, i.e. how many times will the underlying process occur where the risk can manifest.

The at risk population we have focused on for this assessment is collection of metered data for Settlement processes from Balancing Mechanism (BM) Units or Grid Supply Points (GSPs). This assessment has not included metered data related to Interconnectors (of which there are 5).

Data point considered

We assessed data provided from BSC Central Systems on Settlement Run performance on a BM Unit and GSP level. The following table provides counts of each aggregation unit type at the Initial Settlement Run (SF) for recent annual periods. *The 2019/20 figures are as at September 2019.

Market	GSPs and BM Units	2017/18	2018/19	2019/20*
CVA	GSPs	356	358	358
CVA	BM Units	482	503	514
CVA	Totals	838	861	872

Forecast

Below are the key considerations and assumptions when forecasting the at risk population in the 2020/21 period:

- We are estimating an increase of approximately 30 in the number of aggregation unit types in the upcoming period based on our knowledge of upcoming GSP and BM Unit registrations.

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Failure rate

From the population at risk, we need to estimate the proportion where the risk will manifest, i.e. the failure rate. To do this, we assess historical performance in the area and consider any upcoming changes that have the potential to impact future performance.

Data point considered

Using the data source previously noted, we assessed the number of aggregation units with estimated data at SF. The following tables provide statistics on the count of aggregation units with estimation at SF over the last three annual periods.

GSP /PAOP	Event	Min	Avg	Max
2017/18	GSP	0	3.83	5
2018/19	GSP	0	4.30	13
2019/20*	GSP	2	8.99	14

- The data used for the 2019/2020 period is only up to September 2019
- Taking the above into account the maximum number of GSPs being estimated at SF has roughly stayed the same but the average number of GSPs being estimated at SF doubled.

BMU /PAOP	Event	Min	Avg	Max
2017/18	BMU	14	15.50	17
2018/19	BMU	3	14.59	27
2019/20*	BMU	8	14.04	25

- There are a number of BMUs currently being estimated to zero at SF which are known to be disconnected and awaiting de-registration. We have excluded these BMUs from our reporting as the estimation is known to be accurate

Forecast

Below are the key consideration and assumptions when forecasting failure rates in the 2020/21 period:

- By assessing all estimation at SF, we are assuming that it is caused by metered data not being collected. We acknowledge that there are other issues not related to data collection that will result in estimated data. However, as per the CVA fault reporting Risk (023), of the 500 faults raised in a similar period considered for this risk, 491 (or 98.2%) related to remote communications failures
- We are going to see comparable numbers of BM Unit sites being estimated as SF in the upcoming period and slightly more GSP sites being estimated as SF in the upcoming period (up from 1.18% to 3.03%)

Market	Event	Failure Rate		
		Lower	Middle	Upper
CVA	GSP SF estimation	0.75%	3.03%	4.19%
CVA	BMU SF estimation	1.71%	2.52%	4.36%

Impact

To estimate the impact of a risk we need to understand the days impacted and error volume on average per instance.

Average days impacted

As we are assessing estimation at SF, it will be all SF runs within the annual period which will equate to **365**.

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Average error per day

When estimating impact per day, we used the standard rate card related to average daily inaccuracy when estimating consumption for the aggregation unit types. This rate card is derived by analysing consumption details on an aggregation unit level and looking at the gross difference when an estimate is replaced by an actual consumption value. Please see the rate card for estimation inaccuracy for further details

We convert the error volume into a monetary value by the forecast system buy and sell price for the upcoming period.

Other considerations for this risk

- Estimating data for a single CVA site has the potential to have a large impact on Settlement, as outlined in the estimated impact range