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

Estimated impact in 2019/20

Lower	Middle	Upper
£18.6m	£31.1m	£48.5m

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 Agg. rules

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 Units (BMUs) or Grid Supply Points (GSPs). This initial assessment has not included metered data related to Interconnectors.

Data point considered

We assessed data provided from BSC Central Systems on Settlement Run performance on a BMU and GSP level. The following table provides statistics on the counts of each aggregation unit type at the Initial Settlement Run (SF) for a recent annual period.

	GSPs	BMUs
Minimum	356	442
Lower quartile	356	453
Median	356	466
Mean	356	464
Upper quartile	356	473
Maximum	356	485

- We only hold data on our live database up to RF, therefore we only assessed the period May 2017 to May 2018
- The number of GSPs groups has not changed in the year assessed
- Whilst, the number of BMUs has changed, the change is minimal

Forecast

Below are the key considerations and assumptions when forecasting the at risk population in the 2019/20 period:

- We are estimating similar numbers of aggregation unit types in the upcoming period, as there were no reasons identified to suggest it could be different

Failure rate

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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 table provides statistics on the count of aggregation units with estimation at SF during the annual period considered.

	GSPs	BMUs
Minimum	0	6
Lower quartile	2	12
Median	4	15
Mean	4	15
Upper quartile	5	17
Maximum	9	31

- 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
- The number of GSPs estimated as SF is low
- The number of BMUs with estimation at SF is higher than GSPs, but it is still low

Forecast

Below are the key consideration and assumptions when forecasting failure rates in the 2019/20 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, of the 700 faults raised in the same period considered for this risk, 613 (or 87.6%) related to remote communications failures
- We are going to see comparable numbers of sites being estimated as SF in the upcoming period

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**.

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

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- Whilst there was a single Trading Dispute related to CVA data processing in the last 3 years, the materiality of it (£17.3k) was not substantial enough to warrant inclusion in the assessment