

CVA FAULT RESOLUTION

This document outlines the methodology used to assess the Settlement Risk related to fault resolution. 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... a fault with CVA Metering Equipment is not resolved, such that metered data is recorded incorrectly or cannot be retrieved **resulting in...** erroneous or estimated data in Settlement

Category: Fault resolution

Sub category: Metering

Covers: CVA faults related to dial failures and data quality issues that resulted in estimated data

Estimated impact in 2019/20

Lower	Middle	Upper
£14.3m	£30.2m	£56.7m

Does not cover: Faults where estimation was based on a main Meter associated with a Secondary Outstation, and faults related to max values exceeded, time tolerances, routine calibrations and Meter Advance Reconciliations

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 for this risk is all faults for (Central Volume Allocation) Metering System that result in estimation data

Data point considered

We assessed the fault log maintained by the Central Data Collection Agent (CDCA) to understand the historical volume of faults that resulted in estimated data. The following table provides counts of resolved faults related to dial failures or data quality.

Fault type	2016/17	2017/18	2018/19*
Dial failure	459	414	206
Data quality	28	38	7

- *The 2018/19 period covers part of an annual period (Apr-18 to Sep-18)
- This excludes faults where estimation was based on a main Meter associated with a Secondary Outstation, as these are entered into Settlement as actuals
- We excluded faults related to max consumption values being exceeded as these are likely immaterial and related to documentation administration
- We excluded faults related to time tolerances, routine calibrations and Meter Advance Reconciliation failures as we deemed these less material

Forecast

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

- We could see a comparable volume of faults as seen in previous years

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 points considered

We assessed the proportion of faults resolved that impacted the Initial Settlement Run (SF) as per the fault log. The below table provides the proportion of resolved faults that impacted SF for each fault type.

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Fault type	2016/17	2017/18	2018/19*
Dial failure	23.75%	28.26%	22.82%
Data quality	53.57%	60.53%	71.43%

Forecast

Below are the key consideration and assumptions when forecasting failure rates in the 2019/20 period:

- We could see a comparable proportion of faults resolved outside of SF timescales as seen in previous years

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

We assessed the average days impacted for a fault resolved after SF as per the fault log. The below table provides the average numbers of days a fault is resolved after SF for each fault type.

Fault type	2016/17	2017/18	2018/19*
Dial failure	62	64	50
Data quality	112	86	28

Average error per day

We considered the primary impact of CVA faults to be estimated data, as data is either unavailable or suspect.

When estimating the error per day, we used the standard rate card related to estimated data. Please see the documentation on the rate card for estimated data for more details.

Forecast

Below are the key consideration and assumptions when forecasting impact in the 2019/20 period:

- We have not adjusted dial failures to take into account estimation that is mitigated by CDCA obtaining hand held reads