

# CHANGES TO METERING EQUIPMENT ARE NOT NOTIFIED

This document outlines the methodology used to assess the Settlement Risk related to changes to Metering Equipment not being notified. 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...** changes to CVA Metering Equipment are not notified to CDCA **resulting in...** erroneous or estimated data in Settlement.

## Estimated impact in 2019/20

Lower	Middle	Upper
£0.82m	£5.2m	£16.0m

**Category:** Metering

**Sub category:** Notification of changes to Metering Equipment

**Covers:** Changes to CVA Metering Equipment

**Does not cover:** SVA impacts as a result of changes to CVA Metering Equipment where the same Metering Equipment is also SVA Metering Equipment

## Please note:

### 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 changes made to (Central Volume Allocation) Metering Equipment that results in erroneous or estimated data.

### Data point considered

We assessed the fault log maintained by the Central Data Collection Agent (CDCA) to understand the historical volume of faults per year. We looked at faults that could be caused by a failure to notify changes of Metering Equipment to the CDCA. The following table provides the counts of faults related to dial failures, data quality, routine calibration, time tolerance and Meter Advance Reconciliations.

- \* The 2018/19 period covers part of an annual period (Apr-18 to Sep-18)
- We could look to ignore routine calibration, time tolerance and Meter Advance Reconciliations faults as these are unlikely to materially impact Settlement.

Data Source	2016/17	2017/18	2018/19*
Fault Log	814	683	257

### 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.

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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 points considered

We assessed the fault log and based on a manual assessment of the fault log we estimated a 2% failure rate per year (because the number of events was too small to allow statistically meaningful breakdown by year).

Fault Log	2015/16	2016/17	2017/18
Failure rate	2%	2%	2%

## Forecast

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

- We could see a comparable failure rate in future 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 looked at specific faults in the fault log to estimate the number of days impacted. We took the average value of the days faults were outstanding for to estimate the Middle Days Impacted figure, and then calculated the 25<sup>th</sup> and 75<sup>th</sup> percentiles of the distribution to give the Upper and Lower Days Impacted figures.

➤ We looked at dial failures that appeared to be associated with MTD changes that weren't notified (e.g. incorrect Meter serial numbers, incorrect passwords, decommissioned Metering Equipment)

### Average error per day

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.

Rate	Avg. error per day (kWh)
CVA BM Unit	59,793

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