

CVA METERING EQUIPMENT INSTALLATION, PROGRAMMING, MAINTENANCE AND COMMISSIONING

This document outlines the methodology used to assess the Settlement Risk related to the installation, programming, maintenance and commissioning of CVA metering equipment. 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 Metering Equipment is installed, programmed or maintained incorrectly including where Commissioning is performed incorrectly or not at all **resulting in...** erroneous or estimated data in Settlement

Estimated impact in 2019/20

Market	Lower	Middle	Upper
CVA	£618.0k	£14.0m	£21.2m

Category: Metering

Sub category: Metering Equipment installation, programming, maintenance and

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 metering equipment in the CVA market. Any metering system has the potential to be installed, programmed or maintained incorrectly, and so has the potential to cause a material error.

Data point considered

Market	Unique MSIDs (2017)
CVA	891

Forecast

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

- ELEXON maintains a record of all of the upcoming metering equipment installations or changes to metering equipment for the upcoming 3 month period. The number of installations/updates for this period was used to estimate how many new MSIDs would be present in the 2019/20 year.

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

When assessing historical performance in the area, we considered:

- Trading disputes
- TAA audit findings

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Source	2015/16	2016/17	2017/18
Trading disputes	0	1	2
TAA non-compliances	1	2	1
Total	1	3	3
Proportion of all metering systems	0.02%	0.37%	0.22%

Using

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

Due to the small number of instances, there was little data to estimate how long these issues may manifest for. Consequently, the average days impacted was assumed to be the same as the equivalent SVA risk (The risk that SVA metering equipment is installed,...). This was roughly **250 days**.

Average error per day

When estimating the error per day, we used the standard rate card related to erroneous actuals in the CVA market. Although installation issues can result in a number of erroneous readings (such as double counting, missing consumption, etc.), we assumed that an erroneous actual rate card would be the most representative of these errors.

Market	Avg. error per day (kWh)
CVA	388.778

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

➤ The TAA only audit a subsection of the market, so the proportion of all metering systems with an issue was estimated by extrapolating the number of audit issues to the full population.