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

Category: Metering

Sub category: Metering Equipment installation, programming, maintenance and commissioning

Estimated impact in 2020/21

Lower	Middle	Upper
£0.5m	£1.0m	£1.7m

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. The data points were extracted from BSC Central Systems and include all GSPs and BM Units in the market.

Data point considered

Market		GSPs and BMUs 2017/18	GSPs and BMUs 2018/19
CVA	GSPs	356	358
CVA	BM Units	482	503
CVA	Totals	838	861

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Forecast

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

- ELEXON maintains a record of all of the GSP and Transmission System connected BM Unit registrations for the upcoming year. These records were used to estimate the net increase in the number of GSP and BM Unit registrations for the 2020/21 year.
- These figures do not include upcoming registrations for Distribution System connected BM Units or registration transfers from SVA to CVA.

Market	GSPs and BM Units	At Risk Population		
		Lower	Middle	Upper
CVA	Total	867	872	889

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
- Technical Assurance Agent audit findings
- Number of CVA Metering Systems

Source	2016/17	2017/18	2018/19
Trading Disputes	1	1	0
TAA non-compliances	0	0	3
Total	1	1	3
Proportion of all Metering Systems	0.11%	0.11%	0.21%

➢ The TAA only audits 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.

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 equivalent to the days impacted under Risk 023 'A fault with CVA Metering Equipment is not resolved, such that metered data is recorded incorrectly or cannot be retrieved…). This was roughly **110 days**.

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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 BM Unit	146,797
CVA GSP	141,561

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