

007 SVA RISK: RETRIEVAL OF METERED DATA

This document outlines the methodology used to assess the Settlement Risk related to the retrieval 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... SVA Metered Data is not retrieved, such that the proportion of estimated data being used in Settlement contributes to performance standards not being met **resulting in...** estimated data in Settlement.

Category: Data retrieval and processing

Sub category: Retrieval of metered data

Covers: All types of meter reads (except UMS)

Estimated impact in 2019/20

Market	Lower	Middle	Upper
NHH & HH	£9.3m	£26.8m	£55.9m

Does not cover:

Please note: In contrast to other risks, we have considered the consequence of estimated data at each Settlement Run. Most other risks are either scored yearly, or scored regardless of whether the data could be amended in subsequent reconciliation runs. In this case, however, the relationship with Risk 8 and the required performance standards set at specific runs was conducive to considering materiality by Settlement Run. Furthermore, we have only considered import volumes in the scoring of this risk, as export is often estimated to 0, resulting in inflated performance.

Similarly, this risk also diverges from other risks in that there is not an 'at-risk population'. Rather, this risk was scored by:

- Finding the average annual consumption for a profile or measurement class;
- Analysing the industry's performance for each of those classes at each run, thus identifying how much estimation was occurring past the allowed standard;
- Estimating how much of that estimation was due to failing to retrieve reads, and;
- Finding the cost associated with those estimates.

Annual consumption

For this risk, an estimation of the annual consumption of a measurement class or profile class was required to infer the volume of estimation taking place. This estimation of annual consumption is the total energy settled on estimates or actuals at RF.

Market	Annual Consumption (mWh)	
	2014/15	2015/16
NHH	155.2m	153.5m
HH (Measurement Class C)	127.0m	125.4m

- This table shows an example of the total energy consumption for the NHH market, and for HH Measurement Class C meters at RF. Consumption is fairly constant, and therefore is unlikely to show a large divergence in 2019/20.
- Although this example only shows Measurement Class C, all other HH Measurement Classes were also considered in the scoring.

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Percentage estimates below Requirement

Following an estimation of the total annual consumption, we needed to estimate how much of that energy is settled on estimates when it should be settled on actuals to reach the required performance standard. For measurement classes C and E and the NHH market, we looked at historical performance by market over the past year. For the rest of the HH market (measurement classes F and G), the large influx of new connections over the past year resulted in patterns of settlement performance that are unlikely to be representative of future performance. As a result, only the previous 3 months, at which point performance had appeared to plateau, was used in estimating future performance.

In some cases, industry performance never dropped below the required standard, and thus those Settlement Runs were excluded from the analysis.

It is important to note that these are averages over the year period. Supplier performance is often seasonal, and shows considerable fluctuation, however, for the sake of ease, these fluctuations were averaged out over the year

Proportion of estimation due to not retrieving read

Of the estimation below the standard that takes place, only a proportion of this estimation will be due to failing to retrieve a read. The rest of that estimation will be caused other than failing to retrieve a read, such as identified but unresolved faults.

The method of estimating how much estimation occurs due to failing to retrieve a read differed between HH and NHH. For NHH, we analysed a snapshot of a particular Settlement day, to see how many meters were yet to be read at RF. This equated to around 3% of the NHH market. A further analysis was undertaken to identify whether this 3% equated to roughly 3% of consumption, which it did. We therefore assumed that of the roughly 4.5% of estimation that occurs in the NHH, around 3% (or **85%** of that 4.5%) will be due to failing to retrieve a read.

For the HH market, we analysed a small sample of EFR plans to identify what proportion of their underperformance Suppliers were attributing to failing to retrieve a read. This revealed that around **95%** of a Supplier's efforts to improve their performance were centred on retrieving reads. As a result, we assumed that around 95% of the estimation under the performance standard for the HH market is due to failing to retrieve a read.

Estimation inaccuracy

Following an appreciation of the volumes of estimation occurring under the required performance standard, we needed to estimate the error associated with an estimate compared to an actual reading. This was done by comparing estimates that were subsequently replaced with actuals in a sample of MPANs. This provided an average percentage inaccuracy for an estimate.

Market	Measurement / Profile Class	Avg. estimation inaccuracy
NHH	1-8	21.00%
HH	C	32.70%
HH	E	40.31%
HH	F	21.00%
HH	G	55.52%

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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

- The required performance standard for measurement classes F and G is set to change in the coming year. Currently, the performance standard for both measurement classes is 90% at R1. From 1 January 2020, however, that standard will become 99%. The current analysis assumes that performance in both measurement classes is likely to carry on at the same level despite the change in requirement.
- Due to BSC obligations for parties to estimate their export volumes to zero if they do not hold actual data, including export data in the analysis resulted in inaccurate estimations and so export data was excluded. In further revisions, we may want to analyse export estimation in greater depth to understand the associated error, even if it is not a BSC non-compliance.
- The proportion of estimation due to failing to retrieve a read in the HH market was based on a small sample of Supplier's EFR plans. In reality, there could be a much larger variation associated with this figure, and so further iterations could apply the same logic with a larger sample to improve the accuracy of the estimation.
- Although performance in the half-hourly market was often below the required standard at more than one Settlement Run, only the first impacted Settlement Run was considered in the scoring, as the materiality of any subsequent Runs would likely only be a subset of the first Run where performance was under the standard. This was done to avoid double-counting poor performance, which would have inflated the materiality of this risk in comparison to others. For the non-half-hourly market, Settlement Performance was only below the standard at RF, and so this was the only Settlement Run considered for the NHH market.