



The BSC Audit

**BSC Audit Approach**

SVA MARKET | 2021/2022

ELEXON

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# Executive Summary

During the 2020/21 BSC Audit COVID-19 understandably had an impact across the industry. The BSC Audit Approach took this into account for the processes deemed most likely to be impacted and flexed the approach accordingly. Whilst delivering the BSC Audit 100% remotely was a necessity for 2020/21, the overwhelmingly positive feedback received by Performance Assurance Parties (PAPs) (*84% of PAPs found that remote Audits provided a smooth or more efficient Audit process*) means that this approach will continue for the 2021/22 BSC Audit year.

The 2020/21 BSC Audit saw reduced activity in the market (due to lockdown restrictions) which softened the impact on the audit findings. What was seen though, was an increase in backlogs at PAPs where manual intervention is needed, in part due to furloughing of staff.

What is expected to be seen therefore, is that when activity in the market increases post-lockdown, PAPs will not only have to service the increased activity but also work through the outstanding backlogs. This combined with the COVID-impacted RFs hitting during the 2021/22 BSC Audit period suggests a difficult period for PAPs and the industry. The BSC Audit Scope, and the Approach, take this concern into account, and focuses on these areas in the 2021/22 BSC Audit year.

## Our focus

The BSC Audit continues to closely align itself with other Performance Assurance Techniques (PATs), and the 2021/22 BSC Audit will focus on the 3 Key SVA Focus Risks (see Appendix 3) as outlined in the Risk Evaluation Register (RER) and the Risk Operation Plan (ROP) and further detailed in the BSC Audit Scope.

## Key Changes to Approach

- Earlier Planning and notification of audits to allow Parties to plan for the audits accordingly.
- Remote Audits will be the default method for all audits, however site visits can be conducted, if permissible and either requested by the PAP or considered to be advantageous by Elexon and/or the BSC Auditor..
- Enquiry questions will be sent ahead of site visits (virtual or physical) to increase efficiency and effectiveness of time spent with Parties and allow the Parties to focus more on Business as Usual activities
- Refinement of workpapers to align with changes to the 2021/22 BSC Audit Scope.
- Continued refinements and enhancements to Data Transfer Network (DTN) tests.

## 2021/22 BSC Audit Year stats



73

Performance Assurance Parties (PAPs) in scope



99%

MPAN coverage



850+

Planned workpapers



30+

Experienced auditors involved



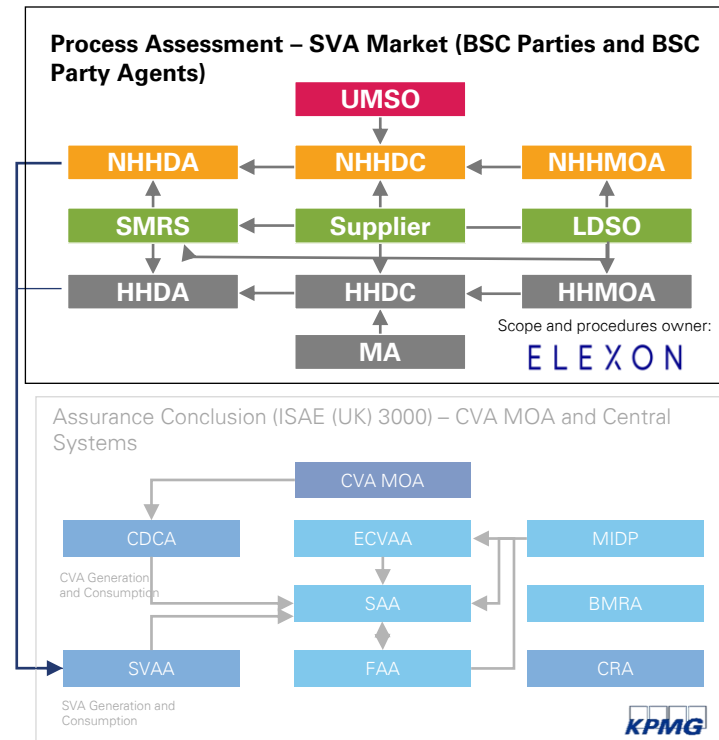
# The BSC Audit approach

## The BSC Audit will be delivered in two distinct streams of work:

- Supplier and SVA Agents are within the scope of a Process Assessment engagement, forming part of ELEXON's Performance Assurance Framework (PAF).
- ELEXON are responsible for the scope of the detailed on site work as well as the owner of the conclusions reached on the assessment. Testing at market participants will be performed in a similar way to previous years. ELEXON will issue a report summarising the key findings, which will be presented to The Performance Assurance Board (PAB) and The Panel.
- Central Systems and Central Volume Allocation Meter Operator Agent (CVA MOA) are within the scope of an ISAE (UK) 3000 Assurance Conclusion (the approach of which is covered in a separate Approach Document);

## Key differences in activities performed in SVA Market compared to CVA / Central Systems Agents:

- Increased risk based approach to scoping based on ELEXON Risk Evaluation Register and the six focus risks / events;
- Enhanced Entity Selection including justification for inclusion;
- Outputs from other Performance Assurance Techniques (PATs) were considered in Entity Selection Process;
- Removal of automatic triggering of Error and Failure Resolution (EFR) process as a result of Medium and High rated BSC Audit issues
- Further enhancement of existing DTN Tests increasing the accuracy of results;
- Improvements to the Audit Planning Memorandum (APM) documents, giving further detailed information related to the site visits;
- Continued reduction of Data Requests to parties increasing the reliance on access to DTN rather than reliance on parties.
- Continued amendments and improvements to the Workpapers to align with the new Risks and focus on quality and accuracy of data within flows as well as timeliness.



# BSC Audit Findings

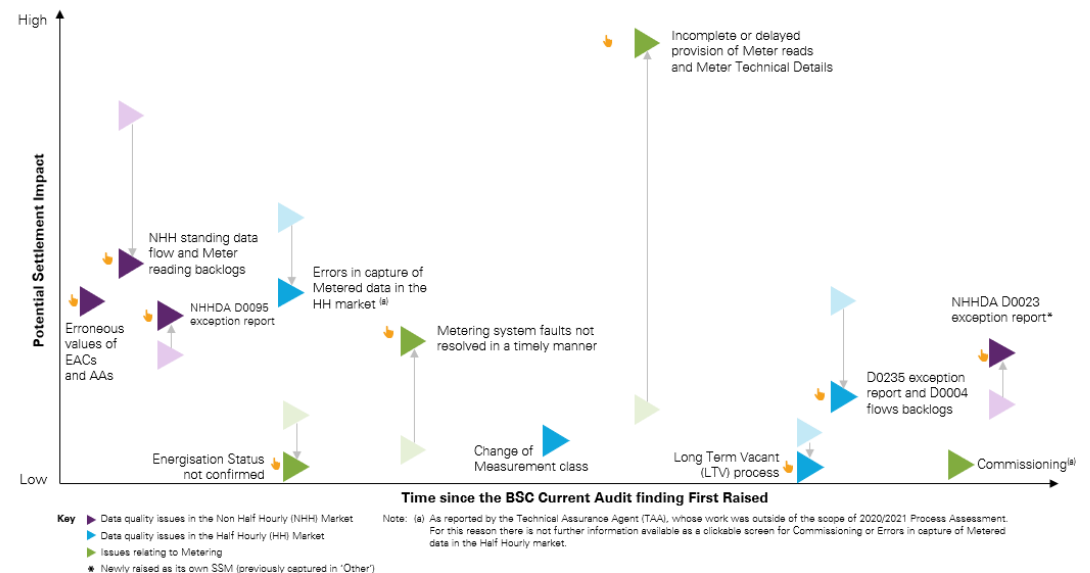
## BSC Audit 2020/21 findings summary

- There has been a decrease in the number of identified material findings in the SVA Market from 205 to 168 compared to last year. Within the material findings, the number of High and Medium findings has decreased from 47 to 36.

## Within the findings a number of themes have emerged:

- 51% of all material findings were raised at just five PAPs (41% last year), which is less than 7% of the total population of PAPs tested. And by role, the SVA MOAs account for 39% of all material findings (46% last year), largely spread across just two metering processes.
- 43 material findings were raised in relation to the Incomplete or delayed provision of Meter Reads and Meter Technical Details process. These findings were raised across 16 separate PAPs and five roles.
- This year the number of material findings within the SVA MOA role has significantly reduced (from 96 last year to 65), mainly in relation to closures of issues related to Change of Energisation Status and Processing of reconfiguration, and replacement and removal of metering equipment. The decrease in findings can be linked to the COVID-impacted audit approach, however, we are still seeing 57% of all material findings from these two processes.

The chart below shows the individual categories of 2020/21 findings, split by age, movement compared to the year before and potential Settlement impact. The previous year position of a finding is indicated by a partially transparent triangle. Arrows indicate the direction of change and the solid triangle indicates 2020/21 impact position (where there has been no material change in impact, the triangles remain in the same position as last year. The changes will be taken into consideration and reflected when performing scoping.



# Operational approach



## 1. Planning

### Risk assessment and entity selection

The scope will be defined by ELEXON, including the entities where we will be performing testing and the composition of each work intensity. A separate Entity Selection Document provides further details as to the selection criteria and market participants in scope for the BSC Audit Engagement during each assurance period.

## 2. Entity engagement

### APM and Data Requests

Prior to each testing period, a planning meeting will be held with nominated representatives at in-scope entities. For new market entrants, an extended planning meeting will be scheduled to introduce the BSC Audit. Prior to the planning meeting, a draft APM will be sent to each in-scope entity outlining the timeframes, key contacts and data requested.

The APMs will provide further details on the work that will be performed, including a description of the processes that will be covered. This will allow entities to plan effectively for the site visits.

Where possible, DTN Data will be used to reduce the volume of data that parties need to provide.

Pre-site enquiry questionnaires will be sent to PAPs after the initial planning meeting to make the time with PAPs during site visits more valuable.

## 3. Fieldwork and data modelling

Site visits for fieldwork will generally take place between October 2021 and March 2022 and will be primarily conducted remotely. The timing of this work will be agreed with entities during the entity engagement phase. We will also utilise remote auditing techniques and structured ordering of Party Audits to minimise the impact on Parties while retaining the level of assurance expected from the BSC Audit

### Detailed Testing

Detailed testing involves inspection of a selection of transactions and records to verify that they have been created and/or processed in compliance with the BSC. Testing will establish completeness and accuracy of the data flow, or metering system level information in relation to BSC requirements. The BSC Audit will continue to focus on the quality of data processing as well as the timeliness of sending flows.

The testing work programmes continue to be reviewed and improved to focus on the current focus risks. As in previous years, scripts over DTN data will be used to perform testing over full population of transactions. The existing DTN tests continue to be reviewed to improve their effectiveness and reduce the number of false positives. Where DTN data is used to identify potential anomalies prior to the fieldwork, a sample of these will be sent to parties for follow up in advance of the site visits, leading to a more efficient use of time whilst on site.

# Operational approach (continued)



## Data Modelling Techniques

The BSC contains complex calculations with respect to deriving generation and consumption, aggregation, allocation, apportionment and Settlement. A number of models will be utilised to support the BSC Audit. The models use source data provided by Market Participants and re-perform the calculations to check their arithmetical accuracy.

Specific data requests to support the operation of the models are included in the APMs sent to in-scope entities.

## Moderation

Moderation procedures will be performed to ensure consistency. This will involve reviewing all issues and their ratings to ensure they are applied consistently across all audited agents.

## 4. Clearance Meetings and Reporting

### Observations

At the conclusion of testing at each site visit, the observations will be classified and ranked based on whether they have resulted in a non-compliance with the BSC and whether it has resulted in a potential impact on the completeness and/or accuracy of Settlement, or not. The observations will be discussed with entities as they arise to determine compensating or mitigating activities in place.

A clearance meeting will be held with entities to discuss and formally agree the accuracy of observations raised, however the ratings of these observations will not be discussed.

The ratings for observations have been categorised as follows:

- Settlement impacting non-compliance
- Immaterial non-compliance
- Process improvement

See Appendix 1 (slide 11) for how these categories are defined.

## Reporting

Following clearance meetings, immaterial non-compliance and process improvement observations will be reported to the audited entity as MLPs within an overall audit issues document that will also set out the Settlement impacting non-compliances noted from testing.

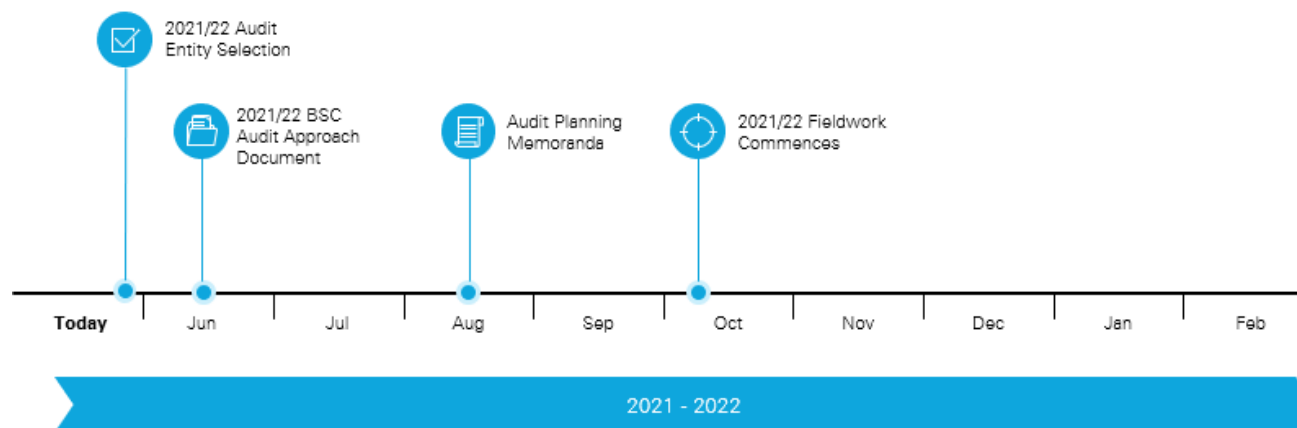
# Operational approach (continued)

## All Settlement Impacting Non-compliances will be reported

Where non-compliances have resulted in an impact to Settlement the potential impact will be assessed across all affected MPANs and aggregated over the BSC Audit period. For Process Assessment work performed over SVA Market, the consolidated findings will be reported by ELEXON in a report to PAB.

SVA Parties will be requested to submit Senior Stakeholder Sign-off Letters. These will endeavour to frame the issues and insights highlighted by the testing performed and indicate the potential financial impact of the issues. The purpose of the Senior Stakeholder Sign-off Letters is to drive further engagement in the improvement of BSC compliance within the parties.

## An indicative time-line for delivery of the annual BSC Audit is illustrated below.





# Appendix 1 - The BSC Audit findings

## Overview

The findings are categorised as either Issues or Management Letter Points ('MLP's) depending on whether there is a potential impact on the completeness and/or accuracy of Settlement.

An impact rating of High, Medium or Low is applied to each issue. A number of underlying principles which provide guidance as to how this will be applied are set out in this document. Issues will be considered across the entities in at an issues 'moderation' meeting to ensure the determination of ratings is consistent.

## How each finding will be considered?

Each finding will be individually determined but will also be considered in the context of similar findings raised at other entities.

Two entities may have the same underlying issue but if one entity has a mitigating process or control and is responsible for a much lower error rate, impact or residual risk as a result, then a different impact rating may apply.

One moderation session will be performed during the year, following completion of the fieldwork at all market participants. The aim of this session is to ensure a ratings consistency across each of the entities in scope.

## Ratings for findings have been defined as follows:

- **Settlement Impacting Non-Compliance** – a non-compliance with the BSC that, if left uncorrected, may have an impact on the completeness and/or accuracy of Settlement. In this case we will assess the impact as High, Medium or Low, depending on the estimated overall potential impact on Settlement.
- **Immaterial Non-Compliance** – a non-compliance with the BSC that is unlikely to have a direct impact on the completeness and/or accuracy of Settlement. These observations will be categorised as 'Management Letter Points' (MLPs); and
- **Process Improvement** – the BSC appears to have been complied with but the BSC Auditor has identified the potential for process improvements at the entity in scope. These observations will also be categorised as 'Management Letter Points' (MLPs).

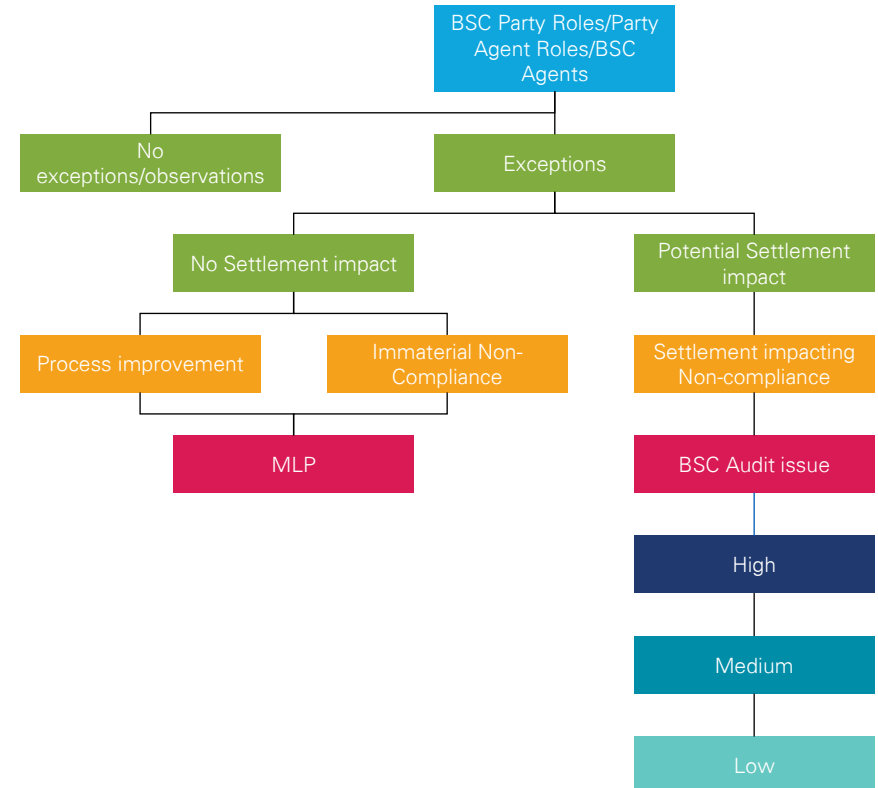
# Appendix 1 - The BSC Audit findings (continued)

## How will the impact of these factors be determined?

Each Settlement Impacting Non-Compliance issue will be rated as High, Medium or Low after gaining an understanding of the following:

- Nature of the issue
- Extent of potential impact of the issue on Settlement in MWh
- Improvement / deterioration (both quantitatively and qualitatively) since the previous BSC Audit
- Whether the number and/or nature of exceptions indicates the issue is pervasive or not
- Impact of the issue on other Audited Entities or Trading Parties
- Extent to which a compliance issue might impact other issues (especially those which have a direct impact on Settlement)
- Existence of any mitigating factors (see below), including the following:
  - Other controls or procedures applied by the entity that reduce the potential impact of the error/non-compliance arising
  - Whether the issue has been resolved in the BSC Audit period (the importance of the issue remains the same but the required focus to be placed on it by ELEXON/PAB will be less)

The diagram on the right of this page summarises the rating methodology followed.



# Appendix 2 - Glossary of terms

Acronym	Definition	Acronym	Definition	Acronym	Definition
<b>AA</b>	Annualised Advance	<b>EFR</b>	Error and Failure Resolution	<b>NHHMOA</b>	Non Half Hourly Meter Operator Agent
<b>APM</b>	Audit Planning Memorandum	<b>ELEXON</b>	ELEXON Limited	<b>PAB</b>	Performance Assurance Board
<b>Approach</b>	BSC Auditor's Audit Approach for the year ended 31 March 2022	<b>FAA</b>	Funds Administration Agent	<b>PAF</b>	Performance Assurance Framework
<b>Audit Year</b>	Year ended 31 March 2022	<b>HHDA</b>	Half Hourly Data Aggregator	<b>PAP</b>	Performance Assurance Party
<b>BM</b>	Balancing Mechanism	<b>HHDC</b>	Half Hourly Data Collector	<b>PAT</b>	Performance Assurance Technique
<b>BMRA</b>	Balancing Mechanism Reporting Agent	<b>HHMOA</b>	Half Hourly Meter Operator Agent	<b>Panel</b>	BSC Panel
<b>BMU</b>	Balancing Mechanism Unit	<b>LDSO</b>	Local Distribution System Operator	<b>SAA</b>	Settlement Administration Agent
<b>BSC</b>	Balancing & Settlement Code	<b>MA</b>	Meter Administrator	<b>SF</b>	Initial Settlement Run
<b>BSCP</b>	Balancing & Settlement Code Procedure	<b>MIDP</b>	Market Index Data Provider	<b>SSM</b>	Statement of significant matters
<b>CDCA</b>	Central Data Collection Agent	<b>MLP</b>	Management Letter Point	<b>Statement</b>	Statement of significant matters
<b>Code</b>	Balancing & Settlement Code	<b>MPAN</b>	Metering Point Administration Number	<b>SMRS</b>	Supplier Meter Registration Service
<b>CoMC</b>	Change of Measurement Class	<b>MPID</b>	Market Participant Identifier	<b>SVA</b>	Supplier Volume Allocation
<b>CRA</b>	Central Registration Agent	<b>MSID</b>	Metering System Identifier	<b>SVAA</b>	Supplier Volume Allocation Agent
<b>CVA</b>	Central Volume Allocation	<b>MTD</b>	Meter Technical Details	<b>TAA</b>	Technical Assurance Agent
<b>CVA MOA</b>	Central Volume Allocation Meter Operator Agent	<b>MOA</b>	Meter Operator Agent	<b>TDC</b>	Trading Disputes Committee
<b>DTN</b>	Data Transfer Network	<b>NHH</b>	Non Half Hourly	<b>TWh</b>	TeraWatt Hour(s)
<b>EAC</b>	Estimated Annual Consumption	<b>NHHDA</b>	Non Half Hourly Data Aggregator	<b>UMSO</b>	UnMetered Supplies Operator
<b>ECVAA</b>	Energy Contract Volume Aggregation Agent	<b>NHHDC</b>	Non Half Hourly Data Collector		

# Appendix 3 – Direction for the BSC Audit 2021/22

## Risk Operating Plan (ROP) alignment and COVID-19 Pandemic recovery

The energy market continues to react and change in light of lockdowns and other restrictions across the country. Elexon and the Performance Assurance Board (PAB) wish to ensure that assurance activities strike the right balance of effective control and monitoring of performance within the market, whilst recognising and responding to the pressures and unprecedented challenges in the current environment.

The Risk Operating Plan (ROP) for the Performance Assurance Operating Period (PAOP) 2021/22 outlines three focused risk areas:

ROP Focus	Description	Recommended action	Associated Risks
<b>Supporting the recovery of the market, following the COVID-19 pandemic</b>	Retrieval rates from properties are likely to remain impacted by COVID-19 lockdowns and other restrictions for some time, the focus should be on ensuring that all processes that impact on the quality of retrieved data are as effective and efficient as possible, to maximise the quality of the data received.	Processes that were put under unique stress during COVID-19 lockdown will continue to be investigated, such as the Disaster Recovery process, effectiveness of remote working and implementation of changes to policies will be reviewed. Work Papers will be updated to include controls based questions where not currently present.	05, 06, 07, 08, 10, 12
<b>Understand and mitigate, where possible, the impact of any potential transition of Risk to the Retail Energy Code (REC)</b>	The REC, which plans to give effect to Retail Code Consolidation, is expected to take effect on 1 September 2021 and is likely to significantly impact the vires Elexon and the PAB have for SVA MOA BSC processes which affect the risks in the Risk Evaluation Register (RER).	Elexon and the BSC Auditor will continue to assess the scope of the transition and adapt where appropriate, however no specific action will be undertaken to change the Audit for the current period.	All SVA Risks
<b>Address actions arising from Market Issues identified within the BSC Audit</b>	A number of Market Issues were identified in the BSC Audit. To address these, along with other areas of feedback received from BSC Parties during the BSC Audit, The ROP includes the Market Issues and accompanying actions.	The Audit will continue to gather information on the existing Market Issues and potential new ones.	All Risks



# Appendix 4 – SVA risks 2021/22

Risk/Event reference	Description
001	SVA Metering Point is registered incorrectly or not at all, such that metered data is not collected or aggregated
002	SVA Metering System attributes held in the Supplier Meter Registration Service (SMRS) or by any party in the Supplier Hub are incorrect
003	SVA Metering Equipment is installed, programmed or maintained incorrectly including where Commissioning is performed incorrectly or not at all
004	Changes to SVA Metering Equipment are not notified, such that all members of the Supplier Hub do not use the current Meter Technical Details
005	A fault with SVA Metering Equipment is not resolved, such that metered data is recorded incorrectly or cannot be retrieved
006	On a change of agent, Meter Technical Details are not transferred or processed correctly or at all, such that parties do not use the latest Meter Technical Details
007	SVA Metered data is not retrieved, such that the proportion of estimated data being used in Settlement contributes to performance standards not being met
008	SVA metered data is not processed or transferred correctly, or at all
009	The Data Aggregator does not process metered data correctly or at all, including transfer to SVAA, such that the energy volumes required for Settlement are incorrect or missing
010	On change of Supplier or Agent, meter read history is incorrect or not transferred such that sufficient history is not available for validating and estimating energy volumes
011	Unmetered Supplies volumes are calculated incorrectly or not at all
012	SVA Metering System technical details are created incorrectly
013	Manual adjustments to Metered Data are not completed correctly, or at all
014	Agents are not appointed or de-appointed correctly, such that SMRS is not complete or up to date, members of the Supplier Hub do not hold the correct MPID of other Hub members or the appropriate agents are not appointed
015	SVA reference data is not created or transferred correctly, or at all
016	The energisation status held in SMRS or by any party in the Supplier Hub does not match the physical energisation status of the SVA Metering System
017	Exception reports are not sufficiently managed, such that material exceptions are not addressed at all or in a timely manner
018	Revenue protection processes are not managed sufficiently, such that unrecorded energy volumes are excluded from Settlement

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