Performance Assurance Board **MEETING NAME** 25 July 2019 Date of meeting Paper number PAB222/13 Owner/author Kat Higby Purpose of paper For Decision Classification **Public** Summary This paper provides the Performance Assurance Board (PAB) with ELEXON's Recommendations in response to the Technical Assurance Agent (TAA) Annual Report.

1. Background

- 1.1 The Technical Assurance of Metering (TAM) technique monitors compliance with the Half Hourly (HH) Metering System requirements, as documented in the Balancing and Settlement Code (BSC) and its Subsidiary Documents¹. ELEXON contracts the TAA (C&C Group Plc) to facilitate the TAM technique.
- 1.2 At the May 2019 PAB meeting (PAB220), the TAA presented its <u>Annual Report</u> for 2018/19. This provided its opinion on the health of the HH Metering System population in both the Supplier Volume Allocation (SVA) and Central Volume Allocation (CVA) markets. The audit findings highlighted the following audit issues that are impacting the health of the markets:
 - Measurement transformer ratio mismatches; and
 - Measurement transformer Calibration Certificates (Commissioning)
- 1.3 The TAA also presented its Annual Report to the BSC Panel at its June 2019 meeting (Panel 292). The Panel noted the TAA Annual Report.

2. Associated Risk to Settlement

2.1 The two audit issues identified by the TAA are associated to Risk 003:

"The risk that SVA Metering Equipment is installed, programmed or maintained incorrectly including where Commissioning is performed incorrectly or not at all."

- 2.2 Risk 003 is one of eight "focus" risks described in the Risk Operating Plan (ROP) for the 2019/20 Performance Assurance Operating Period (PAOP). ELEXON will undertake the following actions in order to manage and mitigate the Risk:
 - Monitor the changes that were introduced by CP1496² on 01 November 2018. The change
 introduced two new data flows to be used as part of the Commissioning process. ELEXON will apply
 detective techniques and analysis in order to monitor the impact of the change.

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¹ This includes Balancing and Settlement Code Procedures (BSCPs) and Metering Codes of Practice (CoPs).

² <u>CP1496: Introduction of two data flows for the Commissioning process for Half Hourly (HH) Supplier Volume Allocation (SVA) Current Transformer (CT) operated Metering Systems</u>

• Undertake a review of the current Risk reporting processes, and identify changes that will assist with the identification of Parties that are not performing satisfactorily. ELEXON will assist these Parties with improving their processes. For further information on Risk reporting, please refer to the Quarterly Performance Assurance Report (QPAR), (PAB222/06).

3. Audit Issues

3.1 In addition to monitoring and reporting actions, ELEXON recommends that further actions are undertaken against each audit issue. Descriptions of the two identified audit issues, recommendations from the TAA and ELEXON's recommendations are set out in the table below:

Audit issue	Audit issue descriptions and TAA recommendations	ELEXON recommendations
Measurement transformer ratio mismatches (Commissioning)	The TAA has recorded any increase in non-compliances caused by measurement transformer ratio mismatches. Commissioning is a control that helps to ensure the accuracy of Metering Systems. It is recognised that if Commissioning is completed, the likelihood of measurement transformer ratio mismatches are reduced. Recommendation: The TAA recommends that ELEXON should issue guidance or training to assist Parties in understanding the importance of Commissioning in accordance with CoP 4 ³ .	assist Parties to strengthen their Commissioning processes, which will reduce the number of
Measurement transformer Calibration Certificates not provided	In 2018/19, the TAA reported the lack of measurement transformer Calibration Certificates as a key issue. Each CoP requires Calibration Certificates be made available to the TAA for review at a TAA Inspection Visit. The number of noncompliances recorded would indicate that certificates are no longer readily available to present to the TAA auditor, possibly due to the age of many 100kW Metering System installations. Recommendation: The TAA recommends a	ELEXON is working with the Technical Assurance of Metering Expert Group (TAMEG) to progress the following changes: Amending the minimum class accuracy requirements for Meters in CoP 5 ⁴ to assist the Meter Operator Agent (MOA) in completing the overall accuracy assessment of the Metering System. This will reduce the amount of Category 2 ⁵ Non-Compliances identified by the TAA in relation to overall accuracy of Metering Systems. Amending the minimum class accuracy
	concerted effort by all industry participants to	requirements for Current Transformers (CTs) in

³ The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes

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⁴ The Metering of Energy Transfers with Max Demand of up to (and including) 1MW for Settlement Purposes

⁵ Errors that are potentially affecting the quality of data for Settlement purposes (but not currently affecting it)

establish what is now deemed as satisfactory evidence in maintaining Metering System overall accuracy in order to reduce the number of new non-compliances being raised.

CoP 5 and CoP 36 to provide more assurance that the CTs remain accurate when measuring lower currents.

Implementation of these changes will remove the requirement to provide measurement transformer Calibration Certificates for Low Voltage (LV) Metering Systems registered as CoP 5.

ELEXON will update the PAB on when the changes will be raised via the QPAR.

4. No Access and Licenced Distribution System Operator (LDSO) Attendance

No Access

- 4.1 ELEXON notes that the rate of no access has increased in 2018/19 in comparison to the 2017/18 audit year. The no access rate has risen from 10% to 16% for SVA Inspection Visits, and 5% to 8% for CVA Inspection Visits.
- 4.2 The TAA is currently progressing a change on behalf of ELEXON that will strengthen the process of arranging Inspection Visits (see "Service Improvement Changes" in Section 5 below).
- 4.3 The ELEXON Assurance Team will write to Registrants on a regular basis, detailing individual no access performance and requesting further information on access issues.
- 4.4 ELEXON will inform the PAB quarterly of any performance issues in terms of no access throughout the audit year via the QPAR.

LDSO Attendance at Inspection Visits:

- 4.5 ELEXON notes that approximately 27% of Inspection Visits undertaken in 2018/19 were incomplete as the TAA was unable to access the Current Transformer (CT)/Voltage Transformer (VT) rating plates due to a lack of LDSO attendance. This is an increase on the 18% recorded in 2017/18.
- 4.6 To assist with LDSO attendance on site, ELEXON and the TAA will attend an Energy Networks Association (ENA) working group in September 2019 to notify LDSO representatives of their obligations in terms of providing access to Metering Equipment to the TAA.
- 4.7 The TAA is currently progressing a change on behalf of ELEXON that will strengthen the process of arranging LDSO attendance on site (see "Service Improvement Changes" in Section 5 below).

5. Future changes

5.1 It has been recognised that changes are required to improve the TAM technique. The TAA (on behalf of ELEXON) are currently progressing the following changes:

	Title of Change	Change Description	Implementation
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⁶ The Metering of Circuits with a Rated Capacity not Exceeding 10 MVA for Settlement Purposes

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		Date
Reporting on the validity of Metering Dispensations	The change will allow the TAA to review current Metering Dispensations and report on whether a Metering Dispensation is: Valid and covers any non-compliances identified; Expired; and No longer required The process for validating Metering Dispensations will be included in the new TAA contract, which will go live in April 2020.	April 2020
Changes to LDSO and MOA Notifications	This will incorporate changes that were introduced by CP1496 into the audit process, and reflect the Commissioning obligations already in place from Modification P283 ⁷ , which was implemented in November 2018. The Technical Assurance Agent Management Tool (TAAMT) will be updated to reflect that for Metering Systems that have a Trading Status effective from date on or after 01 November 2018 (CP1496's implementation date), LDSOs will be responsible for the provision of CT/VT certificates to the TAA.	September 2019
2019/20 Specific Sample (SVA multi-circuit Inspection Visits)	Approximately 250 specific sample Inspection Visits will be completed on SVA CoP 18 and CoP 29 Metering Systems in the 2018/19 audit year. The Metering Systems selected for audit have either one or two circuits. This change will allow the TAA to complete multi-circuit Inspection Visits as part of the Specific Sample. The single circuit Inspection Visits will commence in advance of the change implementation date to ensure that all Inspection Visits are completed within the audit year.	September 2019
Service Improvement Changes	Improvement The change will strengthen the process for arranging Inspection Visits by	

⁷ P283: Reinforcing the Commissioning of Metering Equipment Processes



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⁸ The Metering of Circuits with a Rated Capacity Exceeding 100MVA for Settlement Purposes

⁹ The Metering of Circuits with a Rated Capacity not exceeding 100 MVA for Settlement Purposes

	LDSO attendance on site. An email will be sent to LDSOs requesting their attendance on site if the Supply is High Voltage (HV) or if the current transformers are remote.	
	The PAF review identified an opportunity to introduce lower intensity Desktop Audits into the TAM technique. Desktop Audits will provide a flexible, pragmatic and cost-effective addition to onsite Inspection Visits.	
Desktop Audits (subject to BSC Panel approval)	The change requires a Modification (92-B), which is scheduled to go live in the February 2020 release (subject to approval). It is anticipated that changes will be made to BSC Section L ¹⁰ , BSC Section Z ¹¹ , BSCP27 ¹² and ELEXON guidance notes.	April 2020
	The new Desktop Audit process will be included in the new TAA contract, which will go live in April 2020.	

6. Recommendations

- 6.1 We invite you to:
 - a) **NOTE** the two identified TAA audit issues affecting the health of the market;
 - b) AGREE the ELEXON recommendations against each issue;
 - c) AGREE the actions to be completed by ELEXON regarding no access and LDSO attendance; and
 - d) **NOTE** the future changes to the TAM technique

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¹⁰ BSC Section L: Metering

¹¹ BSC Section Z: Performance Assurance

¹² BSCP27: Technical Assurance of Half Hourly Metering Systems for Settlement Purposes