

REMOVING THE REQUIREMENT TO PRESENT CALIBRATION CERTIFICATES TO THE TAA

MEETING NAME Technical Assurance of Metering Expert Group

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Purpose of paper For Discussion

Classification Public

Summary The Technical Assurance Agent (TAA) currently requests Meter and measurement transformer calibration certificates from Meter Operator Agents (MOAs) for review and performs an overall accuracy assessment when completing an Inspection Visit. This paper suggests other ways the overall accuracy calculation can be performed and lists the documents which would need to change to enable the calculation method to be changed.

1. Background

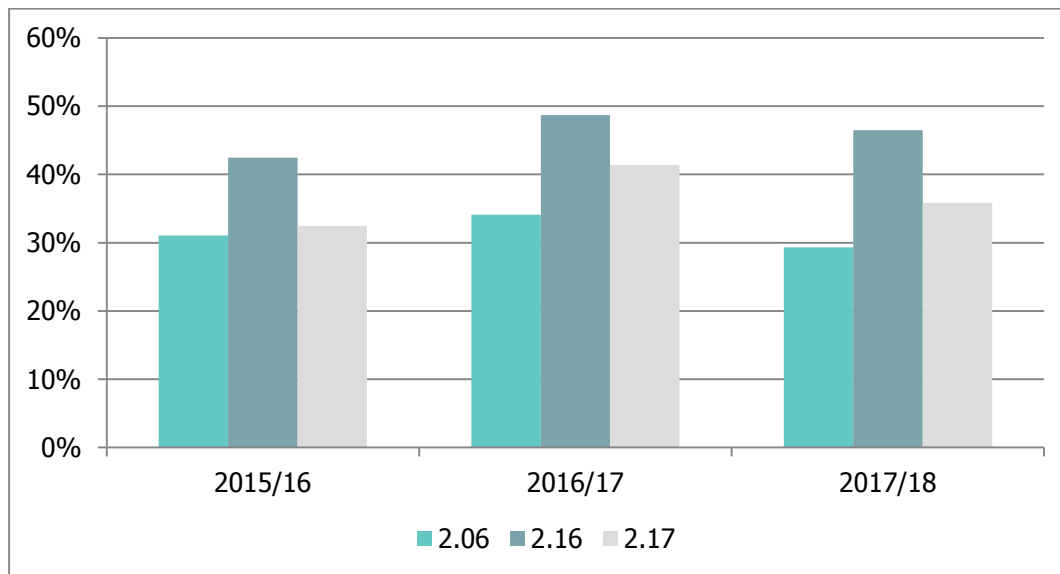
- 1.1 The TAA continues to report the longstanding issue that a lack of calibration certificates being produced for inspection is a key issue in its audit findings.
- 1.2 Each Code of Practice (CoP) requires that calibration certificates are made available to the TAA for review at a TAA inspection. If a measurement transformer certificate is not made available, the TAA will issue a Category 2.16¹ non-compliance. The TAA will also issue a Category 2.17² non-compliance if a certificate is not made available for a Meter.
- 1.3 The TAA uses the certificates in its assessment of overall accuracy (see section 3). The TAA will raise Category 2.16 and 2.17 non-compliances for missing certificates regardless of whether overall accuracy of the Metering System can be proven in their absence. If overall accuracy cannot be proven in the absence of certificates, the TAA will raise an additional Category 2.06 non-compliance³.
- 1.4 The following graph shows the percentage of Inspection Visits which have resulted in Category 2.16, Category 2.17 and Category 2.06 non-compliances over the last three audit years:

¹ Measurement Transformer Certificates not provided or incorrect

² Meter Certificates not provided or incorrect

³ Possibility that overall accuracy of Metering System not maintained

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2. Issue

- 2.1 BSC Parties are not able to rectify Category 2.16 and Category 2.17 non-compliances because historical measurement transformer certificates cannot be sourced in a manner that would be justifiable in resource and cost when compared against the tangible risk to Settlement.
- 2.2 The table below illustrates how many Category 2.16 and 2.17 non-compliances have been raised over the last three audit years, and how many have been rectified by BSC Parties:

Category of Non-Compliance	Number of Non-Compliances Raised	Number of Non-Compliances Rectified	Percentage of Non-Compliances rectified
Category 2.06	1369	113	8.25%
Category 2.16	1939	92	4.74%
Category 2.17	1676	560	33.41%

- 2.3 The above figures show that BSC Parties are being allocated non-compliances which are not being rectified. The reasons why current transformer (CT)/voltage transformer (VT) certificate non-compliances are not being rectified may be as a result of the following:
- The difficulty and cost of retrieving CT/VT certificates from the equipment owner
 - The CT/VT certificates are no longer physically available
 - The impracticality and cost associated with recalibrating the CT/VTs
- 2.4 The reasons why Meter certificate non-compliances are not being rectified may be as a result of the following:

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- The Meter certificates are no longer physically available
- The cost associated with recalibrating the Meter

2.5 Whilst the TAA continues to raise non-compliances for missing calibration certificates, they are being added to an increasing list of non-compliances which remain outstanding.

3. Overall accuracy calculation - current process

3.1 The TAA calculates overall accuracy of a Metering System using the following calculations:

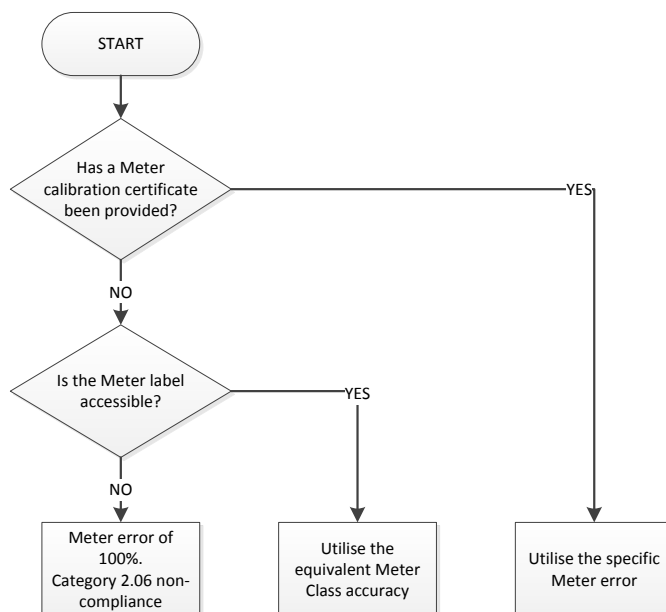
Type of Metering System	Overall Accuracy Calculation
Whole Current	Overall Accuracy = Meter Error + Meter Compensation
LV CT Operated	Overall Accuracy = Meter Error + Meter Compensation + CT Error
HV CT Operated	Overall Accuracy = Meter Error + Meter Compensation + CT Error + VT Error

3.2 Where overall accuracy exceeds the limits of the relevant CoP at unity power factor, but where there is uncertainty in the error, a category 2.06 non-compliance is raised indicating overall accuracy may not be maintained,

3.3 Where the overall accuracy is determined to be greater than the CoP limit and the errors of the individual Meter and measurement transformers is proven, a category 1 non-compliance (Overall CoP Accuracy not maintained) is raised.

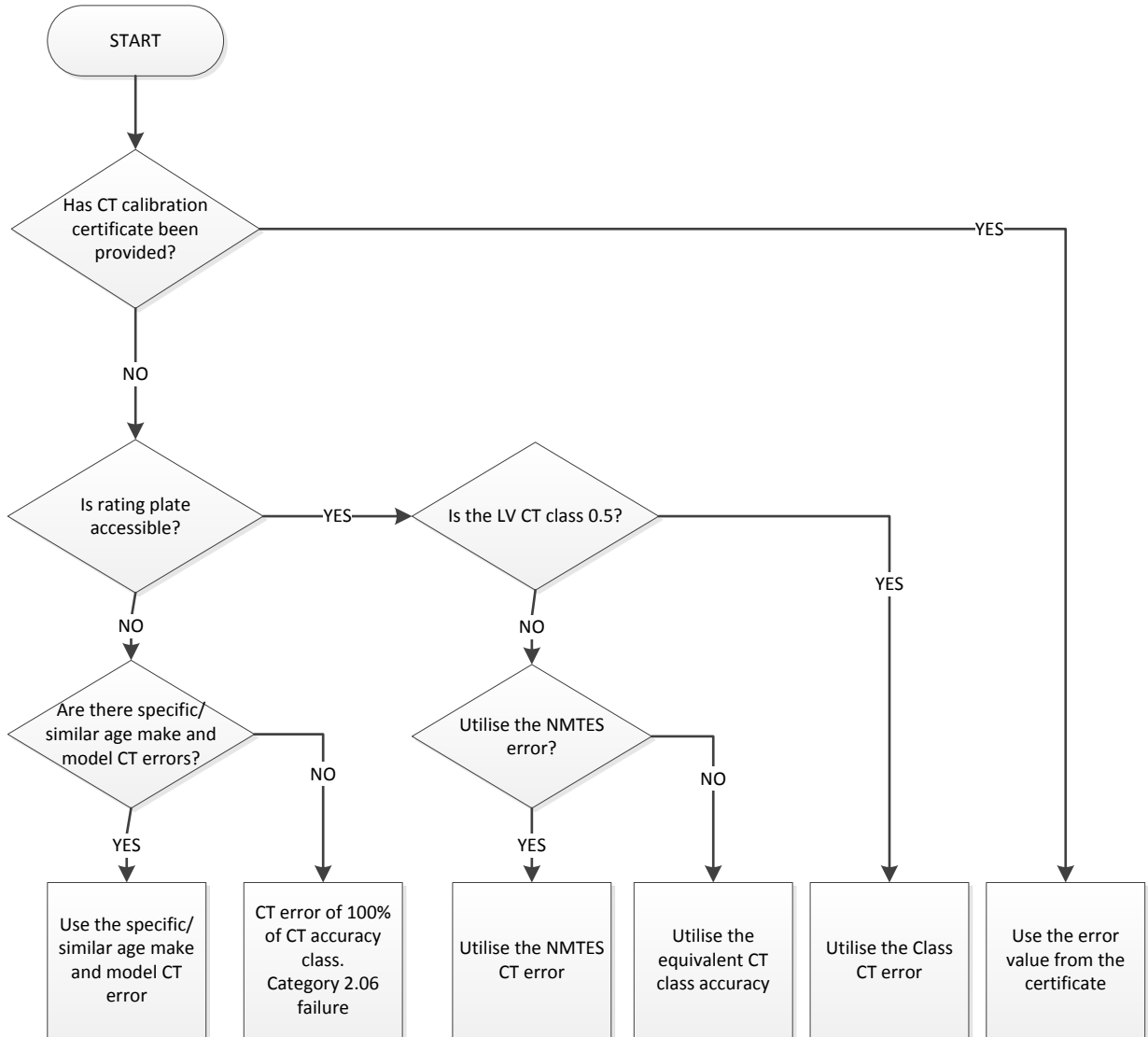
3.4 The processes currently used by the TAA in assessing the error values required for the above calculations for the Meter, CTs and VTs are as follows:

Meter:



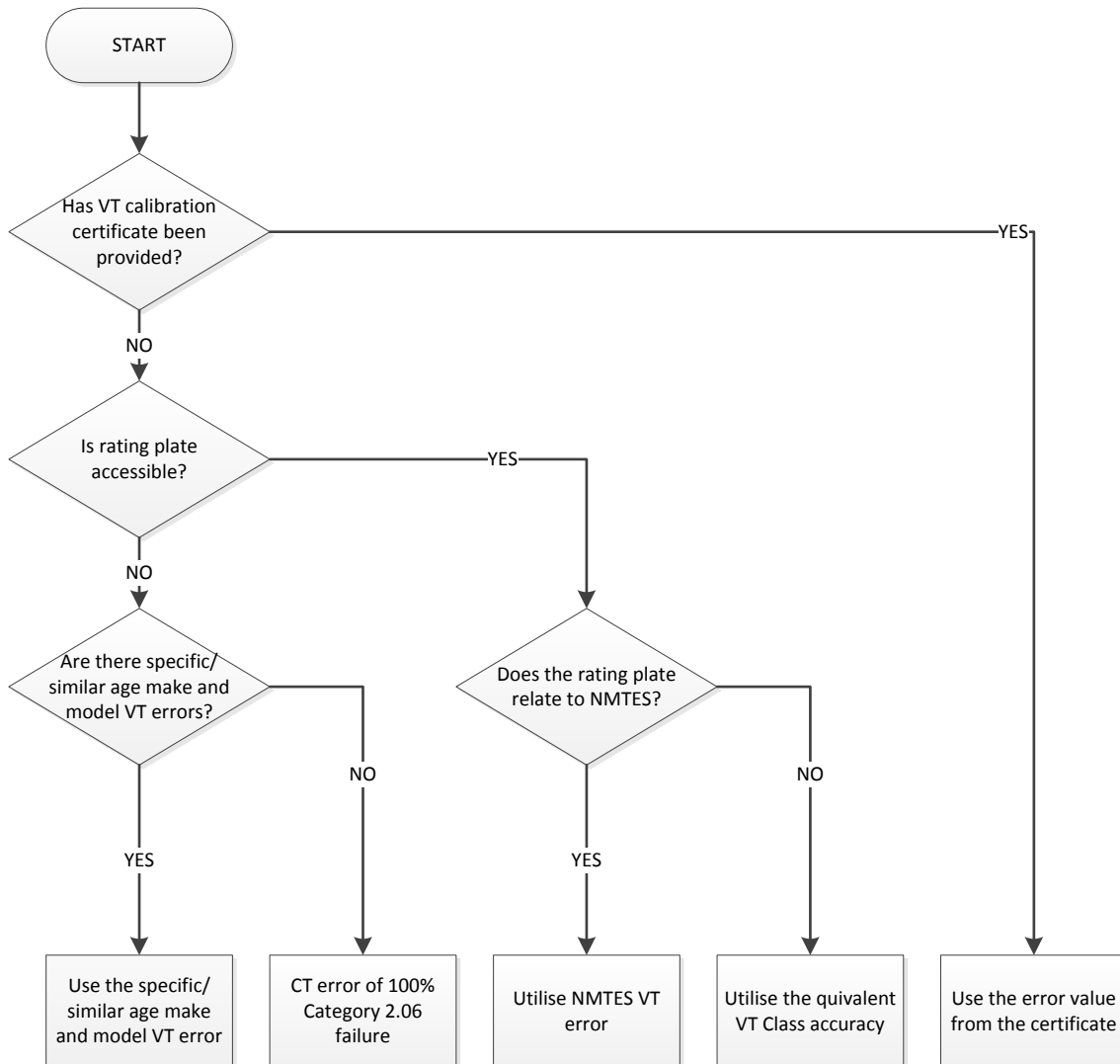
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Current Transformer:



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Voltage Transformer:



4. Overall accuracy calculation - proposed process

4.1 ELEXON would like to propose that any of the following sources can be used by the TAA to assess the error values required for overall accuracy calculations:

Meter

4.2 Rather than reliance on only the Meter calibration certificate or Meter label, the error value from any of the following can be used:

- Calibration Certificate
- Generic Error – ELEXON hope to create an equivalent register to the National Measurement Transformer Error Statement (NMTES) for Meters in the future
- Meter Label
- Commissioning Record (for the class accuracy or actual errors)

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Current Transformer

- 4.3 The current process used by the TAA relies on a calibration certificate or rating plate to ascertain an error value. The proposed process will allow the TAA to use the error value from any of the following:
- Calibration Certificate
 - Generic Error (using the NMTES)
 - Rating Label/plate
 - Commissioning Record (for the class accuracy or actual errors)
 - Use a specific/similar age make and model CT error

Voltage Transformer

- 4.4 The current process used by the TAA relies on a calibration certificate or rating plate to ascertain an error value. The proposed process will allow the TAA to use the error value from any of the following:
- Calibration Certificate
 - Generic Error (using the NMTES)
 - Rating Label/plate
 - Commissioning Record (for the class accuracy or actual errors)
 - Use a specific/similar age make and model VT error
- 4.5 Further information on the process proposed can be found in **Attachment A** of this paper.

5. Proposed solution

- 5.1 The TAA will no longer raise Category 2.16 and Category 2.17 non-compliances for missing certificates.
- 5.2 ELEXON proposes that (using the proposed process) if overall accuracy can be proven to be within CoP limits using the error values from any of the documents listed above, the Metering System will be found compliant.
- 5.3 Should the TAA be unable to confirm that the overall accuracy of the Metering System is within the limits of the applicable CoP, a Category 2.06 non-compliance will be raised.
- 5.4 The Code requirements for Parties to keep the calibration certificates will not change. Rectification of Category 2.06 non-compliances may still involve sending calibration certificates to the TAA as part of a rectification plan.
- 5.5 In order to ensure the MOA continues to meet its obligation to assess overall accuracy of the Metering System, ELEXON proposes to add a requirement within BSCP27 for the MOA to present a calculation of overall accuracy as part of the information provided in a TAA audit. This calculation will be required to detail what data sources the MOA has used to assess overall accuracy, and how the MOA can be confident that the overall accuracy of the Metering System is within the accuracy limits defined within the relevant CoP.
- 5.6 For the avoidance of doubt, where compensation is applied to the Meter, for any reason, all calibration certificates will still be required.

6. Documents to be changed

- 6.1 In order to proceed with the proposed changes to the TAA audit scope, the following documents would need to be changed:
- BSCP27

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- CoP1
- CoP2
- CoP3
- CoP4
- CoP5
- The TAA Local Working Instruction (LWI)
- The ELEXON Guidance Notes

7. Next steps

- 7.1 A paper will be presented to the Performance Assurance Board (PAB) in October to agree the proposed work to implement the change.
- 7.2 Subject to PAB approval, ELEXON will raise a Change Proposal (CP) for future implementation.

8. Recommendations

- 8.1 We invite you to:
- a) **DISCUSS** the proposed solution;

For more information, please contact:

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