

#### 4.5. MP Form

<b>Modification Proposal – BSCP40/03</b>	MP No: P283 <i>(mandatory by BSCCo)</i>
<b>Title of Modification Proposal:</b> Reinforcing the Commissioning of Metering Equipment Processes	
<b>Submission Date:</b> 12 April 2012	
<p><b>Description of Proposed Modification</b></p> <p>Section L ‘Metering’ of the Balancing and Settlement Code (BSC) requires that Registrants of Metering Systems are to be responsible for ensuring that Metering Equipment, comprised within that Metering System, is installed, commissioned, maintained and operated in accordance with Section L and the relevant metering Codes of Practice (CoP) and that a Meter Operator Agent (MOA) is appointed to perform these obligations.</p> <p><b>Background</b></p> <p>Half hourly Metering Equipment is subject to the commissioning process as set out in Code of Practice 4 (CoP4). These tests are to be carried out by the appointed MOA and test records are to be retained for the life of that Metering Equipment. The commissioning process is designed specifically to prove the accuracy of metering and will detect any inherent metering problems that would otherwise not be identified. Therefore any failure in this process has the potential to mask very significant issues that are unlikely to be detected later.</p> <p>The main issue is in the commissioning of current and voltage transformers (CTs and VTs), which will normally be provided by the relevant transmission or distribution system operator. Such equipment, especially in the case of High Voltage (HV) supplies, will often be installed before a MOA has been appointed. Due to operational safety issues and potential disruption to customers later on, the MOA may lose the opportunity to commission this equipment and therefore confirm the accuracy of the Metering System.</p> <p>Almost all of the 125,000 half hourly Metering Systems are CT and/or VT operated, and the CTs and VTs are pivotal for the accuracy of the Metering System as a whole. This issue above means that MOAs are often unable to commission CTs and VTs properly, which can and does lead to fundamental inaccuracies in the overall Metering System. The only identified means of addressing this defect is for the customer to be disconnected to allow the CTs/VTs to be checked once a MOA is appointed, however this is extremely disruptive and may not be agreed by the customer.</p> <p>As of January 2012 the Technical Assurance Agent (TAA) has outstanding some 1,600 non compliant Metering Systems due to inadequate commissioning. These Metering Systems have the potential to be inaccurate by a significant amount (typically between 33% and 100% or more).</p> <p>In addition a further 3,500 Metering Systems have no records relating to the accuracy of relevant measurement transformers (CTs and VTs). This, generally, has the potential to mask Metering Equipment errors of a few percentage points.</p> <p>Although undetected metering problems can be materially very significant, the current probability remains comparatively low. However through the TAA and other processes evidence indicates a rise in probability. It is for this reason that it is felt necessary to address the issues now and before they</p>	

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<p>become even more prevalent.</p> <p>Through the Technical Assurance Metering System process the Performance Assurance Board (PAB) is aware of the growing issues with half hourly Metering Systems as identified above. To address the concerns PAB had requested that its expert group, the Technical Assurance of Metering Expert Group (TAMEG) to review the issues and recommend solutions, which this Modification represents.</p> <p><b><u>Solution</u></b></p> <p>This Modification proposal seeks to place new obligations on the Transmission Company and Licence Distribution System Operators in respect of newly installed measurement transformers which are, or are to be, installed on its system for Settlement purposes relating to the requirements of CoP4. This will mean that the relevant system operator is required to commission and provide, or make readily available, CT/VT certificates as well as commissioning records to the Registrant.</p> <p>Registrants will continue to remain responsible for the Metering System as a whole and MOAs will perform commissioning tests on the remaining Metering Equipment as they are currently required to do. However, in addition, and within a specific period of the effective registration date (to be determined) the MOA will be required to evaluate the accuracy of the Metering System as a whole and inform the Registrant of any incomplete or ambiguous tests and their potential impact.</p> <p>Where the Registrant has been notified as above then it will be obligated to discuss and agree with the relevant system operator what action is to be taken to remove the uncertainty (a reciprocal obligation will be required applicable to system operators to co-operate in this process). This allows for a certain degree of flexibility with the commissioning process that minimises disruption yet maximises assurance for customers and Settlement.</p> <p>For the avoidance of doubt this Modification proposal is not intended to be retrospective. Where notification is given to Registrants of potential defects, existing obligations may, by agreement with the system operator, be waived in favour of alternative tests or checks that provide the same level of assurance as to the overall accuracy of the Metering System.</p> <p>Consideration will be necessary for any measurement transformers that are to be installed on Associated Distribution Systems, private or other networks which are not part of the Total System.</p>	
<p><b>Description of Issue or Defect that Modification Proposal Seeks to Address</b></p> <p>Current practices surrounding the provision and responsibility for Metering Equipment in respect of measurement transformers (CTs and VTs) makes the BSC obligations difficult to meet. This is putting Settlement at significant risk because the accuracy of Metering Equipment is not established and any problems, which can exist, remain undetected for some considerable time driving the materiality of these problems.</p> <p>Metering Equipment which has not been fully commissioned at installation has the potential to be significantly inaccurate. Additionally, as there is often no information for comparison with new installations these problems will go undetected for many years. ELEXON has progressed a number of Trading Disputes in 2011 where metering problems that should have been identified at commissioning</p>	

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<p>have been uncovered, through a variety of routes, where errors in excess of 33% loss are not uncommon.</p> <p>The extent of the issues arising from incomplete commissioning of measurement transformers has been highlighted by the TAA in its annual report to the BSC Panel in 2011 (Attachment A). The TAA report suggests that deficiencies with commissioning and associated records carry significant risk to the integrity of Settlements.</p> <p>This Modification Proposal therefore seeks to place relevant obligations on those Parties who are reasonably capable of fulfilling them.</p>	
<p><b>Impact on Code</b> BSC Section A ‘Parties and Participation’; BSC Section J ‘Party Agents and Qualification under the Code’; and BSC Section L ‘Metering’.</p>	
<p><b>Impact on Core Industry Documents or System Operator-Transmission Owner Code</b> None identified.</p>	
<p><b>Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties</b> None identified.</p>	
<p><b>Impact on other Configurable Items</b> None identified.</p>	
<p><b>Justification for Proposed Modification with Reference to Applicable BSC Objectives</b> The risk to Settlements without change to the responsibility for measurement transformers is clear in that commissioning is not completed in all cases and for a variety of reasons. Mistakes are being made, with increasing frequency, which are rarely immaterial. BSC Parties are at risk of legacy problems being discovered sometimes years after the initial installation. For these reasons this Modification Proposal will better facilitate BSC objectives (c) and (d).</p>	
<p><b>Is there a likely material environmental impact?</b> None Identified.</p>	
<p><b>Urgency Recommended: No</b></p>	
<p><b>Justification for Urgency Recommendation</b> Not applicable.</p>	
<p><b>Self-Governance Recommended: No</b></p>	
<p><b>Justification for Self-Governance Recommendation</b> Not applicable.</p>	

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<b>Should this Modification Proposal be considered exempt from any ongoing Significant Code Reviews?</b> Yes.	
<b>Details of Proposer:</b>  <i>Name</i> .....BSC Panel  <i>Organisation</i> .....  <i>Telephone Number</i> .....  <i>Email Address</i> .....	
<b>Details of Proposer's Representative:</b>  <i>Name</i> .....Modification Secretary  <i>Organisation</i> .....ELEXON  <i>Telephone Number</i> ...020 7380 4363  <i>Email address</i> .....adam.lattimore@elexon.co.uk	
<b>Details of Representative's Alternate:</b>  <i>Name</i> .....Dean Riddell  <i>Organisation</i> .....ELEXON  <i>Telephone Number</i> ...020 7380 4366  <i>Email address</i> .....dean.riddell@elexon.co.uk	
<b>Attachments: Yes</b>  Attachment A: Technical Assurance of Metering systems Annual Reports TAA Annual Report BSC year 2010/11 (37 pages)	