DCP No: 0005

Version No: 2.0 (mandatory by BSCCo)

Title (mandatory by originator)

The Review of Code of Practice 4

Description of Problem/Issue (mandatory by originator)

Code of Practice (CoP) 4 'Code of Practice for the Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlements Purposes' sets out the requirements for ensuring that Metering Equipment is installed to accurately measure energy transfers throughout the Metering System's lifetime at the Defined Metering Points as set out in the relevant metering Codes of Practice (e.g. CoP1, 2, 3 and 5).

In 2005 members of the Supplier Agent Forum (SAF) requested a review of CoP4 on the grounds that CoP4 has remained substantively unchanged since 1995 and that metering and other technologies have advanced since then.

In March 2005 ELEXON requested that an expert group be set up to review CoP4 but recommended that the review be put on hold until after the outcome of the Measuring Instruments Directive (MID) was known. In March 2006, having established that the MID regulations, as implemented by Statutory Instrument No 1679 2006 'The Measuring Instruments (Active Electrical Energy Meters) Regulations 2006', do not apply to the 'above 100kW' market (i.e. CoPs 1, 2, 3, and 5), ELEXON requested that the Supplier Volume Allocation Group (SVG) and the Imbalance Settlement Group (ISG) establishes the CoP4 Review Group. Both groups agreed to the request.

The Review Group first met in May 2006 and after a series of meetings during 2006 created a new draft version of CoP4. Following those meetings ELEXON conducted an internal walkthrough to improve the document's readability, consistency and alignment with the Balancing and Settlement Code. The resulting version of CoP4 (Issue 5 v4.1) was issued for impact assessment (as part of Change Proposal Circular CPC00603) on 30 March 2007 as an attachment to DCP0005 'Review of Code of Practice 4' v1.0.

The impact assessment provided many detailed comments in response. Generally, the industry believed that the draft Code of Practice 4 (version 4.1) was not yet fit for purpose and more work was needed to address the remaining issues. ELEXON created a log of the issues raised and invited interested parties to two further meetings in June and August 2007 in which further substantive work was carried out on the draft CoP4 v5.1. The meetings were supported by members of the expert group and those that provided responses to CPC000603. This work resulted in further drafts of CoP4 culminating with Issue 5 v 4.5 and is included as an attachment to this draft CP. In order to progress the matter, the group agreed that a new version of the draft CP be raised for industry to consider the recommended changes.

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Justification for Change (mandatory by originator)

CoP4 has not been reviewed or changed substantively for over 10 years. Since that time Meter technology and standards technology has advanced sufficiently to warrant a review of their calibration periods. The requirements of the new version of CoP4 will better reflect the current market/environment and provide a more cost reflective balance between monitoring Metering System accuracy and the impact that inaccuracies may have on Settlement.

Proposed Solution(s) (mandatory by originator)

The major changes between the draft CoP4 Issue 5 v4.1 and CoP4 Issue 5 v4.5 are highlighted below:

The scope contained references to the treatment of Meters found outside of permissible limits of error as a result of periodic calibrations. These references have been moved to the relevant sections within the draft CoP4 (e.g. Section 5.1.1 'Types of Calibration').

5.1.1 Types of Calibration (Page 13)

The requirement for a quality assurance scheme covering the process of compensating blank calibrated Meters by means of software has been added.

5.1.2.5 & 6 (Page 15)

Provision is made for the transition of periodic Meter calibrations from the current CoP4 to the proposed new requirements. These provisions define, for existing Meter calibrations, the criteria for transition to the new scheme proposed in Appendix A.

5.1.4 Records (Pages 16 and 17)

The requirement for the retention of calibration certificates has been defined to state that in respect of CoP1 and 2, all certificates must be kept for the life of the Meter and for CoP 3, 5, 6 and 7 (for the purpose of CoP4) only the latest set of calibration records are required.

5.1.4.2 Annual Calibration Report (Page 17) The text contained in this section has been simplified for clarity.

5.1.4.4 Quality Assurance (Pages 17 and 18)

Changes have been made such that a laboratory or test house providing calibration services in accordance with CoP4 need not specifically hold a BS EN ISO 9001 accreditation where other methods of obtaining the required level of assurance are permissible.

5.2 Sample Calibrations (Page 18)

Provision is made such that routine calibrations may be used for the purposes of sample calibrations.

5.3.3 Records (Page 19)

Certificates providing evidence of calibrations for measurement transformers are required to indicate the measurement uncertainties under which they are performed. The change allows the required statement to be a single figure covering all test points or individual figures for each test point.

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Non Half Hourly Metering Systems (Page 22)This section has been populated with requirements for the commissioning of NHH Metering Systems.

Appendix A Calibration Period Table (Page 27) Table A1 has been re-formatted. Additional test have also been added for Reactive Meters.

Appendix B Test Points (Page 29)

The tables in this appendix have been re-drafted to provide greater alignment with the certification requirements as required by 'The Electricity Act 1989' and also to provide a logical link between type A and type B calibration test points.

Appendix D Measurement Uncertainty (Page 36)

A minor change has been made to table D3 such that the limits of uncertainty for a class 3 reactive Meter tested at non-unity power factors are within 1.5% rather than 2% and the requirement to test reactive Meters at test points other than unity power factor have been removed from table D4.

Appendix E Annual Report Format (Page 37) The forms in this section have been re-drafted for ease of use.

Appendix F Guidance for Commissioning.

This appendix has been removed from the draft CoP4 as the group considered it inappropriate for a Code of Practice to contain such guidance. However guidance is to be produced as a separate exercise.

Other Potentially Impacted Configurable Items:

BSCP27 'Technical Assurance of Half Hourly Metering Systems for Settlement Purposes' may be impacted as the TAA will not need to request details of Calibration reports. This will be done by ELEXON according to the current drafting of CoP4.

Version History (mandatory by BSCCo)

V1.0 - Issued for Industry Impact Assessment following Review Group and ELEXON internal walkthrough.

V2.0 - Issued for Industry Impact Assessment following incorporation of industry comments as a result of V1.0.

Has this DCP been raised for discussion by a Working Group (optional by originator): No

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Originator's Details:

Organisation...ELEXON Ltd.....

BCA Name.....

Email Address...ccc@elexon.co.uk.....

Date...7 September 2007.....

Attachments: Y (If Yes, No. of Pages attached:) DCP0005 v2.0 Attachment A - Draft Code of Practice 4 Issue 5 version 4.5 (36 Pages)