CP Progression Paper

'Future proofing changes to the measurement transformer standards in CoPs 1, 2, 3, 4, 5 and 10'

Contents

About This Document

This document provides information on a new Change Proposal and outlines our proposed progression timetable for this change, including when it will be issued for CP Consultation in the next suitable Change Proposal Circular (CPC) batch.

We are presenting this paper to the ISG and the SVG on 2 November 2021 to capture any comments or questions from Committee Members on this CP before we issue it for consultation.

There are eight parts to this document:

- This is the main document. It provides a summary of the solution, impacts, anticipated costs, and proposed implementation approach, as well as our proposed progression approach for this CP.
- Attachment A contains the CP proposal form.
- Attachments B-G contains the proposed redlined changes to deliver the CP solution.

Committee

Imbalance Settlement Group (ISG) and Supplier Volume Allocation Group (SVG)

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1 Summary?

Why change?

Metering Codes of Practice (CoPs) rely on the British Standard Institution (BSI) / International Electrotechical Commission (IEC) standards for measurement transformers (i.e. current transformers and voltage transformers).

These standards are reviewed every five years and as a result, could be extended without amendments, amended by an industry expert group, or withdrawn. When they are amended, their reference number may change, creating issues for the relevant Balancing and Settlement Code (BSC) Party or Party Agents.

These issues could lead to stranding of measurement transformer stocks, which is costly to the BSC Parties and Party Agents.

For the purpose of this paper, metering CoPs 1[1], 2[2], 3[3], 4[4], 5[5] and 10[6] will be referred to as 'the relevant CoPs'.

Solution

This CP seeks to update the relevant CoPs to allow measurement transformer stocks, which refer to the old standard, to be installed once the relevant CoPs are updated with the new standard and to allow newly procured measurement transformers, to the new standard, to be installed, until the relevant CoPs are updated.

Impacts and costs

This CP is expected to impact Registrants, Licensed Distribution System Operators (LDSOs), Central Volume Allocation (CVA) Meter Operator Agents (MOAs), Metering Equipment Manager (MEM) under the Retail Energy Code (REC) and other procurers of measurement transformers for Settlement purposes.

The cost of amending these documents is expected to be less than £3,000.

Implementation

The CP is proposed for implementation on 30 June 2022 as part of the June 2022 BSC Standard Release.

British Standards (BS)

British Standards (BS) are the standards produced by the BSI Group which is incorporated under a royal charter and which is formally designated as the national standards body (NSB) for the UK.

[1] Code of Practice 1 'Code of Practice for the metering of circuits with rated capacity exceeding 100MVA for settlement purposes'
[2] Code of Practice 2 'Code of Practice for the metering of circuits with a rated capacity not exceeding 100MVA for settlement purposes'
[3] Code of Practice 3 'Code of Practice for the metering of circuit with a rated capacity not exceeding 10MVA for settlement purposes'
[4] Code of Practice 4 'Code of Practice for the calibration, testing and commissioning requirements of metering equipment for settlement purposes'
[5] Code of Practice 5 'Code of Practice for the metering of energy transfers with max demand of up to (and including) 1MW for settlement purposes'
[6] Code of Practice 10 'Code of Practice for the metering of energy via low voltage circuits for settlement purposes'

2 Why Change?

What is the issue?

This issue has come from Issue 93 'Review of the BSC metering Codes of Practice' which was raised by the Association of Meter Operators (AMO) in January 2021, to improve the metering CoPs.

The relevant metering CoPs rely on BS/IEC standards for Meters, Current Transformers (CT) and Voltage Transformers (VT). These BS/IEC standards are reviewed every five years and as a result may be extended without new amendments, amended by an industry expert group (e.g. PEL/38 — Instrument Transformers) or withdrawn.

When the standards are amended, their reference number may change (e.g. requirements for CTs, 60044-1 was withdrawn and superseded by 61869-2 in 2012), creating two issues for the Registrants, Licensed Distribution Operators (LDSOs), Meter Operator Agents (MOAs) and other procurers of Settlement measurement transformers. The issues are:

i. They may have stocks of measurement transformers under the old standard. This means that the measurement transformers cannot be used once the CoPs are updated with the new standard.

ii. They may have procured measurement transformers to the new standard, when the CoPs still refer to the previous standard. This means that the measurement transformers cannot be used until the new standard is updated in the CoPs through a CP process in a standard BSC Release.

Unless subject to a Metering Dispensation (for example D/477) under BSCP32 'Metering Dispensations'.

Background

Reference number changed due to amendments of standards

The BS/IEC standards referred to in the CoPs are examples of some of the standards published by the BSI and IEC. BSI standards are used in the United Kingdom (UK). IEC standards can be adopted by international countries. Some IEC standards are adopted as European Normative (EN) standards and then as British Standards.

According to the BSI website, their standards are the basis of which machines, apparatus, materials and the installation should be designed, manufactured and tested. This is to ensure efficiency and function safety according to the United Kingdom (UK) Electrical Industry British Standard.

The notion of future proofing changes to the BSI/IEC standards in the relevant CoPs originally stemmed from a previously implemented change CP1508 'Updating standards in the CoPs and BSCP601'. This change was raised to reflect the current BS EN/IEC standard at that time and to ensure that any changes (amendments) to these standards did not need to be reflected in the relevant metering CoP documents. The notion was further discussed at the second meeting of Issue 93 where a decision was made to update the relevant metering CoP documents so that it is future proofed for future changes to the BSI/IEC measurement transformer standards.

This Change seeks to incorporate the principle of D/505 in the applicable CoPs and as such, end date the D/505 Metering Dispensation. However, it will be applicable to measurement transformers.

British Standards Institution (BSI)

The British Standards Institution is the national body of the United Kingdom. BSI produces technical standards on a wide range of products and services and also supplies certification and standards related services to businesses.

3 Solution

Proposed solution

This CP proposes to update Section 5.1 'Measurement Transformers' of the relevant CoPs to allow measurement transformer stocks, which refer to the old standard number, to be installed after the relevant CoPs are updated with the new standard.

It will also allow newly procured measurement transformers, to the new standard, to be installed, until the relevant CoPs are updated.

This is subject to the accuracy classes and the error limits remaining the same in both old and new standards.

Proposer's rationale

This change will prevent stranding of measurement transformer stocks as existing ones can be utilised even though the CoPs have been updated and newly purchased stocks used even when the CoPs haven't yet been updated.

Additionally, by incorporating the principles of Metering Dispensation D/515 in the relevant CoPs, it will become clearer to purchasers of stocks that they can use their stock stamped with different standard numbers. Therefore, time is saved as they would not need to contact Elexon to confirm if they need a Metering Dispensation because it already exist in the CoPs and they would not have to look for the Statement of Generic Metering Dispensations on the Elexon Website

Proposed redlining

The CP proposes to update CoPs 1, 2, 3, 4, 5 and 10. Please see Attachments B-G for the proposed redlining.

4 Impacts and Costs

BSC Party & Party Agent impacts and costs

BSC Party & Party Agent Impacts	
BSC Party/Party Agent	Impact
Distribution System Operator (DSO)	They will need to update their processes to ensure only stock that meets the criteria can be used where the badged measurement transformer BS EN/IEC standard is different from the current standard or one quoted in the relevant CoP.
Meter Operator Agents (MOAs)	If they purchase low voltage current transformers they will need to update their processes to ensure only stock that meets the criteria can be used where the badged measurement transformer BS EN/IEC standard is different from the current standard or one quoted in the relevant CoP.
Suppliers and Registrants	They will need to update their processes to reflect this change.

Central impacts and costs

Central impacts

The solution in this CP only affects BSC documentation. Therefore, no BSC Central Systems will be impacted

Central Impacts	
Document Impacts	System Impacts
• Code of Practice 1 'The Metering of Circuits with a Rated Capacity Exceeding 100MVA for Settlement Purposes'	• None
• Code of Practice 2 'The Metering of Circuits with a Rated Capacity not exceeding 100 MVA for Settlement Purposes'	
• Code of Practice 3 'The Metering of Circuits with a Rated Capacity not Exceeding 10 MVA for Settlement Purposes'	
• Code of Practice 4 'The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes'	
• Code of Practice 5 'The Metering of Energy Transfers with Max Demand of up to (and including) 1MW for Settlement Purposes'	

Central Impacts	
Document Impacts	System Impacts
• Code of Practice 10 'The Metering of Energy via Low Voltage Circuits for Settlement Purposes'	

Impact on BSC Settlement Risks

Impact on BSC Settlement Risks
Elexon anticipates no impact on BSC Settlement Risks.

Central costs

The central implementation costs for the CP will be approximately less than £3,000 to update the relevant BSC documents.

5 Implementation Approach

Recommended Implementation Date

This CP is recommended for implementation on 30 June 2022 as part of the June 2022 Standard BSC Release.

6 Proposed Progression

Progression timetable

The table below outlines the proposed progression plan for the CP:

Progression Timetable	
Event	Date
CP Progression Paper presented to ISG for information	2 November 2021
CP Progression Paper presented to SVG for information	2 November 2021
CP Consultation	8 November 2021– 3 December 2021
CP Assessment Report presented to ISG for decision	4 January 2022
CP Assessment Report presented to SVG for decision	4 January 2022
Proposed Implementation Date	30 June 2021 (June 22 Release)

CP Consultation questions

We intend to ask the standard CP Consultation questions for the CP. We do not believe any additional questions need to be asked for this CP.

Standard CP Consultation Questions
Do you agree with the CP proposed solution?
Do you agree that the draft redlining delivers the CP proposed solution?
Will the CP impact your organisation?
Will your organisation incur any costs in implementing the CP?
Do you agree with the proposed implementation approach for this CP?

7 Recommendations

We invite you to:

- **NOTE** the proposed progression timetable for the CP; and
- **PROVIDE** any comments or additional questions for inclusion in the CP Consultation.
- **NOTE** that the CP will be presented to:
    - the ISG on 2 November 2021; and
    - the SVG on 2 November 2021.

Appendix 1: Glossary & References

Acronyms

Acronyms used in this document are listed in the table below.

Acronyms	
Acronym	Definition
AMO	Association of Meter Operators
BS	British Standard
BSC	Balancing and Settlement Code
BSCP	Balancing and Settlement Code Procedure
BSI	British Standard Institution
CoP	Code of Practice
CP	Change Proposal
CT	Current Transformer
IEC	International Electrotechnical Commission
LDSO	Licensed Distribution System Operator
MOA	Meter Operator Agent
UK	United Kingdom
VT	Voltage Transformer

External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
3	Issue 93 'Review of the BSC metering Codes of practice'	https://www.elexon.co.uk/smg-issue/issue-93/
	60044-1	https://shop.bsigroup.com/products/instrument-transformers-current-transformers?pid=000000000030028020
	61869-2	https://shop.bsigroup.com/products/instrument-transformers-additional-requirements-for-current-transformers
	BSCP32 'Metering Dispensations'	https://www.elexon.co.uk/csd/bscp32-metering-dispensations/
	British Standard Institution (BSI)	https://www.bsigroup.com/en-GB/our-services/product-certification/product-certification-schemes/IEC-testing-and-certification/
	Second meeting of Issue 93	https://www.elexon.co.uk/meeting/issue-93-workgroup-2/
5	Code of Practice 1 'The Metering of Circuits with a Rated Capacity Exceeding 100MVA for Settlement Purposes'	https://www.elexon.co.uk/csd/cop-code-of-practice-1/
	Code of Practice 2 'The Metering of Circuits with a Rated Capacity not exceeding 100 MVA for Settlement Purposes'	https://www.elexon.co.uk/csd/code-of-practice-2-the-metering-of-circuits-with-a-rated-capacity-not-exceeding-100-mva-for-settlement-purposes/
	Code of Practice 3 'The Metering of Circuits with a Rated Capacity not Exceeding 10 MVA for Settlement Purposes'	https://www.elexon.co.uk/csd/cop-code-of-practice-3/
	Code of Practice 4 'The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes'	https://www.elexon.co.uk/csd/cop-code-of-practice-4/
	Code of Practice 5 'The Metering of Energy Transfers with Max Demand of up to (and including) 1MW for Settlement Purposes'	https://www.elexon.co.uk/csd/cop-code-of-practice-5/
	Code of Practice 10 'The Metering of Energy via Low Voltage Circuits for Settlement Purposes'	https://www.elexon.co.uk/csd/code-of-practice-10-the-metering-of-energy-via-low-voltage-circuits-for-settlement-purposes/
5	Metering Dispensation D/505	https://www.elexon.co.uk/reference/exceptions/metering-dispensations/