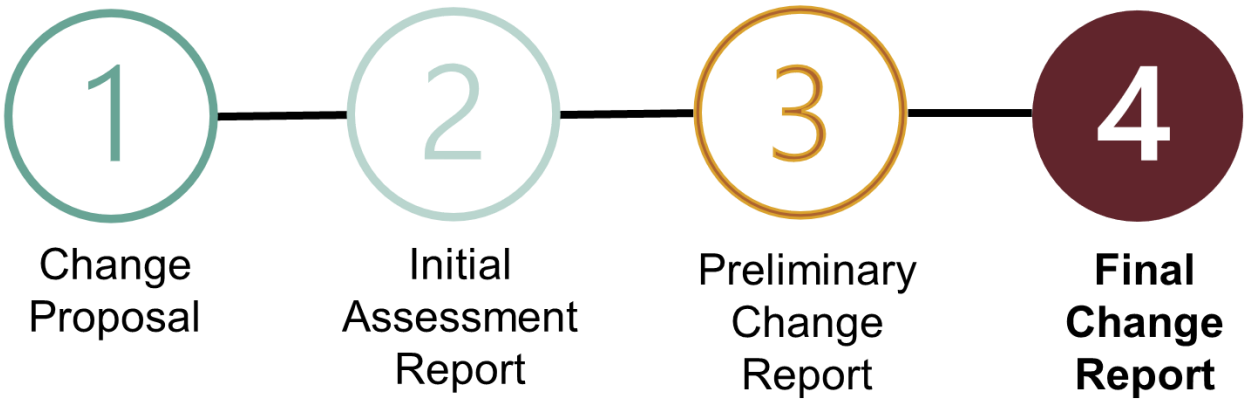
RETAIL ENERGY CODE

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FINAL CHANGE REPORT



PURPOSE:	The Final Change Report sets is the final stage of the Change Proposal, following consultation of the Preliminary Change Report. The Code Manager will set out their final assessment and recommendation, clarifying any changes made from the Preliminary Change Report.
NOTES:	There are three versions of the Final Change Report: one is issued the Responsible Committee for decision; one is published after the vote; and (if Authority Approval is required) one is published after the Authority determination.
NEXT STEPS:	The Final Change Report will be issued to the Responsible Committee who will vote to either approve or reject the Change Proposal, considering the recommendation of the Code Manager.

RETAIL ENERGY CODE

01	Initial Assessment Report
02	Preliminary Change Report
03	Final Change Report

FINAL CHANGE REPORT

R0014 – CABLE COLOUR IDENTIFICATION

DOCUMENT VERSION	2.0
DATE ISSUED	11/03/2022
DOCUMENT APPROVAL STATUS	POST-VOTE

RESPONSIBLE COMMITTEE	METERING EXPERT PANEL

LEAD ANALYST	COLETTE BALDWIN	EMAIL

CHANGE OVERVIEW

	High Impact: N/A
	Medium Impact: Metering Equipment Managers, Distribution Network Operators
	Low Impact: Metering Scheme Auditors

This Change Proposal seeks to update Appendix 9 of the REC MOCoP to include the requirement to label cables where it is necessary to use alternative outer sheath coloured cable to that of the inner insulation colour due to supply chain shortages. By aligning the requirements with the Institution of Engineering and Technology (IET) Wiring Regulations – BS7671:2018, with those required of electricity Meter Equipment Managers a common labelling process will exist.

RESPONSIBLE COMMITTEE DECISION

On the 09 March 2022 the Metering Expert Panel voted for Change Proposal R0014 to be APPROVED for implementation on 30 June 2022.

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BACKGROUND

1 SUMMARY

During times of supply chain shortages, it is not always possible to source cables with the correct outer sheath colour, as required by the Electricity Meter Operations Code of Practice (MOCoP). Where there is a sustained period of supply shortage, an alternative approach needs to be adopted.

Appendix 9 of the REC Electricity Meter Operation Code of Practice (MOCoP) sets out the obligations for the use of cables with different outer sheath colours from the inner insulation. This legal text does not currently reference the need to label the alternative cables.

The Institution of Engineering and Technology (IET) Wiring Regulations provide an alpha-numeric code to be used which corresponds to the cable colours. This code is set out in Table 51.1 of the IET Wiring Regulations – BS7671:2018, Section 514.

This Change Proposal seeks to update Appendix 9 of the REC MOCoP to include the labelling of cables, in accordance with IET Wiring Regulations, where an alternative outer sheath colour has been used.

This will provide clarity to Metering Equipment Managers and Distribution Network Operators of their obligations in these circumstances and ensure that Metering Scheme Auditors are clear about permissible alternative solutions.

2 PROBLEM STATEMENT

During times of sustained supply chain shortages, some colour coded cables may not generally be available. Where this is the case, Metering Equipment Managers (MEMs) and Distribution Network Operators (DNOs) need to be able to source a suitable alternative cable so that they can continue to install and maintain meters. Although the labelling of cables with different outer sheath colours from the inner insulation is covered by the IET Wiring Regulations, this is not set out within the REC Electricity MOCoP.

3 USER STORIES

REF.	USER STORIES
CONSUMER USER STORIES	
C1	As an electricity Consumer, I want requested meter work to take place safely and efficiently at the time and date agreed, so that I have a safe and working meter.
MARKET PARTICIPANT USER STORIES	
M1	As a MEM or a DNO I want clarity on how to deal with cable labelling during periods of coloured cable supply chain shortages, so that I can continue to install or maintain consumer metering.

M2	As a Metering Scheme Auditor, I want there to be clarity on the permitted labelling of non-standard colour coded cables used when connecting meters, so that audits can be appropriately completed.

PROPOSAL

4 SUMMARY OF ANALYSIS UNDERTAKEN

Analysis of the wider electrical regulations found that an alpha numeric labelling requirement has been put is in place for coloured single and polyphase cables. The Institution of Engineering and Technology (IET) Wiring Regulations requires the use of an alpha-numeric coded label to be used by electricians which corresponds to the cable colours. This code is set out in Table 51.1 of the IET Wiring Regulations – BS7671:2018, Section 514. It would therefore be sensible to adopt the same approach in the REC.

5 SUMMARY OF IMPACT ASSESSMENT ACTIVITY

5.1 SERVICE PROVIDER IMPACT ASSESSMENTS

No REC Service Providers are impacted by this proposal. However, the solution will inform the completion of metering audits by the Metering Scheme Auditors.

6 KEY RISKS, ASSUMPTIONS, ISSUES AND DEPENDENCIES

6.1 RISKS AND ISSUES

No risks or issues have been identified that would affect the progression of the Change Proposal.

No.	RISK	NOTES	MITIGATION
R1	Coloured tails are used for the safety of the customer and reduce the risk of MEMs and electricians who connect to isolators from making a mistake and creating a reverse polarity and ensuring the compliance with the Electricity at Work Act 1989.	The IET Wiring Regulations BS7671 "Requirements for Electrical Installations" does not mandate a link between the requirement for a specific outer coloured sheath to be used to match the inner insulation of the cable, and neither does the Electricity at Work Act 1989	While it may have been considered good practice to retain the relationship between the outer sheath colour and the inner insulation colour, it would be dangerous to assume the colour is more important to indicate the safe condition of the site, rather than the MEM or electrician having conducted the necessary safety checks. It is the responsibility of each MEM to ensure there are sufficient processes and controls in place

			which are followed by their operatives when working with both standard and non-standard cable colours.

6.2 ASSUMPTIONS AND DEPENDENCIES

No assumptions or dependencies have been identified that may impact the progression or implementation of the proposed solution for this Change Proposal.

7 PROPOSED SOLUTION

The proposed adoption of the alpha numeric code developed under the IET Wiring Regulations provides a consistent approach for MEMs to that used by electricians in respect of cable labelling.

The solution was originally developed under the former MOCoPA governance, and was handed over to the REC. The original legal text proposed was reviewed and aligned with the new MOCoP Schedule under the REC, including ensuring clause references were consistent.

No alternative solutions were considered.

In addition to the consideration by the Metering Expert Panel, views were sought from MEMs and the Association of Meter Operators.

There are no cross-code impacts for this proposal. The Code Manager will consider whether any changes are needed to the scope of future audits to reflect the change, and MEMs may consider seeking a derogation on using different coloured cable sheaths until this change is implemented.

8 DRAFT LEGAL TEXT

The legal text changes to deliver the proposed solution to R0014 can be found here.

The Legal text updates Appendix 9 of the MOCoP Schedule, setting out the labelling requirements for coloured single and polyphase (2, 3 or 6 phase) cables.

9 PROPOSED IMPLEMENTATION DATE AND APPROACH

PROPOSED IMPLEMENTATION DATE	30/06/2022

PROPOSED IMPLEMENTATION APPROACH	BIG BANG

We propose this change is implemented in the next standard REC release following approval, on 30 June 2022.

10 CHANGE PATH

CHANGE PATH	SELF-GOVERNANCE

11 RESPONSIBLE COMMITTEE

RESPONSIBLE COMMITTEE	METERING EXPERT PANEL

12 SUMMARY OF CONSULTATION RESPONSES

A consultation was issued on 25 January 2022 to obtain views on the Preliminary Change Report. In total 5 responses were received. The key themes from these responses have been summarised and set out below.

12.1 SUMMARY OF RESPONSES

12.1.1 COMMENTS ON THE SOLUTION

Of the 5 respondents, 3 were received from MEMs, 1 came from a Supplier and 1 from a Distribution Network Operator. The Supplier and the MEMs supported the solution, with just the DNO respondent providing qualified support based on comments provided on the proposed legal text. These comments are non-material to the solution and are minor changes to the legal text but will be addressed as updates to the Legal Text set out below in Section 13. Additional suggestions for wider changes to the MOCoP will be considered outside the scope of this Change Proposal.

A full table of responses is available at Appendix 1 below.

12.1.2 CASE FOR CHANGE AND CODE MANAGER'S RECOMMENDATION

All respondents supported the Code Manager's recommendation.

12.1.3 IMPLEMENTATION APPROACH AND DATE

All respondents agreed with the proposed implementation approach and date

13 SUMMARY OF AMENDMENTS MADE FOLLOWING CONSULTATION

DOCUMENT	SECTION	AMENDMENT	REASON
Legal Text	Appendix 9, Section 1	All cables should be marked at both ends, however, for conductors of less than 500mm in length and clearly visible throughout, marking at one end ~~may be~~ is considered acceptable. The markings may be by printed tape, tag or other suitable permanent medium.	The change of "may be" to "is", provides certainty that it is acceptable to mark the cable of less than 500mm just at one end. This was in the original proposed drafting but was not included in the revision. It was in the original MOCOPA draft.
Legal Text	Appendix 9, Section 4b & 4c	(a) all brown and marked L1, L2, L3 ~~at both ends~~, or (b) brown, black and grey and marked L1, L2, L3 ~~at both ends~~,	Section 4c has this already removed, and Section 1 changes above make it clear when both ends should be labelled.

14 BUSINESS CASE ASSESSMENT

We have not identified material costs or impacts for implementing this Change Proposal.

It will benefit MEMs at times of supply chain shortages by allowing flexibility on the colour of cables that can be installed, providing that appropriate labelling is used.

It will benefit the Metering Scheme Auditors who will also have confidence on the permitted labelling of non-standard colour coded cables used to connect meters, so that audits can be appropriate completed and avoiding any non-compliance reporting.

14.1 CASE FOR CHANGE

The Code Manager considers that there is a positive case for change to implement this Change Proposal, on the basis that:

- The proposed solution is fully formed and appropriately resolves the problem statement.
- The impact of not implementing the solution will cause difficulties in MEMs being able to connect meters where appropriately coloured cables are unavailable due to supply chain issues, which could lead to unnecessary consumer detriment.
- The implementing of the solution will also align the labelling approach with that used by electricians who complete other electrical work at the premises under the IET Wiring Regulations.

15 CODE MANAGER'S RECOMMENDATION

Based on the business case assessment and the case for change in Section 14, the Code Manager considers a positive business case can be made for implementing this solution and recommends the Metering Expert Panel:

- **APPROVE** the proposed change solution; and
- **APPROVE** the proposed implementation approach, and
- **APPROVE** the proposed implementation date of 30 June 2022.

16 RESPONSIBLE COMMITTEE DECISION

On 09 March 2022, the Metering Expert Panel voted unanimously to:

- **APPROVE** the proposed change solution; and
- **APPROVE** the proposed implementation approach, and
- **APPROVE** the proposed implementation date of 30 June 2022.

Subject to no appeal being raised before the closure of the appeals window on 24 March 2022, this Change Proposal shall be implemented on 30 June 2022.

17 APPENDIX

CHANGE PROPOSAL	Link
LEGAL DRAFTING	Link to EMAR
CONSOLIDATED CONSULTATION COMMENTS AND CODE MANAGER'S RESPONSES	Appendix 1 - below

APPENDIX 1

Question 1	Responder	Response	Code Manager's Comment
Do you agree with the Proposed Solution? If not, please explain why.	Northern Power Grid (DNO)	Section 1b. The draft says, "All cables should be marked at both ends, however, for conductors of less than 500mm in length and clearly visible throughout, marking at one end may be considered acceptable". I think the "may be" should be replaced with "is" if we are	Suggested changes to Section1b and 4a and 4b have been updated to the legal text. Wider changes to the section have not been consulted on so may be

		allowing the cables to be marked at one end in the circumstances described. This was in the original MOCOPA draft referred to in section 5. Section 4. The draft refers to "inner" insulation and "outer" sheath to add clarity. I agree with this change so this prefix should be added to other references to insulation and sheath within the section for clarity and consistency. Section 4a and b. "at both ends" should be deleted as has been done in c as it is covered in the new text of section 1b.	picked up in a future change.
	SMS PLC (MEM)	Yes	
	Morrisons Energy Services (MEM)	Yes	
	Association of Meter Operators (Trade Association)	Yes	
	Utilita Energy Ltd (Supplier)	Yes	
Question 2	**Responder**	**Response**	**Comment**
Do you agree with the proposed implementation date and implementation techniques? If not, please explain why	Northern Power Grid	Yes – subject to comments in section 1	
	SMS PLC (MEM)	Yes	
	Morrisons Energy Services (MEM)	Yes	
	Association of Meter Operators (Trade Association)	Yes	
	Utilita Energy Ltd (Supplier)	Yes	
Question 3	**Responder**	**Response**	**Comment**

Do you agree with the Code Manager's assessment of the Change Path, that this Change Proposal should be subject to Self-Governance approval by the Metering Expert Panel? If not, please explain why.	Northern Power Grid (DNO)	Yes	
	SMS PLC (MEM)	Yes	
	Morrisons Energy Services (MEM)	Yes	
	Association of Meter Operators (Trade Association)	Yes	
	Utilita Energy Ltd (Supplier)	Yes	
Question 4	**Responder**	**Response**	**Comment**
Do you agree with the Code Manager's recommendation that this Change Proposal should be approved for implementation on 30 June 2022? If not, please explain	SMS PLC (MEM)	Yes	
	Northern power Grid (DNO)	No	See comments to q 1
	Morrisons Energy Services (MEM)	Yes	
	Association of Meter Operators (Trade Association	Yes	
	Utilita Energy Ltd (Supplier)	Yes	
Question 5	**Responder**	**Response**	**Comment**
Do you have any additional Comments?	Northern Power Grid (DNO)	Yes: This change proposal was drafted and debated under MOCOPA (prior to the move to REC). Though it didn't go through the full process due to time constraints of the REC move, I was under the impression the changes were agreed by parties. The change proposed under REC does not fully reflect the MOCOPA draft – although I acknowledge that some of the draft changes in REC are an improvement on the MOCOPA draft e.g. adding a section for single-phase cable markings.	The changes in the REC cover the proposed changes handed over by MOCoPA and have been further expanded to include some additional clarity, as well as correcting some incorrect clause references that had been copied over.

	SMS PLC (MEM)	No	
	Utilita Energy Ltd (Supplier)	No	
	Morrisons Energy Services (MEM)	No	
	Association of Meter Operators (Trade Association)	No	