RETAIL ENERGY CODE

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

CHANGE REPORT

R0160 – ELECTRICITY SUPPLY TO HYDROGEN ELECTROLYSERS

CHANGE REPORT	FINAL
DOCUMENT VERSION	2.0
ISSUED DATE	23/05/2024
DOCUMENT APPROVAL STATUS	POST-VOTE

RESPONSIBLE COMMITTEE	CHANGE PANEL	CHANGE PATH	AUTHORITY DETERMINED
PRIORITY STATUS	HIGH	URGENCY	URGENT

DEADLINE FOR ALTERNATIVE CHANGE PROPOSALS	26/04/2024

LEAD CHANGE ANALYST



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CHANGE OVERVIEW

This Change Proposal is seeking to facilitate efficient and robust procedures between licensed Suppliers and Low Carbon Contracts Company (LCCC) as part of the regulatory solution to prove that electricity supplied to the hydrogen producer is Low Carbon Hydrogen Standard (LCHS) compliant.

	High Impact: N/A
	Medium Impact: N/A
	Low Impact: Electricity Suppliers (Industrial & Commercial)

RESPONSIBLE COMMITTEE DECISION

On 04 June 2024, the REC Change Panel voted to recommend that the Authority **APPROVE** R0160 for implementation on 28 June 2024, if Authority Approval is received before 18 June 2024 or, the next available REC release following Authority Approval.

RETAIL ENERGY CODE

CONTENTS

BACKGROUND		
1.	Summary	**3**
2.	Problem Statement	**3**
3.	User Stories	**4**
PROPOSAL		
4.	Proposed Solution	**4**
5.	Draft Legal Text	**5**
6.	Delivery Against Change Proposal Plan	**5**
7.	Key Risks, Assumptions, Issues and Dependencies	**5**
8.	Proposed Implementation Date and Approach	**6**
9.	Summary of Consultation Responses	**6**
10.	Business Case Assessment	**7**
11.	Case for Change	**8**
12.	Code Manager's Recommendation	**9**
13.	Responsible Committee Decision	**9**
14.	Appendix	**9**
15.	Glossary	**9**

RETAIL ENERGY CODE

BACKGROUND

1 SUMMARY

Primary legislation for hydrogen production does not mention the role of licensed Suppliers. Consequently, the Low Carbon Contracts Company (LCCC) does not have the power needed to compel licensed Suppliers to disclose the information needed by the LCCC to carry out its duties with regards the Hydrogen Production Business Model (HPBM) and Low Carbon Hydrogen Agreement (LCHA) to prove that the electricity is compliant with the Low Carbon Hydrogen Standard (LCHS).

The Proposer believes this to be an unintended oversight since nearly all generation above 5 megawatts (MW) must pass through a licensed Supplier. There are a number of projects with contract offers in the Government's first electrolytic Hydrogen Allocation Round (HAR1) seeking to source electricity through a licensed Supplier, however they may not be able to sign the contracts while the information disclosure issue remains unless otherwise agreed/instructed by the Department for Energy Security and Net Zero (DESNZ).

HAR1 projects total 125MW of hydrogen production capacity. The application window for HAR2 is currently open and is seeking to award up to 875MW of hydrogen production capacity. While the issue of information disclosure is already impacting the HAR1 projects, it is only going to become even more of an issue for HAR2 where more numerous and larger capacity projects will be relying on licensed Suppliers to source their LCHS-compliant electricity.

This change to the REC will facilitate efficient and robust procedures between licensed Suppliers and LCCC as part of the regulatory solution to prove that electricity supplied to the hydrogen producer is LCHS (Low Carbon Hydrogen Standard) compliant.

As part of the Change Proposal submission, the Code Manager received a fully formed solution from the proposer following engagement and consultation with stakeholders at DESNZ and LCCC.

2 PROBLEM STATEMENT

Primary legislation for hydrogen production does not mention the role of licensed Suppliers. Consequently, the LCCC does not have the power needed to compel licensed Suppliers to disclose the information needed by the LCCC to carry out its duties with regards the Hydrogen Production Business Model (HPBM) and Low Carbon Hydrogen Agreement (LCHA) to prove that the electricity is compliant with the Low Carbon Hydrogen Standard (LCHS).

3 USER STORIES

REF.	USER STORIES
MARKET PARTICIPANT USER STORIES	
M1	As an Electricity Supplier, I want to ensure that I can fully understand and meet my regulatory obligations and provide the appropriate documentation to conduct my business projects.
M2	As an Electricity Supplier supplying energy to Low Carbon Hydrogen producers, I want to be able to prove that the hydrogen we are supplying is LCHS compliant.
M3	As a hydrogen Market Participant, I want to ensure there are efficient and robust procedures between the licensed Suppliers and the Low Carbon Contracts Company.

PROPOSAL

4 PROPOSED SOLUTION

This change to the REC will facilitate efficient and robust procedures between licensed suppliers and LCCC as part of the regulatory solution to prove that electricity supplied to the hydrogen producer is LCHS (Low Carbon Hydrogen Standard) compliant.

A fully formed solution has been provided as part of the Change Proposal. This includes a new REC Schedule, titled 'Electricity Supply to Hydrogen Electrolysers Schedule," that sets out the obligations on Electricity Suppliers in respect of their electricity supply to Low Carbon Hydrogen Producers. The purpose of these obligations would be to ensure that the Low Carbon Hydrogen Agreements Counterparty (referred to as the LCHA Counterparty) has access to the data it needs to perform its role in relation to Low Carbon Hydrogen Agreements.

The proposed solution also adds definitions for LCHA Counterparty, Low Carbon Hydrogen Agreement, Low Carbon Hydrogen Producer, and Low Carbon Hydrogen Standard, into Schedule 1 – Interpretation and Definitions Schedule.

The draft legal text changes, found in section 5 of this Final Change Report, provide the appropriate regulatory requirements that are required for Suppliers, and by the LCCC, regarding electricity supply to hydrogen electrolysers that are currently not found in primary legislation.

The draft legal text was produced by the Proposer and was reviewed by Department for Energy Security and Net Zero (DESNZ) and LCCC prior to the Change Proposal being submitted and has also included relevant engagement with the stakeholders.

The Code Manager also sought a further external legal review of the newly proposed Schedule and was advised that that the proposed REC Schedule "Electricity Supply to Hydrogen Electrolysers" achieves what the Change Proposal sets out to accomplish and is drafted appropriately. The Code Manager was also informed that the proposed Schedule does not cause any unintended consequences for any other provisions in the REC, with each of the defined terms being checked and traced to ensure compatibility.

No drafting suggestions or amendments were suggested following the legal review.

This is a legal text solution only. It requires no technical or system changes, other than the standard legal text changes via EMAR/digital navigator.

4.1 MARKET WIDE HALF-HOURLY SETTLEMENT

DESIGN	DATA SPECIFICATION	DRAFTING
No impact on MHHS design	No Data Specification impact.	Indirect impact – additions to Schedule 1 (Interpretations and Definitions Schedule)

5 DRAFT LEGAL TEXT

The legal text changes to deliver the proposed solution to R0160 can be found here.

6 DELIVERY AGAINST CHANGE PROPOSAL PLAN

To date, all activity has been completed within the planned timescales.

Please note that due to the urgency of this change, the Code Manager has worked to complete the necessary stages of this change earlier than the planned milestones, where possible.

The Change Proposal Plan can be found here.

7 KEY RISKS, ASSUMPTIONS, ISSUES AND DEPENDENCIES

7.1 RISKS AND ISSUES

No risks or issues have been identified.

7.2 DEPENDENCIES

No.	DEPENDENCY	NOTES	STATUS
R0160.PCR.D001	Authority Approval	The proposed implementation date of 28 June 2024 is dependent upon receiving Authority Approval prior to this date. The Code Manager has engaged with the Authority to ensure they have full visibility and awareness of this change to ensure authority determination can be provided as soon as possible.	Ongoing

8 PROPOSED IMPLEMENTATION DATE AND APPROACH

PROPOSED IMPLEMENTATION DATE	28 June 2024, if Authority Approval is received prior to this date; or, the next available release following Authority Approval.
PROPOSED IMPLEMENTATION APPROACH	BIG BANG

This is an urgent change that requires implementation as soon as possible, otherwise projects with contract offers for HAR1 may not be able to sign their contracts until the proposed change is implemented, unless otherwise agreed/instructed by DESNZ.

The Code Manager plans to include this change in the next REC Release, which is set for 28 June 2024. This, however, will depend on the change obtaining Authority Approval in advance of the release date.

The Code Manager has engaged with the Authority to ensure prior notice has been provided about this change and the urgency of the proposal. If, however, the Authority cannot provide a response before the proposed implementation date, the Code Manager will seek to implement the change as part of the next available release following Authority Approval.

9 SUMMARY OF CONSULTATION RESPONSES

A consultation was circulated on 26 April 2024 to obtain views on the Preliminary Change Report. In total, one response was received from an Energy Supplier. The respondent was supportive of the proposed solution, the implementation approach, and the implementation date. Their full set of responses and any comments by the Code Manager in response, can be found here.

The key points raised by the respondent have been summarised below:

- The proposed solution resolves the problem statement for this Change Proposal.
- Many HAR1 projects will require the regulatory solution to be finalised prior to making a final investment decision, and therefore an expeditious implementation would appear sensible.
- The proposed change will facilitate efficient and robust procedures between licensed Suppliers and the LCCC.
- The change will bring organisational benefits, as the respondent recognises the need to accelerate the transition to renewables and sees green hydrogen as a key enabler to decarbonisation and widening the flexibility of energy systems.
- The respondent notes the UK Government's commitment to £900 million of funding for hydrogen projects, and for those projects underpinned by the Low Carbon Hydrogen Standards, and they welcome and support this change as part of the wider regulatory solution.

10 BUSINESS CASE ASSESSMENT

10.1 COSTS

No costs have been identified to deliver the solution for this Change Proposal.

10.2 BENEFITS

INTANGIBLE BENEFITS	BENEFITS DESCRIPTION
INTANGIBLE BENEFITS	• Projects with contract offers in the Government's first electrolytic hydrogen application round (HAR1) seeking to source electricity through a licensed Supplier will be able to sign the contracts and will provide a solution to ensure there are no issues around information disclosure. • This change will ensure that regulatory obligations are provided for Electricity Suppliers who supply energy to Low Carbon Hydrogen producers, which are fully understandable and allows the stakeholders to efficiently conduct their business projects. • The LCCC will be able to acquire evidence and documentation to ensure that hydrogen supplied by Electricity Suppliers to Low Carbon Hydrogen producers is LCHS compliant via efficient and robust procedures that ensure appropriate quality and safety. • This Change will support the HAR1 and HAR2 projects, which will support DESNZ commitment to producing 10GW of hydrogen by 2030 and will also support the wider retail energy market in achieving Net Zero. This Change supports the Code Roadmap theme of Net Zero, where significant benefit could be gained for all REC stakeholders, including consumers, within the long-term energy retail landscape.

10.3 COST BENEFIT ANALYIS SUMMARY

Since the solution for this change is a legal text change only, and as there are no costs associated with the implementation of this change, the cost benefit analysis relies on the intangible benefits that this change facilitates.

11 CASE FOR CHANGE

11.1 AUTHORITY DETERMINATION

The Code Manager believes that R0160 better facilitates the following REC Objectives:

OBJECTIVE	IMPACT TYPE	DESCRIPTION AND JUSTIFICATION
To ensure the REC operates and evolves in a manner that facilitates the achievement of its mission statement[1]	Positive	This change facilitates the efficient and effective running of electricity supplied to hydrogen electrolysers. As per the mission statement, RECCo's mission is to "facilitate the efficient and effective running of the retail energy market", and this change will ensure Electricity Suppliers can supply Low Carbon Standard Hydrogen to hydrogen producers efficiently and effectively and ensures that retail energy market can participate in innovative projects, such as those included in HAR1 and HAR2.
To ensure customers interests and data is protected in the operation of the REC	Positive	Currently, there are no regulatory requirements in place that provide the LCCC with the powers needed to compel licensed Suppliers to disclose the information needed by the LCCC to perform its duties with regards to Hydrogen Production Business Model (HPBM) and LCHA to prove that the electricity is compliant with the LCHS. This change will overcome this issue around information disclosure, and will provide customers involved in hydrogen projects, or being supplied, that their electricity is compliant with the LCHS, and that any related data can be appropriately closed to the appropriate parties.
To drive continuous improvements and efficiencies in the operation of the REC and the central systems and communication infrastructures it governs	Positive	The introduction of a new REC Schedule setting out obligations on Electricity Suppliers in respect of their electricity supplies to Low Carbon Hydrogen Producers aligns with the Code Roadmap theme of Net Zero, that supports driving continuous improvements to the REC. This change also drives continuous improvements by providing obligations that have not been included in other regulatory methods (such as primary legislation), and ensures the REC is adapted for wider improvements and developments in the retail energy market, such as the advance of the use of hydrogen.

[1] REC Mission Statement

12 CODE MANAGER'S RECOMMENDATION

The Code Manager recommends that the REC Change Panel recommends that the Authority:

- **APPROVE** the proposed change solution.
- **APPROVE** the proposed implementation approach; and
- **APPROVE** the proposed implementation date of 28 June 2024, if Authority Approval is received before 18 June 2024; or, the next available release following Authority Approval.

13 RESPONSIBLE COMMITTEE DECISION

This report was discussed at the REC Change Panel meeting on 04 June 2024. The REC Change Panel voted to recommend that the Authority:

- **APPROVE** the proposed change solution.
- **APPROVE** the proposed implementation approach; and
- **APPROVE** the proposed implementation date of 28 June 2024, if Authority Approval is received before 18 June 2024; or, the next available release following Authority Approval.

14 APPENDIX

CHANGE PROPOSAL	Link
LEGAL DRAFTING	Link
CONSOLIDATED CONSULTATION COMMENTS AND CODE MANAGER'S RESPONSES	Link

15 GLOSSARY

TERM	DEFINITION
Electricity Supplier	means a person holding an Electricity Supply Licence.
Hydrogen Allocation Rounds (HAR)	means the government funding mechanism to support low carbon hydrogen production across the UK.

TERM	DEFINITION
LCHA Counterparty	means a hydrogen production counterparty designated as such by the Secretary of State under the Energy Act 2023.
Low Carbon Contracts Company (LCCC)	means the private company owned by DESNZ, who are the counterparty to the contracts awarded in the hydrogen allocation rounds, and who issue the contracts and manage them during the construction and delivery phases.
Low Carbon Hydrogen Agreement (LCHA)	means a hydrogen production revenue support contract entered into pursuant to the Energy Act 2023.
Low Carbon Hydrogen Producer	means the hydrogen producer under a Low Carbon Hydrogen Agreement.
Low Carbon Hydrogen Standard (LCHS)	means the UK Low Carbon Hydrogen Standard published by the Secretary of State. Unless otherwise specified, this shall be taken to include each and every official version published by the Secretary of State.
Net Zero	means any emissions would be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere.