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**Code Administrator Consultation**

# CMP441:

## Reducing the credit risk of supplying non-embedded hydrogen electrolysers

**Overview:** This modification seeks to address a discrepancy in the timing in de-energising a non-embedded site verses an embedded site.

### Modification process & timetable



**Have 30 minutes?** Read the full Code Administrator Consultation

**Have 40 minutes?** Read the full Code Administrator Consultation and Annexes.

**Status summary:** We are now consulting on this proposed change.

**This modification is expected to have a: **Low impact**** On Customers, Suppliers and Transmission System Operators

<b>Governance Route</b>	Standard Governance modification with assessment by a Workgroup	
<b>Who can I talk to about the change?</b>	<b>Proposer:</b> Dan Brimelow <a href="mailto:dan.brimelow@statkraft.com">dan.brimelow@statkraft.com</a> 0207 549 1000	<b>Code Administrator Contact:</b> <a href="mailto:cusc.team@nationalenergyso.com">cusc.team@nationalenergyso.com</a>
<b>How do I respond?</b>	Send your response proforma to <a href="mailto:cusc.team@nationalenergyso.com">cusc.team@nationalenergyso.com</a> <b>by 5pm on 19 November 2024.</b>	

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## Contents

<b>What is the issue?</b> .....	<b>3</b>
Why change?.....	4
<b>What is the proposer’s solution?</b> .....	<b>4</b>
Legal text.....	4
<b>What is the impact of this change?</b> .....	<b>6</b>
Proposer’s assessment against CUSC Non-Charging Objectives .....	6
<b>When will this change take place?</b> .....	<b>7</b>
Implementation date.....	7
Date decision required by .....	7
Implementation approach.....	7
<b>Interactions</b> .....	<b>7</b>
<b>How to respond</b> .....	<b>7</b>
Code Administrator consultation questions .....	7
<b>Acronyms, key terms, and reference material</b> .....	<b>8</b>
<b>Annexes</b> .....	<b>8</b>

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## What is the issue?

To achieve clean power by 2030, Government has pledged to double the target on green hydrogen, with 10GW of production for use particularly in flexible power generation, storage, and industry like green steel.

Hydrogen Allocation Rounds (HAR) are currently the Government's main tool to kick start this emerging industry. Agreements for the first of these rounds are due to be issued imminently with around 2.5GW due to be awarded within the next three years.

Industry codes, designed around traditional supply use cases, need changing to accommodate this new evolution to the energy system.

Hydrogen electricity supply is very different to traditional electricity supply since almost 100% of the variable input cost of the electrolyser is electricity.

Hydrogen electrolyser projects present a significantly higher credit risk to suppliers than a traditional very large I&C supply customer due to the embryonic state of the hydrogen industry, projects tending to be thinly capitalised SPVs, technology risk, size of the supply, dependency on the anchor hydrogen offtaker, limited diversification, grant funding arrangements, load concentration, term, and size of delivered unpaid.

There is a discrepancy between the DCUSA and CUSC as to the time it takes to deenergise a customer, in the special case of where a directly connected customer governed under the CUSC, has embedded clients on its private site – referred to in the relevant CUSC text (introduced as CMP254, prior to which non-supplier-paying directly-connected customers could never be disconnected, contrary to the Electricity Act's provisions), as "downstream customers"

In the case of non-payment, to the Supplier, if the primary customer is embedded on a DNO network, disconnection by the DNO at the Supplier's request can be relatively prompt, even within 24 hours. Likewise for a simple directly-connected site with no downstream customers, disconnection by the TO at the Suppliers request can, again, be relatively prompt. However in the case where the directly-connected site does have "downstream customers" (embedded clients on its own private network), potentially unbeknown to the Supplier, CMP254/CUSC text requires various processes of further dialogue; disconnection of the site (of the primary directly-connected site) will be slower in these cases were it hosts downstream customers, so that disconnection of the primary site could take at least an additional seven days.

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Since the credit risk for electricity supplied to hydrogen electrolyzers may be very considerable versus a large I&C site, this discrepancy between the DCUSA and the CUSC for such sites acts as a barrier in delivering hydrogen electrolyser projects which are transmission connected versus those that are distribution connected.

### Why change?

The change will allow a level playing field between the transmission and distribution connected hydrogen electrolyzers and will reduce some of the credit risk associated with delivered unpaid supply.

## What is the proposer’s solution?

The solution has been resubmitted following feedback from the CUSC Panel Meeting on 27 September 2024.

The amended solution would be to disapply paragraphs 3.6.9.7 and 3.6.9.8 of the CUSC for Non-Embedded Customers with Connection Sites connected after [1<sup>st</sup> January 2025 or such other date determined by the Authority], so that the extra process for “downstream customers” embedded as a separate entity on that site, does not apply for all newly connected sites going forwards irrespective of whether the site is a transmission connected hydrogen electrolyser.

The text in red shows the proposed additional text to be added to the code

### Legal text

3.6.9.1 The Company shall, to the extent that it may lawfully do so, at the request of the Supplier, when the Supplier is entitled to have the Deenergisation of a Non-Embedded Customer, Connection Site(s), carried out, carry out such Deenergisation on behalf of and at the cost of the Supplier within a reasonable time or, in circumstances of urgency, as soon as is reasonably practicable.

[...]

3.6.9.7 **Save for Non-Embedded Customers with Connection Sites connected after [1<sup>st</sup> January 2025 or such other date determined by the Authority], a Non-Embedded Customer** shall provide its **Supplier** on request and as soon as is reasonably practicable with the details of any **Downstream Parties** including (but not limited to) contact names, addresses, email addresses, and telephone numbers.

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3.6.9.8 Save for Non-Embedded Customers with Connection Sites connected after [1<sup>st</sup> January 2025 or such other date determined by the Authority], prior to a **Supplier** instructing **The Company** to **Deenergise** the Non-Embedded Customer's Connection Site(s) under Paragraph 3.6.9.1:

- (a) the **Supplier** shall request the **Non-Embedded Customer** to confirm within 48 hours of such request that the details supplied under Paragraph 3.6.9.7, remain correct and/or provide updated details for any **Downstream Parties**, and where such details had been supplied by the **Non-Embedded Customer** to the **Supplier** within the preceding **10 Business Days**, the **Supplier** may, whilst making this request, in parallel and without delay give notice to arrange the meeting described in (b), below;
- (b) where there are **Downstream Parties** (other than **Downstream Parties** that are **Affiliates** of the **Non-Embedded Customer**), the **Supplier** shall, giving not less than 48 hours' notice, arrange a meeting between the **Supplier**, the **Non-Embedded Customer**, those **Downstream Parties** and **The Company** to discuss the impact of the **Deenergisation** and whether an agreement to avoid the **Deenergisation** and resulting impact on those **Downstream Parties** can be reached to the reasonable satisfaction of the **Supplier** (acting reasonably); and
- (c) the **Supplier** shall not issue its **Deenergisation** instruction to **The Company** within 72 hours (or such longer period, determined by the **Supplier** from time to time, at their sole discretion, and notified to the attendees of any meeting held under (b)) from the commencement of any meeting held under (b).

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## What is the impact of this change?

Proposer's assessment against CUSC Non-Charging Objectives	
Relevant Objective	Identified impact
(a) The efficient discharge by the Licensee of the obligations imposed on it by the Act and the Transmission Licence;	<b>Neutral</b>  No impact
(b) Facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity;	<b>Positive</b>  Provides consistency with the DCUSA for newly connected supply.  Provides a level playing field for supplying transmission connected hydrogen electrolysers.  If not addressed, Suppliers, particularly smaller I&C suppliers, may be unable to participate in the market.
(c) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency *; and	<b>Neutral</b>  No impact
(d) Promoting efficiency in the implementation and administration of the CUSC arrangements.	<b>Positive</b>  Very limited implementation required
*The Electricity Regulation referred to in objective (c) is Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) as it has effect immediately before IP completion day as read with the modifications set out in the SI 2020/1006.	

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## When will this change take place?

### Implementation date

At least 10 business days after a decision has been received by the Authority.

### Date decision required by

As soon as practical.

### Implementation approach

There are no systems or processes that would be impacted by this change. Implementation is therefore very minimal.

## Interactions

- |   |   |  |                                |
|---|---|--|--------------------------------|
| <input type="checkbox"/> Grid Code              | <input type="checkbox"/> BSC                              | <input type="checkbox"/> STC                 | <input type="checkbox"/> SQSS  |
| <input type="checkbox"/> European Network Codes | <input type="checkbox"/> EBR Article 18 T&Cs <sup>1</sup> | <input type="checkbox"/> Other modifications | <input type="checkbox"/> Other |

This modification has no interactions with other industry work or modifications.

## How to respond

### Code Administrator consultation questions

1. Please provide your assessment for the proposed solution against the Applicable Objectives?
2. Do you support the proposed implementation approach?
3. Do you have any other comments?
4. Do you agree with the Proposer's assessment that the modification does not impact the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the CUSC?

Views are invited on the proposals outlined in this consultation, which should be received by **5pm** on **19 November 2024**. Please send your response to [cusc.team@nationalenergyso.com](mailto:cusc.team@nationalenergyso.com) using the response pro-forma which can be found on the [CMP441 modification page](#).

*If you wish to submit a confidential response, mark the relevant box on your consultation proforma. Confidential responses will be disclosed to the Authority in full*

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but, unless agreed otherwise, will not be shared with the Panel or the industry and may therefore not influence the debate to the same extent as a non-confidential response.

## Acronyms, key terms, and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
CMP	CUSC Modification Proposal
CUSC	Connection and Use of System Code
DCUSA	Distribution Connection and Use of System Agreement
EBR	Electricity Balancing Regulation
HAR	Hydrogen Allocation Rounds
SPV	Special Purpose Vehicle

## Annexes

Annex	Information
Annex 1	CMP441 Proposal form