



**LOW CARBON
CONTRACTS COMPANY**

POWERING NET ZERO

CfD Co-location Generator Guidance

May 2023

Version 1

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Disclaimer

This guidance does not and is not intended to supersede or replace the provisions of the CfD. This guidance does not constitute legal or investment advice and should not be relied upon as such. Generators should consult their professional advisors where they require advice, whether legal or otherwise. LCCC further reserves the right to amend this guidance and any associated guidance.

This guidance should not be viewed as in any way restricting LCCC in the nature, type and/or amount of evidence, information and documentation it will require to satisfy itself of the Generator's fulfilment of the contractual milestones, nor as to the nature, level and timing of our consideration or reconsideration of the evidence that is provided. LCCC reserves the right at any time to request further or additional evidence, and to review or reconsider the evidence already provided.



2 About This Document

This document provides generators with guidance on the requirements for co-locating electricity storage and hydrogen production alongside generation supported under the Contracts for Difference (CfD) scheme.

This Guidance Document applies to the Generic CfD agreement. Generators with Private Network, Unincorporated Joint Ventures, or Phased CfDs should, where available, consult other Guidance.



3 Introduction

- 3.1 The deployment of storage within the electricity network provides essential flexibility to the system, it benefits consumers by helping to reduce the costs of operating the system and improving integration of low carbon heat, power and transport.
- 3.2 The Smart Systems and Flexibility Plan (SSFP) was originally launched in 2017 and sets out actions the government, Ofgem and industry will take to facilitate the deployment of flexibility, support clean growth, reduce the costs of the energy system, and help keep energy bills low for consumers. It sets out a range of actions to remove barriers and reform markets to smart technologies, including electricity storage.
- 3.3 In July 2021 government and Ofgem published the 2021 Smart Systems and Flexibility Plan (SSFP¹), which includes an action to remove barriers to the co-location of electricity storage with generation projects supported under the Contracts for Difference (CfD) scheme.
- 3.4 In principle, storage should be able to provide grid services and store power from CfD generators, providing the metering arrangements can distinguish between the two to the subject to agreement with LCCC.
- 3.5 The same metering methodology also now applies to hydrogen production co-located with generation projects supported under the CfD scheme.
- 3.6 This Guidance Document does not intend to provide CfD generators with guidance on co-locating a CfD Facility with an asset participating in any other market or subsidised schemes, CfD generators should consult documents and the relevant bodies that relate directly to these other markets and schemes for further information.

¹ <https://www.gov.uk/government/publications/transitioning-to-a-net-zero-energy-system-smart-systems-and-flexibility-plan-2021>

4 Definitions

“BM Unit”, “Primary BM Unit”, “Secondary BM Unit” have the meanings given to such terms in the BSC;

“BSC” means the Balancing and Settlement Code that is provided for in Standard Condition C3 (Balancing and Settlement Code (BSC)) of the Transmission Licence;

“Boundary Point” means a point at which any Plant or Apparatus not forming part of the Total System is connected to the Total System;

“CfD Counterparty” is the Low Carbon Contracts Company Ltd (LCCC);

“Electricity Storage”, in the electricity system, is the conversion of electrical energy into a form of energy which can be stored, the storing of that energy, and the subsequent reconversion of that energy back into electrical energy;

“Electricity Storage Facility” means a facility where Electricity Storage occurs or can occur and includes all assets performing or contributing to any such Electricity Storage;

“Facility” means the generating facility comprising all assets (including all Generating Units but excluding all assets forming part of an Electricity Storage Facility) which are used (or intended to be used) to generate or deliver electricity;

“Facility Metering Equipment” means: (i) the Metering Equipment measuring the flows of electricity associated with the Facility, its Metering System and its associated BM Unit(s); and (ii) in the case of a Dual Scheme Facility, the Metering Equipment used to measure the Imported Input Electricity of the Generating Station.

5 Principles of CfD Co-location

Conditions

- 5.1 An Electricity Storage Facility can be co-located with a project supported under the CfD scheme, provided the Generator complies with certain

conditions. We also intend for these conditions to be applied to co-location with hydrogen production.

- 5.2 The CfD contractual conditions are set out in the [Contract for Difference Standard Terms and Conditions \(May 2023 template\)](#) - Part 7 – Representations, warranties and undertakings, section 31, paragraphs (E) and (F):

(E) to ensure at all times that no Electricity Storage Facility shall be used by or otherwise associated with the Facility, unless:

- *(i) such Electricity Storage Facility is associated with a separate BM Unit to the BM Unit associated with the Facility; or*
- *(ii) subject to Condition 31.1(F), such Electricity Storage Facility is associated with the same BM Unit as that associated with the Facility and the CfD Counterparty has issued a notice certifying that it is satisfied that the arrangement and installation of the Facility Metering Equipment is such that the Generator is able to comply with the Condition 31.1(F);*

(F) to ensure at all times that any Electricity Storage Facility, where associated with the same BM Unit as that associated with the Facility, shall only store electricity generated by the Generating Unit(s) of the Facility using the Facility Generation Technology and shall not store electricity imported from any other source.

- 5.3 The metering archetypes in section 6 of this guidance generally comply with the conditions set out above. The archetypes provide examples of multiple BM Units on the same site that comply with the terms of the CfD and the BSC, and realise the intent of the CfD and the SSFP.

Facility Description

- 5.4 Paragraph (D) of Part A (Initial Conditions Precedent) of Schedule 1 (Conditions Precedent) to the [Contract for Difference Standard Terms and Conditions \(March 2023 template\)](#) states the generator must provide:

(D) a description of any Electricity Storage Facility, in form and content satisfactory to the CfD Counterparty (acting reasonably), including details of any assets relating to Electricity Storage or Electricity Storage Facilities which are intended to be located within the Facility site or be used by or be associated with the Facility;

5.5 The [LCCC Facility Description Guidance](#) sets out the requirements for generators to comply with paragraph D:

4.1 In compliance with paragraph (D), the Generator should provide:

- *4.1.2 a statement of whether the Facility is, or is not, intended to use or be associated with an Electricity Storage Facility.*
- *4.1.3 a description of any such Electricity Storage Facilities, including details of the expected capacity of the Electricity Storage Facility and of any assets relating to the Electricity Storage Facilities which are intended to be located within the Facility site and/or be used by or associated with the Facility.*
- *4.1.4 a statement as to whether the Facility Metering Equipment (including any BM Units associated with the Facility) are, or will be, separate from and not also constitute the metering equipment (including any BM Units) associated with any Electricity Storage Facilities.*
- *4.1.5 where Electricity Storage is included as part of the Facility or associated with it, a brief description is required as to how it is intended that such Electricity Storage would operate.”²*

5.6 We expect Generators that wish to Co-locate with hydrogen to include that information in their Facility Description as if it was Electricity Storage.

² Note that the fact that LCCC, for the purposes of the Initial Conditions Precedent, accepts the provision of a Facility Description which includes a description of Electricity Storage or an Electricity Storage Facility does not and shall not be deemed to constitute an acceptance or agreement to any matter for the purposes of Condition 31.1(B) (E) and (F)

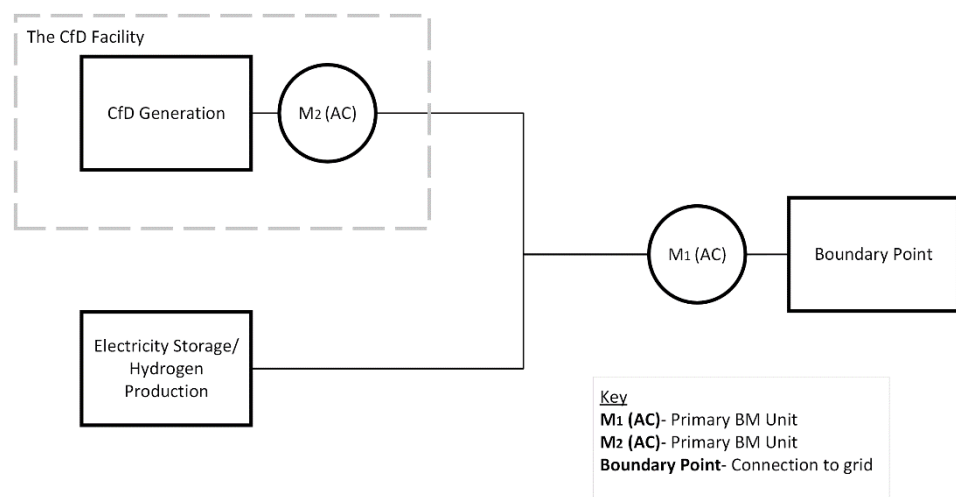
6 Metering archetypes

Metering archetypes

- 6.1 LCCC have developed two high-level examples of acceptable metering arrangements to support co-location that are compatible with both the CfD and the BSC.
- 6.2 In addition to the two examples provided, we are aware that other metering solutions may be possible within the obligations of the CfD and BSC. LCCC will consider alternative proposals submitted by CfD generators.
- 6.3 CfD payments are made on electricity generated by the CfD generating asset based on the applicable reference price and not energy exported from the Electricity Storage Facility.
- 6.4 CfD payments are calculated on the metered volumes at the point of generation and not the point of export of the generation.
- 6.5 Arrangements that sit outside of the BSC (i.e. 'behind-the-meter') shall not be approved at this stage.

Example 1

6.6

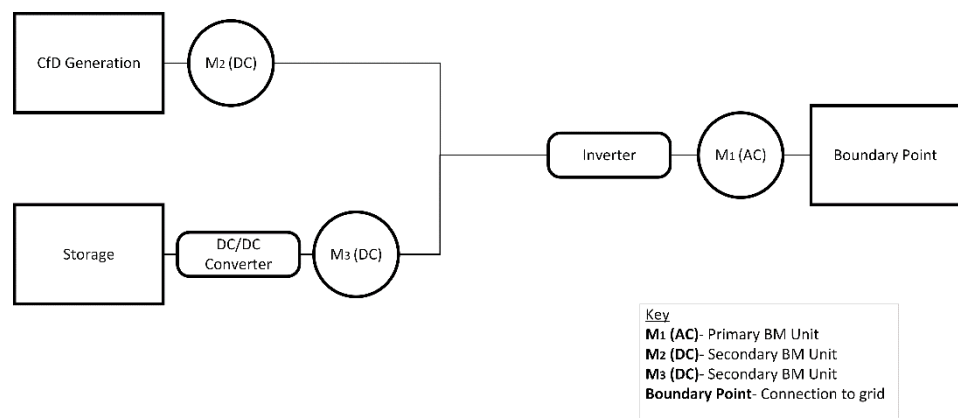


- CfD generation is settled at M2, this is a primary BM Unit;
- This may require a Metering Dispensation under the BSC BSCP32 process;
- Co-located battery or hydrogen production asset is measured under a differencing arrangement between M1 and M2;
- All CfD eligible electricity generated is subject to CfD payments at the time of generation;

This archetype is suitable for both Electricity Storage and Hydrogen Production.

Example 2

6.7



- M1 is registered as a Primary BM Unit, M2 and M3 are registered as Secondary BM Units;
- CfD generation is settled at M2 using the EMR aggregation rule to account for DC to AC losses at M1 and establish CfD payments;
- All CfD eligible electricity generated is subject to CfD payments at the time of generation;
- This example is only suitable for Electricity Storage under the BSC;
- The DC metering should be approved under the BSC BSCP601 process.



7 Further considerations

Further considerations

- 7.1 For the avoidance of doubt, this Guidance Document will be applicable to existing Generators, and those Generators that enter contract through AR5.
- 7.2 Co-location may cause issues with calculating Installed Capacity. This is addressed further in the IC and FIC Guidance Document.



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