



LOW CARBON
CONTRACTS COMPANY

Facility Description Guidance

Based on CFD Agreement and CFD
Standard Terms and Conditions
issued on March 2017

Version 1.0



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Section 1: Introduction

The Facility Description must be provided by the Generator under the Initial Conditions Precedent and is an important descriptor, used in other conditions within the contract where “Facility” is referred to. It is therefore important that Generators give proper consideration to how they describe their Facility at the outset, and this guidance is aimed at ensuring consistency of approach.

- 1.1 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 generators should not rely on it as such. Generators should consult with professional advisors where they require advice, whether legal or otherwise, on the CfD.
- 1.2 This guidance and any associated guidance is subject to change from time to time.
- 1.3 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 requires to confirm compliance with the CfD.
- 1.4 This guidance sets out the form and content of the description of the Facility which is required by Low Carbon Contracts Company Limited (“LCCC”), as CfD Counterparty, pursuant to paragraphs (C) and (D) of Part A (Initial Conditions Precedent) of Schedule 1 (Conditions Precedent) to the Contract for Difference Standard Terms and Conditions (March 2017 template). LCCC reserves the right to amend this guidance and/or to seek more information from, or clarification of any information provided by, the Generator.¹
- 1.5 Paragraph (C) states that Generators must provide:

“a description of the Facility² in a form and content satisfactory to the CfD counterparty (acting reasonably), including:

- “(i) details of the assets comprising the Facility; and*
- (ii) an aerial view of the unique geographical location of the Facility, whether an extract from the Ordnance Survey map or equivalent, showing the proposed locations of:*
 - (a) the Facility;*
 - (b) the Facility Metering Equipment; and*
 - (c) (if the Facility Generation Technology is Offshore Wind) the Offshore Transmission System...”*

- 1.6 Paragraph (D) states that Generators must provide:

“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”.

¹ Please note that the fact that the CfD Counterparty, for the purposes of the Initial Conditions Precedent, accepts the provision of a Facility Description does not and shall not be deemed to constitute an acceptance or agreement for the purposes of any other provision of the Contract for Difference.

² The term “Facility” is defined in the CfD Agreement, available at: <https://www.gov.uk/government/publications/contracts-for-difference-standard-terms-and-conditions-version-2-march-2017>

Section 2: Details of assets

General guidance

- 2.1 In compliance with paragraph (C)(i), details of the assets comprising the Facility should include:
- 2.2 A detailed description of the location of the Facility site (including the lease area or the property boundaries).
- 2.3 A description of assets which should include the following:
- 2.3.1 A description of the main assets, elements and systems comprising the Facility,³ including those assets which are or will be used to generate or deliver electricity and those taken into account to determine the Initial Installed Capacity Estimate. This description must include a statement of the total net capacity of the Facility (expressed in MW).
 - 2.3.2 A description of the main assets, elements and systems forming part of, or required for, the operation of the Facility such as substations, which are not, or are not intended to be, located within the area shown on the map provided pursuant to paragraph (C)(ii) of Part A of Schedule 1. A description of where these assets are, or are intended to be, located should be provided.
 - 2.3.3 A description of any material assets, elements and systems which are connected to and/or related to the operation of the Facility, such as feedstock preparation system, loading and store facilities, remote control and remote operations centres, any assets within a combined heat and power system dedicated to supply heat or steam to other premises. A description of where these assets are, or are intended to be, located should be provided.
- 2.4 A statement of the assets, elements and systems, which the Generator considers are Material Equipment as described in Annex 5 of the CfD Agreement in relation to its Facility Generation Technology.⁴ Unless otherwise indicated assets and systems described under 2.3.1 and 2.3.2 are intended to be considered as Material Equipment.
- 2.5 A description of the proposed Facility Metering Equipment (including location of meters and the number of proposed Balancing Mechanism Units (“**BM Units**”) where applicable).
- 2.6 A description of the transmission or distribution system network entry point to which the Facility is expected to connect.

Technology specific guidance

- 2.7 According to the relevant generating technology, when providing the description of the assets above, the Generators should also provide the additional information as described below.

Onshore wind or offshore wind

- 2.8 Where the generation technology is onshore or offshore wind, in compliance with Paragraph (C)(i), the description⁵ should also include as a minimum:

- (i) the number of turbines and the expected nameplate capacity of each turbine (expressed in MW);

³ LCCC appreciates that during the design and construction of the Facility the precise layout of the Facility or plant within it may change and as such consequential changes to the Facility Description may be appropriate, subject to being approved by LCCC, and provided that the proposed changes do not increase the Installed Capacity Estimate (calculated on the net basis referred to above), change the Facility Generation Technology or change a term or matter material to the appropriate operation of the CFD Agreement. Please see LCCC's Installed Capacity guidance at https://lowcarboncontracts.uk/sites/default/files/20160131_Installed%20Capacity%20Guidance%20%28003%29_0.pdf.

⁴ Please note that the fact that LCCC, for the purposes of the Initial Conditions Precedent, receives or accepts the provision of a Facility Description which includes a description of the assets, components or elements which the Generator considers constitute Material Equipment is not determinative of whether or not those items are indeed Material Equipment for the purposes of the CFD. For the avoidance of doubt, LCCC's position is that it will give consideration in due course and at the appropriate to the question of what items constitute Material Equipment for the purposes of the relevant CFD technology and LCCC reserves its rights in this regard.

⁵ See footnote 4.

- (ii) a brief description of the relevant Offshore Transmission System assets (clearly identifying such assets as Offshore Transmission System assets); and
- (iii) details of expected capacity of the electrical collector system(s).

Thermal technology

2.9 Where the generation technology is a thermal technology, in compliance with Paragraph (C)(i), the description should also include as a minimum:

- (i) the number and size of combustion systems, boilers, combustion chambers and the number, and nameplate capacity, of prime movers such as steam turbines, engines and turbines including electric generators (expressed in MWe or MWth as appropriate);
- (ii) the main components for the balance of plant such as gasification or pyrolysis units, syngas cleaning, water treatment, ash handling, flue gas cleaning system and condensers or other main auxiliary systems, together with an estimate of likely relevant electrical loads (expressed in MW).

Please note that the total net capacity of the Facility cannot exceed the amount set out in the Generator's application for a CFD.⁶ For the purposes of calculating the total net capacity of the Facility you must deduct from the maximum total gross generating capacity all parasitic loads that are necessary for electricity generation or delivery and electrical losses to the export meter.

⁶ This may well be referred to in the application form as "Provisional Capacity Estimate".

Section 3: Location of assets and site

- 3.1 In compliance with both Paragraphs (C)(i) and C(ii), the description should include an aerial view of the unique geographical location of the Facility, whether an extract from the Ordnance Survey map or equivalent, in the form of an aerial map, chart or plan showing:
- 3.1.1 the geographic co-ordinates of the Facility site that is to scale, with the scale set out clearly;
 - 3.1.2 four extreme compass co-ordinates which **must** be shown in WGS84 format;⁷
 - 3.1.3 all boundaries of the Facility; and
 - 3.1.4 the location of all main assets, components and elements of the Facility.
- 3.3 Without limitation, a Facility description which suffers from the following defects will not be considered to be in the form and content acceptable to the CfD Counterparty:
- a) vague or ambiguous references to assets, location or Material Equipment;
 - b) simply referencing the aerial view of the Facility, for example “see map provided...”; or
 - c) qualifications or disclaimers, for example “the area may change depending on...”.

⁷ See Appendix for illustrative example.

Section 4: Electricity storage

- 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.⁸

⁸ Please specifically 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).

Appendix: Illustrative examples

The following illustrative descriptions are not intended to be overly prescriptive and Generators should feel free to add any further relevant details.

Wind Technologies

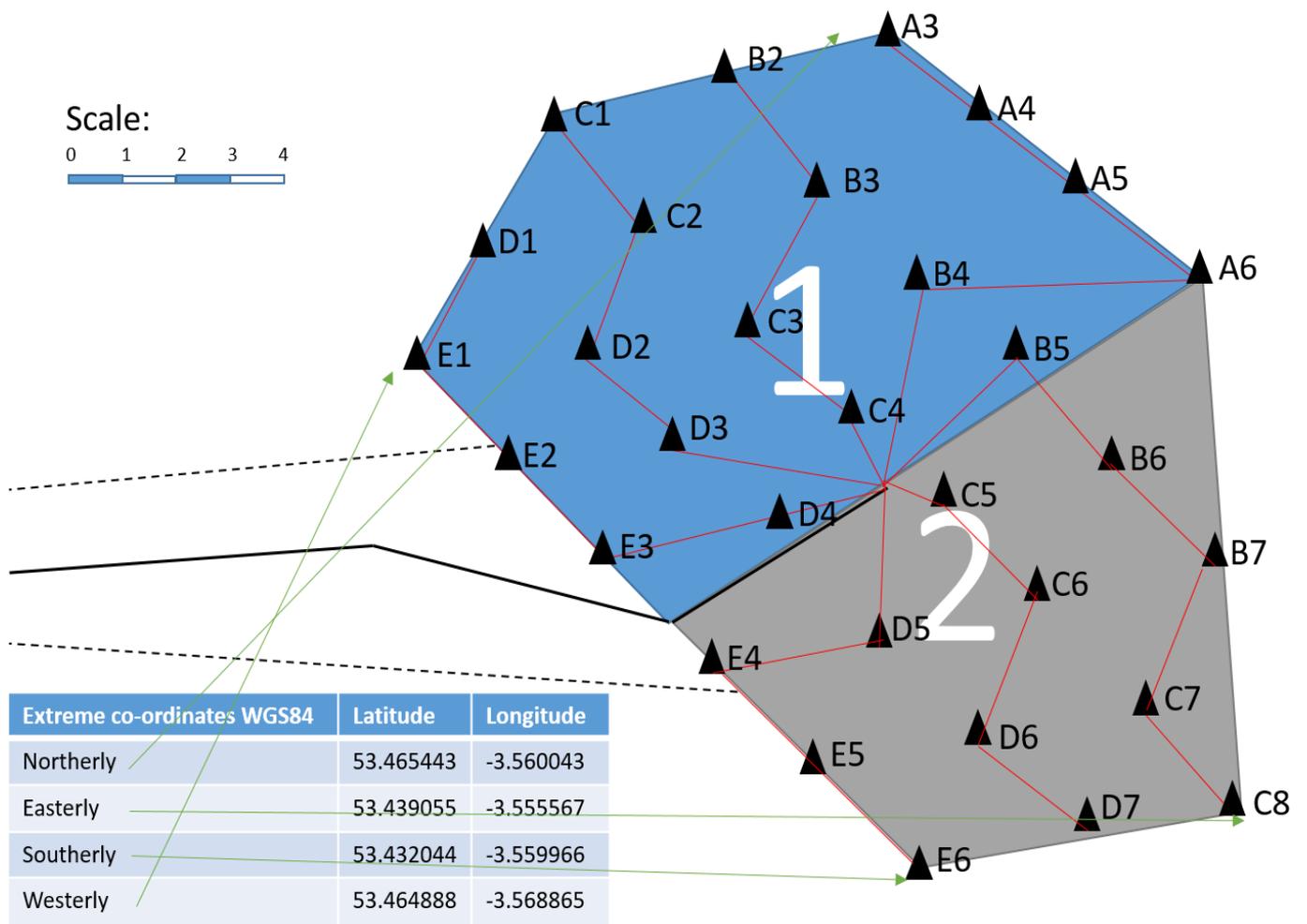
5.1 Details of the assets comprising an **Offshore Wind** Facility:

- The Facility site is located in the UK North Sea, 32km East of Dunbar, County of East Lothian and covers an area of approximately 48km².
- The Facility is located on a Crown Estate lease area which was granted on 28 August 2013 as part of the Scottish Territorial Waters programme. A map of the leased area with the reference GPS coordinates is shown in Figure [].
- The water depth of the site range between 18m and 22m. The expected foundation type for the WTGs and the Offshore Substation (OSS) is piled jackets.
- The Facility is an offshore wind farm and consists of 40 wind turbine generators (WTGs), each with a nameplate capacity of 7MW, totalling 280MW Facility total gross generating capacity.
- The estimated electrical losses and electrical parasitic loads amount to 2.5% of the Facility total gross generating capacity;
- The Facility total estimated net capacity is 273MW.
- The main assets, elements and systems forming the Facility are:
 - > 40 WTGs;
 - > 40 jacket foundation structures for the WTGs;
 - > 40 transition pieces;
 - > 37km of array cables rated at 33kV and organised in 8 strings; and
 - > Metering equipment includes 5 meters [description] and 1BM Unitelocated on the OSS shown on the map as Item 3.
- The assets which are part of the Offshore Transmission System (OFTO) are identified on the map and include:
 - > 1 33kV/220kV OSS with associated equipment (including two 33kV/220kV/150MVA transformers) shown on the map as Item 3;
 - > 1 foundation structure for the OSS;
 - > 1 export cable of 32km length rated at 220kV shown on the map as Item 4; and
 - > 1 220kV/400kV Onshore Substation (ONS) with associated equipment (including one 220kV/400kV/300MVA transformer) shown on the map as Item 5.
- The assets, elements and systems that are Material Equipment are the 40 WTGs, 40 foundation structures, 37Km array cables [etc];
- The OFTO will connect to the Transmission System at the 400kV Dunbar substation.
- The following assets, elements and systems required for the operation of the Facility, are not located within the

area shown on the map provided pursuant to paragraph (c)(ii) of Part A of Schedule 1:

- > Wind farm remote control and operations centres, located respectively in London and Hull, England;
and
 - > Operations and maintenance harbour and storage facilities, located in Dunbar, Scotland .
- The Facility does not include an Electricity Storage Facility.

Extreme Compass Co-ordinates



Thermal Technologies

5.2 Details of the assets comprising a **Thermal** Facility:

- The Facility site is located in Ickleford, 10km North of Stevenage, Hertfordshire and covers an area of 1km² (as shown on the Facility site map provided pursuant to paragraph (c)(ii) of Part A of Schedule 1 (attached)). The Facility is located to the south of the Facility site, as shown on the Facility site map.
- The Facility is a biomass power plant with a total Facility gross generating capacity of 27MWe, generated by one steam turbine generator.
- The Facility will be a combined heat and power generating station. Steam will be taken from the steam turbine and supplied to [Name] Chemical Works, a chemicals processing facility located next to the site. The steam off-take is expected to be approximately [number] t/year, at [number] bar, [number]C (corresponding to [number] MWth).
- The main assets, elements and systems forming the Facility are:
 - > 1 x boilers;
 - > 1 x steam turbine generators;
 - > Fuel pre-processing (1 x wood chipper);
 - > Fuel handling (wood chip reclaimer/conveyors);
 - > Air cooled condenser;
 - > Flue gas cleaning system;
 - > Water treatment plant;
 - > Waste water treatment plant;
 - > Compressed air system;
 - > CHP system (circulating pumps, condensate return pumps, heat exchanger);
 - > Electricity storage system;
 - > Electrical export system; and
 - > Building services.
- The assets, elements and systems that are Material Equipment are [boilers, steam turbines generators... [etc]/ [as follows/referred to in paragraph x above].
- The estimated relevant cumulative electric parasitic loads and electrical losses are 2.7MWe. The resulting Facility total net capacity is 24.3MWe (calculated as gross turbine-generator output – parasitic load/electrical losses).
- The following systems were not taken into account to determine the Installed Capacity Estimate:
 - > Fuel pre-processing (1 x wood chipper); and
 - > Fuel handling (wood chip reclaimer/conveyors).
- All assets comprising the Facility are located on the Facility site as shown on the map [].
- The Facility includes an Electricity Storage Facility. The Electricity Storage Facility (or the following assets, system or components) will be located on the Facility site as shown on the map [] and connected to the Facility as detailed in diagram []. The following describes the Electricity Storage Facility and sets out how the Electricity Storage Facility will operate [description].
- The Facility Metering Equipment for the Facility is 1 meter [description] and [description]
- The Facility Metering Equipment will be separate from the metering equipment associated with any Electricity Storage Facility as detailed in the drawing [].
- The Facility will connect to the distribution network at 33kV at the point clearly marked on the Facility site map.

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