

DCP 406 'ACCESS SCR: CHANGES TO CCCM'
PROPOSED LEGAL TEXT

SCHEDULE 22 – COMMON CONNECTION CHARGING METHODOLOGY

Amend the following Paragraphs

Introduction

1. This Schedule 22 sets out the Common Connection Charging Methodology (CCCM). The CCCM is the whole of this Schedule 22 excluding only this introductory section.
2. Each DNO Party is obliged by Standard Licence Condition 13 to have a connection charging methodology in force (each a Connection Charging Methodology). Each DNO Party is obliged by Standard Licence Condition 13 to include the CCCM within its Connection Charging Methodology.
3. The DNO Party will include within the document containing its Connection Charging Methodology other matters which are outside the scope of the CCCM.
4. The CCCM is split into two sections numbered '1' and '2', and refers to other sections of the document in which the CCCM is to be included. When each DNO Party includes the CCCM within the document containing its Connection Charging Methodology, the DNO Party shall replace such section numbering and cross-references with the section numbers and cross-references appropriate for its document.
5. Modifications to this Schedule 22 are governed by the provisions of this Agreement.
6. The glossary forming part of the CCCM contains definitions of terms and acronyms used in the CCCM. In the case of any conflict between the defined terms and acronyms set out in the CCCM (on the one hand) and the definitions and rules of interpretation set out in Clause 1 of this Agreement (on the other), the defined terms and acronyms set out in the CCCM shall prevail for the purposes of the CCCM.

Common Connection Charging Methodology

Section 1 – Common Connection Charging Methodology

This Section sets out the Common Connection Charging Methodology that is implemented to ensure a consistent approach in the way your Connection Charge is calculated.

Minimum Scheme

1.1 The Minimum Scheme is the Scheme with the lowest overall capital cost (as estimated by us), solely to provide the Required Capacity. The Minimum Scheme will be subject to:

- accepted industry standards, including the requirements of the Distribution Code;
- the status and configuration of the Relevant Section of Network (RSN);
- the standard sizes and types of equipment currently used by us on our Distribution System which shall be reasonable in all the circumstances;
- maintaining our ability to minimise regulatory penalties associated with the Interruptions Incentive Scheme and the Guaranteed Standards of Performance; and
- where the Customer is an LDNO, maintaining the Customer's ability to minimise regulatory penalties associated with the Guaranteed Standards of Performance.

and shall be consistent with our statutory and licence obligations including the requirement to develop, maintain and operate an efficient, co-ordinated and economical electricity Distribution System.

1.2 We will make available our design policies and standards as appropriate.

1.3 Subject to paragraphs 1.4 and 1.7 below, we will calculate the Connection Charge based on the estimated costs of the Minimum Scheme.

1.4 In certain circumstances we may decide to design an Enhanced Scheme. This will include one or more of the following:

- additional assets not required as part of the Minimum Scheme;

- assets of a larger capacity than required by the Minimum Scheme;
- assets of a different specification than required by the Minimum Scheme.

1.5 If we decide to design an Enhanced Scheme, the Connection Charge that will apply will be the lower of the Connection Charge associated with the Minimum Scheme and the Connection Charge associated with the Enhanced Scheme.

1.6 The Connection Charge associated with the Enhanced Scheme will be calculated subject to the exclusion of costs of any additional assets not necessary for the provision of your connection.

1.7 We may recover the reasonable costs incurred, both direct and indirect, in providing a connection and may, where allowed by our Licence, apply a margin on some of those costs. The factors taken into account by us to calculate the Connection Charge will include, but are not limited to:

- industry standards governing the Distribution System;
- the Required Capacity;
- available capacity of the existing Distribution System;
- whether any necessary extension or Reinforcement of the existing Distribution System is by underground cable or overhead lines;
- whether any diversionary work is required as a result of the development and the required disconnection of any assets;
- the length of cable or line required;
- type of ground requiring excavation, the type and extent of reinstatement necessary (including New Roads and Street Works Act requirements and any other relevant legislation), and the need for road, bridge crossings etc;
- any Electrical Plant and civil costs required, allowing for any civil works undertaken by you with our agreement;
- the cost of installing communication equipment;

- the costs of installing system management equipment;
- the requirement to work outside of normal working hours;
- the costs of undertaking the design;
- the costs of securing wayleaves/easements for plant, cables or lines including any consents;
- the costs of securing suitable substation sites including any necessary Land Rights;
- any overhead line surveys required;
- the costs of public enquiries and environmental impact studies;
- charges for any other costs associated with the work on Sites of Special Scientific Interest (SSSI), railway lines etc; and
- any variations in respect of the actual costs that were reasonably incurred as specified in the Connection Offer.

Cost Allocation

1.8 The costs to be charged to you as a Connection Charge may be split into three categories:

- Costs for providing the connection which are to be paid in full by you (see paragraphs [1.10](#) to [1.16](#));
- Costs for providing the connection which are to be apportioned between you and us (see paragraphs [1.28](#) to [1.32](#); and
- Costs to be paid by you in respect of works that have previously been constructed or are committed and are used to provide the connection (see paragraph [1.34](#)).

1.9 Some costs may be borne in full by us and will not be included in your Connection Charge (see paragraphs [1.35](#) to [1.39](#)).

Costs to be paid in full by you

- 1.10 The costs of providing Extension Assets are charged in full to you.
- 1.11 Where you have requirements for additional security or the characteristics of your load requires us to install assets in excess of the Minimum Scheme then you will pay the costs in excess of the Minimum Scheme in full. Where you have requested a three-phase connection and/or a supply voltage that is not necessary to meet the Required Capacity, and the local Distribution System is not of the requested number of phases and/or voltage, then you will pay in full the cost of Reinforcement of the Distribution System to your specified number of phases and/or voltage.
- 1.12 The costs of the future operation and maintenance of any additional assets requested by you (over and above those associated with the Minimum Scheme) will be payable in full. This would normally be levied as a one-off charge representing the net present value of the future operation and maintenance costs and calculated as a percentage (specified in Section [6]) of the additional capital cost of the Scheme. See Example [3-7](#) for an illustration of where you request additional security.
- 1.13 Work required to reconfigure the Distribution System to meet your requirements where no additional Network or Fault Level Capacity is made available shall be charged in full to you. See Example [8D20](#).
- 1.14 Where the Extension Assets would normally require the extension of existing switchgear equipment and this is not possible, the cost of the full replacement of the switchgear (using the nearest standard size) will be charged to you, provided that there is no Reinforcement of the Distribution System (see paragraph [1.24-1.24](#)).

Add new Paragraph 1.15 and adjust the subsequent numbering.

- 1.15 [If your development is considered to be speculative then the reinforcement costs will be charged in full \(see paragraphs 1.41.46 to 1.43.48\).](#)

Amend the following paragraphs

1.16 ~~For generation connections only,~~ Reinforcement costs for the Minimum Scheme, in excess of the high-cost project threshold ~~of £200/kW~~, shall be charged to you in full as a Connection Charge. ~~Where both this paragraph 1.15 and paragraph 1.30 below apply to a generation connection, the provisions of paragraph 1.30 shall take precedence.~~ The calculation of this charge will include all costs for Reinforcement carried out at the same Voltage Level and one Voltage Level above the POC to the existing Distribution System. The definition of Voltage Level is included within the Glossary of Terms. For Generation Connections the threshold is £200/kW; for Demand Connections the threshold is £1,720/kVA. Reinforcement costs below the high-cost project threshold will follow the methodology outlined within this document under paragraphs 1.17 to 1.27. The table below illustrates the application of the high-cost project threshold.

Add two new tables as below

England and Wales

	<u>Voltage at the POC</u>			
<u>Voltage of Scheme Assets</u>	<u>LV (at or below 1000V)</u>	<u>HV (above 1kV but not more than 22kV)</u>	<u>EHV EHV (above 22kV but not more than 72kV)</u>	<u>132kV</u>
<u>132kV Network</u>	<u>Excluded from assessment¹</u>	<u>Excluded from assessment¹</u>	<u>Included in assessment</u>	<u>Included in assessment</u>

<u>132kV/ EHV Substation</u>	<u>Excluded from assessment²</u>	<u>EHV CBs only included in assessment</u>	<u>Included in assessment</u>	<u>Not applicable</u>
<u>EHV Network</u>	<u>Excluded from assessment¹</u>	<u>Included in assessment</u>	<u>Included in assessment</u>	
<u>132kV/ HV Substation</u>	<u>HV CBs only included in assessment</u>	<u>Included in assessment</u>	Not applicable	
<u>EHV/HV Substation</u>	<u>HV CBs only included in assessment</u>	<u>Included in assessment</u>		
<u>EHV/LV substation</u>	<u>Included in assessment</u>	<u>Not applicable</u>		
<u>HV Network</u>	<u>Included in assessment</u>	<u>Included in assessment</u>		

<u>HV/ LV Substation</u>	<u>Included in assessment</u>	<u>Not applicable</u>		
<u>LV Network</u>	<u>Included in assessment</u>			

¹ Except where there is direct transformation from 132kV to HV or EHV to LV when the higher voltage costs are included.

² Except where there is direct transformation from 132kV to HV or EHV to LV when the higher voltage circuit breaker costs are included.

NB: The above table may not accommodate every possible set of circumstances, where this is the case, the Voltage Level rule, as defined in the Glossary, shall be applied.

Scotland

	<u>Voltage at the POC</u>		
<u>Voltage of Scheme Assets</u>	<u>LV (at or below 1000V)</u>	<u>HV (above 1kV but not more than 22kV)</u>	<u>EHV (above 22kV but not more than 72kV)</u>
<u>EHV Network</u>	<u>Excluded from assessment¹</u>	<u>Included in assessment</u>	<u>Included in assessment</u>
<u>EHV/HV Substation</u>	<u>HV CBs only included in assessment</u>	<u>Included in assessment</u>	<u>Not applicable</u>
<u>EHV/LV substation</u>	<u>Included in assessment</u>	<u>Not applicable</u>	
<u>HV Network</u>	<u>Included in assessment</u>	<u>Included in assessment</u>	
<u>HV/ LV Substation</u>	<u>Included in assessment</u>	<u>Not applicable</u>	
<u>LV Network</u>	<u>Included in assessment</u>		

¹ Except where there is direct transformation from EHV to LV when the higher voltage costs are included.

NB: The above table may not accommodate every possible set of circumstances, where this is the case, the Voltage Level rule as defined in the Glossary shall be applied.

Amend/ add the following Paragraphs

Costs to be apportioned between you and us of Reinforcement

1.17 Reinforcement is defined as assets installed that add capacity (network or fault level) to the existing shared use Distribution System.

1.18 For Generation Connections, where the Reinforcement is at the same Voltage Level of the voltage at the POC to the existing Distribution System, then ~~the~~ the costs of Reinforcement shall be apportioned between you and us, unless other exceptions apply which take precedence. The methods used to apportion the costs of Reinforcement are set out in paragraphs 1.28 to 1.3301.33.

1.19 For Demand Connections, then the costs of Reinforcement will be paid in full by us, unless other exceptions apply which take precedence.

~~1.16~~1.20 There are ~~five~~six exceptions to ~~this rule~~these rules. Where an exception applies Reinforcement will be treated as Extension Assets and costs will not be apportioned; or paid in full by us. These exceptions are described below and the application of exceptions 1, 2, 4, and 5 is demonstrated in the Examples.

~~1.17~~1.21 Exception 1: Where the Reinforcement is:

- down stream of the POC; and
- over and above the Minimum Scheme; and
- provided at our request; and
- provided by connecting two points on the existing Distribution System; ~~and~~
 - ~~there is little or no prospect of the capacity created being required within the next five years;~~

then the apportionment rules will not apply. You will pay the costs associated with the Minimum Scheme and we will pay the costs over and above the Minimum Scheme.

See Example ~~2B~~4.

[1.181.22](#) Exception 2: Where the Reinforcement is in excess of the Minimum Scheme and is at your request, the Reinforcement will be treated as Extension Assets and the apportionment rules will not apply. The costs in excess of the Minimum Scheme will be borne in full by you (see paragraphs 1.11 and 1.12 above).

[1.191.23](#) Exception 3: Where the Reinforcement is provided to accommodate a Temporary Connection the Reinforcement will be treated as Extension Assets and the apportionment rules will not apply. The costs associated with the Temporary Connection will be borne in full by you. Temporary Connections are defined as connections that are only required for a period of up to five years, but exclude connections to provide the initial connection to a development, where the Reinforcement will subsequently be required for the permanent connection.

[1.201.24](#) Exception 4: Where the replacement of switchgear results in an increase in fault level capacity and:

- that increase is solely as a result of the fault level rating of the standard switchgear equipment used by us being higher than that of the existing switchgear; and
- that increase in fault level capacity is not needed to accommodate your connection.

then, unless the switchgear adds network capacity and the Security CAF applies, the switchgear replacement will be treated as Extension Assets and the apportionment rules will not apply. You will pay the full cost of the switchgear replacement. See Example [7B15](#).

[1.25](#) Exception 5: Where the Minimum Scheme requires Reinforcement that is provided by connecting two points on the existing distribution system to provide connectivity to the connection(s), then the lowest cost feeder shall be treated as an Extension Asset and all other feeders required to connect the Customer shall be treated as Reinforcement.

See Example 17.

[1.211.26](#) Exception [56](#): Where the Reinforcement:

- is provided by connecting two points on the existing distribution system; and
 - is providing connection to a development with a number of Entry/ Exit Points,
- then the additional network length (measured from suitable points close to the site boundaries which would allow for a clear demarcation of Contestable and Non-Contestable Work) required to provide connectivity within the development will be considered to be Extension Assets and the apportionment rules will not apply. You will pay the full cost of the additional network length. See Example [8B18](#).

[1.221.27](#) For avoidance of doubt, where the costs of Reinforcement are borne in full by you and any capacity created is used to accommodate new or increased connections within the ECCR Prescribed Period, the ECCR will apply (see paragraphs [1.42](#) 1.43–[1.45](#)-1.46).

Add new title and amend following Paragraphs

Costs to be apportioned between you and us

[1.231.28](#) The costs of Reinforcement will be apportioned using one of two Cost Apportionment Factors (CAFs), dependent upon which factor is driving the requirement for Reinforcement:

- The ‘Security CAF’; and
- The ‘Fault Level CAF’.

4.241.29 The following definitions are used in the application of the CAFs.

<p>Existing Capacity</p>	<p>For existing Customers their Existing Capacity will be either:</p> <p>(a) the Maximum Capacity used in the calculation of their use of system charges; or</p> <p>(b) for Customers who are not charged for use of system on the basis of their Maximum Capacity the lower of:</p> <ul style="list-style-type: none"> • No. of phases x nominal phase-neutral voltage (kV) x fuse rating (A); and • The rating of the service equipment.
<p>Fault Level Contribution from Connection</p>	<p>is the assessment of the Fault Level contribution from the equipment to be connected taking account of its impact at the appropriate point on the Distribution System. Where an existing Customer requests a change to a connection then the ‘‘Fault Level Contribution from Connection’’ is defined as the incremental increase in Fault Level caused by the Customer.</p>
<p>New Fault Level Capacity</p>	<p>is the Fault Level rating, following Reinforcement, of the equipment installed after taking account of any restrictions imposed by the local network Fault Level capacity. For the avoidance of doubt this rule will be used for all equipment types and voltages.</p>
<p>New Network Capacity</p>	<p>is either the secure or non-secure capacity of the Relevant Section of Network (RSN) following Reinforcement. Whether secure or non-secure capacity is applicable depends upon the type of capacity that can be provided from the RSN. For example, if the capacity provided to the Customer by the RSN is secure, but the capacity requested by the Customer at the point of connection is</p>

	<p>non-secure, the secure capacity will be used. See Example 24-12.</p> <p>The capacity to be used will be based on our assessment of the thermal ratings, voltage change and upstream restrictions and compliance with our relevant design, planning and security of supply policies. The equipment ratings to be used are the appropriate operational rating at the time of the most onerous operational conditions taking account of seasonal ratings and demand.</p>
<p>Relevant Section of Network (RSN)</p>	<p>is that part or parts of the Distribution System which require(s) Reinforcement. Normally this will comprise:</p> <ul style="list-style-type: none"> • the existing assets, at the voltage levelVoltage Level that is being reinforced, that would have been used to supply you (so far as they have not been replaced) had sufficient capacity been available to connect you without Reinforcement; and/or • the new assets, at the same voltage levelVoltage Level, that are to be provided by way of Reinforcement. <p>Where it is unclear what assets would have supplied the Customer in the event that sufficient capacity had been available, the existing individual assets with the closest rating to the new assets will be used. See Example 13.</p> <p>There may be more than one RSN (e.g. at different voltage levelVoltage Levels).</p>
<p>Required Capacity</p>	<p>is the Maximum Capacity agreed with the Customer. In the case of multiple connections (e.g. a housing development) it may be adjusted after consideration of</p>

	the effects of diversity. Where an existing Customer requests an increase in capacity then it is the increase above their Existing Capacity.
--	--

[1.251.30](#) The ‘Security CAF’ is applied, where the costs are driven by either thermal capacity or voltage (or both) as assessed against the relevant standard. This rule determines the proportion of the Reinforcement costs that should be paid by you as detailed below.

$$\text{Security CAF} = \frac{\text{Required Capacity}}{\text{New Network Capacity}} \times 100\% \quad (\text{max } 100\%)$$

[1.261.31](#) The ‘Fault Level CAF’ is applied, where the costs are driven by Fault Level restrictions. This rule determines the proportion of the Reinforcement costs that should be paid by you as detailed below.

$$\text{Fault Level CAF} = 3 \times \frac{\text{Fault Level Contribution from Connection}}{\text{New Fault Level Capacity}} \times 100\% \quad (\text{max } 100\%)$$

[1.271.32](#) For clarity, where you require an augmentation to an existing connection, both the Security and Fault Level CAFs will be based on the increase in Required Capacity and increase in Fault Level Contribution from the connection respectively. Any related increases within the previous three year period will be taken into account in determining the increase in the Required Capacity or increase in the Fault Level Contribution from the connection to be applied within the CAF.

[1.281.33](#) On some Schemes there may be interaction between the two rules. In such cases, the ‘Security’ CAF will be applied to costs that are driven by the security requirement. The ‘Fault Level CAF’ will be applied to costs that are driven by Fault Level requirements. See the Examples for illustrations on the application of the CAFs.

Recovery of costs for previous works

[1.291.34](#) Where, in order to provide your connection;

- we propose to utilise existing Distribution System assets that were previously installed to provide a connection to another Customer, and

- the other Customer has paid us (either in part or in full) a Connection Charge for those assets or paid an ICP for those assets which were adopted by us

you may be required to make a payment towards them. The ECCR prescribes the circumstances where such payment is required. Charges for such works only apply where the new connection is provided within the ECCR Prescribed Period.

Costs to be paid in full by us

~~1.30~~1.35 For Demand Connections we will fully fund all Reinforcement. For Generation Connections ~~W~~we will fully fund Reinforcement carried out at a voltage greater than ~~one voltage level above~~ the voltage ~~at~~ the POC ~~to~~of the existing Distribution System. Exceptions to these approaches are set out elsewhere.

~~1.31~~1.36 ~~1.30A~~—We will fully fund Reinforcement carried out to allow the installation of all equipment at an existing premises which remain connected via an existing low-voltage single, two or three phase service fused at 100 amperes or less per phase which is metered with whole-current metering; provided that (to the extent relevant):

- the Reinforcement is carried out to allow the installation of equipment as part of a single application for a single or multiple installations;
- any and all electricity generation equipment installed has a rated output not greater than 16 amperes per phase (or not greater than 16 amperes per phase at any single premises if a single application for multiple installations);
- any and all equipment installed which does not constitute a modification to the existing service conforms with the technical requirements of the following standards (notwithstanding that the equipment may have an input current that is more than 16 amperes per phase):
 - BS EN 61000-3-2 Electromagnetic compatibility (EMC). Limits. Limits for harmonic current emissions (equipment input current \leq 16 A per phase); and
 - BS EN 61000-3-3 Electromagnetic compatibility (EMC). Limits. Limitation of voltage changes, voltage fluctuations and flicker in

public low-voltage supply systems, for equipment with rated current \leq 16 A per phase and not subject to conditional connection

~~1.321.37~~ ~~1.30B~~—Where it is necessary to modify a low-voltage single phase looped service for an existing premises, this shall be considered to have remained connected under Paragraph 1.3~~60A~~ above.

~~1.331.38~~ Where another LDNO with a distribution network that is connected to our Distribution System requires an increase in capacity to its distribution network, the voltage at the POC for assessing the ~~one~~-voltage rule will be:

- In the case of a new extension to the network of the other LDNO, the voltage of connection at which the Extension Assets will connect to the other LDNO's network; or
- In the case of additional capacity required in respect of a Customer connected to the existing assets of the LDNO, the voltage at which the Customer connects to the LDNO's network; or
- In the case of additional capacity required to meet general load growth on the LDNO's network then the Reinforcement costs will be borne by us. The LDNO will be required to provide justification in such circumstances.

~~1.341.39~~ The tables below illustrates the application of the ~~one~~-voltage rules in relation to Reinforcement: for Demand Connections and Generation Connections. For Generation Connections, ~~Y~~you will be required to contribute towards the cost of any Reinforcement provided at ~~one~~the voltage level~~Voltage Level above~~of the POC, up to and including the cost of circuit breakers provided at that voltage.

England and Wales

<u>Demand Connections</u>				
	Voltage at the POC			
Voltage of Scheme Assets	LV (<u>at or below</u> 1000V)	HV (above 1kV but <u>lessnot more than</u> 22kV)	EHV (above 22kV but <u>lessnot more than</u> 72kV)	132kV
132kV Network	We fund	We fund ⁺	<u>ApportionedWe e fund</u>	<u>ApportionedWe e fund</u>
132kV/ EHV Substation	We fund	<u>EHV circuit breakers only</u> <u>ApportionedWe fund</u>	<u>ApportionedWe e fund</u>	Not applicable
EHV Network	We fund	<u>ApportionedWe fund</u>	<u>ApportionedWe e fund</u>	Not applicable
132kV/ HV Substation	<u>HV circuit breakers only</u> <u>ApportionedWe e fund</u>	<u>ApportionedWe fund</u>	Not applicable	Not applicable
EHV/HV Substation	<u>HV circuit breakers only</u> <u>ApportionedWe e fund</u>	<u>ApportionedWe fund</u>	Not applicable	Not applicable
<u>HV Network</u> <u>EHV/LV substation</u>	<u>ApportionedWe e fund</u>	<u>ApportionedNo t applicable</u>	Not applicable	Not applicable
<u>HV Network</u>	<u>We fund</u>	<u>We fund</u>	<u>Not applicable</u>	<u>Not applicable</u>
HV/ LV Substation	<u>ApportionedWe e fund</u>	Not applicable	Not applicable	Not applicable

LV Network	<u>Appportioned We fund</u>	Not applicable	Not applicable	Not applicable
-------------------	-----------------------------	----------------	----------------	----------------

⁺ _____ Except where there is direct transformation from 132kV to HV when the costs are apportioned. NB: The above table may not accommodate every possible circumstance, where this is the case, the Voltage Level rule, as defined in the Glossary, shall be applied.

Add new table

<u>Generation Connections</u>				
	<u>Voltage at the POC</u>			
<u>Voltage of Scheme Assets</u>	<u>LV (at or below 1000V)</u>	<u>HV (above 1kV but not more than 22kV)</u>	<u>EHV (above 22kV but not more than 72kV)</u>	<u>132kV</u>
<u>132kV Network</u>	<u>We fund</u>	<u>We fund⁺</u>	<u>We fund</u>	<u>Apportioned</u>
<u>132kV/ EHV Substation</u>	<u>We fund</u>	<u>We fund</u>	<u>EHV circuit breakers only Apportioned</u>	<u>Not applicable</u>
<u>EHV Network</u>	<u>We fund</u>	<u>We fund</u>	<u>Apportioned</u>	<u>Not applicable</u>
<u>132kV/ HV Substation</u>	<u>We fund</u>	<u>HV circuit breakers only Apportioned</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>EHV/HV Substation</u>	<u>We fund</u>	<u>HV circuit breakers only Apportioned</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>EHV/LV Substation</u>	<u>LV board only Apportioned</u>	<u>Not applicable</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>HV Network</u>	<u>We fund</u>	<u>Apportioned</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>HV/ LV Substation</u>	<u>LV board only Apportioned</u>	<u>Not applicable</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>LV Network</u>	<u>Apportioned</u>	<u>Not applicable</u>	<u>Not applicable</u>	<u>Not applicable</u>

Except where there is direct transformation from 132kV to HV when the costs are apportioned. NB: The above table may not accommodate every possible circumstance, where this is the case, the Voltage Level rule, as defined in the Glossary, shall be applied.

Scotland

<u>Demand Connections</u>			
	<u>Voltage at the POC</u>		
<u>Voltage of Scheme Assets</u>	<u>LV</u> (below 1000V), <u>LV</u> (at or below 1000V)	<u>HV</u> (above 1kV but less than 22kV), <u>HV</u> (above 1kV but not more than 22kV)	<u>EHV</u> (above 22kV but less than 72kV), <u>EHV</u> (above 22kV but not more than 72kV)
<u>EHV Network</u>	We fund	We fund Apportioned	We fund Apportioned
<u>EHV/HV Substation</u>	We fund HV circuit breakers only Apportioned	We fund Apportioned	Not applicable
<u>EHV/LV substation</u>	We fund	Not applicable	Not applicable
<u>HV Network</u>	We fund Apportioned	We fund Apportioned	Not applicable
<u>HV/ LV Substation</u>	We fund Apportioned	Not applicable	Not applicable
<u>LV Network</u>	We fund Apportioned	Not applicable	Not applicable

NB: The above table may not accommodate every possible circumstance, where this is the case, the Voltage Level rule, as defined in the Glossary, shall be applied.

Add new table

<u>Generation Connections</u>			
	<u>Voltage at the POC</u>		
<u>Voltage of Scheme Assets</u>	<u>LV</u> <u>(at or below 1000V)</u>	<u>HV</u> <u>(above 1kV but not more than 22kV)</u>	<u>EHV</u> <u>(above 22kV but not more than 72kV)</u>
<u>EHV Network</u>	<u>We fund</u>	<u>We fund</u>	<u>Apportioned</u>
<u>EHV/HV Substation</u>	<u>We fund</u>	<u>HV circuit breakers only Apportioned</u>	<u>Not applicable</u>
<u>EHV/LV Substation</u>	<u>LV board only Apportioned</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>HV Network</u>	<u>We fund</u>	<u>Apportioned</u>	<u>Not applicable</u>
<u>HV/ LV Substation</u>	<u>LV board only Apportioned</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>LV Network</u>	<u>Apportioned</u>	<u>Not applicable</u>	<u>Not applicable</u>

NB: The above table may not accommodate every possible circumstance, where this is the case, the Voltage Level rule, as defined in the Glossary, shall be applied.

Amend the following Paragraphs

Additional Cost Allocation for Flexible Connections

1.4032A To facilitate a Flexible Connection, we may need to install and maintain specific system management equipment, either or both at your Premises and further upstream in other parts of the Distribution System. Some of the costs associated with installing, operating and maintaining the system management equipment will be directly attributed to your connection and be included as part of your Connection Charge (see illustrative table in paragraph 1.32B). The proportion of the costs which you must fund depends on whether your connection forms part of a Dedicated Scheme or a Wide Area Scheme, as described below:

Type 1 – Dedicated Scheme: A scheme managing constraint(s) where there are no Customers downstream of the constraint(s) who could connect new or additional demand or generation without being controlled by the Dedicated Scheme:

- Type ‘1A’ considers a scenario involving only one customer; and
- Type ‘1B’ considers a scenario involving multiple customers.

Type 2 – Wide Area Scheme: A scheme managing constraint(s) where there are Customers downstream of the constraint(s) who could connect new or additional demand or generation without being controlled by the Wide Area Scheme.

~~1.35~~1.40 1.41:32B The table below illustrates the scheme types and methodology for cost recovery associated with each type of Flexible Connection. The methodology covers Type 1A, Type 1B and Type 2 (as each is described in paragraph 1.32A).

Typical connection components¹	Type 1A - Single	Type 1B - Multiple	Type 2 - Wide Area
Extension Assets for customer	You fund	You fund	You fund
End user control unit for the customer	You fund	You fund	You fund
Local system management unit	You fund	Shared equally between participants	We fund
Scheme management unit	You fund	Shared equally between participants	We fund
Central management unit	N/A	N/A	We fund

¹ We will describe the main connection components within the relevant connection offer, which will also include the funding arrangements for each such connection component (if different to that stated in this illustrative table).

Scheme specific ongoing costs e.g. communications	We fund	We fund	We fund
--	---------	---------	---------

Recovered Equipment and Deferral of Asset Replacement

[1.361.41](#) Normally, you will not receive any credit for the value of any equipment recovered by us as a result of the connection. However, where a Temporary Connection is to be Disconnected, we will determine the value of recovered equipment that we can subsequently reuse (net of depreciation and removal and refurbishment costs). Where there is a net value in the recovered equipment that can be reused, we will pay you the amount of such net value subject to a de minimis level as specified in Section [6].

[1.371.42](#) You will not receive any credit for the value of any deferral of asset renewal expenditure by us.

Rebates

[1.381.43](#) For Distribution System assets where you have paid in full, then you may be entitled to a future rebate of charges should another Customer connect to those assets. These circumstances are detailed in the ECCR.

[1.391.44](#) For Distribution System assets where you have paid in proportion to your Required Capacity, then you are not entitled to a future rebate of charges should another Customer connect to those assets.

[1.401.45](#) Your entitlement to receive payments under the ECCR only applies to connections made within the ECCR Prescribed Period from the first provision of the connection.

[1.411.46](#) These provisions do not apply where your connection was made before 6 April 2017 and we have adopted the assets from an ICP. However, for connections made on or after 6 April 2017, these provisions do apply to assets we have adopted from an ICP (as further described in the ECCR).

Speculative Developments

~~1.42~~1.47 Developments which have one or more of the following characteristics may be considered as speculative:

- their detailed electrical load requirements are not known;
- the development is phased over a period of time and the timing of the phases is unclear;
- the capacity requested caters for future expansion rather than the immediate requirements of (an) end user(s);
- the capacity requested caters for future speculative phases of a development rather than the initial phase(s) of the development; or
- the infrastructure only is being provided, with no connections for end users requested.

~~1.43~~1.48 Where we are asked to provide a connection to a speculative development then the cost of the work including any Reinforcement is charged in full and the CAFs do not apply. Additional charges to reflect ongoing operation, repair and maintenance costs may also be levied.

~~1.44~~1.49 We may, at our sole discretion, allow capacity to be reserved on the infrastructure provided to service the speculative development on the commercial terms agreed between you and us in respect of the development.

Connection Alterations

~~1.45~~1.50 Where you request an alteration to your connection arrangements, including a change in the supply voltage, the costs are charged in full to you. For the avoidance of doubt increases in the Required Capacity are dealt with in accordance with the previous Sections.

National Electricity Transmission System Operator (NETSO) Charges

~~1.46~~1.51 We have an obligation under the CUSC to discuss certain requests for connection or changes in connection with the NETSO. Such requests are typically for large electrical demand or generation projects. Under certain circumstances, as determined by the NETSO, they may apply charges to assess the potential impact on the GB transmission system of a request or the combined effect of a number of requests and these will be included in the Connection Charge, or through a separate mechanism agreed between you and us.

~~1.47~~1.52 Subsequent to such assessment, the NETSO may also require works to be undertaken on the GB Transmission System as a condition of the connection being permitted. In the event of NETSO applying charges for these works, we will reflect these charges in our charges to you.

~~1.48~~1.53 ~~1.44A~~ Should GB Transmission System works be required, NETSO may apply a cancellation charge in the event that your project is cancelled or the capacity of your project reduces. The NETSO also calculates a secured amount in respect of this cancellation charge (being a percentage of the cancellation charge, which reduces at certain trigger points). We may ask you for security in respect of this cancellation charge, but we will not ask you for more than the secured amount calculated by the NETSO.

Land Rights

~~1.49~~1.54 Where Land Rights are required from a third party, the cost of acquiring those rights will be included in either the Connection Charge to you or through a separate mechanism agreed between you and us.

~~1.501.55~~ If the Land Rights that we require cannot be obtained by negotiation, we may, following discussion with you, exercise our powers of compulsory purchase (Section 10 and Schedule 3 of the Act) or apply to the Secretary of State or the Scottish Government in Scotland for a ‘necessary wayleave’ (paragraphs 6-8 of Schedule 4 of the Act). If we do so, the costs that we incur, including those of the Lands Tribunal/ Lands Tribunal for Scotland (which determine issues of compensation) will be charged to you. The Lands Tribunal may award compensation to the landowner and/or anyone who holds an interest in the land and this will be included in the Connection Charge or through a separate mechanism agreed between you and us.

Unmetered Supplies

~~1.511.56~~ For some street lighting and other installations, we may allow items of equipment to be connected to our Distribution System without a meter. This is subject to the equipment having a low and predictable pattern of consumption and meeting the requirements of The Electricity (Unmetered Supply) Regulations 2001.

~~1.521.57~~ Where we agree that a meter is not required the provision of such a connection is dependent on the owner entering into an unmetered Connection Agreement and providing and maintaining an auditable inventory, in a format agreed with us, so that an accurate estimate of the consumption can be produced.

~~1.531.58~~ Where certain criteria are met the provision of services for unmetered connections may be made via a time-based connection service charge, e.g. Rent-a-Jointer Services. This is subject to us entering into a contract with you for the provision of such services.

~~1.541.59~~ You may elect to appoint an accredited ICP to carry out the Contestable Work for unmetered connections. The ICP will be allowed to carry out live jointing on low voltage₂ underground cables. Where you use an ICP, arrangements must first be established as follows:

- You will enter into an agreement with the ICP to carry out and complete the Contestable Work; and
- We will enter into an agreement and/or an Adoption Agreement with you and/or your appointed ICP as appropriate.

Capacity Ramping for LDNOs

[1.551.60](#) For an LDNO the Required Capacity (expressed in kVA) is the Maximum Capacity to be provided at the boundary between the LDNO's distribution network and our Distribution System. This value will be agreed with us and stated in the Bilateral Connection Agreement for the relevant embedded network.

[1.561.61](#) When a connection is provided to an LDNO the take-up of capacity may grow over a period of time as the site develops and individual customers are connected. In such circumstances the Bilateral Connection Agreement shall include a phased Required Capacity based on the Development Phase.

[1.571.62](#) During the Development Phase a review may be undertaken annually on the anniversary of the Energisation of the embedded network. Any unused capacity identified in such review may be released for use by other customers and the Maximum Capacity reduced to an agreed level within the Bilateral Connection Agreement.

[1.581.63](#) The Required Capacity agreed with us as being required at the end of the Development Phase shall be used to determine the Required Capacity for determination of the Cost Apportionment Factors where applicable.

[1.591.64](#) Should additional capacity subsequently be required, the LDNO may incur additional Connection Charges for any Reinforcement based on the increase in capacity.

Disconnection and De-Energisation

[1.601.65](#) If we either Disconnect or De-energise your Entry/ Exit Point

- at the request of your Supplier; or
- due to a failure of your Supplier to comply with the terms of the DCUSA

then the cost of such disconnection or De-energisation will be borne by your Supplier.

[1.611.66](#) If we either Disconnect or De-energise your Entry/ Exit Point

- at your request; or

- due to a failure by you to comply with the terms of your Connection Agreement, then the cost of such disconnection or De-energisation will be borne by you.

~~1.621.67~~ On termination of your Connection Agreement, we retain the right to remove our Electrical Plant and Electric Lines and charge you if we do so. Apparatus which is not cost effective for us to recover (e.g. Electric Lines laid underground) will normally be made safe and left at the Premises, but if you require us to remove them, the cost of removal will be payable by you. All such apparatus will remain our property unless otherwise agreed in writing.

Adoption Payments

~~1.631.68~~ Where we adopt assets installed by an ICP we will not make any adoption payment in respect of those assets.

Competition in Connections

~~1.641.69~~ Where you choose to have any Contestable Work undertaken by an ICP, we levy CIC Charges associated with the design approval, inspection and adoption of the Contestable Works as set out in Section [6] and Section [7].

Add new definitions for Demand Connection, Electricity Storage, Electricity Generation, Generation Connection and Voltage Level.

Amend varies references to align with suggested new numbering

Section 2 – Glossary of Terms

Act	the Electricity Act 1989 (as amended)
Adoption Agreement	<p>is an agreement for us to adopt the Contestable Work, subject to the satisfaction of certain conditions. This agreement, amongst other things, addresses a number of fundamental principles:</p> <ul style="list-style-type: none">• The transfer of title from the asset owner (normally the• Customer or the ICP) to us;• The quality and safety of the adopted asset;• Any required sureties;• The transfer of Land Rights;• The procedure for us to Energise the assets installed by the ICP during the works;• The payment of any residual Connection Charges or fees;• Planning permissions and compliance with street• works legislation; and• Defect correction processes, where applicable. <p>The parties to the Adoption Agreement may vary depending on the circumstances and may be between:-</p> <ul style="list-style-type: none">• us and you• us and your appointed ICP• us, you and your appointed ICP

<p>Bilateral Connection Agreement</p>	<p>an agreement between us and another LDNO setting out the terms and conditions under which an embedded network shall be entitled to be and remain connected to the Distribution System</p>
<p>Business Day</p>	<p>any day other than a Saturday, a Sunday, Christmas Day, Good Friday or a day which is a bank holiday within the meaning of the Banking and Financial Dealings Act 1971 and will be from 9:00am to 5:00pm (GMT or BST as applicable).</p>
<p>CIC Charges</p>	<p>are the charges detailed in parts D, E, G, H, I, and J of Section [7] of this document.</p>
<p>Connection Agreement</p>	<p>The owner/ occupier of the Premises to which the connection is to be provided will be required to enter into a Connection Agreement with us. The Connection Agreement will set out the terms upon which they will be, and remain, connected to our Distribution System. The Connection Agreement will normally be provided on our behalf by the owner/occupier's chosen Supplier for the Premises as part of their application for a supply of electricity.</p> <p>However, in some cases for larger connections, or where non-standard conditions exist, we will provide a site-specific Connection Agreement, which replaces any Connection Agreement put in place via the Supplier, as part of the connection process. This particular Connection Agreement will only take effect upon completion of the connection and will set out, in more detail, our rights and obligations to one another. Additionally, it may contain the technical detail of the installation being connected to the Distribution System and will require the owner/occupier of the Premises to comply with the provisions of the Distribution Code.</p>

Connection Charge	the payment to be made by the applicant to us for the provision of the connection.
CUSC	the Connection and Use of System Code which constitutes the contractual framework for connection to, and use of, the GB Transmission System.
Customer	the person requesting the connection.
DCUSA	the Distribution Connection and Use of System Agreement designated as such by the Authority under condition 22 of the Licence
Dedicated Scheme	Is defined in paragraph 1.32A.
De-energise	to deliberately prevent the flow of electricity to or from an Exit/ Entry Point for any purpose other than a system outage on the our Distribution System (and cognate expressions shall be construed accordingly).
<u>Demand Connection</u>	Means...[three alternate drafting's have been proposed within the Consultation. The final definition will reside here].
Development Phase	the five year period, unless otherwise agreed with us, commencing on the date of Energisation of an embedded network during which period the development is to be constructed.
Disconnect	means to permanently De-energise an Exit/ Entry Point by the removal of all or part of our equipment (and cognate expressions shall be construed accordingly).
Distributed Generation Connections Guide	The guide produced by us as required by our Licence which provides guidance on the connection process for distributed generation.
Distribution Code	covers, amongst other matters, all material technical aspects

	<p>relating to:</p> <ul style="list-style-type: none"> • connection to, and the operation and use of a LDNO's Distribution System; and • the operation of electrical lines and electrical plant or apparatus connected to an LDNO's Distribution System. <p>A copy of the Distribution Code can be downloaded from the Distribution Code website at www.dcode.org.uk.</p>
Distribution System	the system (as defined in the Licence) consisting (wholly or mainly) of electric lines owned or operated by us and used for the distribution of electricity.
ECCR	the Electricity (Connection Charges) Regulations 2002 (SI 2002/93) as amended from time to time or the Electricity (Connection Charges) Regulations 2017 (SI 2017/106) as amended from time to time, as applicable.
ECCR Prescribed Period	the relevant period from the date on which a connection is made as prescribed by the ECCR, being either (a) five years, for connections made prior to 6 April 2017; or (b) ten years, for connections made on or after 6 April 2017.
EHV	more than 22kV but not more than 72kV
Electric Lines	<p>means any line which is used for carrying electricity to or from an Exit/ Entry Point and includes, unless the context otherwise requires:</p> <ul style="list-style-type: none"> (a) any support for such line, that is to say, any structure, pole or other thing in, on, by or from which any such line is or may be supported, carried or suspended; (b) any apparatus connected to such line for the purpose of carrying electricity; and

	(c) any wire, cable, tube, pipe or other similar thing (including its casing or coating) which surrounds or supports, or is surrounded or supported by, or is installed in close proximity to, or is supported, carried or suspended in association with, any such line.
Electric Plant	means any plant, equipment, apparatus or appliance used for or for purposes connected with the distribution of electricity (including any metering equipment) other than an Electric Line.
<u>Electricity Storage</u>	<u>Electricity Storage 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.</u>
<u>Electricity Generation</u>	<u>is the process of generating electricity.</u>
Energise	to deliberately allow the flow of electricity to or from an Exit/ Entry Point where such a flow of electricity has never previously existed (and cognate expressions shall be construed accordingly).
Enhanced Scheme	is defined in paragraph 1.4-1.4 .
Entry/ Exit Point	A point at which electricity, whether metered or unmetered, enter or exit our Distribution System.
Existing Capacity	is defined in paragraph 1.29-1.29 .
Extension Assets	are assets installed to connect a party or parties to the existing distribution network but which exclude Reinforcement assets.
Fault Level	the maximum prospective current or power that will flow into a short circuit at a point on the network, usually expressed in MVA or kA.

Fault Level Contribution from Connection	is defined in paragraph 1.29-1.29 .
Flexible Connections	are connection arrangements whereby a Customer's export or import of electricity is managed (often through real-time control) based upon contracted and agreed principles of available capacity. Flexible Connections typically allow quicker and cheaper connection to the Distribution System but are made on the basis that there is no limit on the extent to which a user's access can be interrupted.
GB Transmission System	the system consisting (wholly or mainly) of high voltage electric wires owned or operated by transmission licensees within Great Britain.
<u>Generation Connection</u>	Means...[three alternate drafting's have been proposed within the Consultation. The final definition will reside here].
Guaranteed Standards of Performance	standards of service backed by a guarantee and set out in the Electricity (Standards of Performance) Regulations 2015-2005 (as amended) .
HV	more than 1kV but not more than 22kV
Independent Connections Provider (ICP)	a person with sufficient accreditation to carry out all or part of the Contestable Work.
Interruptions Incentive Scheme	the scheme which provides incentives on us to deliver a good level of performance in respect of customer interruptions and customer minutes lost.
Land Rights	all such rights in, under or over Land as are necessary for the construction, installation, operation, repair, maintenance, renewal or use of the Contestable Work or Non-Contestable Work.
Licensed Distribution Network Operator (LDNO)	the holder of a Licence to distribute electricity.

LV	not more than 1kV
Maximum Capacity	means in relation to any connection the maximum amount of electricity, as agreed with us and expressed in kW or kVA, that can be imported from or exported onto our Distribution System.
Meter Point Administration Number (MPAN)	is a 21 digit reference to uniquely identify Exit/ Entry Point, such as individual domestic residences.
Minimum Scheme	is defined in paragraphs 1.1-1.1 to 1.71.7 .
New Fault Level Capacity	is defined in paragraph 1.29-1.29 .
New Network Capacity	is defined in paragraph 1.29-1.29 .
NETSO	means the national electricity transmission system operator for Great Britain from time to time
Point of Connection (POC)	is the point (or points) of physical connection to our existing Distribution System.
Premises	means any land, building or structure
Reinforcement	is defined in paragraphs 1.171.17 to 1.27-1.21 .
Relevant Section of Network	is defined in paragraph 1.29-1.29 .
Rent-a-Jointer Services	the service relating to hiring of resource from us to facilitate the provision of unmetered connections.
Required Capacity	is defined in paragraph 1.29-1.29 .
Scheme	our network design to provide the connection.
Speculative Developments	is defined in paragraph 1.46-1.47 .
Supplier	a person who holds a Supply Licence.

Supply Licence	a licence granted under section 6(1)(d) of the Act.
Supply Number	a unique identifier of those Entry/ Exit Points on the Distribution System which are used for the purposes of either taking a supply of electricity or for the connection of a distributed generator, and which forms the basis of the metering point record on the Company's registration system.
Temporary Connections	is defined in paragraph 1.23 -1.23.
Validity Period	The period for which a connection Offer or POC Offer is open for acceptance.
Voltage of Connection	is the voltage at the POC between the existing distribution network and the assets used to provide the connection. For clarity, this is not necessarily the voltage of supply to the Customer
<u>Voltage Level</u>	A Voltage Level is deemed to be the voltage at the transforming point between two points on the Distribution System that is directly associated with the Customer's connection. The higher voltage is deemed to be one Voltage Level above the POC.
Wide Area Scheme	is defined in paragraph 1.32A.
Working Day	Any day other than a Saturday, a Sunday, Christmas Day, Good Friday or a day which is a bank holiday within the meaning of the Banking and Financial Dealings Act 1971.