




Part A: Generic

DCUSA Change Proposal (DCP)		At what stage is this document in the process?
<h1>DCP 305:</h1> <h2>LDNO Boundary Level Definitions in the EDCM</h2> <p>Date Raised: 12th July 2017</p> <p>Proposer Name: Andrew Enzor</p> <p>Company Name: Northern Powergrid</p> <p>Company Category: DNO</p>		<div>01 – Change Proposal</div> <div>02 – Consultation</div> <div>03 – Change Report</div> <div>04 – Change Declaration</div>
<p>The intent of this change proposal is to amend the definitions and application of DNO/LDNO boundaries under the EDCM to avoid instances of double- and/or non-charging for certain assets.</p>		
	<p>Governance:</p> <p>The Proposer recommends that this Change Proposal should be:</p> <ul style="list-style-type: none"> • Treated as a Part 1 Matter • Treated as an Urgent Change • Proceed to Working Group <p>The Panel will consider the proposer's recommendation and determine the appropriate route.</p>	
	<p>Impacted Parties: Predominantly DNOs and LDNOs; minor impact on suppliers from revenue matching to correct any DNO revenue surplus/shortfall generated.</p>	
	<p>Impacted Clauses: Schedules 17 and 18, sections 24, 25 and 26</p>	

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 Any questions?

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Indicative Timeline

The Secretariat recommends the following timetable:

Initial Assessment Report	19 July 2017
Consultation Issued to Industry Participants	TBC
Change Report Approved by Panel	20 September 2017
Change Report issued for Voting	22 September 2017
Party Voting Closes	13 October 2017
Change Declaration Issued to Authority	17 October 2017
Authority Decision	21 November 2017

1 Summary

What?

This change proposal seeks to resolve a defect identified in the Extra-high-voltage (EHV) Distribution Charging Methodology (EDCM) whereby designated EHV properties connected to Licenced Distribution Network Operator (LDNO) networks (i.e. networks operated by either an Independent Distribution Network Operator (IDNO) or a Distribution Network Operator (DNO) operating out of area) will have the potential to be double charged for the use of certain DNO network assets; and designated high-voltage (HV) or low-voltage (LV) properties will have the potential to not be charged at all for the use of certain DNO network assets.

Why?

The definition of the DNO to LDNO boundary under the EDCM has the following defects:

1. In respect of embedded LDNO networks with several connectees, including at least one connectee which is a designated EHV property, the current definition leads to the DNO calculating a boundary equivalent tariff for the designated EHV property having applied the

customer category at the DNO/LDNO boundary. This results in double-charging for any DNO assets that are for the sole use of the LDNO network, since the LDNO would pay fixed charges in respect of these assets, and then through the boundary category pay again for these DNO network levels as if they were shared assets.

However, for an LDNO network with a single connectee which is a designated EHV property, the current definition leads to the DNO calculating a boundary equivalent tariff for the designated EHV property having applied the customer category for the LDNO network (i.e. the point on the DNO network where the power flow associated with the LDNO network interacts with the power flows associated with other DNO connectees). This results in the DNO applying the customer category at the point where assets for the sole use of the LDNO network meet the remainder of the DNO network, and so only charging fixed charges in respect of assets for the sole use of the LDNO network.

2. In respect of embedded LDNO networks with a single customer which is a designated HV or designated LV property, the current definition leads to the DNO applying the boundary at the point of common coupling for the LDNO network. This results in the DNO charges recovering nothing in respect of assets that are for the sole use of the LDNO network.

More detail, including a worked example of each issue, is included in section 3 – ‘Why Change’.

How?

The proposed solution is to introduce separate definitions for the LDNO boundary level for the purposes of section 25 and section 26 of the EDCM. Both definitions would operate in the same way irrespective of the number of customers on the LDNO network.

For section 25 (which relates to LDNO tariffs for designated LV and designated HV properties where the LDNO network would itself qualify as a designated EHV property) the boundary level would be defined by reference to the DNO/LDNO asset boundary. The section 25 LDNO boundary classification would take the same five values as now (0000, 132kV, 132kV/EHV, EHV and HV plus). This would ensure that all DNO network levels used are charged for, irrespective of whether they would be classified as sole use under a power flow analysis or not.

For section 26 (which relates to LDNO tariffs for designated EHV properties) the customer category would be determined by reference to the same criteria as for DNO end users, using the LDNO network point of common coupling defined as the point on the DNO network where the power flow associated with generation and load on that LDNO network may interact with the power flows associated with other customers. The section 26 LDNO boundary classification would take the same 15 four-digit code values as now. This would ensure consistency with the sole use asset definition at paragraph 26.7, so that DNO assets would be charged for once and only once, either as sole use assets or shared assets through the customer category.

2 Governance

Justification for Part 1 and Part 2 Matter

This change proposal is considered a Part 1 matter as it has a material impact on DNO charging methodologies and on the resulting charges.

Requested Next Steps

This Change Proposal should:

- Be treated as a Part 1 Matter
- Be treated as an Urgent Change
- Proceed to Working Group

Urgency is requested for this change owing to the potentially significant impact on the charges applicable for prospective LDNO customers. Whilst Northern Powergrid does not have any sites to date where either of the issues above is present, prospective future sites will be impacted and so the change should be made as soon as possible. Failure to make the change may cause significant adverse commercial impact on LDNOs operating networks where either of these issues is present, and may cause the host DNO to be in breach of their duties not to distort competition in electricity distribution and not to discriminate unduly.

3 Why Change?

The definition of the DNO to LDNO boundary under the EDCM has the following defects:

1. In respect of embedded LDNO networks with several connectees, including at least one connectee which is a designated EHV property, the current definition (using clauses 24.8 and 26.3) leads to the DNO calculating a boundary equivalent tariff for the designated EHV property having applied the customer category at the DNO/LDNO boundary.
 - Clause 24.8: “IDNO Party Distribution Systems are split into 15 categories based on the network level of the boundary between the host DNO Party and the IDNO Party, and whether or not higher network levels are used by the IDNO Party.”
 - Clause 26.3: “For the purposes of calculating the boundary-equivalent portfolio EDCM tariffs, each EDCM Connectee on the IDNO Party’s network would be assigned the demand Connectee category relating to the 15 IDNO Party boundary categories.”

This may result in double-charging for any DNO assets that are for the sole use of the LDNO network, since the LDNO would pay fixed charges in respect of these assets, and then through the boundary category pay again for these DNO network levels as if they were shared assets.

However, for an LDNO network with a single connectee which is a designated EHV property, the current definition (using clause 24.6) leads to the DNO calculating a boundary equivalent tariff for the designated EHV property having applied the customer category for the LDNO network (i.e. the point on the DNO network where the power flow associated with the LDNO network interacts with the power flows associated with other DNO connectees).

- Clause 24.6: “Where the IDNO Party’s Distribution System only has one Connectee (whether a designated EHV property or not), the network level of the boundary between the host DNO Party and IDNO Party is determined by reference to the Point of Common Coupling. The Point of Common Coupling is determined in the same way as it is for an EDCM Connectee connected directly to the host DNO Party’s network.”

This results in the DNO applying the customer category at the point where assets for the sole use of the LDNO network meet the remainder of the DNO network, and so only charging fixed charges in respect of assets for the sole use of the LDNO network.

For example, consider an LDNO taking a supply from a dedicated DNO 132kV cable from a GSP (i.e. where the DNO 132kV cable is for the sole use of the LDNO network) and supplying one customer which is a designated EHV property through its embedded system, as shown in Figure 1.

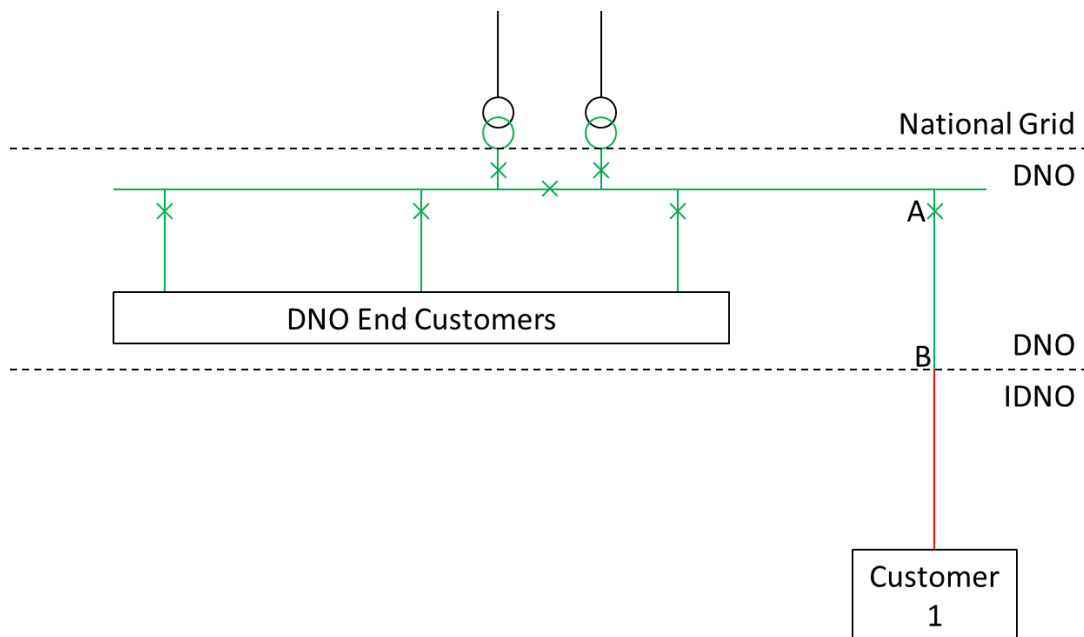


Figure 1 - LDNO Network with one Designated EHV Property only

When calculating a boundary equivalent tariff, the DNO would assign the customer category 'by reference to the Point of Common Coupling' (clause 24.6) marked as point 'A' in Figure 1, i.e. 0000 – 'Point of Common Coupling at the GSP, whether the GSP is shared or not', and so the customer would be charged for the DNO 132kV cable from point 'A' to point 'B' as a sole use asset only.

Now consider another customer which is a designated EHV property (or indeed any other connectee) connecting to that LDNO network, as shown in Figure 2.

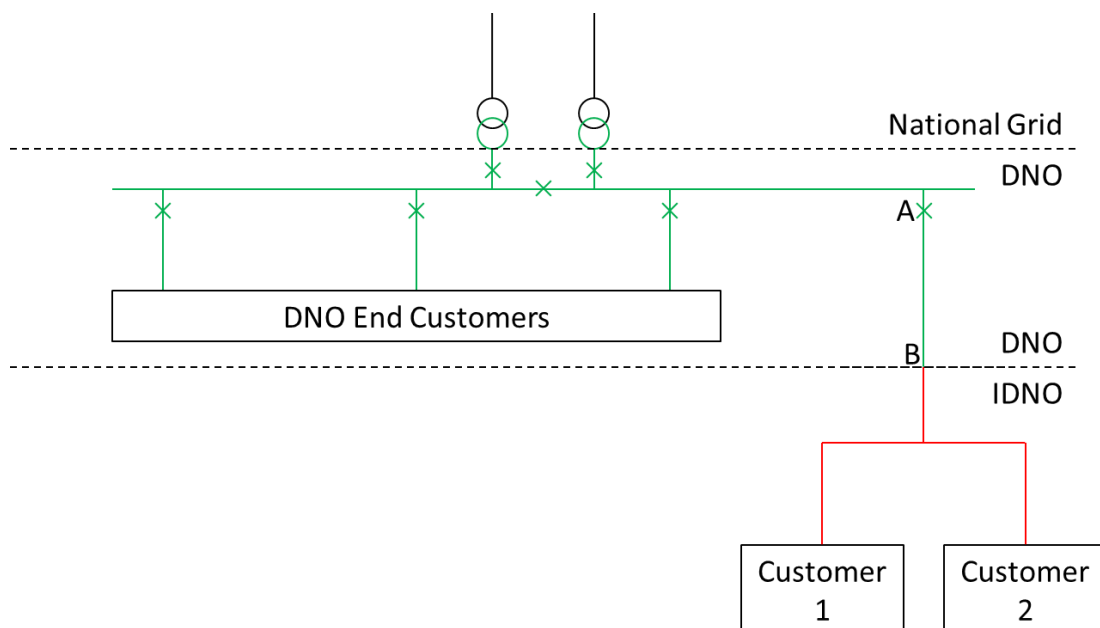


Figure 2 - LDNO Network with two Designated EHV Properties

When calculating boundary equivalent tariffs the DNO would assign both customers category 'the demand Connectee category relating to the 15 IDNO Party boundary categories' (clause 26.3) which are 'based on the network level of the boundary between the host DNO Party and the IDNO Party' (clause 24.8) marked as point 'B' in Figure 2, i.e. 1000 – 'In England or Wales only, Point of Common Coupling at a voltage of 132 kV, unless the Connectee qualifies for category 0000', and so the customer would be charged for the DNO 132kV cable from point 'A' to point 'B' as both a sole use asset and a shared asset.

2. In respect of embedded LDNO systems with a single customer which is a designated HV or designated LV property, the current definition (using clause 24.6) leads to the DNO applying the boundary at the point of common coupling for the LDNO network. This results in the DNO charges recovering nothing in respect of assets that are for the sole use of the LDNO network.

For example, consider an LDNO taking a supply from a dedicated DNO 132kV/11kV substation fed directly from a GSP and supplying a single HV network customer, as shown in Figure 3.

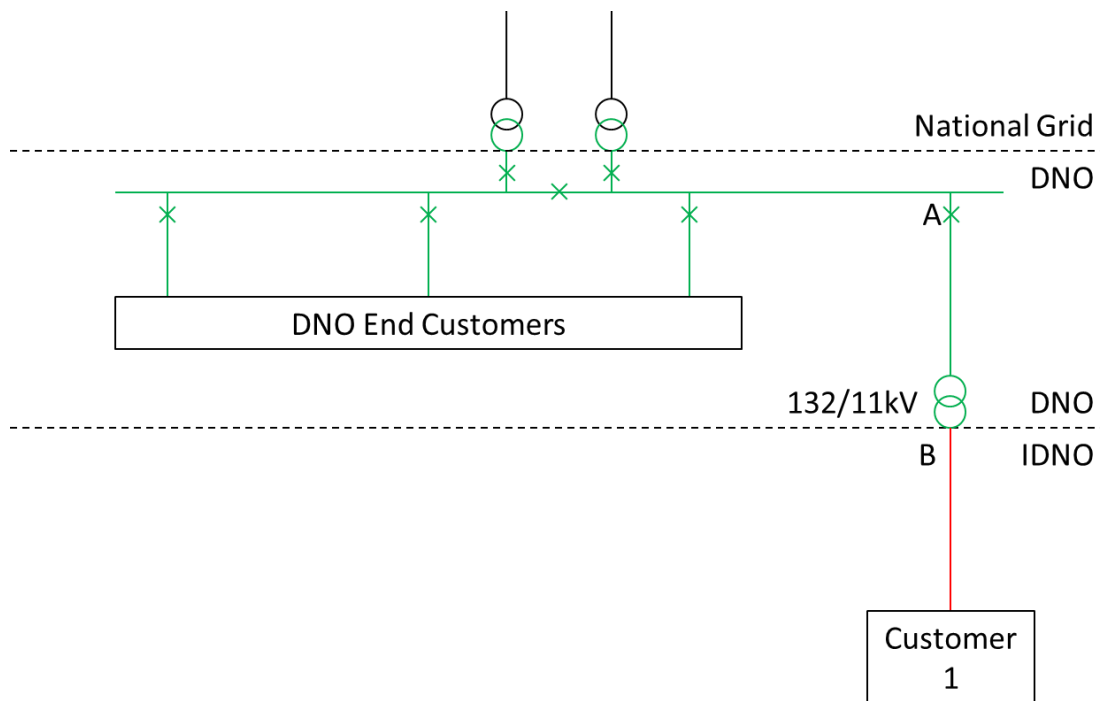


Figure 3 - LDNO Network with one Designated HV Property only

When determining which tariff to apply, the DNO would assign the customer category 'by reference to the Point of Common Coupling' (clause 24.6) marked as point 'A' in Figure 3, i.e. 0000 – 'Point of Common Coupling at the GSP, whether the GSP is shared or not', so this customer would be assigned the 'LDNO 0000: HV HH Metered' tariff. This results in the customer not being charged at all for use of assets between points 'A' and 'B' (the DNO's 132kV circuits and the DNO's 132kV/11kV substation).

Now consider another HV network customer (or indeed any other connectee) connecting to the LDNO network, as shown in Figure 4.

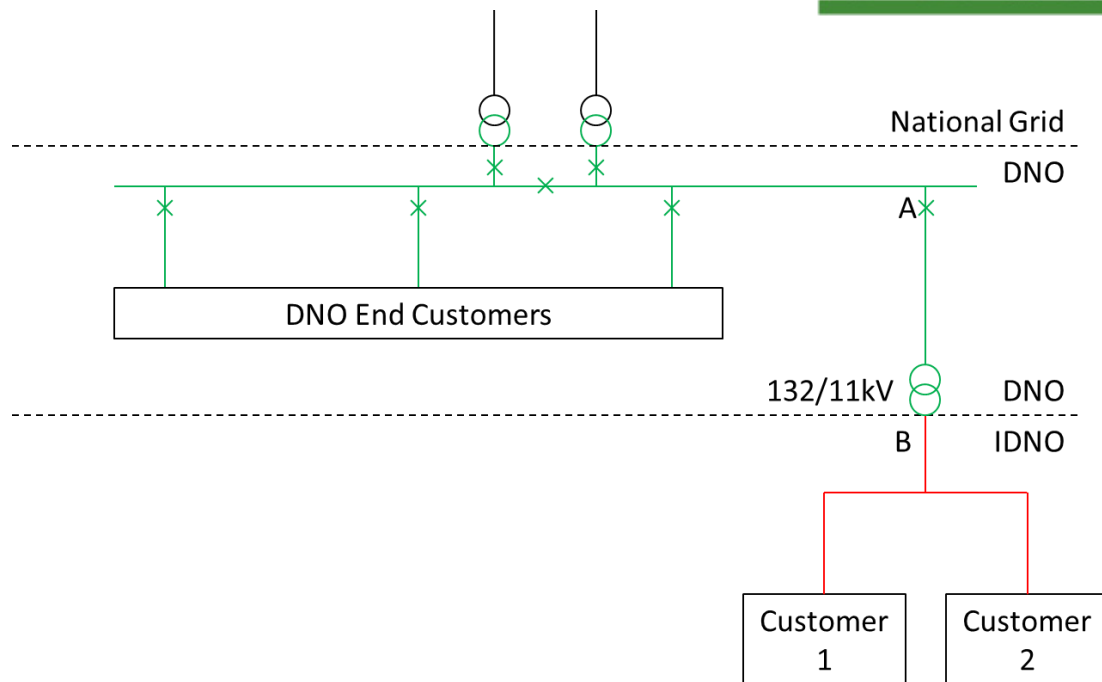


Figure 4 - LDNO Network with two Designated HV Properties

Clause 24.6 would no longer apply and so the DNO would assign both customers the category based on the DNO/LDNO boundary, marked as point 'B' Figure 4, i.e. 1001 – 'Point of Common Coupling at a voltage of less than 22 kV on the secondary side of a substation whose primary side is attached to a 132kV distribution circuit'. So both customers would be assigned the 'LDNO HVplus: HV HH Metered' tariff and would be charged for the assets between points 'A' and 'B'.

Part B: Code Specific Details

4 Solution and Legal Text

The solution is to amend schedules 17 and 18, sections 24, 25 and 26.

Legal Text

Proposed redlined legal text is included as an attachment. This is based on version 9.1 of schedule 18. This proposed legal text will be impacted by the implementation of DCP 234 (Merging the PCDM and extended PCDM) in April 2018; and would also interact with DCP 251 and 252 if approved, most notably with regard to the introduction of the term Qualifying Network Operator (QNO).

5 Code Specific Matters

Reference Documents

n/a

6 Relevant Objectives

DCUSA Charging Objectives	Identified impact
<input type="checkbox"/> 1 that compliance by each DNO Party with the Charging Methodologies facilitates the discharge by the DNO Party of the obligations imposed on it under the Act and by its Distribution Licence	Positive
<input type="checkbox"/> 2 that compliance by each DNO Party with the Charging Methodologies facilitates competition in the generation and supply of electricity and will not restrict, distort, or prevent competition in the transmission or distribution of electricity or in participation in the operation of an Interconnector (as defined in the Distribution Licences)	Positive
<input type="checkbox"/> 3 that compliance by each DNO Party with the Charging Methodologies results in charges which, so far as is reasonably practicable after taking account of implementation costs, reflect the costs incurred, or reasonably expected to be incurred, by the DNO Party in its Distribution Business	Positive
<input type="checkbox"/> 4 that, so far as is consistent with Clauses 3.2.1 to 3.2.3, the Charging Methodologies, so far as is reasonably practicable, properly take account of developments in each DNO Party's Distribution Business	Positive
<input type="checkbox"/> 5 that compliance by each DNO Party with the Charging Methodologies facilitates compliance with the Regulation on Cross-Border Exchange in Electricity and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	None
<input type="checkbox"/> 6 that compliance with the Charging Methodologies promotes efficiency in its own implementation and administration.	Positive

Charging Objective 1: DNOs have a licence obligation to not distort competition in electricity distribution. This would be achieved by removing an undue barrier to growth by LDNO networks that currently arises from the change in customer categorisation that would result from the connection of a second customer. DNOs also have a licence obligation to not discriminate unduly. This would be achieved by removing unjustified differences in treatment between LDNO networks with one customer and LDNO networks with more than one customer.

Charging Objective 2: Implementation of this change would better meet this objective by removing an undue barrier to growth by LDNO networks due to the change in customer categorisation that would result from the connection of a second customer.

Charging Objective 3: Implementation of this change would better meet this objective by preventing instances of DNOs double charging for certain assets, and instances of DNOs not charging at all for certain assets.

Charging Objective 4: Implementation of this change would better meet this objective by recognising the recent development of LDNO networks serving multiple EHV customers.

Charging Objective 6: Implementation of this change would better meet this objective by making the boundary classification for customers connected to LDNO networks under the EDCM methodology simpler, clearer and more logical. Impacts & Other Considerations

7 Impacts & Other Considerations

None

Does this Change Proposal Impact Other Codes?

- | | |
|-----------|--------------------------|
| BSC | <input type="checkbox"/> |
| CUSC | <input type="checkbox"/> |
| Grid Code | <input type="checkbox"/> |
| MRA | <input type="checkbox"/> |
| SEC | <input type="checkbox"/> |
| Other | <input type="checkbox"/> |
| None | <input type="checkbox"/> |

Consideration of Wider Industry Impacts

None

Confidentiality

This change proposal is not confidential

8 Implementation

Urgency is requested for this change owing to the potentially significant impact on the charges applicable for prospective LDNO customers. Whilst Northern Powergrid does not have any sites to date where either of the issues above is present, prospective future sites will be impacted and so the change should be made as soon as possible. Failure to make the change may cause significant adverse commercial impact on LDNOs operating networks where either of these issues is present, and may cause the host DNO to be in breach of their duties not to distort competition in electricity distribution and not to discriminate unduly.

This implementation date will depend on whether other instances of such networks already exist on other DNO networks. The Working Group should establish whether this is the case; if so deviation from the requirement to give 15 months' notice of charges may be required.

Proposed Implementation Date

1st February 2018

9 Recommendations

Part C: Guidance Notes for Completing the Form

Ref	Section	Guidance
1	Attachments	Append any proposed legal text or supporting documentation in order to better support / explain the CP.
2	Governance	<p>A CP must be categorised as a Part 1 or Part 2 matter in accordance with Clause 10.4.7 of the DCUSA. All Part 1 matters require Authority Consent.</p> <p>Part 1 Matter</p> <p>A change Proposal is considered a Part 1 Matter if it satisfies one or more of the following criteria:</p> <ul style="list-style-type: none"> a) it is likely to have a significant impact on the interests of electricity consumers; b) it is likely to have a significant impact on competition in one or more of: <ul style="list-style-type: none"> i. the generation of electricity; ii. the distribution of electricity; iii. the supply of electricity; and iv. any commercial activities connected with the generation, distribution or supply of electricity; c) it is likely to discriminate in its effects between one Party (or class of Parties) and another Party (or class of Parties); <ul style="list-style-type: none"> i. it is directly related to the safety or security of the Distribution Network; and ii. it concerns the governance or the change control arrangements applying to the DCUSA; and iii. it has been raised by the Authority or a DNO/IDNO Party pursuant to Clause 10.2.5, and/or the Authority has made one or more directions in relation to it in accordance with Clause 11.9A. <p>Part 2 Matter</p> <p>A CP is considered a Part 2 Matter if it is proposing to change any actual or potential provisions of the DCUSA which does not satisfy one or more of the criteria set out above.</p>
3	Related Change Proposals	Indicate if the CP is related to or impacts any CP already in the DCUSA or other industry change process.

4	Proposed Solution and Draft Legal Text	<p>Outline the proposed solution for addressing the stated intent of the CP. The Change Proposal Intent will take precedence in the event of any inconsistency. A DCUSA Working Group may develop alternative solutions.</p> <p>The plain English description of the proposed solution should include the changes or additions to existing DCUSA Clauses (including Clause numbers).</p> <p>Insert proposed legal drafting (change marked against any existing DCUSA drafting) which enacts the intent of the solution. The legal text will be reviewed by the Working Group (if convened) and is likely to be subject to legal review as part of its progress through the DCUSA change process.</p>
5	Proposed Implementation Date	<p>The Change can be implemented in February, June, and November of each year or as an extraordinary release. For Charging Methodology CPs, select an implementation date which takes into consideration the minimum notice periods for publishing tariffs. These are:</p> <ul style="list-style-type: none"> • 15 months, for DNOs acting within their Distribution Services Areas; or • 14 months, for IDNOs and DNOs acting outside their Distribution Services Area. <p>Please select an implementation date that provides sufficient time for the Change to be incorporated into the appropriate charging model and the DCUSA in order to be reflected in future tariffs.</p> <p>Contact the DCUSA helpdesk for any further information on the releases dcusa@electralink.co.uk.</p>
6	Impacts & Other Considerations	<p>Indicate whether this Change Proposal will be impacted by or have an impact upon wider industry developments. If an impact is identified, explain why the benefit of the Change Proposal may outweigh the potential impact and indicate the likely duration of the Change.</p>
7	Environmental Impact	<p>Indicate whether it is likely that there would be a material impact on greenhouse gas emissions as a result of the proposed variation being made. Please see Ofgem Guidance.</p>
8	Confidentiality	<p>Clearly indicate if any parts of this Change Proposal Form are to remain confidential to DCUSA Panel (and any subsequent DCUSA Working Group) and Ofgem</p>
9	DCUSA General Objectives	<p>Indicate which of the DCUSA Objectives will be better facilitated by the Change Proposal.</p>
10	Detailed Rationale for DCUSA Objectives	<p>Provide detailed supporting reasons and information (including any initial analysis that supports your views) to demonstrate why the CP will better facilitate each of the DCUSA Objectives identified.</p>

11	DCUSA Charging Objectives	Indicate which of the DCUSA Charging Objectives will be better facilitated by the Change Proposal.
12	Defining 'Material' for Charging Methodology Changes	In respect of proposals to vary one or more of the Charging Methodologies, such proposals shall be deemed to be "material" if they might reasonably be expected to have a significant impact on the tariffs calculated under one or more of the methodologies.