

Proposed variation:	Distribution Connection and Use of System Agreement (DCUSA) DCP305 – LDNO Boundary Level Definitions in the EDCM		
Decision:	The Authority ¹ directs this modification ² be made ³		
Target audience:	DCUSA Panel, Parties to the DCUSA and other interested parties		
Date of publication:	25 May 2018	Implementation date:	Next DCUSA release date

Background

The intent of the change proposal is to amend the definitions and application of DNO/LDNO boundaries under the EDCM to avoid instances of double or non-charging for certain assets.

A defect has been identified in the Extra-high-voltage (EHV) Distribution Charging Methodology⁴ (EDCM) whereby customers connected to Licensed Distribution Network Operator (LDNO) networks have the potential to be charged double or not charged for the use of certain DNO network assets. LDNOs are defined in the Distribution Connection and Use of System Agreement (DCUSA) as – ‘an IDNO Party or DNO Party operating an electricity distribution system outside of its Distribution Services Area’.

Under DCUSA Schedule 18, the DNO is required to set the customer category of each LDNO-connected end customer based on the network level⁵ of the DNO/LDNO boundary, and whether or not higher network levels are used by the LDNO.

There are two potential defects to be addressed. The first is a problem where there is more than one connectee, but not where there is a single connectee, and for the second defect, the opposite is true.

For example, in respect of embedded LDNO networks with several connectees, including at least one connectee where the associated premises is a Designated EHV Property⁶, 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 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, in respect of an embedded LDNO network which is itself a Designated EHV Property, and with a single connectee at either high voltage (HV) or low voltage (LV), the current definition can result in the DNO charges recovering nothing in respect of assets that are for the sole use of the LDNO network. These examples are explained in more detail in Appendix 1.

¹ References to the “Authority”, “Ofgem”, “we” and “our” are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

² ‘Change’ and ‘modification’ are used interchangeably in this document.

³ This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

⁴ https://www.dcuca.co.uk/SitePages/Documents/Publications_EDCM.aspx

⁵ For the purposes of price control disaggregation the network is split into five levels: LV services, LV mains, HV/LV, HV, and a single level covering EHV and 132kV

⁶ The definition of ‘Designated EHV Properties’ as set out in SLC 13B.6 of the electricity distribution licence, serves to identify properties or Distribution Systems that would be subject to the EDCM for the purpose of DUoS charges.

The modification proposal

The proposal was raised by Northern Powergrid on 12 July 2017 to seek to address the issues described above, in advance of the situation arising on its network.

The proposal seeks 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. The proposal sets out the following changes to the EDCM:

- Section 26 (relating 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 be equivalent to the application of the EDCM 'sole use asset' definition (at para 26.7) so that DNO assets would be charged for once, either as sole use assets or shared assets through the customer category.
- Section 25 (relating to LDNO tariffs for properties that are connected to LDNO networks at either HV or LV 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 seeks to 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.

The proposer believes the proposal will better facilitate DCUSA Charging Objectives 1, 2, 3, 4 and 6, and is neutral in relation to Charging Objective 5.

DCUSA Parties' recommendation

In each party category where votes were cast (no votes were cast in the DG party category),⁷ there was unanimous support for the proposal and the implementation date in all categories. In accordance with the weighted vote procedure, the recommendation to the Authority is that DCP305 is accepted. The outcome of the weighted vote is set out in the table below:

DCP305	WEIGHTED VOTING (%)							
	DNO ⁸		IDNO/OTSO ⁹		SUPPLIER		DG ¹⁰	
	Accept	Reject	Accept	Reject	Accept	Reject	Accept	Reject
CHANGE SOLUTION	100%	0	100%	0	100%	0	n/a	n/a
IMPLEMENTATION DATE	100%	0	100%	0	100%	0	n/a	n/a

Impact assessment

The Working Group decided to undertake a Request for Information¹¹ (RFI) to determine whether there were further instances of customers potentially affected by either of the

⁷ There are currently no gas supplier parties.

⁸ Distribution Network Operator

⁹ Independent Distribution Network Operator/Offshore Transmission System Operator

¹⁰ Distributed Generation

two scenarios identified by the Proposer and if so, what approach the relevant DNO had taken when determining the tariffs to be applied.

The Working Group also carried out a consultation to give DCUSA Parties and other interested parties an opportunity to review and comment on the changes proposed under DCP305. There were seven responses to the consultation (one supplier, 5 distributors, including one confidential and one IDNO). All respondents understood the intent of the proposal and agreed that a flaw in the methodology had been identified.

Our decision

We have considered the issues raised by the proposal and the Change Declaration and Change Report dated 19 April 2018. We have considered and taken into account the vote of the DCUSA Parties on the proposal which is attached to the Change Declaration. We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the Applicable Charging Methodology Objectives;¹² and
- directing that the modification be made is consistent with our principal objective and statutory duties.¹³

Reasons for our decision

We have decided to approve this proposal as we agree with the Working Group that it better facilitates Applicable Charging Methodology Objectives 1, 2, 3, 4 and 6 and has a neutral impact on objective 5. We note that no respondents to the Working Group consultation, nor voting parties considered the proposal to have a negative impact on any of the Applicable Charging Objectives.

First Applicable Charging Methodology Objective – that compliance with the Relevant Charging Methodology facilitates the discharge by a Distribution Services Provider¹⁴ of the obligations imposed on it under the Act and by its licence

Three DNO parties which responded to the Working Group consultation agree that this modification better facilitates this charging objective. They note that DNOs have a licence obligation not to distort competition in electricity distribution nor discriminate between any person or class of persons. Respondents considered this would be achieved by removing unjustified differences in treatment between LDNO networks with one customer and LDNO networks with more than one customer. We agree that DCP305 will better facilitate this objective for the reasons set out above.

Second Applicable Charging Methodology Objective – that compliance with the Relevant Charging Methodology facilitates competition in the generation and supply of electricity and will not restrict, distort, or prevent competition in the

¹¹ The RFI was anonymous so that DNOs would feel able to reveal if they were not compliant with DCUSA.

¹² The DCUSA Charging Objectives (Relevant Objectives) are set out in Standard Licence Condition 22A Part B of the Electricity Distribution Licence.

¹³ The Authority's statutory duties are wider than matters that the Parties must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

¹⁴ Distribution Services Provider: 'means any Electricity Distributor in whose Electricity Distribution Licence the requirements of Section B of the standard conditions of that licence have effect (whether in whole or in part).'

transmission or distribution of electricity or in the participation in the operation of an Interconnector

Three DNOs which responded to the WG consultation, consider that 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. One DNO stated that it is less likely the charging methodology would be interpreted in a manner that results in a barrier to competition after this change. We would agree that this objective will be better facilitated by this change and that a more cost-reflective charging methodology will help to not restrict, distort or prevent competition in the distribution of electricity.

Third Applicable Charging Methodology Objective – that compliance with the Relevant Charging Methodology results in charges that, so far as is reasonably practicable after taking account of implementation costs, reflect the costs incurred, or reasonably expected to be incurred, by a Distribution Services Provider in its Distribution Business

Four DNOs and an IDNO which responded to the Working Group consultation consider that 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. Respondents noted that under the proposed changes, the methodology will produce charges that better reflect the costs incurred or expected to be incurred by the DNO with regard to these assets. We agree with this and believe this objective will be better facilitated by this change.

Fourth Applicable Charging Methodology Objective – so far as is consistent with the first three Applicable Charging Methodology Objectives, the Relevant Charging Methodology, so far as is reasonably practicable, properly takes account of developments in a Distribution Services Provider’s Distribution Business

We agree with the Working Group and two DNOs who responded to the Working Group consultation, who considered that implementation of this change would better meet this objective by addressing the issues of potential double charging in LDNO networks serving multiple EHV customers.

Sixth Applicable Charging Methodology Objective - compliance with the Relevant Charging Methodology promotes efficiency in its own implementation and administration

Two DNOs and one IDNO who responded to the Working Group consultation consider that the implementation of this change would better meet this objective by making the boundary classification for customers connected to LDNO networks under the EDCM simpler, clearer and more logical. One DNO considered that this change removes an element of ambiguity in the methodology, which they considered could be the cause of negative outcomes under some interpretations. We agree that this change promotes a clearer and more efficient explanation of how to implement and administer the charging methodology, which should result in fairer and more transparent charging.

Implementation approach

The majority of respondents agreed with the proposed approach of implementing these changes in first DCUSA release following Authority approval. However, one respondent disagreed on the grounds that the usual notice period should apply for charging related changes and therefore the change should be introduced to take effect from April 2020.

The Working Group discussed this view and unanimously agreed that the implementation date should be the next release following Authority decision. They considered that the amendment to the definition in schedule 26 does not impact tariff setting as all DNOs' 2018/19 and 2019/20 charges are compliant with the proposed changes (as one of the DNOs has a derogation in place to enable this to happen). In relation to the amendment to the definition in Schedule 25, they considered that it only changes how the tariffs are applied and, as such, considered that a 15-month lead time for the change is not required.

The Authority issued a [derogation](#) to a DNO relating to Defect 1 in November 2017 in advance of this scenario arising on its network. This derogation will remain in effect until such time as the Authority either rejects DCP305 or, if it approves the change, until the change is implemented. This derogation will now lapse on the implementation date of DCP305 and we consider that there will be no need for other derogation requests to be raised.

Decision notice

In accordance with standard licence condition 22.14 of the Electricity Distribution Licence, the Authority hereby directs that modification proposal DCP305: LDNO Boundary Level Definitions in the EDCM be made.

Chris Brown

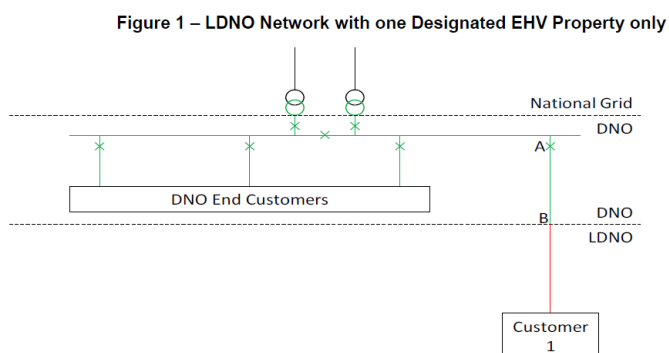
Head of Core and Emerging Policy

Signed on behalf of the Authority and authorised for that purpose

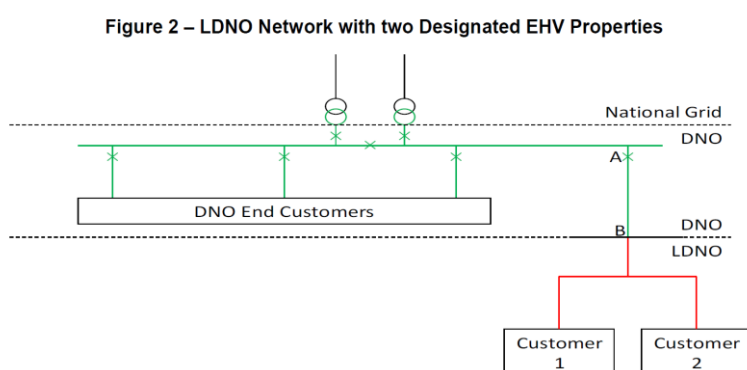
Appendix 1

This section outlines in further detail, the potential scenarios under which double or non-charging for certain assets could take place.

In Figure 1 below, an LDNO is taking a supply from a dedicated (sole use) DNO 132kV cable from a Grid Supply Point (GSP) and supplying one customer through its system. The DNO would calculate the boundary equivalent tariff by assigning the customer category by reference to the Point of Common Coupling (clause 24.6) marked as point A, so the customer would be charged for the DNO 132kV cable from point A to B as a sole use asset.



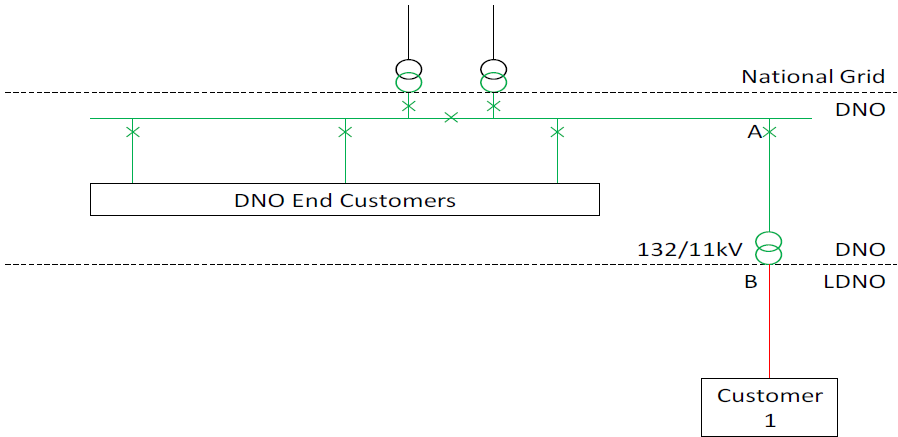
However, if another customer which is a Designated EHV Property (or indeed any other connectee) connects to the LDNO network, as shown in Figure 2 below, the DNO would calculate the boundary equivalent tariff by assigning both customers the 'demand Connectee category relating to the 15 IDNO Party boundary 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 at point B above. This would mean that 'In England or Wales only, Point of Common Coupling at a voltage of 132kV, unless the Connectee qualifies for category 0000'. The customer would therefore be charged for the DNO 132kV cable from point A to point B as both a sole use asset and a shared asset.



In respect of an embedded LDNO network which is itself a Designated EHV Property, and with a single connectee at either high voltage (HV) or low voltage (LV), the current definition (using clause 24.6) leads to the DNO applying the customer-category boundary at the Point of Common Coupling (marked A below) 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.

In the example below (Figure 3), an LDNO taking a supply from a dedicated DNO 132kV/11kV substation fed directly from a GSP and supplying a single HV network customer. The single (HV) customer would be assigned the customer category; 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 132/11kV substation).

Figure 3



In the example below (figure 4) , with another HV network customer connecting to the LDNO network, 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 'B' i.e. 'Point of Common Coupling at a voltage of less than 22kV on the secondary side of a substation whose primary side is attached to a 132kV distribution circuit'. Both customers would therefore be assigned the LDNO HV Plus: HV HH Metered' tariff and would be charged for the assets between points 'A' and 'B'.

Figure 4

