

DCP328 – Legal Drafting

Use of System charging for private networks with competition in supply

Solution 1 plus 3

Charging the boundary supplier for Difference Metering installations and providing a rebate for Private Network Operators in the CDCM and charging embedded suppliers in the EDCM for fully settled installations

Add new definitions in Clause 1

Difference Metering	means an arrangement defined in the BSC (BSCP514) for the purposes of Settlement, whereby the flows of electricity measured by metering equipment embedded within a Licence Exempt System are deducted from the flows of electricity measured by the metering equipment at the Entry Point or Exit Point by which electricity flows from or to that Licence Exempt System.
Licence Exempt System	means an electricity distribution system that is not owned or operated by a DNO/IDNO Party.
Non-Settlement MPAN	means a 13-digit reference number for a Metering Point at an Entry Point or Exit Point, in the same format as an MPAN, which reference number is only to be used for the purposes described in this Agreement.
Meter Timeswitch Code	has the meaning given to that term in Data Transfer Catalogue (J0220).

Add a new Clause 29.5A

29.5A The following provisions shall apply in the case of an Entry Point or Exit Point on the Company's Distribution System that is subject to Difference Metering:

29.5A.1 the User shall ensure that the MPAN for the Metering Point at that Entry Point or Exit Point has Meter Timeswitch Code 996 applied to it by MPAS;

29.5A.2 the Supplier Party that is registered under the MRA in respect of an MPAN for metering equipment embedded within that Licence Exempt System shall ensure that such MPAN has Meter Timeswitch Code 997 applied to it by MPAS;

29.5A.3 the Company shall ensure that MPAS identifies the relevant Licence Exempt System for the data item 'Metering Point Address Line 1' (as described in the Data Transfer Catalogue) for each of the MPANs referred to in Clauses 29.5A.1 and 29.5A.2;

Commented [JL1]: Potential question – should we use this or an identifier in MPRS as per the Ofgem requirement to identify private networks with a Licence Exempt Network Indicator

29.5A.4 the Company shall procure that the User is provided with a Non-Settlement MPAN for the Metering Point at that Entry Point or Exit Point;

29.5A.5 in addition to the Metering Data to be provided in respect of that Entry Point or Exit Point under Clause 29.4, the User shall (without charge) provide (or ensure that its BSC Party Agent provides) the Company with the metering data the User would have been obliged to procure the provision of in respect of that Entry Point or Exit Point under the BSC if Difference Metering did not apply, using the Data Transfer Catalogue D0036 or D0275 (as specified by the Company) and quoting the Non-Settlement MPAN (instead of the actual MPAN);

29.5A.6 the User shall ensure that the data referred to in Clause 29.5A.5 is provided to the Company in the same timescales as would have applied under the BSC if Difference Metering did not apply; and

29.5A.7 the Supplier Party referred to in Clause 29.5A.2 agrees that the User may receive and manipulate the Metering Data relating to consumption by the

Supplier Party's Customers connected to the Licence Exempt System in order to comply with the User's obligations under Clause 29.5A.5 and for the purpose of matters provided for or envisaged by its Supply Licence.

Add a new Clause 29.5B

29.5B Notwithstanding Clause 15.3, it is agreed that Clause 29.5A.2 creates binding obligations between the Company and the Supplier Party referred to in that Clause, and that Clause 29.5A.7 creates binding obligations between the User and the Supplier Party referred to in that Clause.

SCHEDULE 16 – COMMON DISTRIBUTION CHARGING METHODOLOGY

This Schedule 16, version ~~10.0X.XX~~, is to be used for the calculation of Use of System Charges which will become effective from, 01 April ~~2018-XXXX~~ and remain effective until superseded by a revised version.

- 1A. The CDCM is applicable to “Designated Properties”, as defined in Standard Condition 13A (Common Distribution Charging Methodology) of the DNO Party’s Distribution Licences.

3. In order to comply with this methodology statement when setting distribution Use of System Charges the DNO Party will populate and publish the CDCM model version ~~XX104~~ when issued by the Panel in accordance with Clause 14.5.3.

Part 1 — Cost allocation

Main steps in the allocation

6. Figure 1 gives a general overview of how the four main steps in the methodology relate to each other.

Figure 1 Overview of the main steps in the methodology

Commented [EA2]: This could be problematic. Part of the definition:

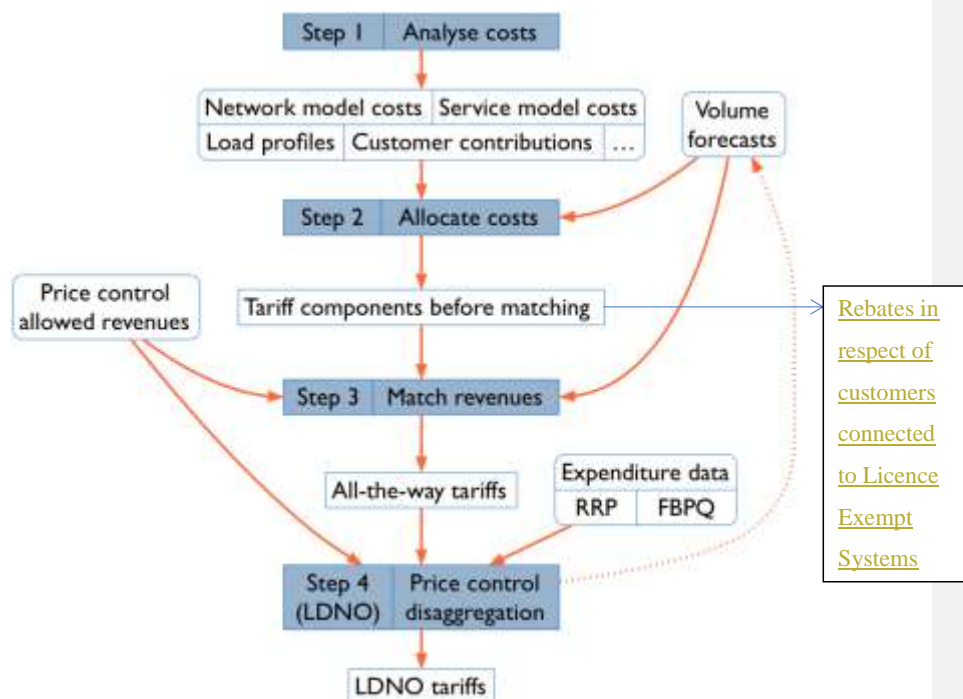
“...premises or Distribution Systems... connected to the licensee’s Distribution System at a voltage level of less than 22 kilovolts”.

We are going to define new charges which DNOs will apply in respect of customers connected to private networks, including those with DNO to PNO boundary above 22kV. But a private network with DNO to PNO boundary above 22kV is a Designated EHV Property so the licence says its charges must be calculated under the EDCM (in the same way that LDNO charges for CDCM-like customers with DNO to LDNO boundary at EHV are calculated in the EDCM).

Commented [JL3R2]: Have we covered this off in the EDCM? Sense check required by the group

Commented [JL4]: Speak to Hollie or Dylan re inclusion in the master figure but show in strikethrough

Commented [RC5R4]: Have requested the master version.



8. Step 2 is the application of the cost allocation rules set out below. These rules are only for all-the-way tariffs and tariffs used to determine rebates in respect of customers.

68. For demand tariffs, tariffs used to determine rebates in respect of customers connected to Licence Exempt Systems and portfolio tariffs related to demand users with a single unit rate or several unit rates and non-half hourly unmetered supplies tariffs, the contributions of each network level to the unit rate are calculated as follows:

$$[p/kWh \text{ from network model assets}] = 100 * [\text{network level } £/kW/\text{year}] * [\text{user loss factor}] / [\text{network level loss factor}] * [\text{pseudo load coefficient}] * (1 - [\text{contribution proportion}]) / [\text{days in charging year}] / 24$$

$$[\text{p/kWh from operations}] = 100 * [\text{transmission exit or other expenditure} \\ \text{£/kW/year}] * [\text{user loss factor}] / [\text{network level loss factor}] * [\text{pseudo load} \\ \text{coefficient}] / [\text{days in charging year}] / 24$$

71. For generation users, tariffs used to determine rebates in respect of customers connected to Licence Exempt Systems and portfolio tariffs for generation users, no contribution to the unit rate is calculated in respect of the network level corresponding to circuits at the Entry Point, and a negative contribution to the unit rate (i.e. a credit) comes from each network level above the Entry Point. That contribution is calculated as follows:

$$[\text{p/kWh from network model assets}] = -100 * [\text{network level £/kW/year}] * [\text{user} \\ \text{loss factor}] / [\text{network level loss factor}] * (1 - [\text{contribution proportion}]) / [\text{days in} \\ \text{year}] / 24$$

$$[\text{p/kWh from operations}] = -100 * [\text{transmission exit or other expenditure} \\ \text{£/kW/year}] * [\text{user loss factor}] / [\text{network level loss factor}] / [\text{days in year}] / 24$$

88. For the purpose of the calculation of reactive power unit charges, generation users are taken to make a full contribution to the reactive power flows in the network at their Entry Point and at each network level above their Entry Point.

Derivation of all-the-way tariffs before revenue matching and tariffs to be used for the calculation of rebates in respect of customers connected to Licence Exempt Systems

88a: All-the-way tariffs before revenue matching are determined by summing across all voltages:

- the contribution to each unit rate at each voltage calculated in accordance with paragraph 77 and 86 as applicable;
- the contribution to fixed charges at each voltage calculated in accordance with paragraph 85;

- the contribution to capacity charges at each voltage calculated in accordance with paragraph 81; and
- the contribution to reactive power charges at each voltage calculated in accordance with paragraph 87.

88b. Tariffs for the calculation of rebates for customers connected to Licence Exempt Systems are determined in accordance with paragraph 88a, save that lower voltage elements are excluded as follows:

- where the Licence Exempt System is connected to the LV network, the costs associated with the LV customer level are excluded;
- where the Licence Exempt System is connected at LV substation, the costs associated with the LV customer and LV network levels are excluded; and
- where the Licence Exempt System is connected at HV network, the costs associated with the LV customer, LV network and LV substation levels are excluded.

88c. Capacity charge elements (p/kVA/day) for half-hourly site-specific settled customers connected to Licence Exempt Systems are allocated to the fixed charge (in p/day) by multiplying the capacity charge by the average kVA per customer for an equivalent all-the-way customer, determined from the DNO Party's volume forecast for the equivalent all-the-way half-hourly metered tariff at that voltage.

88d. Reactive power charge elements (p/kVArh) for half-hourly site-specific settled customers connected to Licence Exempt Systems are allocated to the fixed charge (in p/day) by multiplying the reactive power charge by the average kVArh per customer for an equivalent all-the-way customer, determined from the DNO Party's volume forecast for the equivalent all-the-way half-hourly metered tariff at that voltage, and dividing by the number of days in the charging year.

88e. For NHH Settled or HH Aggregate Settled users connected to Licence Exempt Systems, a rebate is calculated in £/customer/year for each customer group and each voltage of connection of a Licence Exempt System as follows:

- a) The average kWh usage per customer per year in each timeband is determined from the DNO Party's volume forecast for that customer group;
- b) The average all-the-way charge for that customer group is calculated by applying the DNO Party's all-the-way tariff to the usage derived under part a).
- c) The average charge applicable for a customer in that customer group connected to a Licence Exempt System with that voltage of connection is calculated by applying the tariffs determined under paragraph 88b to the usage derived under part a).
- d) The rebate per customer per year is calculated as the results of part b) less the result of part c).

88f. For HH Site Specific Settled users connected to Licence Exempt Systems, a rebate is calculated in £/customer/year for each customer by applying the tariff calculated under paragraphs 88b, 88c and 88d to that customer's usage data, and subtracting this total from the amount billed in respect of that customer.

92. Revenue matching is achieved by applying a unit charge adder (p/kWh) to all-the-way charges calculated as follows: the revenue surplus or shortfall (in pence) to be recovered; divided by the total volume of all all-the-way and LDNO demand customers (in kWh). The unit charge adder is applied to all-the-way demand tariffs only

95. Tariffs for generation and for customers connected to Licence Exempt Systems do not have any revenue matching element.

Commented [JL6]: This was agreed but we need a case for the consultation document.
Review 251/252

Tariff structures for Licence Exempt Systems using Difference Metering

146A The tariffs charged in respect of Licence Exempt Systems using Difference Metering shall be charged to the Supplier at the DNO Party's boundary based on the units imported or exported at the boundary between the network and the Licence Exempt System. No charges will be applied by the DNO Party to the boundary settlements data received by the DNO Party, or to the settlements data received in respect of any settlement meters within the Licence Exempt System.

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SCHEDULE 17 – EHV CHARGING METHODOLOGY (FCP MODEL)

This Schedule 17, version ~~XX.X10.0~~, is to be used for the calculation of Use of System Charges which will become effective from, 01 April ~~2018-XXXX~~ and remain effective until superseded by a revised version.

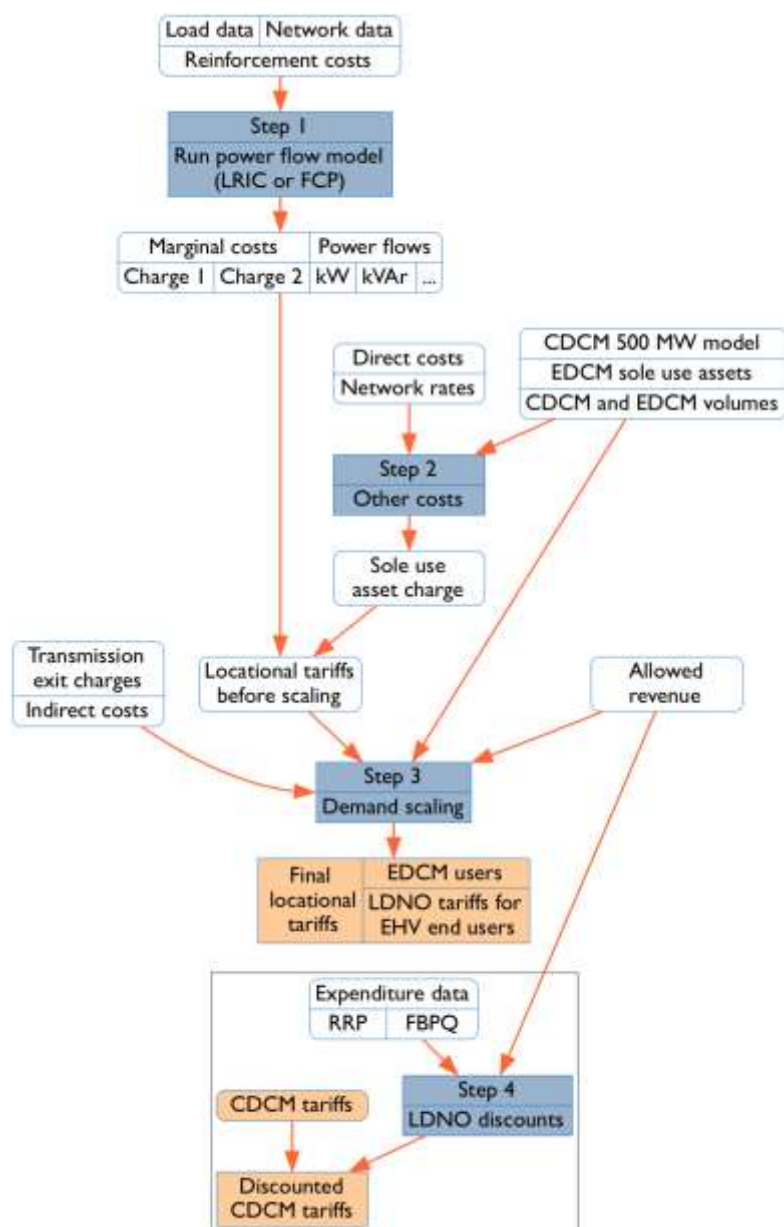
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- 1.3 In order to comply with this methodology statement when setting distribution Use of System Charges the DNO Parties referred to above will populate the EDCM model version ~~F204-XX~~ when issued by the Panel in accordance with Clause 14.5.3.
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Main Steps

- 1.9. Figure 1 provides a diagrammatic overview of the steps involved for import charges.

Figure 1 Diagrammatic overview of the EDCM for import



Commented [JL7]: Is there a need to change this diagram like we did in the CDCM re demand scaling not being applied and also reference to the LES linked back to CDCM tariffs

19. APPLICATION OF EDCM DEMAND FOR EDCM CONNECTEES

- 19.2 The part of EDCM portfolio tariffs (for LDNO networks and ~~Distribution~~-Licence ~~Exempt networks~~Systems) that is based on CDCM tariffs will be billed like CDCM tariffs.
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28. DNO PARTY TO LICENCE EXEMPT SYSTEMSUNLICENSED NETWORKS

- 28.1 Not used.~~Unlicensed networks have a choice. If they are part of the Total System under the Balancing and Settlement Code with the network open to supply competition, and if they are party to the DCUSA, and have accepted the obligations to provide the necessary data, they can, if they wish, be treated as LDNOs.~~

28.2. Otherwise-The DNO Party applies the EDCM to calculate an import and export charge based on ~~capacity and~~ power flow data ~~metered~~ at the boundary and the agreed capacity at the boundary.- ~~Any sole use assets specific to the unlicensed network are charged as a p/day sole use asset charge calculated as applicable to a normal EDCM Connectee.~~

28.3 The tariffs charged in respect of Licence Exempt Systems using Difference Metering shall be charged to the Supplier at the DNO Party's boundary based on the units imported or exported at the boundary between the network and the Licence Exempt System. No charges will be applied by the DNO Party to the boundary settlements data received by the DNO Party, or to the settlements data received in respect of the settlements meter within the Licence Exempt System.

28.4 The tariffs charged in respect of Licence Exempt Systems using fully settled metering shall be charged to the Supplier of each customer within the Licence Exempt System. To derive the charges there will be a two-step approach as follows:

- The first step will be to use the settlement metering data of each embedded customer within the Licence Exempt System to determine the power flow data at the boundary for both import and export charges. No losses are

assumed between the boundary and each embedded customers' premises on the Licence Exempt System.

- The second step will be the allocation of the fixed charge and capacity charge derived under paragraph 28.2 to each embedded customer for both import and export charges. These will be calculated as follows:

[embedded customer fixed charge] = [fixed charge at the boundary] x [agreed capacity of the embedded customer]/[total agreed capacity of all embedded customers]; and

[embedded customer capacity charge] = [capacity charge at the boundary] x ([the agreed capacity at the boundary] x (([agreed capacity of the embedded customer]/[total agreed capacity of all embedded customers])/ [the agreed capacity at the boundary]))

Commented [JL8]: Is this the way we want to do it?

Are the formulae correct

If neither then please provide what we need to see here.

28.5 CDCM Tariffs for customers connected to Licence Exempt Systems are determined in accordance with paragraph 88a of schedule 16, save that lower voltage elements are excluded as follows:

- where the Licence Exempt System is connected at an EHV/HV substation, the costs associated with the LV customer, LV network, LV substation and HV network levels are excluded;
- where the Licence Exempt System is connected to the EHV network, the costs associated with the LV customer, LV network, LV substation, HV network and EHV/HV levels are excluded;
- where the Licence Exempt System is connected at a 132kV/EHV substation, the costs associated with the LV customer, LV network, LV substation, HV network, EHV/HV and EHV network levels are excluded;
- where the Licence Exempt System is connected to the 132kV network, the costs associated with the LV customer, LV network, LV substation, HV network, EHV/HV, EHV network and 132kV/EHV levels are excluded;
- where the Licence Exempt System is connected direct to a GSP, the costs associated with the LV customer, LV network, LV substation, HV network,

EHV/HV, EHV network, 132kV/EHV and 132kV network levels are excluded.

28.5A Capacity charge elements (p/kVA/day) for half-hourly site-specific settled customers connected to Licence Exempt Systems are allocated to the fixed charge (in p/day) by multiplying the capacity charge by the average kVA per customer for an equivalent all-the-way customer, determined from the DNO Party's volume forecast for the equivalent all-the-way half-hourly metered tariff at that voltage as determined under schedule 16.

28.5B Reactive power charge elements (p/kVArh) for half-hourly site-specific settled customers connected to Licence Exempt Systems are allocated to the fixed charge (in p/day) by multiplying the reactive power charge by the average kVArh per customer for an equivalent all-the-way customer, determined from the DNO Party's volume forecast for the equivalent all-the-way half-hourly metered tariff at that voltage as determined under schedule 16, and dividing by the number of days in the charging year.

SCHEDULE 18 – EHV CHARGING METHODOLOGY (LRIC MODEL)

This Schedule 18, version ~~XX.X10.0~~, is to be used for the calculation of Use of System Charges which will become effective from, 01 April ~~XXXX2018~~ and remain effective until superseded by a revised version.

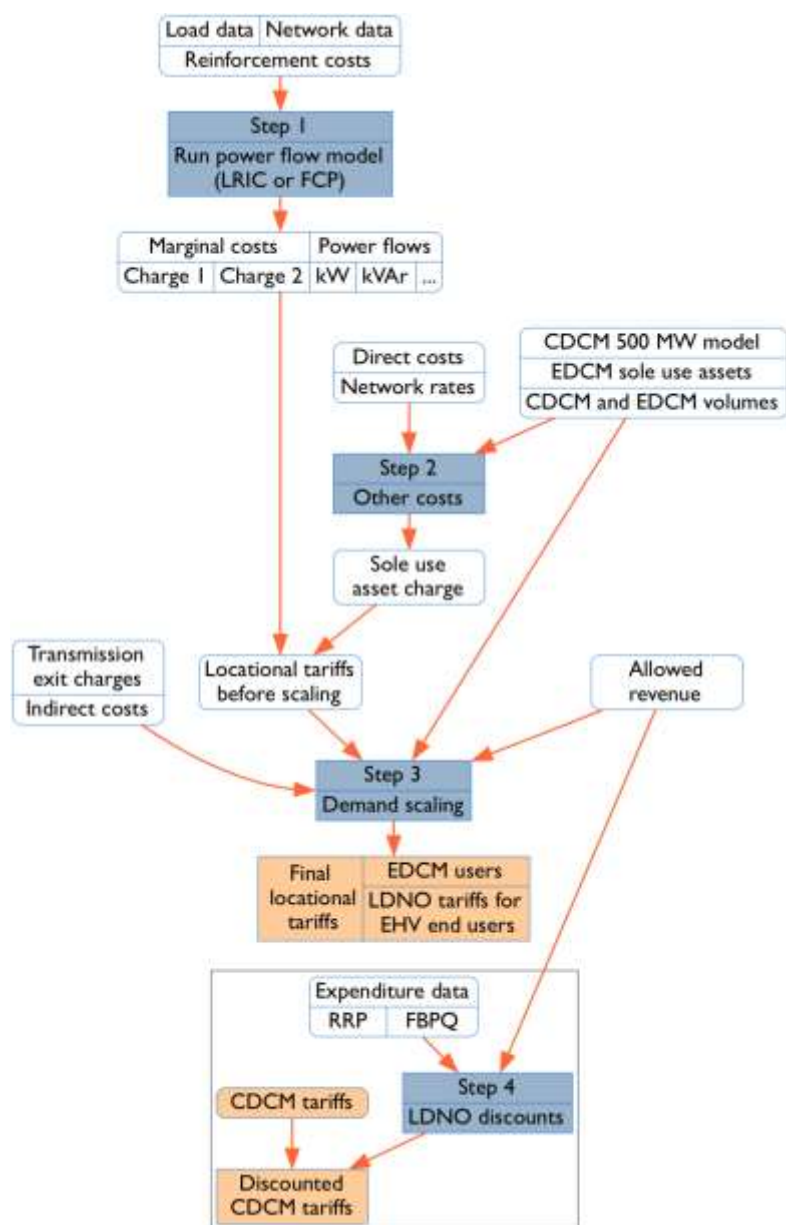
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- 1.3 In order to comply with this methodology statement when setting distribution Use of System Charges the DNO Parties referred to above will populate the EDCM model version ~~XXXXL204~~ when issued by the Panel in accordance with Clause 14.5.3.
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- 1.9 Figure 1 provides a diagrammatic overview of the steps involved for import charges.

Figure 1 Diagrammatic overview of the EDCM for import

Commented [JL9]: Same comment as per Schedule 17



- 19.2 The part of EDCM portfolio tariffs (for LDNO networks and ~~Distribution~~-Licence ~~Exempt networks~~Systems) that is based on CDCM tariffs will be billed like CDCM tariffs.
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28 DNO PARTY TO LICENCE EXEMPT SYSTEMS UNLICENSED NETWORKS

- 28.1 Not used. ~~Unlicensed networks have a choice. If they are part of the Total System under the Balancing and Settlement Code with the network open to supply competition, and if they are party to the DCUSA, and have accepted the obligations to provide the necessary data, they can, if they wish, be treated as LDNOs.~~

- 28.2 ~~Otherwise –~~The DNO Party applies the EDCM to calculate an import charge and an export charge based on ~~capacity and~~ power flow data ~~metered~~ at the boundary ~~and agreed capacity at the boundary~~. ~~Any sole use assets specific to the unlicensed network are charged as a p/day sole use asset charge calculated as applicable to a normal EDCM Connectee.~~

- 28.3 The tariffs charged in respect of Licence Exempt Systems using Difference Metering shall be charged to the Supplier at the DNO Party's boundary based on the units imported or exported at the boundary between the network and the Licence Exempt System. No charges will be applied by the DNO Party to the boundary settlements data received by the DNO Party, or to the settlements data received in respect of the settlements meter within the Licence Exempt System.

- 28.4 The tariffs charged in respect of Licence Exempt Systems using Fully Settled metering shall be charged to the Supplier of each customer within the Licence Exempt System. To derive the charges there will be a two-step approach as follows:

- The first step will be to use the settlement metering data of each embedded customer within the Licence Exempt System to determine the power flow data at the boundary for both import and export charges. No losses are

assumed between the boundary and each embedded customers' premises on the Licence Exempt System.

- The second step will be the allocation of the fixed charge and capacity charge derived under paragraph 28.2 to each embedded customer for both import and export charges. These will be calculated as follows:

[embedded customer fixed charge] = [fixed charge at the boundary] x [agreed capacity of the embedded customer]/[total agreed capacity of all embedded customers]; and

[embedded customer capacity charge] = [capacity charge at the boundary] x ([the agreed capacity at the boundary] x (([agreed capacity of the embedded customer]/[total agreed capacity of all embedded customers])/ [the agreed capacity at the boundary]))

28.5 CDCM Tariffs for customers connected to Licence Exempt Systems are determined in accordance with paragraph 88a of schedule 16, save that lower voltage elements are excluded as follows:

- where the Licence Exempt System is connected at an EHV/HV substation, the costs associated with the LV customer, LV network, LV substation and HV network levels are excluded;
- where the Licence Exempt System is connected to the EHV network, the costs associated with the LV customer, LV network, LV substation, HV network and EHV/HV levels are excluded;
- where the Licence Exempt System is connected at a 132kV/EHV substation, the costs associated with the LV customer, LV network, LV substation, HV network, EHV/HV and EHV network levels are excluded;
- where the Licence Exempt System is connected to the 132kV network, the costs associated with the LV customer, LV network, LV substation, HV network, EHV/HV, EHV network and 132kV/EHV levels are excluded;
- where the Licence Exempt System is connected direct to a GSP, the costs associated with the LV customer, LV network, LV substation, HV network, EHV/HV, EHV network, 132kV/EHV and 132kV network levels are excluded

Commented [JL10]: Is this the way we want to do it?

Are the formulae correct

If neither then please provide what we need to see here.

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28.5A Capacity charge elements (p/kVA/day) for half-hourly site-specific settled customers connected to Licence Exempt Systems are allocated to the fixed charge (in p/day) by multiplying the capacity charge by the average kVA per customer for an equivalent all-the-way customer, determined from the DNO Party's volume forecast for the equivalent all-the-way half-hourly metered tariff at that voltage as determined under schedule 16.

28.5B Reactive power charge elements (p/kVArh) for half-hourly site-specific settled customers connected to Licence Exempt Systems are allocated to the fixed charge (in p/day) by multiplying the reactive power charge by the average kVArh per customer for an equivalent all-the-way customer, determined from the DNO Party's volume forecast for the equivalent all-the-way half-hourly metered tariff at that voltage as determined under schedule 16, and dividing by the number of days in the charging year.

Amend Paragraph 4.1 of Schedule 19

4. MPAN REPORT

- 4.1 On or before the 15th day of each month, the EDNO shall send to the DNO Party a list of the EDNO's MPANs for half-hourly settled Connectees, together with the following information (in separate columns) for each such MPAN (as at the start of that month):
- (a) its trading status;
 - (b) the date from which such trading status has been effective;
 - (c) its energisation status; ~~and~~
 - (d) the date from which such energisation status has been effective;
 - (e) its Meter Timeswitch Code; and
 - (f) the date from which such Meter Timeswitch Code has been effective.
- 4.2. Where there are no half-hourly-settled Connectees, the EDNO shall submit a nil return.