

DCP341 - Removal of residual charging for storage facilities in the CDCM

Draft Legal text

Commented [JL1]: Note this legal text includes DCP268 amendments where they are impacted by this change proposal.

SCHEDULE 16 – COMMON DISTRIBUTION CHARGING METHODOLOGY

Amend the following paragraphs:

Introduction

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of Use of System Charges which will become effective from, ~~01 April 2018~~[TBC] and remain effective until superseded by a revised version.

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 ~~10.4~~[TBC] when issued by the Panel in accordance with Clause 14.5.3.

34. For each tariff, the DNO Party identifies the extent to which each of the service models represents the relevant assets for an average user in that tariff. For the purpose of this calculation, users on the following pairs of tariffs should be considered in aggregate:

- LV Site Specific and LV Site Specific Storage Import;
- LV Sub Site Specific and LV Sub Site Specific Storage Import; and
- HV Site Specific and HV Site Specific Storage Import.

Commented [JL2]: Note that DCP268 changed the title of LV HH metered to LV Site Specific likewise LV Sub HH metered to LV Sub Site Specific and HV HH Metered to HH Site Specific hence the use of these tariff names here and on other paragraphs below.

Load characteristics

42. The DNO Party estimates the following load characteristics for each category of demand users:

Commented [JL3]: Note: 42 c) was deleted by DCP268

- a) A load factor, defined as the average load of a user group over the year, relative to the maximum load level of that user group. Load factors are numbers between 0 and 1; and
- b) A coincidence factor, defined as the expectation value of the load of a user group at the time of system simultaneous maximum load, relative to the maximum load level of that user group. Coincidence factors are numbers between 0 and 1.

For the purpose of this calculation, users on the following pairs of tariffs should be considered in aggregate:

- LV Site Specific and LV Site Specific Storage Import;
- LV Sub Site Specific and LV Sub Site Specific Storage Import; and
- HV Site Specific and HV Site Specific Storage Import.

70. In the paragraph 68 equation:

- (a) the user loss factor is the loss adjustment factor to transmission for the network level at which the user is supplied;
- (b) the network level loss factor is the loss adjustment factor to transmission for the network level for which costs are being attributed; and
- (c) the pseudo load coefficient is calculated as follows:
 - i) calculate the ratio of coincidence factor to load factor that would apply if units were uniformly spread within each time band, based on the estimated proportion of units recorded in each relevant time pattern regime that fall within each distribution time band and the assumption that the time of system simultaneous maximum load is certain to be in the red or black (as appropriate) distribution time band;

- ii) calculate a correction factor for each user type as the ratio of the coincidence factor to load factor, divided by the result of the calculation above;
- iii) for each network level and each unit rate, derive the ratio of coincidence factor (to network asset peak) to load factor that would apply given peaking probabilities at that network level if units were uniformly spread within each time band, multiplied by the correction factor; and

iv) the result of (iii) above is the pseudo load coefficient for the network level and unit rate, save that the coefficients calculated for each of the:

- non-half hourly and half hourly unmetered supplies
- LV Site Specific and LV Site Specific Storage Import;
- LV Sub Site Specific and LV Sub Site Specific Storage Import; and
- HV Site Specific and HV Site Specific Storage Import

are then aggregated to produce one value per network level.

74. The standing charge factors for demand tariffs are shown in the table below:

Tariff	EHV	EHV/HV	HV	HV/LV	LV circuits
Domestic Aggregated					100%
Non-Domestic Aggregated					100%
LV Site Specific			20%	100%	100%
LV Sub Site Specific			100%	100%	
HV Site Specific	20%	100%	100%		

Commented [JL4]: The table below reflects the tariff name changes made by DCP268.

<u>LV Site Specific Storage Import</u>			<u>20%</u>	<u>100%</u>	<u>100%</u>
<u>LV Sub Site Specific Storage Import</u>			<u>100%</u>	<u>100%</u>	
<u>HV Site Specific Storage Import</u>	<u>20%</u>	<u>100%</u>	<u>100%</u>		
Unmetered Supplies					0%

81. For the tariffs listed below, the unit costs calculated by the formula above are allocated to the capacity charge. The exceeded capacity charge for half hourly settled demand users, except unmetered users, is calculated using the same formula, but with the customer proportion set to zero.

- LV Site Specific
- LV Sub Site Specific
- HV Site Specific.
- LV Site Specific Storage Import;
- LV Sub Site Specific Storage Import; and
- HV Site Specific Storage Import.

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- and users on the following pairs of tariffs should be considered in aggregate:

- LV Site Specific and LV Site Specific Storage Import;
- LV Sub Site Specific and LV Sub Site Specific Storage Import; and
- HV Site Specific and HV Site Specific Storage Import.

Step 3: Match revenues

89. The DNO Party uses its volume forecasts to estimate the revenues that would be raised by applying the tariff components derived from step 2, excluding any revenues treated as excluded revenue under the price control conditions.
90. If any separate charging methodology is used alongside the CDCM, e.g. for EHV users, then the forecast revenues from these charges, excluding any revenues treated as excluded revenue under the price control conditions, are added to the total.
91. If the forecast of allowed revenue exceeds the estimate of relevant revenues, then the difference is a shortfall. If the estimate of relevant revenues exceeds the forecast of allowed revenue, then the difference is a surplus.
92. Revenue matching is achieved by applying a unit charge adder (p/kWh) calculated as follows: the revenue surplus or shortfall (in pence) to be recovered; divided by the total volume of all demand customers (in kWh) excluding that associated with the 'LV Site Specific Storage Import', 'LV Sub Site Specific Storage Import' and 'HV Site Specific Storage Import' tariffs. The unit charge adder is applied to demand tariffs only excluding the 'LV Site Specific Storage Import', 'LV Sub Site Specific Storage Import' and 'HV Site Specific Storage Import' tariffs.
93. The unit charges adder is positive if there is a shortfall and negative if there is a surplus.
94. If this procedure would result in negative value for any tariff component, then that tariff component is set to zero, and the unit charge adder figure is modified to the extent necessary to match forecast and target revenue.
95. Tariffs for generation do not have any revenue matching element.

135A Those users in Measurement Class C or E will be HH settled on a site-specific basis, and assigned to the appropriate tariff based on the Measurement Class, type of metering equipment installed and the voltage of connection as specified in the table below:

Tariff	Voltage of Connection	Metering	Measurement Class
LV Site Specific	LV	Current Transformer	C / E
LV Sub Site Specific	LV Sub	Current Transformer	C / E
HV Site Specific	HV	Current Transformer	C / E
<u>LV Site Specific Storage Import</u>	<u>LV</u>	<u>Current Transformer</u>	<u>C / E</u>
<u>LV Sub Site Specific Storage Import</u>	<u>LV Sub</u>	<u>Current Transformer</u>	<u>C / E</u>
<u>HV Site Specific Storage Import</u>	<u>HV</u>	<u>Current Transformer</u>	<u>C / E</u>

Commented [JL5]: Note that DCP268 deleted paragraph 135B and amended this paragraph to remove the date by which each paragraph would be applied due to the passage of time, together with the table identifying the new Tariff names.

Demand Tariff Structures

141. Table 4 below shows the structure for aggregated metered demand tariffs, and Table 5 below shows the structure for site-specific demand tariffs.

Commented [JL6]: Note both tables have been updated due to DCP268 regarding the tariff names.

Table 4: Aggregated Tariffs				
Tariff Name	Unit 1 (p/kWh)	Unit 2 (p/kWh)	Unit 3 (p/kWh)	Fixed charge p/MPAN/day
Domestic Aggregated	Red	Amber	Green	✓
Domestic Aggregated (Related MPAN)	Red	Amber	Green	

Non-Domestic Aggregated	Red	Amber	Green	✓
Non-Domestic Aggregated (Related MPAN)	Red	Amber	Green	
Unmetered Supplies	Black	Yellow	Green	

Table 5: Site Specific Tariffs

Tariff	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN /day	Capacity charge p/kVA/ day	Exceeded Capacity charge p/kVA/day	Reactive power charge p/kVArh
LV Site Specific	Red	Amber	Green	✓	✓	✓	✓
LV Sub Site Specific	Red	Amber	Green	✓	✓	✓	✓
HV Site Specific	Red	Amber	Green	✓	✓	✓	✓
<u>LV Site Specific Storage Import</u>	<u>Red</u>	<u>Amber</u>	<u>Green</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>LV Sub Site Specific Storage Import</u>	<u>Red</u>	<u>Amber</u>	<u>Green</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>HV Site Specific Storage Import</u>	<u>Red</u>	<u>Amber</u>	<u>Green</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
Unmetered Supplies	Black	Yellow	Green				

Note 1: The Domestic Aggregated (Related MPAN) and Non-Domestic Aggregated (Related MPAN) tariffs are supplementary to a standard published tariff and therefore only available under these conditions. These will be charged the same red, amber and green unit rates but will have a zero fixed charge.

Note 2: Where DNO Parties use a default tariff for invalid settlement combinations these will be charged at the Domestic Aggregated rates.

Note 3: LV Sub applies to customers connected to the DNO Party's network at a voltage of less than 1 kV at a substation with a primary voltage (the highest operating voltage present at the

substation) of at least 1 kV and less than 22 kV, where the current transformer (CT) used for the customer's settlement metering is located at the substation. For these purposes, 'at the substation' means:

- a) an HV/LV substation with the metering CT in the same chamber as the substation transformer; or
- b) an HV/LV substation with the metering CT in a chamber immediately adjacent to the substation transformer chamber.

Note 4: not used.

Note 5: Where a customer or its supplier requests a DNO Party to confirm if a connection may be eligible for an LV Sub tariff, the DNO Party will investigate and reach a decision, taking account of any supporting information provided by the customer or supplier and any additional information that is available to it. Administration charges (to cover reasonable costs) may apply if a technical assessment or site visit is required, but shall not be applied where the DNO Party agrees to the change of tariff request. In all circumstances where a DNO Party decides or agrees that a customer should be moved to an LV Sub tariff, the new tariff charges will be applied in the next calendar month following the DNO Party's decision or agreement. Where a customer is already registered on an LV Sub tariff they will remain so.

Note 6: not used.

Note 7: Fixed charges are generally levied on a pence per MPAN basis. However, there are some instances where more than one MPAN exists on a customer's connection and only one fixed charge is appropriate. Where a group of MPANs is classed as a site as identified in the connection agreement, billing systems should be able to group the MPANs, where appropriate, for charging purposes.

Note 8: The 'LV Site Specific Storage Import', 'LV Sub Site Specific Storage Import' and 'HV HH Site Specific Storage Import' tariffs will only be applicable to Electricity Storage Facilities.

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Tariff structures for LDNOs

147. The tariff structure for LDNOs will mirror the structure of the all-the-way-tariff, and is dependent on the voltage of the Point of Connection being either LV (see Table 8) or HV (see Table 9); except for the LDNO unmetered tariffs (marked with ** in Tables 8 and 9 below), which are charged by reference to the voltage of the Points of Connection that provide the majority of the energised domestic connections for the LDNO in the GSP Group (or, where there is no such majority, on such other reasonable basis as the DNO Party determines). In all cases, the same tariff elements will apply.

Table 8: LDNO LV connection*

Commented [JL7]: Tables updated to cater for new tariff names introduced by DCP268

Tariff Name	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPA N/day	Capacity charge p/kVA /day	Exceeded Capacity charge p/kVA /day	Reactive power charge p/kVARh
LV Domestic Aggregated	Red	Amber	Green	✓			
Domestic Aggregated (Related MPAN)	Red	Amber	Green				
Non-Domestic Aggregated	Red	Amber	Green	✓			
Non-Domestic Aggregated (Related MPAN)	Red	Amber	Green				
LV Site Specific	Red	Amber	Green	✓	✓	✓	✓
LV Site Specific Storage Import	Red	Amber	Green	✓	✓	✓	✓
Unmetered Supplies	Black	Yellow	Green				
LV Generation Aggregated	✓			✓			
LV Generation Site Specific	✓			✓			✓

* Where the boundary between the LDNO and DNO network is at LV

Table 9: LDNO HV connection*

Commented [JL8]: Tables updated to cater for new tariff names introduced by DCP268

Tariff Name	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN /day	Capacity charge p/kVA /day	Exceeded Capacity charge p/kVA /day	Reactive power charge p/kVArh
LV Domestic Aggregated	Red	Amber	Green	✓			
LV Domestic Aggregated (Related MPAN)	Red	Amber	Green				
LV Non-Domestic Aggregated	Red	Amber	Green	✓			
LV Non-Domestic Aggregated (Related MPAN)	Red	Amber	Green				
LV Site Specific	Red	Amber	Green	✓	✓	✓	✓
Unmetered Supplies	Black	Yellow	Green				
LV Sub Site Specific	Red	Amber	Green	✓	✓	✓	✓
HV Site Specific	Red	Amber	Green	✓	✓	✓	✓
LV Generation Aggregated	Red	Amber	Green	✓			
LV Sub Generation Aggregated	Red	Amber	Green	✓			✓
LV Generation Site Specific	Red	Amber	Green	✓			✓
LV Sub Generation Site Specific	Red	Amber	Green	✓			✓
HV Generation Site Specific	Red	Amber	Green	✓			✓
<u>LV HH Site Specific Import</u>	<u>Red</u>	<u>Amber</u>	<u>Green</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>LV Sub Site Specific Storage Import</u>	<u>Red</u>	<u>Amber</u>	<u>Green</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>HV Site Specific HH Import</u>	<u>Red</u>	<u>Amber</u>	<u>Green</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>

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Glossary of Terms used in this Schedule 16

Add the following definitions to the glossary of terms:

<i>Term</i>	<i>Meaning</i>
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
Electricity Storage Facility	means a facility <u>that:</u> <u>(a) has an import MPAN and export MPAN with associated metering equipment which both only measure activities necessary for performing Electricity Storage;</u> <u>(b) all metering equipment referred to in point (a) above is CT metering; and</u> <u>(c) is subject to Supplier certification that the facility meets the above criteria and provides confirmation of this to the DNO/IDNO Party.</u>

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