

## DCP342 - Removal of residual charging for storage facilities in the EDCM

### Draft Legal text

#### Introduction

This Schedule 17, 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of Use of System Charges which will become effective from, ~~01 April 2018~~[TBC] and remain effective until superseded by a revised version.

#### Amend paragraph 1.3 of Schedule 17 as follows:

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

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#### Amend the following paragraphs in Schedule 17:

- 18.18 A single asset based residual revenue charging rate is calculated for all EDCM Connectees. This is calculated as follows:

Residual revenue charging rate (per cent) =  $0.8 * (\text{EDCM demand revenue target} - \text{EDCM NR and DOC capacity contribution} - \text{Aggregate indirect cost contribution} - \text{SU recovery} - \text{FCP recovery}) / (\text{Total adjusted site-specific shared assets} - \text{Total adjusted site-specific shared assets for storage sites})$

Where:

EDCM NR and DOC capacity contribution is the sum of the import capacity based network rates and direct costs contribution from each EDCM Connectee.

Aggregate indirect cost contribution is the sum of the import capacity based and import sole use asset based indirect cost contribution from each EDCM Connectee.

SU recovery is the forecast notional recovery from the application of import fixed charges (before any rounding) for sole use assets relating to EDCM Connectees.

FCP recovery is the forecast notional recovery from the application of FCP demand charges (before any rounding) to all EDCM Connectees.

Total adjusted site-specific shared assets is the aggregate value (in £) of all adjusted site-specific shared assets for EDCM Connectees.

Total adjusted site-specific shared assets for storage sites is the aggregate value (in £) of all adjusted site-specific shared assets for EDCM Connectees that are Electricity Storage Facilities.

- 18.19 The asset based charging rate for residual revenue is converted into a p/kVA/day import capacity based residual revenue charge for each EDCM Connectee which is not an Electricity Storage Facility.

Asset based residual revenue charges in p/kVA/day =  $(100 / DC) * TNA_a * \text{Residual revenue rate}$

Where:

DC is the number of days in the Charging Year.

TNA is the total site-specific assets (£/kVA) for that EDCM Connectee.

Residual revenue rate is the residual revenue charging rate in per cent.

18.19A The asset based residual revenue charge for each EDCM Connectee which is an Electricity Storage Facility is zero.

- 18.20 A fixed adder in p/kVA/day for the remaining 20 per cent of residual revenue is calculated as follows:

~~Single-f~~Fixed adder in p/kVA/day =  $100 / DC * 0.2 * (\text{EDCM demand revenue target} - \text{EDCM NR and DOC capacity contribution} - \text{Aggregate indirect cost contribution} - \text{SU recovery} - \text{FCP recovery}) / (\text{Volume for scaling} - \text{Volume for scaling for storage sites})$

Where:

DC is the number of days in the Charging Year.

EDCM demand target is the EDCM demand revenue target calculated as described in the previous section.

EDCM NR and DOC capacity contribution is the sum of the import capacity based direct costs contribution from each EDCM Connectee (from annex 3).

Aggregate indirect cost contribution is the sum of the import capacity based and import sole use asset based indirect cost contribution from each EDCM Connectee

SU recovery is the forecast notional recovery from the application of demand fixed charges (before any rounding) for sole use assets relating to EDCM Connectees.

FCP recovery is the forecast notional recovery from the application of FCP demand charges (before any rounding) to all EDCM Connectees only.

Volume for scaling is calculated as the sum of  $(0.5 + \text{coincidence factor}) \times \text{import capacity}$  for all EDCM Connectees.

Volume for scaling for storage sites is calculated as the sum of  $(0.5 + \text{coincidence factor}) \times \text{import capacity}$  for EDCM Connectees that are Electricity Storage Facilities.

Coincidence factor is calculated as the forecast peak-time consumption in kW divided by maximum capacity in kVA of that Connectee (based on historical data) multiplied by  $(1 - (\text{Hours in super-red for which not a customer} / \text{Annual hours in super-red})) \times (\text{Days in year} / (\text{Days in year} - \text{Days for which not a customer}))$

Import capacity is the Maximum Import Capacity (adjusted if the Connectee is connected for part of the Charging Year) in kVA for that EDCM Connectee.

- 18.21 The fixed adder in p/kVA/day is converted into an import capacity based charge for each EDCM Connectee which is not an Electricity Storage Facility -as follows:

Import capacity based fixed adder in p/kVA/day = Fixed adder \*  $(0.5 + \text{coincidence factor})$

Where:

Fixed adder is the Distribution System-wide p/kVA/day fixed adder calculated as described in the previous paragraph.

Coincidence factor is calculated as the forecast peak-time consumption in kW divided by Maximum Import Capacity in kVA of that Connectee (based on historical data) multiplied by (1 - (Hours in super-red for which not a customer/Annual hours in super-red))\*(Days in year/(Days in year - Days for which not a customer)).

18.21A The fixed adder for EDCM Connectees that are Electricity Storage Facilities is zero.

## **Glossary of Terms used in this Schedule 17**

Add the following new definitions:

**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** means a facility that if, registered in an MPAS Registration System:

### **Storage Facility**

- (a) has an import MPAN and export MPAN with associated metering equipment which both only measure activities necessary for performing Electricity Storage;
  - (b) all metering equipment referred to in point (a) above is CT metering; and
  - (c) is subject to Supplier certification that the facility meets the above criteria and provides confirmation of this to the DNO/IDNO Party;
- or; if registered in CMRS,
- (a) has an import Metering System and export Metering System with associated metering equipment which both only measure activities necessary for performing Electricity Storage;
  - (b) all metering equipment referred to in point (a) above is CT metering; and
  - (c) is subject to customer certification that the facility meets the above criteria with the agreement of the DNO/IDNO Party.

## SCHEDULE 18 – EHV CHARGING METHODOLOGY (LRIC MODEL)

This Schedule 18, 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.

**Amend paragraph 1.3 of Schedule 18 as follows:**

- 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~~[TBC] when issued by the Panel in accordance with Clause 14.5.3.
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**Amend the following paragraphs in Schedule 18:**

- 18.18 A single asset based residual revenue charging rate is calculated for all EDCM Connectees. This is calculated as follows:

Residual revenue charging rate (per cent) =  $0.8 * (\text{EDCM demand revenue target} - \text{EDCM NR and DOC capacity contribution} - \text{Aggregate indirect cost contribution} - \text{SU recovery} - \text{LRIC recovery}) / (\text{Total adjusted site-specific shared assets} - \text{Total adjusted site-specific shared assets for storage sites})$

Where:

EDCM NR and DOC capacity contribution is the sum of the import capacity based network rates and direct costs contribution from each EDCM Connectee.

Aggregate indirect cost contribution is the sum of the import capacity based and import sole use asset based indirect cost contribution from each EDCM Connectee.

LRIC recovery is the forecast notional recovery from the application of LRIC demand charges (before any rounding) to all EDCM Connectees.

SU recovery is the forecast notional recovery from the application of import fixed charges (before any rounding) for sole use assets relating to EDCM Connectees.

Total adjusted site-specific shared assets is the aggregate value (in £) of all adjusted site-specific shared assets for EDCM Connectees.

Total adjusted site-specific shared assets for storage sites is the aggregate value (in £) of all adjusted site-specific shared assets for EDCM Connectees that are Electricity Storage Facilities.

- 18.19 The asset based charging rate for residual revenue is converted into a p/kVA/day import capacity based residual revenue charge for each EDCM Connectee which is not an Electricity Storage Facility.

Asset based residual revenue charges in p/kVA/day =  $(100 / DC) * TNA_a * \text{Residual revenue rate}$

Where:

DC is the number of days in the Charging Year.

TNA is the total site-specific assets (£/kVA) for that EDCM Connectee.

Residual revenue rate is the residual revenue charging rate in per cent.

18.19A The asset based residual revenue charge for each EDCM Connectee which is an Electricity Storage Facility is zero.

- 18.20 A fixed adder in p/kVA/day for the remaining 20 per cent of residual revenue is calculated as follows:

~~Single-f~~Fixed adder in p/kVA/day =  $100 / DC * 0.2 * (\text{EDCM demand revenue target} - \text{EDCM NR and DOC capacity contribution} - \text{Aggregate indirect cost contribution} - \text{SU recovery} - \text{FCP/LRIC recovery}) / (\text{Volume for scaling} - \text{Volume for scaling for storage sites})$

Where:

DC is the number of days in the Charging Year.

EDCM demand target is the EDCM demand revenue target calculated as described in the previous section.

EDCM NR and DOC capacity contribution is the sum of the import capacity based direct costs contribution from each EDCM Connectee (from annex 3).

Aggregate indirect cost contribution is the sum of the import capacity based and import sole use asset based indirect cost contribution from each EDCM Connectee

SU recovery is the forecast notional recovery from the application of demand fixed charges (before any rounding) for sole use assets relating to EDCM Connectees.

LRIC recovery is the forecast notional recovery from the application of LRIC demand charges (before any rounding) to all EDCM Connectees only.

Volume for scaling is calculated as the sum of  $(0.5 + \text{coincidence factor}) \times \text{import capacity}$  for all EDCM Connectees.

Volume for scaling for storage sites is calculated as the sum of  $(0.5 + \text{coincidence factor}) \times \text{import capacity}$  for EDCM Connectees that are Electricity Storage Facilities.

Coincidence factor is calculated as the forecast peak-time consumption in kW divided by maximum capacity in kVA of that Connectee (based on historical data) multiplied by  $(1 - (\text{Hours in super-red for which not a customer} / \text{Annual hours in super-red})) \times (\text{Days in year} / (\text{Days in year} - \text{Days for which not a customer}))$

Import capacity is the Maximum Import Capacity (adjusted if the Connectee is connected for part of the Charging Year) in kVA for that EDCM Connectee.

- 18.21 The fixed adder in p/kVA/day is converted into an import capacity based charge for each EDCM Connectee which is not an Electricity Storage Facility as follows:

Import capacity based fixed adder in p/kVA/day = Fixed adder \*  $(0.5 + \text{coincidence factor})$

Where:

Fixed adder is the Distribution System-wide p/kVA/day fixed adder calculated as described in the previous paragraph.

Coincidence factor is calculated as the forecast peak-time consumption in kW divided by Maximum Import Capacity in kVA of that Connectee (based on historical data)

multiplied by (1 - (Hours in super-red for which not a customer/Annual hours in super-red))\*(Days in year/(Days in year - Days for which not a customer)).

18.21A The fixed adder for EDCM Connectees that are Electricity Storage Facilities is zero.

## **Glossary of Terms used in this Schedule 18**

Add the following new definitions:

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 that if, registered in an MPAS Registration System:

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

or; if registered in CMRS,

- (a) has an import Metering System and export Metering System with associated metering equipment which both only measure activities necessary for performing Electricity Storage;
- (b) all metering equipment referred to in point (a) above is CT metering; and
- (c) is subject to customer certification that the facility meets the above criteria with the agreement of the DNO/IDNO Party.