

## DCUSA Change Proposal Form

This form is issued in accordance with Clause 10.5 of the DCUSA.

Completed forms should be returned to [dcusa@electralink.co.uk](mailto:dcusa@electralink.co.uk) for assessment by the DCUSA Panel. Failure to complete all parts of the form may result in it being rejected by the DCUSA Panel.

- PART A – Mandatory for all Change Proposals
- PART B – Mandatory for Non Charging Methodologies Proposals
- PART C – Mandatory for Charging Methodologies Proposals
- PART D – Guidance Notes

### PART A - MANDATORY FOR ALL CHANGE PROPOSALS

| <b>Document Control</b>   |  |
|---|--|
| CP Status   | Standard   |
| CP Number   | DCP 229  |
| Date of submission  | 14/01/2015   |
| Attachments   | [See Guidance Note 1]  |
| <b>Originator Details</b>   |  |
| Company Name  | WPD  |
| Originator Name   | Dave Wornell   |
| Category  | <del>DG</del> / DNO / IDNO / <del>OTSO</del> / SUPPLIER / OTHER        |
| Email Address   | dwornell@westernpower.co.uk  |
| Phone Number  | 01179332032  |
| <b>Change Proposal Details</b>  |  |
| CP Title  | Generic import charge for generators                                   |
| Impacted parties  | Generators, DNOs, IDNOs and Suppliers                                  |
| Impacted Clause(s)  | Schedule 17/18   |
| Part 1 / Part 2 Matter  | Part 1   |
| Provide your rationale why you consider this change is a Part 1 or Part 2 Matter  | The changes are part of schedule 17/18 are treated as a part 1 matter. |
| Related Change Proposals  | n/a  |
| <b>Change Proposal Intent</b>   |  |
| To produce a generic import charge for generators or generation dominated sites in the EDCM.  |  |
| <b>Business Justification and Market Benefits</b>   |  |
| <p>The EDCM or more particularly the site specific charging methodology was designed to individually price the small/ manageable number of exceptional sites connected at HV Sub or above. Over the last few years DNOs have experienced a large increase in the number of new sites making the total amount of site specific charges more difficult to manage for DNOs, suppliers and customers. One solution to this is to introduce a voltage level generic charge for the import side of the generation dominated site. The import charge for the generator or a generation dominated site is a very small proportion of the total charge and introducing this would simplify the charging process as the number of site specific charges needed to be calculated and checked would reduce. The result of this would have a positive impact on the data entry and checking for suppliers, and greater certainty for generator charges which would improve competition in the generation market.</p> |  |

## Proposed Solution and Draft Legal Text

The voltage level generic charge would use the minimum NUFs and average generator super red as before to drive the voltage level capacity charge.

The sole use asset charge for generators or generation dominated sites would be solely borne by the generation side of the Sole use assets. Therefore the calculation that split the SUA charge between the generation and demand in proportion to import and export capacities should be calculated as if the import capacity was zero.

The LRIC/FCP charge for generators or generation dominated sites would be zero.

Proposed Legal Text

### Schedule 18

6.3 The import charges for the application of charge 1, is given by the formulas:

$$[\text{p/kWh super-red rate}] = (([\text{remote charge 1 } \text{£/kVA/year}] / \text{PF}) / [\text{number of hours in the super-red time band in a year}]) * 100$$

$$[\text{p/kVA/day capacity charge}] = ([\text{local charge 1 } \text{£/kVA/year}] / [\text{days in Charging Year}]) * 100$$

Where:

PF is the power factor of the flow at the point at which the customer is attached in the maximum demand scenario. This is calculated as  $-\text{[Active power flow]} / (\text{SQRT}([\text{Active power flow}]^2 + [\text{Reactive power flow}]^2))$ . If either the numerator or denominator in calculation of the power factor is zero, the PF is replaced with 1. If the active power flow is generation-dominated, then PF is replaced with 1.

If the site is a generator or generation dominated then the  $[\text{p/kWh super-red rate}] = 0$ .

14.4 Where a single site has both import and export charges associated with import and export meter registrations and is not a generator or generation dominated, the sole use assets are allocated between the import and export proportionally to Maximum Import Capacity and Maximum Export Capacity respectively. Where a single site is a generator or generation dominated then the sole use assets are allocated solely to the export.

Where any part of the Maximum Export Capacity associated with an export meter registration is exempt from use of system charges in the charging year, the value of sole use assets allocated to the export tariff is reduced by multiplying it by the ratio of the Chargeable Export Capacity to the Maximum Export Capacity.

19.5 The final EDCM import capacity charge for each EDCM Connectee in p/kVA/day would be calculated as follows:

$$\text{EDCM import capacity charge (p/kVA/day)} = [\text{LRIC p/kVA/day capacity charge}] + [\text{Transmission exit charge p/kVA/day}] + [\text{Network rates and direct costs charge in p/kVA/day}] + [\text{Indirect costs charge in p/kVA/day}] + [\text{Asset based residual revenue charges in p/kVA/day}] + [\text{Single fixed adder in p/kVA/day}]$$

The Import Capacity charge (p/kVA/day) for generators or generation dominated sites =

$[\text{average LRIC p/kVA/day capacity charge for all generators or generation dominated sites at time of tariff setting}] +$

$[\text{Transmission exit charge p/kVA/day}] +$

$[\text{Network rates and direct costs charge in p/kVA/day}] +$

$[\text{Indirect costs charge in p/kVA/day}] +$

$[\text{average Asset based residual revenue charges in p/kVA/day by voltage level for generators or generation}]$

dominated sites] +  
[Single fixed adder in p/kVA/day]

## Schedule 17

6.2 The import charges for the application of charge 1 is given by the formulas:

For Connectees with zero average kW/kVA:

$$[\text{p/kWh super-red rate}] = ([\text{parent charge 1 } \text{£/kVA/yr}] * (\text{abs}[A1] / (\text{SQRT}(A1^2 + R1^2))) / [\text{Super-red hours}] * 100) + ([\text{grandparent charge 1 } \text{£/kVA/yr}] * (\text{abs}[A2] / (\text{SQRT}(A2^2 + R2^2))) / [\text{Super-red hours}] * 100)$$
$$[\text{p/kVA/day capacity charge}] = ([\text{network charge 1 } \text{£/kVA/year}] / [\text{days in Charging Year}] * 100) + ([\text{parent charge 1 } \text{£/kVA/yr}] * (-R1 * [\text{Average kVAr/kVA}]) / (\text{SQRT}(A1^2 + R1^2))) / [\text{days in Charging Year}] * 100 + ([\text{grandparent charge 1 } \text{£/kVA/yr}] * (-R2 * [\text{Average kVAr/kVA}]) / (\text{SQRT}(A2^2 + R2^2))) / [\text{days in Charging Year}] * 100)$$

For all other Connectees:

$$[\text{p/kWh super-red rate}] = [\text{parent charge 1 } \text{£/kVA/yr}] * (\text{abs}[A1] - (R1 * ([\text{Average kVAr/kVA}] / [\text{Average kW/kVA}]))) / (\text{SQRT}(A1^2 + R1^2)) / [\text{Super-red hours}] * 100 + ([\text{grandparent charge 1 } \text{£/kVA/yr}] * (\text{abs}[A2] - (R2 * ([\text{Average kVAr/kVA}] / [\text{Average kW/kVA}]))) / (\text{SQRT}(A2^2 + R2^2)) / [\text{Super-red hours}] * 100)$$
$$[\text{p/kVA/day capacity charge}] = [\text{network group charge 1 } \text{£/kVA/year}] / [\text{days in Charging Year}] * 100$$

Where:

A1 and R1 are the values of the active power flow and reactive power flow modelled through the parent network group in the maximum demand scenario.

A2 and R2 are the values of the active power flow and reactive power flow modelled through the grandparent network group in the maximum demand scenario.

If both A1 and R1 are equal to zero, in respect of that network level in the formulas above, the term  $(\text{abs}[A1] / (\text{SQRT}(A1^2 + R1^2)))$  is set equal to 1,  $(-R1 * [\text{Average kVAr/kVA}]) / (\text{SQRT}(A1^2 + R1^2))$  is set equal to zero, and  $([\text{Average kVAr/kVA}] / [\text{Average kW/kVA}]) / (\text{SQRT}(A1^2 + R1^2))$  is also set to zero.

If both A2 and R2 are equal to zero, in respect of that network level in the formulas above, the term  $(\text{abs}[A2] / (\text{SQRT}(A2^2 + R2^2)))$  is set equal to 1,  $(-R2 * [\text{Average kVAr/kVA}]) / (\text{SQRT}(A2^2 + R2^2))$  is set equal to zero, and  $([\text{Average kVAr/kVA}] / [\text{Average kW/kVA}]) / (\text{SQRT}(A2^2 + R2^2))$  is also set to zero. Version 6.4 Schedule 17 572

Any negative contributions to the [p/kVA/day capacity charge] or the [p/kWh super-red rate] from the parent or the grandparent network groups are set to zero.

Super red hours are the number of hours in the DNO Party's super-red time band.

The average kW/kVA and average kVAr/kVA figures are forecasts for the Charging Year, based on data from the most recent regulatory year for which data were available in time for setting charges for the Charging Year. Specifically, active and reactive power consumptions are averaged over a super-red time band, which is a seasonal time of day period determined by the DNO Party to reflect the time of peak, and then divided by the Maximum Import Capacity (averaged over the same financial year). If the DNO Party considers that the reactive consumption data relates to export rather than import (e.g. the average kVAr figure exceeds half of the Maximum Import Capacity) then the Maximum Import Capacity in the denominator should be replaced by the Maximum Export Capacity of the same Connectee. The average kVAr divided by kVA is restricted to be such that the combined active and reactive power flows cannot exceed the Maximum Import Capacity.

If the site is a generator or generation dominated then the [p/kWh super-red rate]=0

14.4 Where a single site has both import and export charges, associated with import and export meter registrations, and is not a generator or generation dominated, the sole use assets are allocated between the import

and export proportionally to Maximum Import Capacity and Maximum Export Capacity respectively. **Where a single site is a generator or generation dominated then the sole use assets are allocated solely to the export.** Where any part of the Maximum Export Capacity associated with an export meter registration is exempt from use of system charges in the charging year, the value of sole use assets allocated to the export tariff is reduced by multiplying it by the ratio of the Chargeable Export Capacity to the Maximum Export Capacity.

19.5 The final EDCM import capacity charge for each EDCM Connectee in p/kVA/day would be calculated as follows:

EDCM import capacity charge (p/kVA/day) = [FCP p/kVA/day capacity charge] + [Transmission exit charge p/kVA/day] + [Network rates and direct costs charge in p/kVA/day] + [Indirect costs charge in p/kVA/day] + [Asset based residual revenue charges in p/kVA/day] + [Single fixed adder in p/kVA/day]

**The Import Capacity charge (p/kVA/day) for generators or generation dominated sites =**  
[average FCP p/kVA/day capacity charge for all generators or generation dominated sites at time of tariff setting] +  
[Transmission exit charge p/kVA/day] +  
[Network rates and direct costs charge in p/kVA/day] +  
[Indirect costs charge in p/kVA/day] +  
[average Asset based residual revenue charges in p/kVA/day by voltage level for generators or generation dominated sites] +  
[Single fixed adder in p/kVA/day]

#### **Proposed Implementation Date**

April 16.

#### **Impact on Other Codes**

Please tick the relevant boxes and provide any supporting information.

|           |                                     |
|-----------|-------------------------------------|
| 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 checked="" type="checkbox"/> |

If other please specify

#### **Consideration of Wider Industry Impacts**

N/A

#### **Environmental Impact**

None

|                        |
|------------------------|
| <b>Confidentiality</b> |
| N/A                    |

**PART B – MANDATORY FOR NON CHARGING METHODOLOGIES CHANGE PROPOSALS**

|   |
|---|
| <b>DCUSA Objectives</b>   |
| <p><u>General Objectives:</u></p> <p>Please tick the relevant boxes. [See Guidance Note 9]</p> <p><input type="checkbox"/> 1 The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated, and economical Distribution Networks</p> <p><input checked="" type="checkbox"/> 2 The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith) the promotion of such competition in the sale, distribution and purchase of electricity</p> <p><input checked="" type="checkbox"/> 3 The efficient discharge by the DNO Parties and IDNO Parties of obligations imposed upon them in their Distribution Licences</p> <p><input type="checkbox"/> 4 The promotion of efficiency in the implementation and administration of this Agreement</p> <p><input type="checkbox"/> 5 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.</p> |
| <b>Detailed rationale for better facilitation of the DCUSA Objectives identified above</b>  |
| <p>This DCP will improve efficiency in the application of the charging methodologies.</p> <p>This DCP will give greater consistency and transparency for generator charges which will promote competition in the generator market.<br/>[See Guidance Note 10]</p>   |

**PART C – MANDATORY FOR CHARGING METHODOLOGIES CHANGE PROPOSALS**

|   |
|---|
| <b>DCUSA Charging Objectives</b>  |
| <p>Please tick the relevant boxes. [See Guidance Note 11]</p> <p><u>Charging Objectives:</u></p> <p><input type="checkbox"/> 1 that compliance by each DNO Party with the Charging Methodologies facilitates the discharge by</p> |

the DNO Party of the obligations imposed on it under the Act and by its Distribution Licence

- 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)
- 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
- 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
- 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.

General Objectives:

- 1 The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated, and economical Distribution Networks
- 2 The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith) the promotion of such competition in the sale, distribution and purchase of electricity
- 3 The efficient discharge by the DNO Parties and IDNO Parties of obligations imposed upon them in their Distribution Licences
- 4 The promotion of efficiency in the implementation and administration of this Agreement
- 5 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.

**Detailed rationale for better facilitation of the DCUSA Objectives identified above**

This DCP will improve efficiency in the application of the charging methodologies.

This DCP will give greater consistency and transparency for generator charges which will promote competition in the generator market.

**Has this issue been discussed at any other industry forums? If so please specify and provide supporting documentation**

No

**PART D – GUIDANCE NOTES FOR COMPLETING THE FORM**

Guidelines for Working Group Members and Working Group Terms of Reference are available on the DCUSA Website and provide more information about the progression of the Change Process. [www.dcusa.co.uk](http://www.dcusa.co.uk)

| Ref | Data Field | Guidance |
|-----|------------|----------|
|-----|------------|----------|

|          |  |   |
|----------|--|---|
|          |  |   |
| <b>1</b> | <b>Attachments</b>                             | Append any proposed legal text or supporting documentation in order to better support / explain the CP.   |
| <b>2</b> | <b>Part 1 / Part 2 Matter</b>                  | 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.  |
| <b>3</b> | <b>Related Change Proposals</b>                | Indicate if the CP is related to or impacts any CP already in the DCUSA or other industry change process.   |
| <b>4</b> | <b>Proposed Solution and Draft Legal Text</b>  | <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. 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>   |
| <b>5</b> | <b>Proposed Implementation Date</b>            | <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 in to consideration the deadlines for publishing indicative tariffs.</p> <ul style="list-style-type: none"> <li>• Submission of Company indicative tariffs is 31 December of each year.</li> <li>• Final tariffs are published on 1 April of each year.</li> </ul> <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 within the December indicative tariffs.</p> <p>Contact the DCUSA helpdesk for any further information on the releases <a href="mailto:dcusa@electralink.co.uk">dcusa@electralink.co.uk</a>.</p> |
| <b>6</b> | <b>Consideration of Wider Industry Impacts</b> | 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.  |
| <b>7</b> | <b>Environmental Impact</b>                    | 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 <a href="#">Ofgem Guidance</a> .   |

|           |  |   |
|-----------|--|---|
|           |  |   |
| <b>8</b>  | <b>Confidentiality</b>                         | 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.  |
| <b>9</b>  | <b>DCUSA General Objectives</b>                | Indicate which of the DCUSA Objectives will be better facilitated by the Change Proposal.   |
| <b>10</b> | <b>Detailed Rationale for DCUSA Objectives</b> | 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. |
| <b>11</b> | <b>DCUSA Charging Objectives</b>               | Indicate which of the DCUSA Charging Objectives will be better facilitated by the Change Proposal. Please note that a CDCM or EDCM change may also facilitate the DCUSA General objectives.             |