

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 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

Document Control	
CP Status	Standard / Urgent
CP Number	DCP 137
Date of submission	13 June 2012
Attachments	Report by Generator Dominated Areas working group (PDF document)
Originator Details	
Company Name	Electricity North West
Originator Name	Andrew Pace
Category	DG / DNO / IDNO / OTSO / SUPPLIER / OTHER
Email Address	andrew.pace@enwl.co.uk
Phone Number	+44 (0) 1925 846855
Change Proposal Details	
CP Title	Introduction of locational tariffs for the export from HV generators in areas identified as generation dominated.
Impacted parties	Suppliers, DNOs, IDNOs, UMSOs, MAs and end customers
Impacted Clause(s)	Schedule 16
Part 1 / Part 2 Matter	Part 1
Related Change Proposals	
Change Proposal Intent	
<p>This Change Proposal is being raised on behalf of the Generator Dominated Areas (GDA) working group, which is a sub-group of the Methodologies Issues Group (MIG).</p> <p>The intent of this proposal is to change the methodology for calculating charges for HV generators within the CDCM by:</p> <ol style="list-style-type: none"> 1. Introducing a methodology to identify which primary substations are generator dominated. 2. Reducing or removing the credit for the units exported by High Voltage (HV) generators connected to the primary substations that have been identified as generation dominated. 	
Business Justification and Market Benefits	
<p>All LV/HV generators receive a credit for their export within the current Common Distribution Charging Methodology (CDCM). Ofgem have identified that in some areas, LV/HV generators may receive a credit when they are driving reinforcement on the Distributor's network. Continuing to reward these customers by paying a credit could incentivise further generation to connect in these areas which increases the likelihood of the Distributor needing to reinforce these assets for generation purposes rather than demand. Under these circumstances, the Distributor should not pay a credit to the</p>	

generator and pay to reinforce the network. This change proposal removes or reduces the credit to HV generators in GDAs to reflect the likelihood that the distributor will need to reinforce the primary substation due to the output from the connected generation.

Proposed Solution and Draft Legal Text

PROPOSED SOLUTION

To identify primary substations that are generator dominated using the criteria contained within the attached report (the proposed formulae are contained in Appendix 1)

To reduce or remove the CDCM credit for the HV generators connected to the primary substations that have been identified as generator dominated. The proposed solution is option 1 within the attached document (detailed in Appendix 2) which provides a range of discounts depending on the expected duration before the primary substation will become generation dominated.

The attached paper provides more detail on how the charges would be derived and the background behind this methodology.

SUGGESTED LEGAL DRAFTING:

Insert a new section after 146 as follows:

Generator Dominated Areas

147 The DNO will identify any primary substations that are currently, or forecast to become, generation dominated within 10 years from the date of the calculation. The determination of whether the primary substations are generation dominated will take place during the year prior to setting charges effective from April in the following regulatory year.

148 A primary substation is identified as generator dominated where the result of Test 1 and Test 2 below are true. This test will be undertaken four times for each primary substation using different time durations (element "t"). The four values used for time are 2.5, 5, 7.5 and 10 years.

Test 1

$$FC \times SW < GC_t - MIND_t$$

Test 2

$$GC_t - MIND_t > MAXD_t - MING_t$$

Where:

$$GC_t = GC \times (1 + g_{DG\%})^t$$

$$MIND_t = MIND \times (1 + g_{MIND\%})^t$$

$$MAXD_t = MAXD \times (1 + g_{MAXD\%})^t$$

$$MING_t = MING \times (1 + g_{MING\%})^t$$

<i>Where:</i>	Source
FC is the firm capacity served by the substation, measured in MW or MVA.	Long term development statement Table 3 – Load Data 'Firm Capacity'
SW is a factor < 1 reflecting the fact that summer firm capacity is less than winter firm capacity.	Default estimate: 0.8
GC is the lower of the "Total Installed Generation Capacity" and the "Aggregated Maximum Export Capacity" of the HV generators connected to the primary substation.	<p>"Total Installed Generation Capacity" is sourced from the Long Term Development Statement, Table 5 - Generation data</p> <p>"Aggregated Maximum Export Capacity" is the sum of the Maximum Export Capacity of all HV generators connected to the primary substation, sourced from the Connection Agreements with each customer.</p>
g_{DG}% is the estimated annual percentage growth rate in distributed generation.	DG growth rates per DNO area based on FBPQ forecasts
MIND is the estimated existing minimum demand served by the primary substation. This is calculated as the product of the observed maximum demand and a minimum demand scaling factor.	Long term development statement Table 3 – Load Data 'Maximum Demand (MW or MVA)' x 'Minimum demand Scaling Factor'
g_{MIND}% is the annual percentage growth rate in the level of minimum demand.	Apply a minimum demand growth rate of 1%. This is consistent with the growth in demand forecasted between 2010/11 and 2014/15 in the LTDS load data tables. This growth rate is also consistent with assumptions used elsewhere, for example in the EDCM "Long Run Incremental Cost" (LRIC) methodology.
MAXD is the estimated maximum demand served by the primary substation.	Long term development statement Table 3 – Load Data 'Maximum Demand (MW or MVA)'
g_{MAXD}% is the annual percentage growth rate in the level of maximum demand.	Apply a maximum demand growth rate of 1%. This is consistent with the growth in demand forecasted between 2010/11 and 2014/15 in the LTDS load data tables. This growth rate is also consistent with assumptions used elsewhere, for example in the EDCM "Long Run Incremental Cost" (LRIC) methodology.
MING is the estimated minimum generation served by the primary	GC x 'Minimum generation Scaling Factor' The scaling factor is assumed to

substation. This is calculated as the product of the observed generation capacity (GC) and a minimum generation scaling factor.	be 0.4 until a calculated value is derived.	
$g_{MING\%}$ is the estimated annual percentage growth rate in the level of minimum generation.	DG growth rates per DNO area based on FBPQ forecasts	
t is the time horizon (n years) over which the test seeks to identify the prevalence of GDAs.	Test will be undertaken for the following time periods: 2.5, 5, 7.5 and 10 years.	
Note: Use of MW or MVA should be consistent throughout		

149 Where a primary substation is identified as generation dominated, the DNO will identify the HV generation customers connected to that primary substation. These generation customers are defined as GDA Customers.

150 The unit rate of the export tariff applied to the export MPAN of the GDA Customers will be reduced as specified in the table below based on the time when the primary substation to which the site is connected is expected to become generation dominated.

Tariff Name	Time when primary becomes generator dominated (years)	Percentage discount to apply to unit rate/s
HV Generation Intermittent	10 years	0%
HV Generation Intermittent	7.5 years	33%
HV Generation Intermittent	5 years	67%
HV Generation Intermittent	2.5 years	100%
HV Generation Non-Intermittent	10 years	0%
HV Generation Non-Intermittent	7.5 years	33%
HV Generation Non-Intermittent	5 years	67%
HV Generation Non-Intermittent	2.5 years	100%

151 Notwithstanding paragraph 150 above, the discount to the unit rate of the export tariff shall not be applied to export MPANs of generators that have a qualifying generation management agreement with the DNO. A qualifying generation management agreement is an agreement for a generator to reduce its export during a planned outage at or following a fault at the relevant generation dominated primary substation such that it is would not be necessary to reinforce that substation to accommodate export within the following 2.5 years on the assumption that the generation management agreement continues to be in operation.

Proposed Implementation Date
April 2013

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"/>
Other	<input type="checkbox"/>
None	<input checked="" type="checkbox"/>

If other please specify

Consideration of Wider Industry Impacts

None identified

Environmental Impact

None Identified

Confidentiality**PART B – MANDATORY FOR NON CHARGING METHODOLOGIES CHANGE PROPOSALS****DCUSA Objectives**General Objectives:

Please tick the relevant boxes.

- 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.

Rationale for better facilitation of the DCUSA Objectives identified above

PART C – MANDATORY FOR CHARGING METHODOLOGIES PROPOSALS

DCUSA CDCM Objectives

Please tick the relevant boxes.

CDCM Objectives:

- 1 that compliance by each DNO Party with the Charging Methodologies facilitates the discharge by 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

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.

Rationale for better facilitation of the DCUSA Objectives identified above

CDCM Objectives:

1. The change proposal better meets CDCM objective one by satisfying the licence obligation on DNOs to review the charging methodology and bring about changes to improve the methodology.
2. The change proposal better meets CDCM objective two by facilitating competition through more cost reflective charges for generation.
3. The change proposal better meets CDCM objective three by removing the incentive for HV generators to connect to primary substations which are currently or are likely to become

generator dominated. This will result in tariffs that are more reflective of the costs incurred by the DNO in running their networks.

4. The change proposal better meets CDCM objective four by producing tariffs that reflect the degree to which a DNOs network is generator dominated and gradually remove credits to generators as the growth in distributed generation increases.

General Objectives:

1. The change proposal better meets general objective one by removing the incentive for HV generators to connect to primary substations which are currently or are likely to become generator dominated. This will result in less expenditure by DNOs on reinforcing their networks.
2. The change proposal better meets general objective two by producing more cost reflective charges for generation.
3. The change proposal better meets general objective three by satisfying the licence obligation on DNOs to review the charging methodology and bring about changes to improve the methodology.

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

At the DCMF, DCMF MIG meetings and the GDA MIG sub-group.

PART D – GUIDANCE NOTES FOR COMPLETING THE FORM

Data Field	Guidance
Attachments	Append any proposed legal text or supporting documentation in order to better support / explain the CP.
Change Proposal Intent	Outline the issue the CP is seeking to address. Please note that the intent of the CP cannot be altered once submitted.
Confidentiality	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
CP Status	A CP may be deemed 'urgent' in accordance with Clause 10.4.8 of the DCUSA. The proposer should give supporting reasons.
DCUSA General Objectives	Indicate which of the DCUSA Objectives will be better facilitated by the Change Proposal.
DCUSA CDCM Objectives	Indicate which of the DCUSA CDCM Objectives will be better facilitated by the Change Proposal. Please note that a CDCM change may also facilitate the DCUSA General objectives.
Draft Legal Text	Insert proposed legal drafting (change marked against any existing DCUSA drafting). The Change Proposal Intent will take precedence in the event of any inconsistency.

Environmental Impact	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 Ofgem Guidance .
Impact of Wider Industry Change	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.
Part 1 / Part 2 Matter	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.
Proposed Implementation Date	The Change can be implemented in February, June, and November of each year.
Proposed Solution	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.
Rationale for DCUSA Objectives	Provide 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.
Related Change Proposals	Indicate if the CP is related to or impacts any CP already in the DCUSA or other industry change process.