









DCUSA Consultation	At what stage is this document in the process?
<h1 data-bbox="124 376 550 470">DCP 283</h1> <h2 data-bbox="116 504 970 638">The Calculation of Generation Credits in the CDCM</h2> <p data-bbox="116 667 844 703"><i>Raised as a Standard Change on 12 October 2016</i></p>	01 – Change Proposal
	02 – Consultation
	03 – Change Report
	04 – Change Declaration
<p>Purpose of Change Proposal:</p> <p>DCP 283 seeks to amend the calculation of credits for embedded generation to more closely reflect the benefits they bring to Distribution Network Operators.</p> <p>This document is a Consultation issued to DCUSA Parties and any other interested Parties in accordance with Clause 11.14 of the DCUSA seeking industry views on DCP 283.</p>	
	<p>The Workgroup recommends that this Change Proposal should proceed to Consultation.</p> <p>Parties are invited to consider the questions set in section 10 and submit comments using the form attached as Attachment 1 to dcusa@electralink.co.uk by 04 April 2017</p> <p>The Working Group will consider the consultation responses and determine the appropriate next steps for the progression of the Change Proposal (CP).</p>
	<p>Impacted Parties: Distribution Network Operators (DNOs), Generators, Suppliers</p>
	<p>Impacted Clauses: Schedule 16 (CDCM)</p>

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Timetable		
The timetable for the progression of the CP is as follows:		
Change Proposal timetable		
Activity	Date	
Initial Assessment Report Approved by Panel	19 October 2016	
Consultation issued to Parties	14 March 2017	
Change Report issued to Panel	13 September 2017	
Change Report issued for Voting	22 September 2017	
Party Voting Ends	13 October 2017	
Change Declaration issued to Authority	17 October 2017	
Authority Decision	21 November 2017	
Proposed Implementation Date	01 April 2019	

1. Summary

What?

- 1.1 The Distribution Connection and Use of System Agreement (DCUSA) is a multi-party contract between electricity Distributors and electricity Suppliers and large Generators. Parties to the DCUSA can raise Change Proposals (CPs) to amend the Agreement with the consent of other Parties and (where applicable) the Authority.

Why?

- 1.2 DCP 283 has been raised by MVV Environment Services Limited and suggests two changes that could improve the cost reflectivity of generation credits for embedded generators. More cost reflective credits for generators will place incentives on embedded generation that reflect the benefits they bring to network operators.

How?

- 1.3 The current arrangements award credits to embedded generators at all voltage levels above but not including the voltage of connection. This proposed solution is to:
- exclude the customer contributions discount in the assessment of credits for embedded generators in the Common Distribution Charging Methodology (CDCM);
 - award a partial credit at the voltage of connection for Low Voltage (LV) connected non-intermittent generation based on a proposed share of asset costs avoided; and
 - award a full credit at the voltage of connection for Low Voltage Substation (LVS) connected non-intermittent generation.

2 Governance

Justification for Part 1 Matter

- 2.1 DCP 283 is classified as a Part 1 matter and therefore will go to the Authority for determination after the voting process has completed.
- 2.2 This issue is considered a Part 1 Matter as it affects the level of charges for embedded generators and therefore impacts on competition for embedded generation as specified under DCUSA clause 9.4.2 (A).

Requested Next Steps

Following a review of the Consultation responses, the Working Group will work to agree the detail of the solution for DCP 283.

3 Why Change?

Background of DCP 283

- 3.1 The Proposer has raised this CP to address two issues with the calculation of credits within the CDCM; the discounting of credits to take account of customer contributions the principle of applying credits at the voltage of connection. These issues are considered separately below:

Treatment of customer contributions

- 3.2 Within the CDCM, demand charges are reduced by customer contributions to take account of amounts paid up front when customers connect. Customer contributions for demand are also applied to the calculation of generation credits. The impact of the application of customer contributions is to reduce the level of credits.
- 3.3 It is the Proposer's view that when a generator connects to the network, one of the benefits that is realised by the DNO is a reduced flow on the local network. This allows further demand customers to connect without the need for reinforcement and therefore they will need to make less or no customer contribution when they connect. Consequently, applying the customer contributions to generation credits reduces the cost reflectiveness of the credit that is provided to embedded generation under the CDCM.

Credits at the voltage of connection

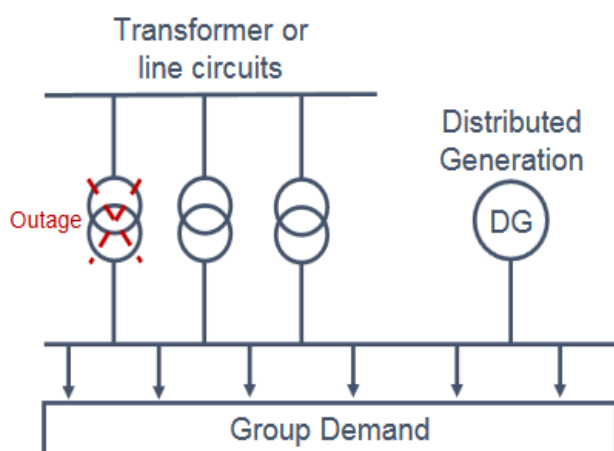
- 3.4 The principle applied within the CDCM is that credits are awarded to embedded generators for voltage levels above but not including the voltage level of connection. For demand, costs are taken into account down to and including the voltage of connection. The rationale for awarding credits above the voltage level of connection was set down when the CDCM was developed and was justified as the benefit of reduced reinforcement was perceived to be higher up the network. The requirement was set out in an Ofgem decision document in 2008¹ within Appendix 2 which outlines the principles and assumptions to be used when setting out the CDCM. The relevant assumption is set out in 1.51 which states:

"1.51. The network is assumed to be demand dominated. Credit will be provided for offsetting demand on the distribution network above the voltage of connection "

- 3.5 The Ofgem decision is based on Engineering Recommendation P2/6 as supported by ETR 130 Application Guide for Assessing the Capacity of Networks Containing Distributed Generation and applies to both intermittent and non-intermittent generation.

¹ [Ofgem decision document - Delivering the electricity distribution structure of charges](#)

- 3.6 The basic principle of P2/6 and ETR130 is that embedded generation can offset the need for network capacity depending on the reliability of the generator and its setup. A simple example where an embedded generator offsets the need for a transformer is shown in the diagram below:



- 3.7 The more reliable the generator is the more the DNO can rely on it for network planning purposes. P2/6 sets out the reliability factors (labelled “f” factors) for different types of generation. Where a generator is intermittent, an additional persistence factor is also taken into account.
- 3.8 When assessing the ability of an embedded generator to offset network capacity, P2/6 refers to a demand group. The demand group is not specified at a network level and the assumption within the CDCM is that the benefit will be realised at the next voltage level up (e.g. for embedded generation connected to the LV circuit level, the benefit will be realised at the LVS transformer).

High Voltage

- 3.9 At High Voltage (HV), DNOs typically exclude HV connected generators when considering the network required to meet the demand for a new customer. However, at the substation, they take account of any embedded generation and consequently less capacity may be required at the substation and voltage levels above. This principle suggests that the current principle within the CDCM of awarding credits for the voltage levels above the voltage of connection is correct as the benefit to the DNO is only realised at higher voltage levels. The Proposer is not suggesting an amendment to the methodology for credits for HV connected generators.

Low Voltage Substation

- 3.10 Embedded generators who connect directly at LVS do not currently get a credit for avoiding the use of the LV substation. However, the principle that the benefit is realised at the substation where the capacity can be reduced holds true even though the generator is connected directly to a substation, provided other customers are also connected to that substation and so the power output from the generator can flow to demand customers without using the HV/LV transformer. It is therefore appropriate that, if LVS generators are predominantly at shared substations, LVS generators should receive the benefit at the voltage of connection. However, as the generator will

only benefit the DNO if it can be relied on, the Proposer is suggesting extending the credits to the voltage of connection for non-intermittent generation only.

Low Voltage

- 3.11 Embedded generators connected to the LV network are not particularly visible to DNOs. When a DNO is planning the LV network, they are more likely to assess the maximum demand at the local substation with some consideration of any large generation that may be connected. At the LV network the presence of generation will be more diverse and therefore the Proposer believes some of the benefits will be realised at the level of connection in addition to the higher voltage levels. The Proposer wishes to take account of generation credits at the voltage of connection for LV connected generation by allocating a proportion of the demand costs at the voltage of connection as a credit to non-intermittent embedded generation at LV. The Proposer suggests a 75% sharing factor for the proportion of the LV demand charge that should be allocated to LV connected generation, but suggest that this value would need further consideration by the Working Group.

Question 1

Do you understand the intent of the CP?

Question 2

Are you supportive of the principles of the CP?

4 Code Specific Matters

Reference Documents

n/a.

5 Working Group Assessment

DCP 283 Working Group Assessment

- 5.1 The DCUSA Panel established a Working Group to assess DCP 283. This Working Group consists of DNO, Supplier, National Grid and Ofgem representatives. Meetings were held in open session and the minutes and papers of each meeting are available on the DCUSA website – www.dcusa.co.uk.

Request for Information

- 5.2 To assist the Working Group in assessing the CP a Request For Information (RFI) was issued to DNOs. The purpose of the RFI was to help establish how DNOs plan their network and the extent

to which they rely on embedded generation from a planning perspective. A copy of the RFI and a summary of responses received is included in Attachment 3. The outcome of the RFI has been used to develop this consultation document.

Treatment of customer contributions

- 5.3 Within the CDCM, demand charges are reduced by the customer contribution to take account of the amount paid up front when a customer connected. The customer contribution is accounted for within the CDCM as a percentage discount at each voltage level that is applied to the demand asset charge only (i.e. not to the operating cost elements of demand charges). The percentage value represents the typical proportion of costs paid for by customers when they connect to the network split by voltage level. For example, where a customer connects at LV, they are likely to pay most of the reinforcement costs at the LV level (normally in excess of 90%) and a smaller proportion of costs at the LVS level and an even smaller proportion at the HV level.
- 5.4 The customer contribution for demand impacts the level of generation credits. This is because the customer contributions are used to discount the yardstick tariffs for demand which are then used to determine the generation credits. Even though the generation credits are only awarded at voltage levels above the level of connection, this still impacts the level of credits as the discount from the customer contributions apply at the voltage of connection and the voltage levels above.
- 5.5 It should be noted that extending the level of credits to the voltage of connection as is proposed under this CP at LV and LVS level would have a bigger impact on generation credits if customer contributions were removed from the calculation. This is because the customer contribution at the voltage of connection for LV demand customers tends to be very large (over 90%) and would therefore effectively negate the additional credit at the voltage of connection for the asset costs but not the operating costs.
- 5.6 The Proposer believes that when a generator connects to the network, one of the benefits that is realised by the DNO is a reduced flow on the local network and at higher voltage levels. The Proposer believes that this allows further demand customers to connect without the need for reinforcement and therefore they will need to make less or no customer contribution when they connect. Consequently, the Proposer believes that applying the customer contributions to generation credits reduces the cost reflectiveness of the credit that is provided to embedded generators under the CDCM.
- 5.7 The Working Group discussed that the treatment of customer contributions is a forward looking process. To offset future costs, the Working Group noted that there is a need for credits. The rationale behind the proposal is when a generator connects there is a cost saving which creates a more resilient network and reduces the need for new demand customers to pay contributions. However not all members of the Working Group agree with the Proposer's assertion that customer contributions will necessarily be reduced by the presence of embedded generation. For example, the majority of the customer contribution paid by a developer to connect a new housing development is likely to be for the local network (i.e. LV mains and service cables within the development). However, the Proposer's view is that the benefit would still be realised at higher

voltage levels and that this element of the change proposal, on a standalone basis, would only remove customer contributions from the calculation of generator credits at higher voltage levels.

- 5.8 The CDCM states: ‘The DNO Party estimates the extent to which the assets at each network level used by each category of users would have been expected to be covered by customer contributions if they had been constructed under the charging year’s connection charging policy’. One working group member suggested where a reduction in customer contributions (which the Proposer believes is driven by embedded generation) is seen, that in reality, the customer contribution percentages in the CDCM will decrease to reflect this. Thus, the benefit which embedded generation has driven will have already been accounted for through reduced customer contributions.
- 5.9 The Proposer’s view is that the CDCM model is forward looking and the historical customer contributions are used as a proxy for future costs. The Proposer notes that the customer contribution percentages are used to discount the asset costs which are derived from the 500MW model. As the 500MW model is a hypothetical model, combining it with customer contributions will not reflect the true incremental benefit of embedded generation. From a demand perspective, reducing the asset charge by customer contributions, leads to additional revenue being recovered from the scaling element. However, as generation credits are not scaled, the customer contributions simply discount the value of building new network as determined by the 500MW model.
- 5.10 DNOs have not routinely updated the customer contributions input over recent years, as this has been the subject of ongoing industry debates. However, some members of the Working Group believe that the perceived flaw in the methodology is not derived from the application of customer contributions to embedded generators, but rather in the calculation of the input values for customer contributions.

Question 3

Do agree with the principle that when a generator connects there is a cost saving which creates a more resilient network and reduces the need for new demand customers to pay contributions? Please provide rationale.

Credits at the voltage of connection

- 5.11 As set out in the CP the Proposer states the principle applied within the CDCM is that credits are awarded to embedded generators for voltage levels above but not including the voltage level of connection. For demand, costs are taken into account down to and including the voltage of connection. It was noted that the rationale for applying credits above the voltage level of connection was set down when the CDCM was developed and was justified as the benefit of

reduced reinforcement was perceived to be higher up the network. The requirement was set out in an Ofgem decision document in 2008² within Appendix 2 which outlines the principles and assumptions to be used when setting out the CDCM.

- 5.12 The Ofgem decision is based on Engineering Recommendation P2/6 as supported by ETR 130 Application Guide for Assessing the Capacity of Networks Containing Distributed Generation and applies to both intermittent and non-intermittent generation. It is suggested by the Proposer that the basic principle of P2/6 and ETR130 is that embedded generation can offset the need for network capacity depending on the reliability of the generator and its setup. It is stated within the CP that the more reliable the generator is the more the DNO can rely on it for network planning purposes.
- 5.13 The Working Group discussed the principle applied within the CDCM that credits are applied for voltage levels above the voltage level of connection. The P2/6 standard and the interaction between embedded generators and DNOs was discussed by members of the Working Group.
- 5.14 The Working Group sought parties' responses to the RFI (Question 1), of when Demand or Generation customers connect at LV/LVS/HV do DNOs adopt a higher standard than P2/6. This RFI question was asked to ascertain whether the benefit of embedded generation can be assessed against the published P2/6 standard or, if the DNOs are working to a higher standard, is it appropriate to assess against this standard.
- 5.15 The Working Group noted that the responses to the RFI indicate that DNOs are operating to P2/6 standard or higher. A number of DNOs highlighted that they may plan some parts of their networks to a higher standard than P2/6 to reduce the Customer Minutes Lost (CMLs) and Customer Interruptions (CIs) which DNOs are incentivised to reduce under the RIIO price control. This implies that the P2/6 Standard may not be directly comparable to the benefits brought by embedded generation. However, when DNOs plan their networks to a higher standard it is in anticipation of receiving higher income under their incentives payments or enhanced customer service. It was also noted that DNOs responded with questions of relevance as the P2/6 Standard doesn't apply when connecting generation customers. The Working Group agreed on the need for a consultation question on whether credits should be awarded at each voltage level of connection.

High Voltage

- 5.16 The Proposer stated that at HV, DNOs typically exclude HV connected generators when considering the network required to meet the demand for a new customer. However, at the substation, they take account of any embedded generation and consequently less capacity may be required at the substation and voltage levels above. This suggests that the current principle within the CDCM of awarding credits at voltage levels above the voltage of connection is correct as the

² [Ofgem decision document - Delivering the electricity distribution structure of charges](#)

benefit to the DNO is only realised at higher voltage levels. As such, the Proposer does not suggest any amendments to the methodology for credits for HV generators.

- 5.17 The Working Group discussed whether it is appropriate to not give credits for the avoidance of the HV network to generators that connect at HV. The Working Group agreed to ascertain via the RFI (Question 2) whether DNOs potentially avoid any costs under their network planning standards at the HV network level when a generator connects at the HV level.
- 5.18 The Working Group noted DNOs' responses generally contained the same theme which was that the connection of a HV generator to their network doesn't normally reduce DNO HV network costs. It was noted that in some instances an increase to network investment is required when a generator connects. In addition, one DNO also responded to the RFI stating that in specific circumstances there is the potential for a HV connected generator to avoid or defer reinforcement of the HV system. The Working Group agreed with the Proposer that no amendments to the methodology are required for credits at the HV level.

Question 4

Should HV connected generators not receive credits at the voltage of connection? Please provide your rationale for your response.

Low Voltage Substation

- 5.19 Embedded generators who connect directly at LVS are not currently awarded a credit for avoiding the use of the LV substation. The Proposer believes that where a generator connects directly to a LV substation, the saving in reinforcement costs are the same as that achieved by a LV connected generator. The Proposer therefore suggests that it is appropriate that the credit for LVS connected generators should include deferred reinforcement costs at the LVS voltage level as the generator is effectively connecting at LV.
- 5.20 The Proposer suggests that as the generator will only benefit the DNO if it can be relied on, then credits at the LVS level should only apply to non-intermittent generators that connect at the LVS voltage level. Where a generator is intermittent, the fuel source cannot be relied upon and therefore for network planning purposes an LVS intermittent generator does not contribute to network security at the voltage of connection. However, at the voltage levels above the voltage of connection intermittent generation can be relied upon to a certain extent due to the application of diversity.
- 5.21 The Working Group identified that an important difference between an LVS generator and LV network generator is where a generator is connected to a LV substation that is sole use. The Working Group agreed to ascertain via the RFI (Question 3) whether DNOs can identify the proportion of LVS generators with a sole use substation.
- 5.22 The Working Group would like to highlight that the data referenced below has been sourced from responses to the RFI and a subsequent request from the Working Group. The DNOs who either didn't respond to the RFI or could not provide a response to this question were given the

preliminary results from the RFI along with the Working Groups initial conclusions and asked if the provided data was representative of the data they hold. The Working Group noted that from five respondents, four identified whether a particular LVS connected generator has a sole use substation. Two parties were able to identify that of the LVS connected generators on their network, just over 50% have a sole use substation. Two parties identified that 100% of the LVS connected generators on their network have a sole use substation. A late submission was received that noted for one DNO, in the majority of cases LVS customers in general have sole use substations.

- 5.23 The Working Group concluded that the majority of LVS connected generators have sole use substations and as such the Working Group decided it was not appropriate to award credits at the voltage of connection to generators connected at the LVS network level.

Question 5

Should LVS connected generators not receive credits at the voltage of connection? Please provide your rationale for your response

If you believe they should be awarded a credit at the voltage of connection, should the credit be restricted to non-intermittent generators only? (As suggested by the Proposer in paragraph 3.10 and 5.12) Please provide your rationale for your response.

Low Voltage

- 5.24 Within the CP the Proposer stated that embedded generators connected to the low voltage network are not particularly visible to DNOs. It was also noted that when a DNO is planning the LV network, they are more likely to assess the maximum demand at the local substation with some consideration of any large generation that may be connected. It is the Proposer's belief that at the LV network the presence of generation will be more diverse and therefore some of the benefits will be realised at the level of connection in addition to the higher voltage levels. Hence it was proposed to take account of generation credits at the voltage of connection for LV connected generation by allocating a proportion of the demand costs at the voltage of connection as a credit to non-intermittent embedded generation at LV.
- 5.25 The Working Group commented that to their knowledge DNOs haven't got network monitoring tools for localised demand patterns. They instead rely on summary points for data within the network which require monitoring. As a result, LV generation is seen as a reduction in net demand whereas generation connected at higher voltage levels is monitored separately. It was therefore considered more likely that embedded generation offsets demand at LV. The Working Group discussed the need to better ascertain the proposed values for credits as the current amount is a suggestion only.
- 5.26 The P2/6 standard sets down minimum requirements for DNOs when planning their network. The network requirements are set relative to the Group Demand which is defined as follows:
- "The DNO's estimate of the maximum demand of the group being assessed for ER P2/6 compliance with appropriate allowance for diversity. The Group Demand at grid supply points must*

be consistent with the demand data submitted to a transmission company under the terms of the GB Grid Code.”

- 5.27 The Proposer also identified that at the LV voltage level, the level of demand and therefore the required network capacity is uncertain due to the limited infrastructure to monitor power flows. The Working Group agreed to confirm via the request of a short statement requested via the RFI (Question 5) on the approach used by DNOs when planning the LV network and how they factor in embedded generation, if at all.
- 5.28 The charging methodology effectively assumes that the Group Demand is at voltage level. This is implied within the methodology as the only benefit factored into the calculation of credits is at the next voltage level up. The Working Group agreed to ascertain via the RFI (Question 4) whether parties use the demand at the LV substation when assessing the benefit of embedded generation that connects at LV or whether the Group Demand is considered at a more granular level (i.e. using a subset of the LV network).
- 5.29 The Working Group noted that the information provided by DNOs in their responses appears to suggest that DNOs can accurately measure demand at the LV substation but not necessarily further down the LV network and as such DNOs may receive a benefit to their networks when embedded generation connects, however, this is largely unknown.
- 5.30 Members considered that within the CDCM model, asset costs are derived from the 500MW hypothetical model. This model is forward looking and reflects the costs of building a new 500MW grid supply point (GSP) as a complete development and doesn't include embedded generation. However, the generation credits are derived as the negative of the 500MW model unit costs to reflect that generation is the same as negative demand.
- 5.31 The Working Group then considered the scenario of a new housing estate being developed. Such a development would be likely to have a sole use HV/LV substation and as a result no costs avoided by embedded generation. However, if over time, embedded generation was connected within this new development additional demand connections could be added without the need for upstream reinforcement as a result of the embedded generation.
- 5.32 The Working Group concluded that a new development is unlikely to benefit at the voltage of connection from the presence of LV connected embedded generation but additional sites may be able to connect at a later date without the need for reinforcement.

Question 6

Based on the understanding in paragraphs 5.29-5.31, do you believe that credits should be awarded to non-intermittent LV connected generators at the voltage of connection? Please provide your rationale for your response.

Do you have any evidence to support a credit being applied where network capacity requirements have not been needed when an intermittent generator has connected to the network?

Sharing Factors

- 5.33 The Proposer suggested a 75% sharing factor for the proportion of the LV demand charge that should be allocated to LV connected generation, but suggested that this value would need further consideration by the Working Group. Under the proposal, the sharing factor represents the proportion of the credit that would be applied at the voltage of connection if the calculation of generation credits was extended to include the voltage level of connection.
- 5.34 The sharing factor should represent the amount of upstream assets on the LV network that is offset by a LV generator. Where the sharing factor is high, the credit awarded at the voltage of connection would also be high. This is illustrated below:
- High sharing factor - LV connected generator is sited close to the LV network demand and therefore offsets the need for most of the upstream assets on the LV network.
 - Medium sharing factor - LV generator is situated mid-way between the demand and LV substation, offsetting some of the upstream LV network costs
 - Low sharing factor – LV generator is situated close to a LV substation, offsetting a small amount of upstream LV network costs
- 5.35 The Proposer has suggested that there is a high sharing factor and indicated in their change proposal that a 75% sharing factor be used. This is due to their perception that LV connected generation tends to connect close to centres of demand and therefore releases headroom on the majority of upstream LV assets.

Question 7

Do you agree with the principle of the sharing factor?

If so, what value would you attribute to the sharing factor?

Should sharing factors be network specific or generic to all?

Please explain your rationale within each response.

Other Considerations

DCP 243 'Treatment of Customer Contributions in the CDCM'

- 5.36 The Working Group agreed that it was worth monitoring DCP 243 as it is seeking to standardise customer contributions and one of the proposed solutions is to set customer contributions to zero which removes the issue of the treatment of customer contributions. The DCP 243 Working Group have issued an RFI to DNO Parties'. They are due to meet on 21 March 2017 to review RFI responses and agree preferred solutions to take forward to consultation. The DCP 243 Working Group are aiming to deliver the Change Report to the DCUSA Panel in June.

DCP 268 'DUoS Charging Using HH settlement data'

5.37 A Working Group member suggested that the proposed changes within DCP 268 have the potential to interfere with the changes being initiated in DCP 283. If approved DCP 268 would remove the distinction between intermittent and non-intermittent generation. Some elements of this CP (for example the proposal that credits should be awarded at the voltage of connection for non-intermittent generators) rely on this distinction being retained. The DCP 268 Working Group are reviewing consultation responses at their 17 March 2017 meeting and aim to submit the Change Report to the May DCUSA Panel if there are no material comments received.

DCP 205 'Recovery Of Costs Due To Load And Generation Increases From Existing Customers In RIIO-ED1'

5.38 The members agreed on the importance of considering the drivers behind reinforcement costs, referencing DCP 205. It was also noted that DNOs adopted a connect and manage policy on reinforcement costs and came to understand that Solar and Heat Pump installations were driving the costs. The Working Group discussed how the smart meter roll-out will mean the industry will be provided with greater clarity on the drivers of reinforcement costs.

5.39 DCP 205 and its alternative (DCP 205A) both looked at how DNO reinforcement costs associated with existing small users who install equipment that results in an increase in their network requirements are recovered. These proposals were submitted to Ofgem who accepted the original proposal on the 12 March 2015 with an implementation date of 1 April 2015.

5.40 Ideally, DNOs recover reinforcement costs from those customers who impose them. However, since this is currently not practicable, Ofgem decided as part of their Decision on Strategy for the RIIO-ED1 price control that, until DNOs have a means to accurately identify all customers who trigger these costs, they will recover the costs of any reinforcement caused by load or generation growth by domestic and small business customers through DUoS charges.

5.41 DCP205 and DCP205A both sought to amend the Common Connection Charging Methodology (CCCM) set out in Schedule 22 of the DCUSA so that DNOs fund all network reinforcement in the following circumstances:

- The premises are already connected to the network at 100 amperes or less per phase and metered with whole current metering;
- The premises remain connected to the distribution network without modification; and
- The premises do not have generation connected that exceeds 16 amperes per phase.

5.42 Ofgem accepted DCP 205 which was identical to DCP 205A, except that it contained some additional requirements that equipment connected within a customer's premises must comply with certain technical standards.

5.43 The intention of DCP 205 was to socialise the reinforcement costs associated with small renewable generation and low carbon equipment such as heat pumps and electric vehicles infrastructure. The criteria used mean that the reinforcement costs are socialised only for existing sites that install equipment and, in the case of generation, they only apply for small installations of less than 16 amps per phase.

- 5.44 This change proposes to include a proportion of credits at the voltage of connection for non-intermittent plant only. The majority of small plant that is captured within the scope of DCP 205 is likely to be renewable and primarily PV and therefore the proposer does not envisage that the socialisation of costs as set out under DCP 205, is relevant to this change proposal.

Question 8

Do you believe that DCP 205 is relevant to non-intermittent generation or is the change relevant to small intermittent generation?

6 Relevant Objectives

Assessment Against the DCUSA Objectives

- 6.1 The Proposer considers that the following DCUSA Objectives are better facilitated by DCP 283.

Impact of the Change Proposal on the Relevant Objectives:	
Relevant Objective	Identified impact
Charging Objective Two - 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)	Positive
Charging Objective Three - 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.	Positive

- 6.2 The Proposer believes that Charging Objective Two is better facilitated by DCP 283 because more cost reflective tariffs will provide a more accurate price signal which will result in a more efficient dispatch of plant and the siting of plant within the distribution network. Both of these will result in the promotion of effective competition in generation.
- 6.3 The Proposer believes that Charging Objective Three is better facilitated by DCP 283 because it increases the cost reflectivity of tariffs within the CDCM by awarding credits to embedded generators that more closely reflect the benefits they bring to DNOs and thereby encourages the development of efficient, co-ordinated and economical distribution networks.

Question 9

Do you consider that the proposal better facilitates the DCUSA Charging Objectives? Please give supporting reasons.

7 Impacts & Other Considerations

Does this Change Proposal impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

7.1 The Working Group does not consider at this stage, there to be any cross-code impact.

Consumer Impacts

7.2 Consumer impacts will be assessed following feedback from parties. There may be multiple solutions which may potentially increase the level of credits to embedded generators which could result in an increase cost to demand customers.

Environmental Impacts

7.3 In accordance with DCUSA Clause 11.14.6, the Working Group assessed whether there would be a material impact on greenhouse gas emissions if DCP 283 were implemented. The Working Group did not identify any material impact on greenhouse gas emissions from the implementation of this CP.

Engagement with the Authority

7.4 Ofgem has been fully engaged throughout the development of DCP 283 as an Observing member of the Working Group.

8 Implementation

8.1 The proposed implementation date for DCP 283 is 01/04/2019. Respondents are invited to consider whether they require any further lead time to comply with this change.

Question 10

Are you supportive of the proposed implementation date of 1 April 2019?

9 Solution and Legal Text

Credits at the voltage of connection

9.1 It was identified by the proposer that clause 62 and 71 of schedule 16 of the DCUSA will need to be amended to implement this change. The Proposer has also suggested an amendment to the CDCM methodology to set customer contributions to 100% for generation by changing clause 31 in Schedule 16. Proposed legal text was provided within the initial CP, however, the Working Group note that upon reviewing consultation responses the solution of this CP will be determined. Legal text will then be drafted as agreed upon by Working Group members.

10 Consultation Questions

10.1 The Working Group is seeking industry views on the following consultation questions:

Number	Questions
1	Do you understand the intent of the CP?
2	Are you supportive of the principles of the CP?
3	Do agree with the principle that when a generator connects there is a cost saving which creates a more resilient network and reduces the need for new demand customers to pay contributions? Please provide rationale.
4	Should HV connected generators not receive credits at the voltage of connection? Please provide your rationale for your response.
5	Should LVS connected generators not receive credits at the voltage of connection? Please provide your rationale for your response
6	<p>Based on the understanding in paragraphs 5.29-5.31, do you believe that credits should be awarded to non-intermittent LV connected generators at the voltage of connection? Please provide your rationale for your response.</p> <p>Do you have any evidence to support a credit being applied where network capacity requirements have not been needed when an intermittent generator has connected to the network?</p>
7	<p>Do you agree with the principle of the sharing factor?</p> <p>If so, what value would you attribute to the sharing factor?</p> <p>Should sharing factors be network specific or generic to all?</p> <p>Please explain your rationale within each response.</p>
8	Do you believe that DCP 205 is relevant to non-intermittent generation or is the change relevant to small intermittent generation?
9	Do you consider that the proposal better facilitates the DCUSA Charging Objectives? Please give supporting reasons.
10	Are you supportive of the proposed implementation date of 1 April 2019?
11	Do you have any other comments on DCP 283?
12	Are you aware of any wider industry developments that may impact upon or be impacted by this CP?
13	Are there any alternative solutions or unintended consequences that should be considered by the Working Group?

10.2 Responses should be submitted using Attachment 1 to dcusa@electralink.co.uk no later than **04 April 2017**.

10.3 Responses, or any part thereof, can be provided in confidence. Parties are asked to clearly indicate any parts of a response that are to be treated confidentially.

Attachments

- Attachment 1 - Consultation Response Form
- Attachment 2 - DCP 283 Change Proposal
- Attachment 3 - RFI Collated Responses